

AVAIO Pittsburg Backup Generating Facility

Initial Study/Mitigated Negative Declaration



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ENERGY
COMMISSION
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Governor

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Initial Study/ Mitigated Negative Declaration

AVAIO Pittsburg Backup Generating Facility

(24-SPPE-01)

Lead Agency

California Energy Commission



October 2025

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Section 1

Mitigated Negative Declaration



MITIGATED NEGATIVE DECLARATION

AVAIO Pittsburg Backup Generating Facility

Docket Number: 24-SPPE-01

1.0 Mitigated Negative Declaration

1.1 Project Description

Project: AVAIO Pittsburg Backup Generating Facility
2232 Golf Club Road
Pittsburg, CA 94565

Applicant: AVAIO Digital Partners I, LLC,
LLC 107 Elm St – Suite 501
Stamford, CT 06902

AVAIO Digital Partners I (AVAIO or applicant) is proposing to construct and operate the Pittsburg Data Hub (PDH) located in the city of Pittsburg. The PDH's main component will be a three-story approximately 347,740 square foot data center building, a substation, a Pacific Gas and Electric Company (PG&E) switching station and transmission lines, the Pittsburg Backup Generating Facility (PBGF), site access and surface parking, landscaping, stormwater controls and features, and water and sewer pipeline interconnections. PBGF would be an emergency backup generating facility with a generation capacity of up to 92 megawatts (MW) to support the need for the PDH to provide uninterruptible power supply for its tenants' servers. The PBGF would consist of thirty-seven (37) 3 MW diesel-fired backup generators arranged in a generation yard located on the west side of the PDH. Thirty-six (36) of the generators would be dedicated to replacing the electricity needs of the data center in case of a loss of utility power, and one (1) of the generators would be used to support general office loads along with building and life safety services (house generator).

The California Energy Commission (CEC) is responsible for reviewing, and ultimately approving or denying, all thermal electric power plants, 50 megawatts (MW) and greater, proposed for construction in California. The Small Power Plant Exemption (SPPE) process allows applicants with generating facilities between 50 and 100 MW to obtain an exemption from the CEC's jurisdiction and proceed with local approval rather than requiring certification by the CEC. AVAIO filed an

application on February 29, 2024, requesting an SPPE for the PBGF. The CEC can grant an exemption if it finds that the proposed facility would not create a substantial adverse impact on the environment or energy resources. Section 25519(c) of the Public Resources Code designates the CEC as the California Environmental Quality Act (CEQA) lead agency, as provided in section 21165 of the Public Resources Code, for all projects that receive an exemption from the CEC's power plant certification process.

1.2 Introduction

Pursuant to the California Environmental Quality Act (CEQA), the CEC staff has prepared an Initial Study (IS) for the proposed project to determine if any significant adverse effects on the environment would result from project implementation. The IS utilizes the environmental checklist outlined in Appendix G of the CEQA Guidelines. If an IS for a project indicates that a significant adverse impact could occur, a public agency shall prepare an Environmental Impact Report.

According to Article 6 (Negative Declaration Process) and Section 15070 (Decision to Prepare a Negative Declaration or Mitigated Negative Declaration) of the CEQA Guidelines, a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- a) *The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or*
- b) *The initial study identifies potentially significant effects, but:*
 - 1) *Revisions in the project plans or proposals made by, or agreed to by, the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and*
 - 2) *There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.*

1.3 Environmental Determination

The IS was prepared to identify the potential environmental effects resulting from proposed project implementation, and to evaluate the level of significance of these effects. The IS is based on information from the applicant's SPPE application including revised project description and associated submittals, data requests and responses, and additional staff research.

Based on the analysis in the IS, it has been determined that all project-related environmental impacts could be reduced to a less than significant level with the incorporation of feasible mitigation measures. See the respective technical area for the full text of the mitigation measures.

Therefore, adoption of a Mitigated Negative Declaration (MND) would satisfy the requirements of CEQA. The project's mitigation measures included are designed to reduce or eliminate the potentially significant environmental impacts. Mitigation measures are structured in accordance with the criteria in Section 15370 of the CEQA Guidelines.

Section 2

Introduction

2.0 Introduction

2.1 Small Power Plant Exemption (SPPE)

Pittsburg Data Hub, LLC, a wholly owned subsidiary of AVAIO Digital Partners I, LLC (AVAIO or applicant) is seeking a Small Power Plant Exemption (SPPE) from the California Energy Commission (CEC) for the Pittsburg Backup Generating Facility (PBGF). The CEC has the exclusive authority to certify all thermal power plants (50 megawatts [MW] and greater), and related facilities proposed for construction in California. The SPPE process allows applicants with facilities not exceeding 100 MW to obtain an exemption from CEC's jurisdiction and proceed with local permitting rather than requiring the CEC's certification. The CEC can grant an exemption if it finds that the proposed facility would not create a substantial impact on the environment or energy resources.

Public Resources Code section 25519(c) designates the CEC as the lead agency, in accordance with California Environmental Quality Act (CEQA), for all facilities seeking an SPPE. As the lead agency pursuant to CEQA, the CEC is responsible for the preparation of this Initial Study. The CEC will use this Initial Study in support of its discretionary decision to grant or deny the small power plant exemption application. Per CEQA Guidelines Section 15070 (Cal. Code Regs., tit. 14, §_15070), a negative declaration or mitigated negative declaration shall be prepared for a project subject to CEQA when:

- (a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
- (b) The initial study identifies potentially significant effects, but:
 - (1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
 - (2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

If the exemption is granted, the Initial Study/Mitigated Negative Declaration is expected to be used by the city of Pittsburg in its consideration of permitting the project as well as by the Bay Area Air Quality Management District for its issuance of various air quality permits. Upon exempting the project, the CEC would have no permitting authority over the project and would not be responsible for any mitigation or permit conditions imposed by the city of Pittsburg or other agencies.

2.2 CEQA Project Definition

According to CEQA Guidelines Section 15378 (Cal. Code Regs., tit. 14, § 15378), a “project” means the whole of an action, which has a potential for resulting in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment, and that is any of the following:

1. An activity directly undertaken by any public agency including but not limited to public works construction and related activities clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100-65700.
2. An activity undertaken by a person which is supported in whole or in part through public agency contacts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.
3. An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

The term “project” refers to the activity which is being approved and which may be subject to several discretionary approvals by governmental agencies. The term “project” does not mean each separate governmental approval (Cal. Code Regs., tit. 14, § 15378(c)).

The CEC SPPE’s determination is limited to the PBGF for the proposed AVAIO Pittsburg Data Hub (PDH). Nonetheless, this initial study evaluates the whole PDH project including the PBGF (construction and operation) to inform the public and decision makers on the potential environmental impacts of the whole action.

2.3 Organization of this Initial Study

The environmental analysis of this SPPE takes the form of an Initial Study (IS), which was prepared to conform to the requirements of CEQA (Pub. Resources Code, § 21000 et seq.), the CEQA Guidelines (Cal. Code Regs, tit. 14, § 15000 et. seq.), and the CEC’s regulations and policies. The IS is based on information from the applicant’s SPPE application and associated submittals, site visits, data requests and responses, and additional staff research and agency consultation.

This IS evaluates the potential environmental impacts that might reasonably be anticipated to result from the construction and operation of the project. Staff’s analysis is broken down into issue areas derived from Appendix G to the CEQA Guidelines:

- | | |
|---------------------------------------|-------------------------|
| - Aesthetics | - Land Use and Planning |
| - Agricultural and Forestry Resources | - Mineral Resources |
| - Air Quality | - Noise |

- | | |
|-----------------------------------|--------------------------------------|
| - Biological Resources | - Population and Housing |
| - Cultural and Tribal Resources | - Public Services |
| - Energy | - Recreation |
| - Geology and Soils | - Transportation |
| - Greenhouse Gases | - Utilities and Service Systems |
| - Hazards and Hazardous Materials | - Wildfire |
| - Hydrology and Water Quality | - Mandatory Findings of Significance |

In addition, CEC's CEQA analysis documents include an analysis of Environmental Justice. For each subject area, the analysis includes a description of the existing conditions and setting related to the subject area, an analysis of the proposed project's potential environmental impacts, and a discussion of mitigation measures, if necessary, to reduce potentially significant impacts to less than significant levels.

Section 3

Initial Study

3.0 Initial Study

3.1 Project Title

AVAIO Pittsburg Backup Generating Facility (24-SPPE-01)

3.2 Lead Agency Name and Address

California Energy Commission
715 P Street
Sacramento, California 95814

3.3 Lead Agency Contact Person and Phone Number

Ali Jahani, Project Manager
Siting, Transmission, and Environmental Protection Division
California Energy Commission
(279) 226-1175

3.4 Project Sponsor's Name and Address

AVAIO Digital Partners I, LLC
107 Elm St – Suite 501
Stamford, CT 06902

3.5 General Plan Designation

The project site has a City of Pittsburg 2040 General Plan land use designation of "Employment Center Industrial" (ECI) (City of Pittsburg 2024a, 2024b, 2024c).

3.6 Zoning

The City of Pittsburg zoning designation for the project site is Planned Development (PD), and the project site is located within the Pittsburg Technology Park Specific Plan. (City of Pittsburg 2024a, 2024b, 2024c).

3.7 Project Location and Surrounding Land Uses

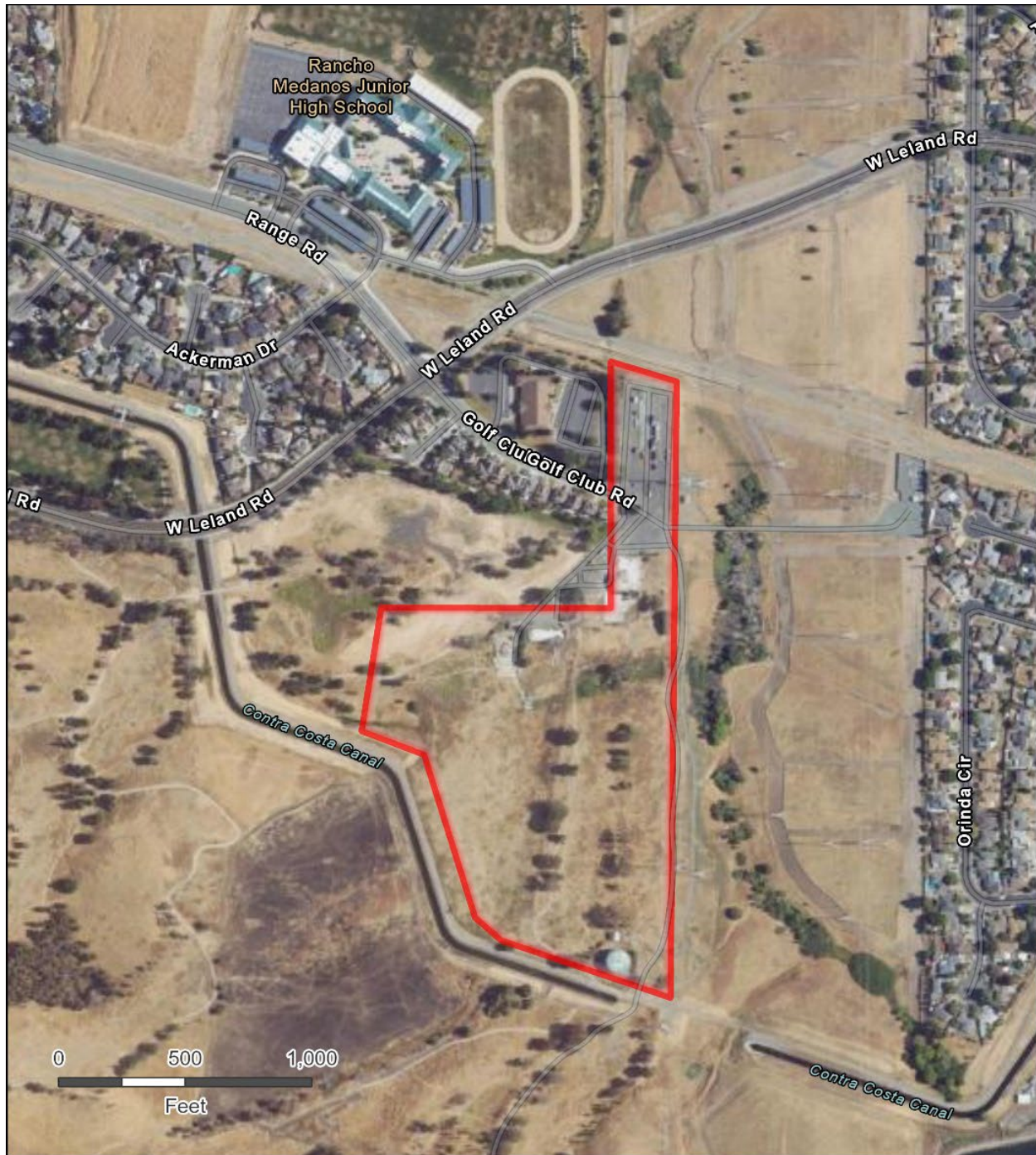
The project site is located at 2232 Golf Club Road, Pittsburg, California. The proposed AVAIO Pittsburg Data Hub (PDH or project), which includes the Pittsburg Backup Generating Facility (PBGF), would be located within Contra Costa County on an approximately 22.31-acre site (DayZenLLC 2024). Figure 3-1 is a Regional Vicinity Map and Figure 3-2 is a Preliminary Site Plan.

The 22.31-acre PDH site currently includes two parcels: APNs 095-160-001 and 095-160-002 (DayZenLLC 2024). However, the applicant has submitted a Vesting Tentative Subdivision Map for the PDH (DayZenLLC 2025a, 2025b). Once the map is approved

and recorded by the City of Pittsburg, the proposed data center and backup generating facility would be located on a single parcel that is 764,308 square feet (DayZenLLC 2025a, 2025b).

The PDH would be constructed within a portion of the former municipal Delta View Golf Course, a 175-acre property that permanently closed in 2018. The former Delta View Golf Course is located within a larger 420-acre property that is known as the Stoneman Property (City of Pittsburg 2025). **Table 3-1** identifies the land uses that surround the project site.

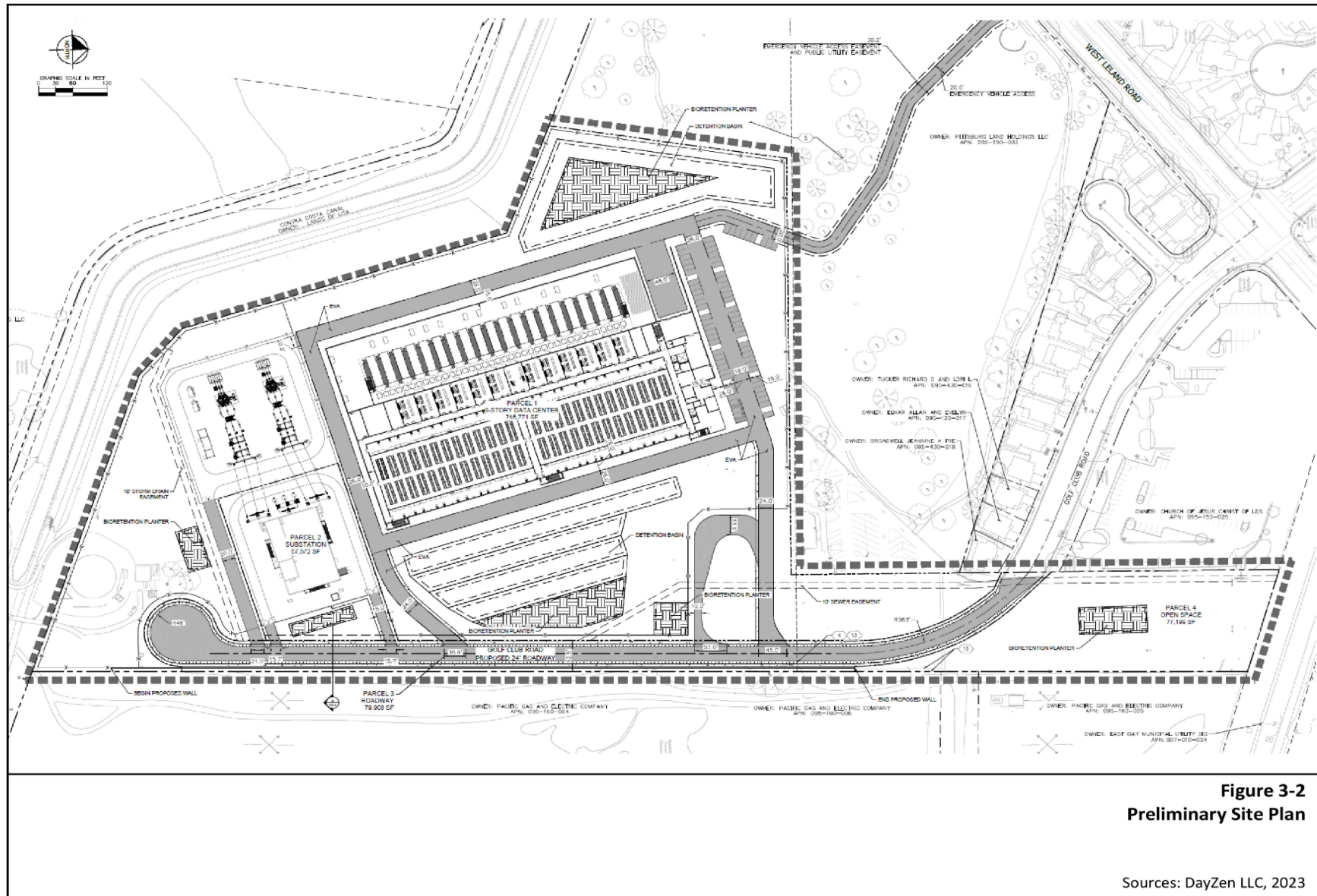
TABLE 3-1 LAND USES SURROUNDING PROJECT SITE		
Direction	Land Use	Location
Northwest	Residences	Located along Golf Club Road, with the nearest residence west of and adjacent to the project site's northernmost end
	Church of Jesus Christ of Latter-Day Saints	Located at 2201 Golf Club Road, west of and adjacent to the project site's northernmost end
	Rancho Medanos Junior High School	Located at 2301 Range Road, approximately 0.1 mile northwest of the project site
North	Delta de Anza Regional Trail	Approximately 100 feet north of the project site
East	PG&E transmission right-of-way	Adjacent to the project site along the east side of the project
	Residences	East of the PG&E right-of-way, approximately 0.15 mile east of the project site
Southeast	Pittsburg Water Treatment Plant	Located at 300 Olympia Drive, approximately 0.2 mile southeast of the project site
South	Contra Costa Canal	Adjacent to the project site's southernmost end
	Former Delta View Golf Course	South of the Contra Costa Canal
Southwest	Diablo Valley Radio Controllers Airfield	Located within the Stoneman Property and accessible via John Henry Johnson Parkway. Approximately 0.85 mile southwest of the project site
	Hiking and mountain biking trails	Located within the Stoneman Property and accessible via John Henry Johnson Parkway. Approximately 0.25 mile southwest of the project site at their nearest point
	Picnic shelter	Located within the Stoneman Property and accessible via John Henry Johnson Parkway. Approximately 0.4 mile southwest of the project site
West	Former Delta View Golf Course	Adjacent to the project site along the west side of the project



 AVAIO Pittsburg Backup
Generating Facility Project Site

Figure 3-1
Regional Vicinity and
Land Use Map

Source: CEC Staff



3.8 Project Description

The following project description is from the Pittsburg Backup Generating Facility's (PBGF) Project Description - Part I of IV, dated February 28, 2024 (DayZen 2024).

Pittsburg Data Hub Site Description

The site is currently part of the abandoned Delta View Golf Course. Golf course uses ceased in 2018. The only structures on site include a water storage tank and an associated one-story building located in the southeastern corner of the site. These structures would remain on site. Other golf course buildings that were located near the northeastern corner of the site were demolished by the City prior to AVAIO's acquisition of the land, although associated foundations and concrete slabs remain. The project's main and secondary entrance to the site would be located off of the extension of Golf Club Road at the northeastern corner of the property. An additional emergency entrance would be located in the northwest corner of the property via an easement which would connect with West Leland Road.

Site vegetation consists of mustard seed and other weeds for most of the abandoned fairways, greens, beaches and ponds. Trees throughout the site are in varying degrees of decline or overgrowth, and are generally species that would not be recommended for the climate. Fire damage and water deprivation have caused distress and death to a good portion of the trees on site. The project proposes to demolish the existing shrubs, groundcovers, and trees on the site, and plant new groundcover, shrubs, and trees that are coordinated with the design, drought tolerant, and suitable for the site.

Property is irregularly shaped and is generally bound to the north by West Leland Road and existing residential development, to the east by an existing PG&E transmission easement, and to the south and west by the Contra Costa Canal. The area to the north and east of the project site consists primarily of residential land uses. The area to the south and west of the project site consists of the remainder of the abandoned golf course. The nearest residence is located to the north approximately 400 feet from the project boundary.

PDH Facilities Description

Overview

The Commission SPPE's determination is limited to solely to the PBGF. However, in order for the Commission to inform the decision-makers of the potential environmental effects of the PBGF, in combination with the PDH, AVAIO has included a complete description of the PDH. The components of the PDH would include:

- A three-story approximately 347,740 square foot data center building;
- A Project Substation;

- A PG&E Switching Station and Transmission Lines;
- The PBGF;
- Site Access and Surface Parking;
- Landscaping;
- Stormwater Controls and Features; and
- Water and Sewer Pipeline Interconnections.

Data Center Building

The PDH project's main component would be a three-story 347,740 square foot data center building would house computer servers for private clients in a secure and environmentally controlled structure and would be designed to provide 60 megawatts (MW) of power to information technology (Critical IT) equipment. Appendix A includes the Preliminary Architectural, Civil, Mechanical, Electrical and Landscaping Plans and Elevation Drawings. The data center building would consist of two main components; the data center suites that would house client servers, and the administrative facilities including support facilities such as the building lobby, restrooms, conference rooms, landlord office space, customer office space, loading dock and storage. The data center suite components would consist of three levels of data center space. Each level would contain two (2) data center suites and corresponding electrical/UPS rooms. The data center is being designed with an average rack power rating of 10 kW. The data center is expected to have between 20 and 30 employees and 12-15 visitors (including deliveries) visit the site per day.

Massing, Heights and Setbacks

The three-story data hall building is composed of admin, data hall, and loading dock masses. The admin portion, located on the North side of the building, is clad with curtain wall and metal panel systems. The data hall portion is clad primarily in precast concrete panels and/or EIFS. The top of the parapet at the admin and data hall is at 81 feet. Two exterior stairs located on the SE corner and in the eastern facade of the building are semi enclosed with cladding to match that of the main datacenter block. A rooftop dunnage platform is provided at 85 feet for mechanical equipment. A sound attenuating screen topping off at 94 feet fully encloses the platform. Access to the platform is provided by a freight elevator and a staircase on the NW corner of the building. The top of the elevator parapet is at 105 feet. The building would be located in the center of the site, orientating its longer axis in a NW-SE angle, and would be set back at a minimum of 400 feet from the nearest residential property to the north, a minimum of 90 feet from the electrical yard to the west (adjacent to a non-residential zone), a minimum of 180 feet from the eastern facade to the east (adjacent to Golf Club Road), and a minimum of 320 feet from the south facade to the south (adjacent to a non-residential zone).

Cooling Technology

Air cooled chillers are used to get rid of the heat generated in the data center. They are sized to be able to carry the full heat load under without any water requirement. The units also have an optional “adiabatic precooling system”. When used in this way, water is sprayed onto the chiller coils, reducing the electric power needed for the compressor and fans significantly. For this operation, recycled water would be utilized. However, due to water quality required by the manufacturer, water filtration is required to ensure water quality is maintained at the chillers. Both the data halls and office areas also require humidification. Although far less than the precoolers noted above, these systems also use water and would be connected to the same water filtration system. There is little discharge from either the precooling or humidification systems; however the filtration system requires approximately 25% of incoming water to be drained as part of the (reverse-osmosis) processing. Conditioned air would cool the IT equipment rejecting heat to Hot Aisle Containment (HAC) and then migrates into the return air plenum above the ceiling. The heat above the ceiling would be drawn back to the gallery and conditioned by the fan wall units before being distributed back to the data hall. The ability to provide chilled water to the IT racks would be available for high-density loads. The office and storage areas would be conditioned via variable air volume (VAV) systems consisting of Roof Top Units (RTUs) connected to interior VAV boxes.

Project Substation

The project would construct a new 100 MVA (mega volt-ampere) electrical substation adjacent to the north side of the data center building project station) as Shown on Figure TX-101 in Appendix A. The two-bay project substation (two 100 MVA 230 kV-34.5kV step-down transformers and primary distribution switchgear) would be designed to allow one of the two transformers to be taken out of service, effectively providing 100 MVA of total power (a 2-to-make-1 design). The project substation would have an all-weather drivable surface. An eight foot high chain link fence would surround 3-sides of the substation with the 4th common with the PG&E switching station enclosure material. An oil containment pit surrounding each transformer would capture unintended oil leaks. Access to the substation would be from a separate entrance from the public right-of-way on Golf Club Road. The project substation would be capable of delivering electricity to the PDC from PG&E’s new adjacent on site Switching Station but would not allow any electricity generated from the PBGF to be delivered to the transmission grid. Availability of project substation control systems would be ensured through a redundant DC battery backup system. The project substation would use (2)245kV, 40kA rated SF6 gas insulated high voltage breakers. These would be procured in 2025 and arrive onsite prior to the January 1, 2027 CARB phase-out date for this class of GIE.

PG&E Switching Station and Transmission Lines

To serve the PDH, PG&E would be constructing a “looped” transmission interconnection to the existing Pittsburg-Eastshore 230 kV Transmission Line involving two overhead

transmission line extensions from the PG&E Switching Station to two new steel monopoles installed within the existing PG&E right of way and that would replace one existing steel lattice tower as shown on Figure TX-101 in Appendix A. PG&E's Switching Station would be constructed adjacent to the project substation and would be built in a Breaker and a Half (BAAH) configuration. This would consist of 2 incoming 230kV circuits entering a BAAH configuration consisting of 6 230kV circuit breakers, steel structures, 230kV switches, metering devices, and a non-occupied control enclosure. The PG&E Switching Station would have crushed rock surface with an aggregate base. A 12ft high ballistic rated metal panel wall would surround all 4 sides of the switchyard. Access to the PG&E Switching Station would be from a separate entrance from the public right-of-way on Golf Club Road. Availability of the Switching Station control systems would be ensured through a redundant DC battery backup system. A preliminary one-line diagram for the PG&E Switching Station is provided in Appendix A, as Figure E1.20. The PG&E Switching Station would use 245kV, 63kA rated Gas-Insulated Switchgear (GIS) with internal high voltage breakers. This would be procured in 2025 and arrive onsite prior to the January 1, 2031 CARB phase-out date for this class of GIE.

PBGF Description

Overview of Proposed PBGF

PBGF would be an emergency backup generating facility with a generation capacity of up to 92 MW to support the need for the PDH to provide uninterruptible power supply for its tenants' servers. The PBGF would consist of thirty-seven (37) 3-MW diesel-fired backup generators arranged in a generation yard located on the west side of the PDH. Thirty-six (36) of the generators would be dedicated to replace the electricity needs of the data center in case of a loss of utility power, and one of the generators would be used to support general office loads along with building and life safety services (house generator).

General Site Arrangement and Layout

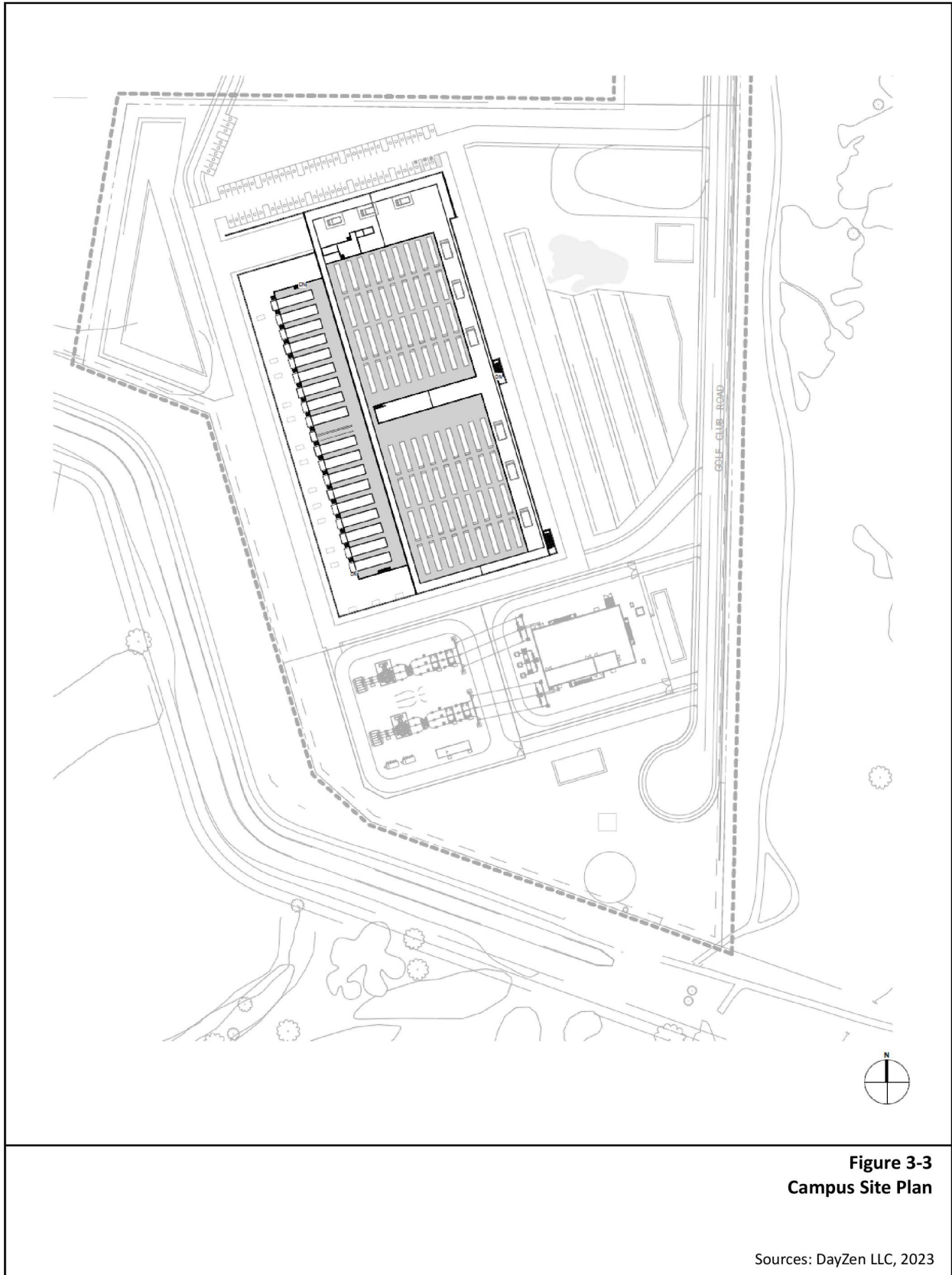
The 37 emergency backup generators (36 for the data center suites and one for the house load) would be located at the site in a generation yard adjacent to the west side of the PDH building. Figures 3-4, 3-5, and 3-3 show the Campus, Building, and Site Plans of the PBGF within the PDH site. The generation yard would be electrically connected to the PDH building through above ground or in trenched cable bus to a location within the building that houses electrical distribution equipment.

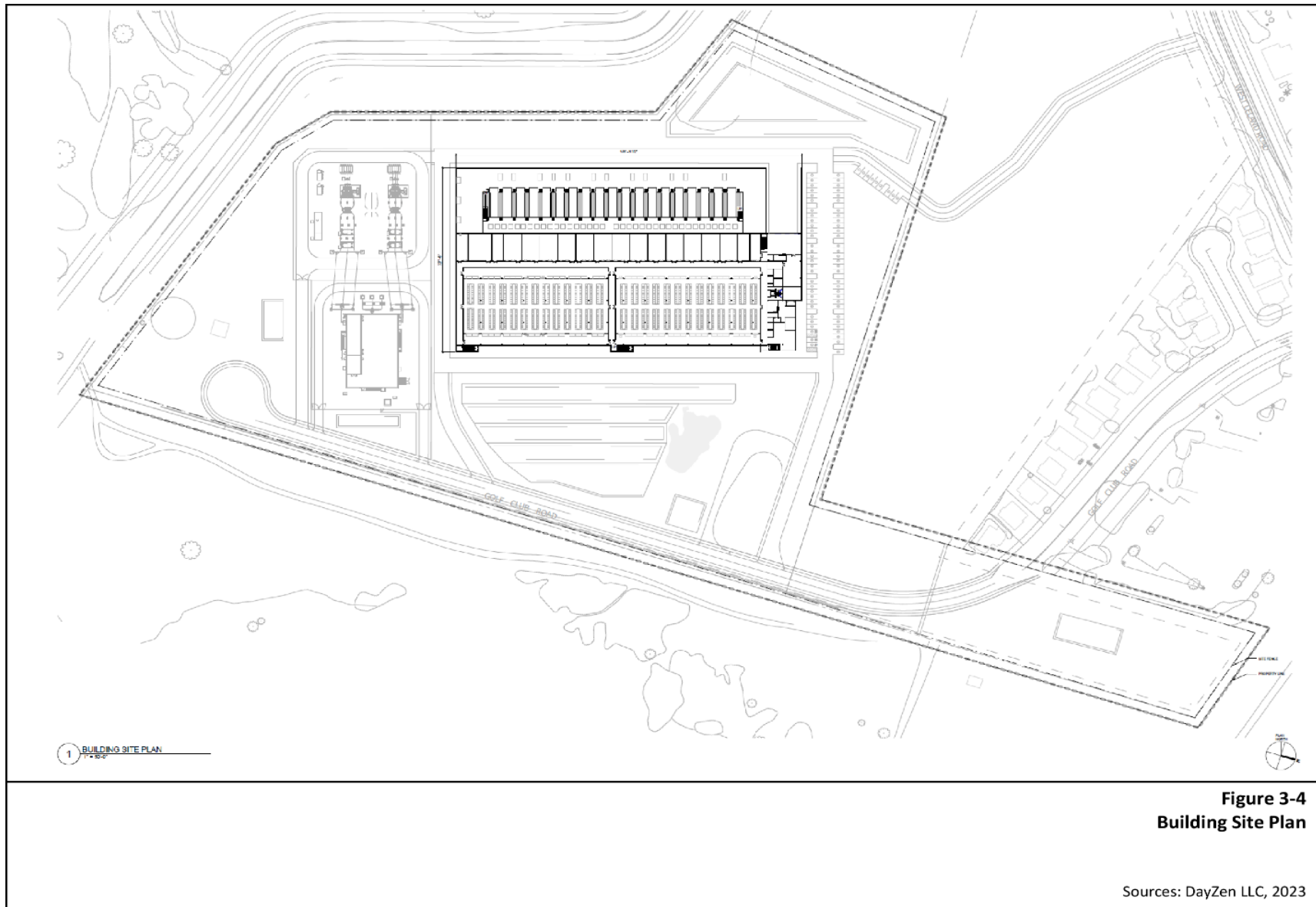
Generating Capacity

Overview

In order to determine the generating capacity of the PBGF, it is important to consider and incorporate the following critical and determinative facts.

1. The PBGF uses internal combustion engines and not turbines.
2. The PBGF internal combustion engines have a peak rating and a continuous rating.
3. The PBGF through software technology and electronic devices is controlled exclusively by the PDH.
4. The PBGF has been designed with a distributed redundant system.
5. There would be a total of six redundant data center generators.
6. There would be a total of one house generator to provide electricity during emergencies to support portions of the admin building and features necessary for emergency response.
7. The PBGF would only be operated for maintenance, testing and during emergency utility power outages and would not operate for any demand response program.
8. The PBGF would only operate at a load equal to the demand of the PDH during an emergency utility outage.
9. The PBGF would only be interconnected to the PDH and would not be interconnected to the transmission or distribution grid.





Generating Capacity and Power Utilization Efficiency

The CEC has determined the maximum generating capacity of a backup generating facility is the maximum capacity of the load being served. The design demand of the PDH, which the PBGF has been designed to reliably supply with redundant components during an emergency, is based on the maximum critical IT load and maximum mechanical cooling electrical load occurring during the hottest hour in the last 20 years. Such conditions are possible but extremely unlikely to ever occur. The PDH load on that worst-case day would be 92 MW. It is important to understand that while the PDH would be designed to accommodate the full IT equipment load of the building, it is AVAIO's experience that the customers that lease data center space do not utilize the entire load identified in their lease. This typically results in data center demand loads approximately 85-90 percent. Therefore, a fully leased 60 MW data center would only be expected to reach a demand load around 54 MW.

The data center industry utilizes a factor called the Power Utilization Efficiency (PUE) to estimate the efficiency of its data centers. The PUE is calculated by dividing the total demand of the data center infrastructure serving the critical IT spaces (including IT load) by the Critical IT load itself. The theoretical peak PUE for the Worst Day Calculation would be 1.51 (Total 92 MW demand of Building on Worst Case Day divided by 60.0 MW Total Critical IT Load). The average annual PUE at full load would be 1.17 (Total 71.4 MW demand of Building average conditions divided by 60.0 MW Design Critical IT Load). These PUE estimates are based on design assumptions and represent worst case. As described above, the expected PUE is much lower because the Critical IT that is leased by clients is rarely fully utilized. AVAIO team members' experience with operation of other data centers is that the actual annualized PUE would be closer to 1.17.

Backup Electrical System Design

Overview

There would be six data center suites in the PDH. Each data center suite would be designed to handle 10 MW of IT equipment load. The total maximum load of each data center suite would be 15 MW which includes the IT equipment load, mechanical equipment to cool the IT equipment load, lighting and data center monitoring equipment. The sum of the six center suites would result in 60 MW of IT equipment load and 90 of total electrical load.

There are 36 electrical lineups supporting the data center suites. Each backup electrical system has been designed to serve the suites in groups. Each redundant system of six 3 MW generators serves a single data center suite. Each group of 6 generator redundant system is designed for one generator to be taken out of service at any moment in time (called "6 to make 5").

During a utility outage, all 6 generators would start and carry load up to approximately 80 percent of their nameplate rating supporting the suite they serve. If one of the generators fails or needs to be taken out of service during the emergency, the 6 to make 5 design allows the failing generator to be removed from operation automatically with the remaining 5 generators to continue to serve the lineups up to the maximum design load of the data center suite.

Each redundant backup generation system is made up of 6 "capacity groups" with each electrical capacity group sized at 3 MW (3000 kW) of total power. An electrical capacity group consists of one 3000 kW generator, one 3,360 kVA 34.5kV-480V medium voltage transformer, one 4,000 ampere 480-volt service switchboard and a 2,000-kW uninterruptible power supply (UPS) system.

The IT equipment would have dual cords that would take power from two different capacity groups. The dual cords are designed to evenly draw power from both cords when power is available on both cords, and automatically draw all of its power from a single cord when power becomes un-available on the other cord. Each of the 6-to-make-5 electrical systems would be designed to continue supporting all of the IT equipment load in the data center suite it serves any time one of the six capacity groups is either scheduled to be out-of-service for maintenance or becomes unavailable due to equipment failure. Therefore, the 18 MW of total power equipment capacity installed for each 6-to-make-5 system effectively provides only 15 MW of total power.

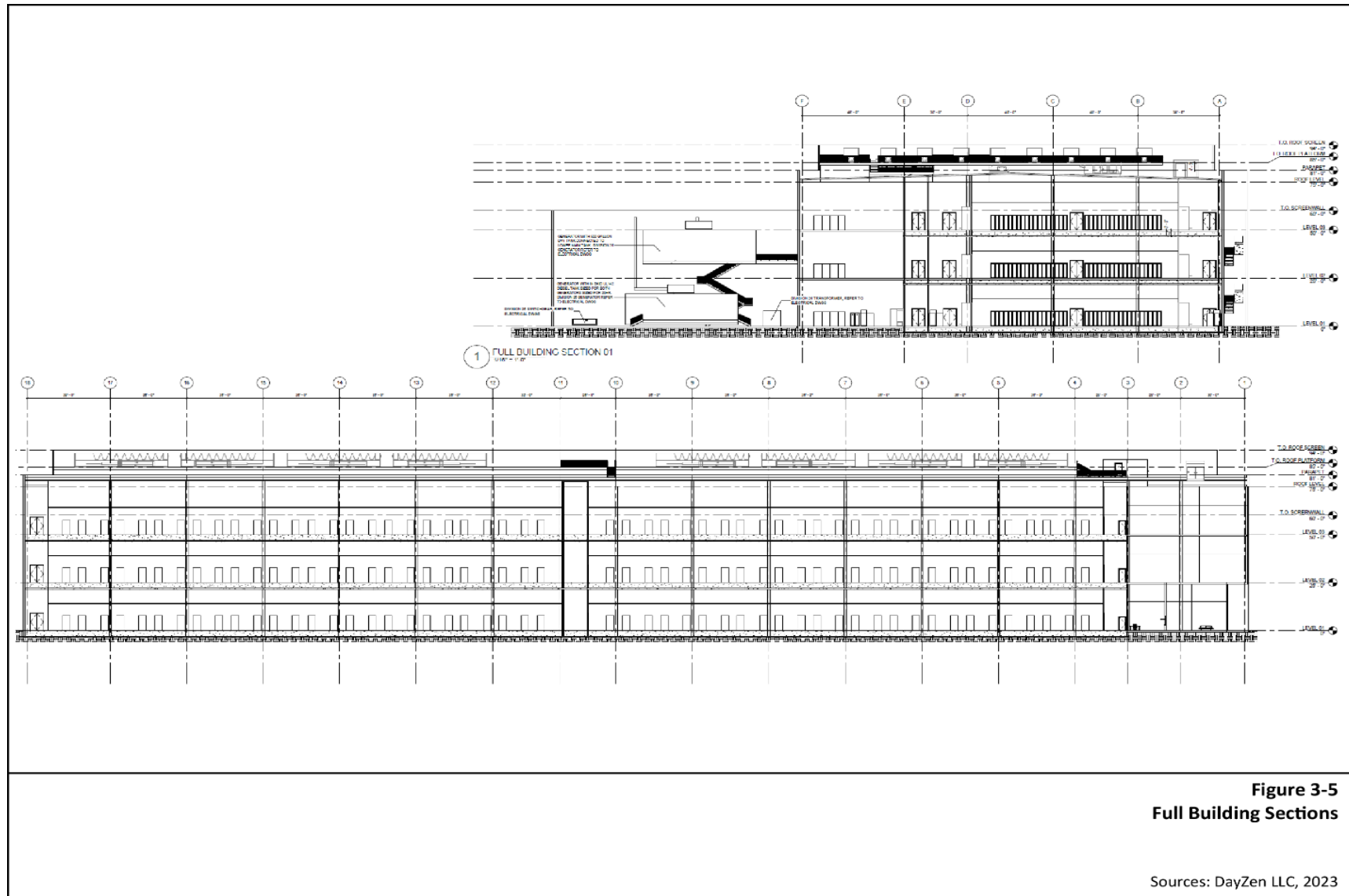
The electrical load on each electrical capacity group is monitored by the building automation system. When any of the electrical capacity groups reach 72 percent loaded (based on 90 percent of the 80 percent maximum loading under normal operation), an alarm is activated in the engineering office. The operations staff would work with the tenants to ensure that the facility power levels are not exceeded. The consequence of electrical capacity groups exceeding 80 percent load could lead to dropping IT equipment when coupled with a capacity group failure event. If all the capacity groups serving a data center suite (six capacity groups) are loaded over 80 percent and an electrical capacity group fails, the resulting load transferring to the five available capacity group would exceed the rating of the capacity groups and would lead to overcurrent protection devices tripping open due to the overload condition. Therefore, it is vital to the reliability of the data center to make sure that all capacity groups remain below the 80 percent threshold.

Generator System Description

Each of the 37 generators would be Cummins Model C3000 D6e standby emergency diesel fired generators equipped with Selective Catalytic Reduction (SCR) equipment and diesel particulate filters (DPF) to comply with Tier 4 emissions standards. The maximum peak generating capacity of each generator is 3 MW for standby applications (short duration operation). Under normal operation with all when all generators are

active, the maximum load on each generator is designed to be 80 percent of the peak capacity. Manufacturer specification sheets and performance data for the proposed generators are provided in Appendix B. Each individual generator would be provided with its own package system. Within that package, the prime mover and alternator would be automatically turned on and off by a Programmable Logic Controller (PLC) located in the 480-volt main switchboard located within the PDH, programmed to manage utility-to-generator power transfer. Each generator would be controlled by a separate, independent transfer controller. The generator would be turned on if the electrical utility power becomes unavailable and would be turned off after utility power has been restored and the transfer controller has returned the utility to the active source of power serving the computer and mechanical loads within the PDH.

The generator package would integrate an SCR and Diesel Exhaust Fluid (DEF) tank. The generators would be constructed in a stacked configuration as shown in Figure 3-5. The bottom generators would be placed on a concrete slab and the upper generators would be supported on a raised structural steel platform. The generators enclosures are approximately 14 feet wide, 56 feet long and 24 feet high. Generators would have stack heights approximately 60 feet above ground level. Each pair of generators would be spaced approximately seven feet apart horizontally. The west end of the generator yard would be partially enclosed with a 60 foot high perforated metal screen to obscure views of the generators.



Fuel System

The backup generators would use renewable diesel as its primary fuel when feasible and ultra-low sulfur diesel as fuel (less than 15 parts per million sulfur by weight) when renewable diesel is not readily available. The bottom generator of each stacked pair would have an approximately 10,400-gallon diesel fuel storage tank to serve both of the generators. The upper generator in the stacked configuration would have a day tank with a storage capacity of approximately 500 gallons. Approximately 9,700 gallons for a stacked pair of generators are required for 24-hour operation. The generators would have a combined diesel fuel storage capacity of approximately 368,600 gallons, which is sufficient to provide more than 24 hours of emergency generation at full electrical worst case demand of the PDH.

Cooling System

Each generator would be air cooled independently as part of its integrated package and therefore there is no common cooling system for the PBGF.

Water Supply and Use

The PBGF would not require any consumption of water.

Grading and construction of the PDH is estimated to utilize 1.75 acre feet of water over the 18 month construction period.

The PDH uses air cooled chillers for cooling needs of the data center. An adiabatic system has been added as an option to reduce compressor use based on weather conditions. **Tables 3-2** through **3-4** present the water and sewer demand for the site.

TABLE 3-2 PROPOSED DOMESTIC WATER DEMAND

Description of Land Use	Domestic Water Demand		
	Average Daily Demand (gpd)	Average Yearly Demand (gpy)	Average Yearly Demand (AFY)
Land Use			
FTE Indoor Demand	196	71,176	0.22
Total Demand	196	71,176	0.22

TABLE 3-3 PROPOSED RECYCLED WATER DEMAND

Description of Land Use	Recycled Water Demand		
	Average Daily Demand (gpd)	Average Yearly Demand (gpy)	Average Yearly Demand (AFY)
Land Use			
Administrative HVAC	19	7,094	0.02
Data Halls	41,177	15,029,638	46.15
FTE Indoor Demand	201	73,502	0.23
Irrigation Demand	17,010	6,208,744	19.07
Total Demand	58,407	21,318,978	65.47

TABLE 3-4 PROPOSED SEWER DEMAND		
Description of Land Use	Sewer Demand	
	Average Daily Demand (gpd)	Average Yearly Demand (gpy)
Land Use		
Administrative HVAC	10	3,582
Data Halls	10,236	3,736,286
FTE Indoor Demand	201	73,502
Total Demand	10,447	3,813,370

Waste Management

The PBGF would not create any waste materials other than minor amounts of solid waste created during construction and maintenance activities.

Hazardous Materials Management

The PDH would prepare a Spill Prevention, Control and Countermeasure Plan (SPCC) to address the storage, use and delivery of diesel fuel for the generators. Each generator unit and its integrated fuel tanks have been designed with double walls. The interstitial space between the walls of each tank is continuously monitored electronically for the existence of liquids. Additionally, the standby generator units are housed within a self-sheltering enclosure that prevents the intrusion of storm water. Diesel fuel would be delivered on an as-needed basis in a compartmentalized tanker truck with maximum capacity of ~17,500 gallons. The tanker truck parks on the access road to the south of the generator yard and extends the fuel fill hose through one of multiple hinged openings in the precast screen wall surrounding the generator equipment yard or via a centralized fueling station with located on the exterior of the precast screen wall. There are no loading/unloading racks or containment for re-fueling events; however, a spill catch basin is located at each fill port for the generators. To prevent a release from entering the storm drain system, storm drains would be temporarily blocked off by the truck driver and/or facility staff during fueling events. Rubber pads or similar devices would be kept in the generation yard to allow quick blockage of the storm sewer drains during fueling events. To further minimize the potential for diesel fuel to come into contact with stormwater, to the extent feasible, fueling operations would be scheduled at times when storm events are improbable. Warning signs and/or wheel chocks would be used in the loading and/or unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed transfer lines. An emergency pump shut-off would be utilized if a pump hose breaks while fueling the tanks. Tanker truck loading and unloading procedures would be posted at the loading and unloading areas. Diesel Exhaust Fluid (DEF) is used as part of the diesel engine combustion process to meet the emissions requirements. Each enclosure would have a 550 gallon DEF gallon tank. Dosing is addressed at each generator within the enclosure.

Site Access and Parking

The overall project site would include one primary entrance from Golf Club Road extension located in the southeastern corner of the site. A secondary emergency entrance would be located in northwestern corner of the site and would connect via easement to West Leland Road. The project would provide a total of 70 parking spaces on site. Sixty-six (66) would be standard spaces, and within those 66, one would be equipped for EV charging, ten would be Electric Vehicle (EV) capable spaces, and one would be EV capable and set up for conversion to being accessible. Of the remaining four stalls, all are accessible, two are van accessible and one of the van accessible stalls would also be equipped for EV charging. The proposed parking plan conforms to City Code and CalGreen Standards.

Landscaping

This project proposes to remove 25 protected trees and 17 dead trees on-site due to various conflicts with proposed civil, architectural, and various site improvements. The City of Pittsburg's landscape ordinance mandates a 4:1 tree replacement ratio with 24-in box trees, for protected trees only.

New landscaping consisting of trees, large and medium shrubs, and groundcovers would be installed along the property boundaries, building perimeters, stormwater treatment facilities, and landscape beds distributed throughout the parking facilities. Trees would be planted five feet away from new or existing water mains or utility lines. The new landscape would include drought tolerant native and non-native trees, shrubs, and groundcovers. New planting would also be tolerant of recycled water. The landscape design would meet the State and City Water Efficient Landscape Ordinance (WELO) requirements for water use. We estimate that the new planting would be approximately 15 percent under the landscape Maximum Water Use for the site as calculated with the WELO formulas.

Stormwater Controls and Features

The San Francisco Bay Regional Water Quality Control Board (RWQCB) has issued the Municipal Regional Stormwater NPDES Permit (MRP) to regulate stormwater discharges from municipalities and local agencies. Under Provision C.3 of the MRP, new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface area are required to implement site design, source control, and Low Impact Development (LID)-based stormwater treatment controls to treat post-construction stormwater runoff. LID-based treatment controls are intended to maintain or restore the site's natural hydrologic functions, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses). Examples of C.3 LID measures include bioretention areas, flowthrough planters, and subsurface infiltration systems. The PDH proposes to construct stormwater treatment areas consisting of LID (Low-Impact Development) bioretention areas and at-grade flow-through planter boxes totaling approximately

31,000 square feet, based on preliminary impervious calculations, sized according to the requirements of the MRP. The stormwater treatment areas would be located around the perimeter of the site, and adjacent to paved parking areas and building. In the existing condition, stormwater discharges the site at two locations, one storm drain lateral located at the north end of the site, and secondly by overland flow from the low point of the site to the parcel to the east. The existing lateral located at the north end of the site would be reused. Given the extension of Golf Club Road, overland discharge from the site cannot be maintained and would be improved with a culvert undercrossing the proposed roadway to transmit flows to the east and match existing hydrology. Downspouts for the roof drainage would connect to storm drains that would route flows either into drainage swales leading to bioretention or directly into bioretention planters. Surface drainage of hardscape such as asphalt drive aisles and parking would be routed to curb cuts and drainage swales that would discharge to bioretention, or into inlets and pipes directly to bioretention.

Flow-through planters and bioretention planters would include perforated underdrains and overflow structures that connect to the on-site storm drains systems.

Utility Interconnections

As part of the construction of the new building, domestic water, recycled water, fire water, sanitary sewer, and fiber connections would be made.

Domestic Water Infrastructure

The site is served by an existing 6" water main on Golf Club Road which is not adequately sized to serve the proposed development. Rather than upsize the existing main in Golf Club Road and interrupt existing residents and the church in the vicinity, the water main located within APN 095-150-032 is proposed to be extended directly to the project site for service. Laterals would provide water service for fire and potable water needs at the building.

Recycled Water Infrastructure

There is a municipal 30-inch existing water main on the project site that feeds a private 1 million gallon storage tank located at the site. The existing storage tank includes an air gap and has back-up connection to domestic water to provide reliable service. A recycled water lateral would be extended from the tank to provide irrigation service and cooling.

Sanitary Sewer Infrastructure

There is an 8-inch water main on the project site, which received flows from the 8-inch main on Golf Club Road and flows to the north, leaving the project site and continuing north. The project would extend the water main south within Golf Club Road and provide service to the project. A service lateral would connect from the proposed data center structure to sewer main within Golf Club Road. Because of existing grading

constraints, a portion of the proposed sewer main extension at the north would be offset from Golf Club Road in an easement to provide for cover and allow gravity service to be maintained, and at south end of Golf Club Road the sewer main would run directly under the Golf Club Roadway.

PHD Project Construction and Operation

Site grading, demolition, excavation, and construction is anticipated to begin in November 2025 through May 2027; a total of approximately 18 months. The peak construction workforce is approximately 150 workers per month with an average of approximately 100 workers per month.

The proposed site grading would involve cut and fill operations utilizing cut material as engineer fill. Based on preliminary grading designs, it is anticipated approximately 29,500 cubic yards of material would be exported from the site. Maximum cut depths are estimated to be 15 feet below existing grade in the western portion of the project site. As recommended in the preliminary geotechnical engineering report contained in Appendix E, the foundation system for the data center building be a cast in place aggregate pier system extending at least 10 feet into underlying formational material. Shallow foundations placed on engineered fill or stable underlying formational material may be used for ancillary support features. The maximum depth below existing grade for any of the drainage facilities (bioretention areas) is 15 feet below existing grade.

PBGF Project Construction

Construction activities for the PDH are expected to begin in 2025. Since the site preparation activities for the PDH would include the ground preparation and grading of the entire PDH site, the only construction activities for the PBGF would involve construction of the generation yard. This would include construction of concrete slabs, fencing, installation of underground and above ground conduit and electrical cabling to interconnect to the PDH Building switchgear, and placement and securing the generators.

The generators themselves would be assembled offsite and delivered to site by truck. Each generator would be placed within the generation yard by a crane. Construction of the generation yard and placement of the generators is expected to take six months and is included in the overall construction schedule for the PDH. Construction personnel for the PBGF are estimated to range from 10 to 15 workers including one crane operator.

PBGF Facility Operation

The backup generators would be run for short periods for testing and maintenance purposes and otherwise would not operate unless there is a disturbance or interruption of the utility supply. Bay Area Air Quality Management District's (BAAQMD) Authority to Construct and the California Air Resources Board's Airborne Toxic Control Measures

(ATCM) limits each engine to no more than 50 hours annually for reliability purposes (i.e., testing and maintenance). Maintenance and testing of each the of generators are anticipated to be once a month. Each generator would be tested individually during monthly and annual testing. Generators would only be run simultaneously during an emergency utility outage. For each generator testing and maintenance would not exceed 34 run hours per year.

3.9 Other Public Agencies Whose Approval is Required

- City of Pittsburg
- Bay Area Air Quality Management District

3.10 Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.31?

On December 18, 2023, the applicant's consultant, ECORP Consulting, Inc. (ECORP), sent letters via certified mail and email to the potentially interested tribes that were identified by the Native American Heritage Commission (NAHC) including:

- Amah Mutsun Tribal Band of Mission Indians San Juan Bautista
- Chicken Ranch Rancheria of Me-Wuk Indians
- Confederated Villages of Lisjan Nation
- Guidiville Rancheria of California
- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the San Fransico Bay Area
- Nashville Enterprise Miwok-Madiu-Nishinam Tribe
- North Valley Yokuts Tribe
- The Ohlone Indian Tribe
- Wilton Rancheria

Andrew Galvan of the Ohlone Indian Tribe responded on December 18, 2023, and requested the results and list of contacts provided by the NAHC. ECORP responded and forwarded the results on December 19, 2023. On January 11, 2024, the Confederated Villages of Lisjan Nation responded requesting a copy of the records search results, EIR, and results of the sacred land file (SLF) search. ECORP replied with a copy of the SLF and record search results on January 15, 2024, and informed the Lisjan Nation that their request would be included in the cultural resources report and continued consultation would be under AB 52 conducted by the lead agency. ECORP has not received any other responses from the potentially interested tribes.

Additionally, consistent with the CEC's tribal consultation policy (CEC 2024), CEC staff contacted the NAHC on April 16, 2024, to request a search of the SLF and a list of California Native American tribes that might be interested in the proposed project. The Native American contacts list differed from the one sent to ECORP the previous year. The list included six additional tribes and excluded two:

- Buena Vista Rancheria of Me-Wuk Indians
- Calaveras Band of Me-Wuk Indians
- California Valley Miwok Tribe
- Chicken Ranch Rancheria of Me-Wuk Indians
- Confederated Villages of Lisjan Nation
- Guidiville Rancheria of California
- Ione Band of Miwok Indians
- Jackson Rancheria Band of Miwuk Indians
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- Northern Valley Yokut/Ohlone Tribe
- Pakan'yani Maidu of Strawberry Valley Rancheria
- The Ohlone Indian Tribe
- Wilton Rancheria

On December 11, 2024, the CEC sent formal consultation request letters via certified mail to the tribes identified by the NAHC. Vanesa Kremer of Wilton Rancheria responded by e-mail on January 13, 2025, confirming that the project is in Wilton's ancestral territory; however, they currently have no concerns with the project. The CEC responded back on January 13, 2025, stating that they will keep Wilton Rancheria updated if there are any changes to the project or if any cultural materials are encountered.

On January 23, 2025, e-mail copies of the letters were sent to the remaining tribes that had not yet responded. Additionally, on January 24, 2025, letters were e-mailed to the two tribes that did not appear on the CEC's contact list. On January 23, 2025, Buena Vista Rancheria of Me-Wuk Indians responded via e-mail informing the CEC about a change in leadership. On January 24, 2025, a representative of the Confederated Villages of Lisjan Nation responded via e-mail requesting consultation. They also asked for copies of all cultural reports, the records search results, and results of the SLF search. The CEC responded via e-mail on January 24, 2025, acknowledging their request to consult. On January 26, 2025, a representative of the Muwekma Ohlone Tribe of the San Francisco Bay Area e-mailed with interest in consultation and offering

monitoring services if needed. The CEC replied via e-mail on January 27, 2025, letting the tribe know we received and acknowledged their desire to consult. On January 27, 2025, a representative of the Northern Valley Yokut/Ohlone Tribe indicated it would like to consult and schedule a meeting to discuss the project. The CEC responded with an e-mail on January 30, 2025, acknowledging the tribe's desire to consult and requesting dates and times for a meeting. On January 27, 2025, a representative from the Amah Mutsun Tribal Band of San Juan Bautista indicated the tribe's interest in the project and provided recommendations. The CEC responded with an e-mail on January 30, 2025, acknowledging their interest in consulting on the project. Please refer to **Section 5.5, Cultural and Tribal Cultural Resources** for additional details regarding tribal consultation.

3.11 References

- CEC 2024 – California Energy Commission (CEC). *Tribal Consultation Policy*. CEC-130-2024-001. Sacramento, CA, February 2024.
- City of Pittsburg 2024a – City of Pittsburg (City of Pittsburg). City of Pittsburg City Council/Agency Concurrent Meeting Minutes. Dated May 6, 2024. Available online at: <https://www.pittsburgca.gov/services/city-clerk/agendas-minutes>
- City of Pittsburg 2024b – City of Pittsburg (City of Pittsburg). City of Pittsburg City Council/Agency Concurrent Meeting Minutes. Dated November 4, 2024. Available online at: <https://www.pittsburgca.gov/services/city-clerk/agendas-minutes>
- City of Pittsburg 2024c – City of Pittsburg (City of Pittsburg). Pittsburg 2040 General Plan. Adopted May 6, 2024. Available online at: <https://www.pittsburgca.gov/services/community-development/planning/advanced-planning-special-projects/general-plan-update>
- City of Pittsburg 2024d – City of Pittsburg (City of Pittsburg). Pittsburg Technology Park Specific Plan. Adopted November 4, 2024. Available online at: <https://www.pittsburgca.gov/services/community-development/planning/advanced-planning-special-projects/pittsburg-technology-park-specific-plan-project>
- City of Pittsburg 2025 – City of Pittsburg (City of Pittsburg). Engage Pittsburg Forum: Future Use of the 175 Acre Golf Course Footprint. Accessed on March 12, 2025. Available online at: https://communityfeedback.opengov.com/portals/pittsburgca/Issue_6153
- DayZenLLC 2024 – DayZenLLC (DayZenLLC). TN 254728. Application for Small Power Plant Exemption Pittsburg Backup Generating Facility. Dated February 29, 2024. Available online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>
- DayZenLLC 2025a – DayZenLLC (DayZenLLC). TN 261064. AVAIO Responses to CEC Data Request Set 2 – PBGF – Part I of II. Dated January 13, 2025. Available

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Available online at:

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DayZenLLC 2024 – DayZenLLC (DayZenLLC). TN 254728. Application for Small Power Plant Exemption Pittsburg Backup Generating Facility. Dated February 29, 2024.

Available online at:

<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>

Section 4

Environmental Determination

4 Environmental Determination

4.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, with some involving at least one impact that is a "Potentially Significant Impact" and requiring implementation of mitigation as indicated by the checklist on the following pages.

- | | | |
|---|--|---|
| ☐ Aesthetics | ☐ Agriculture & Forestry Resources | ☒ Air Quality |
| ☒ Biological Resources | ☒ Cultural & Tribal Cultural Resources | ☐ Energy & Energy Resources |
| ☒ Geology & Soils | ☒ Greenhouse Gas Emissions | ☒ Hazards & Hazardous Materials |
| ☒ Hydrology & Water Quality | ☐ Land Use & Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population & Housing | ☐ Public Services |
| ☐ Recreation | ☐ Transportation | ☐ Utilities & Service Systems |
| ☐ Wildfire | ☒ Mandatory Findings of Significance | |

4.2 Environmental Determination

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the proposed project may have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An

ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.

Dian Vorters

Date: October 14, 2025

Dian Vorters, Deputy Director
Siting, Transmission and Environmental Protection Division
California Energy Commission

Section 5

CEQA Checklist

5.1 Aesthetics

This section describes the environmental setting and regulatory background and discusses impacts pertaining to aesthetics associated with the construction and operation of the project

AESTHETICS				
Except as provided in Public Resources Code Section 21099 would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Environmental checklist established by CEQA Guidelines, Appendix G, aesthetics.

5.1.1 Environmental Setting

Regional Setting

The City of Pittsburg, California, lies within Contra Costa County, which is nestled in the northern portion of the San Francisco Bay Area's East Bay region. Originally settled in 1839 as Rancho Los Méganos, Pittsburg was incorporated as a city on June 25, 1895. The city has an area of 19.15 square miles and has a population of over 74,000 residents (Pittsburg 2025).

Project Site

The proposed Pittsburg Data Hub (PDH) site encompasses approximately 22.31 acres and is located at 2232 Gold Club Road, Pittsburg, California. The City of Pittsburg zoning designation for the project site is Planned Development (PD), and the project site is located within the Pittsburg Technology Park Specific Plan and is adjacent to Park and Low-Density Zones.

The site is currently part of the abandoned Delta View Golf Course. In 2018, the site ceased being used as a golf course. The only structures on site include a water storage tank and an associated one-story building located in the southeastern corner of the site. These structures will remain on site. Other golf course buildings that were located near the northeastern corner of the site were demolished by the City prior to AVAIO's acquisition of the land, although associated foundations and concrete slabs remain.

The project's main and secondary entrance to the site will be located off the extension of Golf Club Road at the northeastern corner of the property. An additional emergency entrance will be located in the northwest corner of the property via an easement which will connect with West Leland Road.

Site vegetation consists of mustard seed and other weeds for most of the abandoned fairways, greens, beaches and ponds.

Existing Conditions on Site

As discussed in Section 5.1 Existing Site Description, the approximately 22.31-acre site is currently part of the abandoned Delta View Golf Course. The general visual character of the project site can be seen in the photographs included in the AVAIO Responses to CEC Data Request Set 2 – PBGF – Part II of II (Attachment DR VIS-4 Photo Simulations, TN 261065) The project is within an urbanized area.

Surrounding Land Use

The property is irregularly shaped and is generally bound to the north by West Leland Road and existing residential development, to the east by an existing PG&E transmission easement, and to the south and west by the Contra Costa Canal.

The area to the north and east of the project site consists primarily of residential land uses. The area to the south and west of the project site consists of the remainder of the abandoned golf course. The nearest residence is located to the north approximately 400 feet from the project boundary.

Regulatory Background

Federal

No federal regulations related to aesthetics/visual resources are applicable to the proposed project and project site.

State

California Scenic Highway Program. The California Scenic Highway Program was established by the Legislature as Article 2.5 (commencing with section 260) of the Streets and Highways Code. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. Section 263 of the Streets and Highways Code, the "State Scenic Highway

System List,” provides a list of highways that have been either officially designated or are eligible for designation as a state scenic highway. Review of the list shows the project site is not along a designated state scenic highway; however, a segment of State Route (SR) 24 from the east portal of the Caldecott Tunnel to SR 680 near Walnut Creek is listed as a Designated Scenic Highway. The project site is not visible from this section of SR 24.

Local

The only governmental agency with regulatory authority applicable to aesthetics and visual resources for the project would be the City of Pittsburg. Compliance with the City of Pittsburg requirements will be ensured through its design review process.

Pittsburg 2040 General Plan. On May 6, 2024, the City Council adopted a comprehensive update to the City of Pittsburg 2040 General Plan (General Plan). The General Plan delineates the City into 16 planning subareas, with the project site located in the West Leland Subarea. The updated General Plan revised the land use designations for the West Leland Subarea to change 112.5 acres of Open Space to Employment Center Industrial (ECI), and the 22.31-acre project site is located within this ECI designation (Pittsburg 2024a). The General Plan Land Use Element identifies a data center as an allowable use within an ECI designation (Pittsburg 2024a). The Economic Development Element further identifies the ECI designation as an employment and revenue-generating opportunity site (City of Pittsburg 2024a).

The following General Plan policies are applicable to the project:

- 2-P-4.10: Ensure that employment-generating development, such as industrial, warehouse, distribution, logistics, and fulfillment projects, does not result in adverse impacts (including health risks and nuisances), particularly to residential uses and other sensitive receptors, including impacts related to the location and scale of buildings, lighting, noise, smell, and other environmental and environmental justice considerations. When development is incompatible, require adequate buffers and/or architectural consideration to protect residential areas, developed or undeveloped, from intrusion of nonresidential activities that may degrade the quality of life in such residential areas.
- 10-P-5.4: Preserve significant visual resources that include unique landforms (e.g., skyline ridges, intermediate ridges, hilltops, and rock outcroppings), creeks, lakes, and open space areas in a natural state, to the extent possible.
- 10-P-5.5: Require new development to avoid obstructing views of, and to minimize impacts to, significant visual resources through the following: creative site planning; integration of natural features into the project; appropriate scale, materials, and design to complement the surrounding natural landscape; clustering of development to preserve open space vistas and natural features; minimal disturbance of topography; and creation of contiguous open space networks.

- 10-P-5.6: Ensure that the visibility of new development from natural features and open space areas is minimized to preserve the landforms and ridgelines that provide a natural backdrop to the open space systems.

Pittsburg Technology Park Specific Plan. On November 4, 2024, the City Council adopted the Pittsburg Technology Park Specific Plan, which establishes development standards for a 76.38-acre area located within a portion of the former Delta View Golf Course (City of Pittsburg 2024b). The 22.31-acre project site is located within the Specific Plan area. The intent of the Specific Plan is to support the development of industrial, office, and technology park uses. A data center is identified as permitted land use within the Specific Plan.

Concurrent with the adoption of the Specific Plan, the City Council changed the zoning of the Specific Plan area to a PD district (City of Pittsburg 2024b). The following development standards apply to projects within this PD district:

- Minimum lot area: 5,000 square feet
- Minimum lot width: 70 feet
- Maximum height of structure(s): 99 feet (Height shall be calculated from the proposed finished grade to top of roof membrane. This excludes screening and architectural facades, i.e., parapet)
- Maximum lot coverage: 60%
- Maximum floor area ratio (FAR): 0.5
- Minimum site landscaping: 7%

Contra Costa County General Plan. The Contra Costa County General Plan identifies scenic resources in the region that include scenic ridges, hillsides, and rock outcroppings and the San Francisco Bay/Delta estuary system. The project site is not identified as a scenic resource. The Contra Costa County General Plan identifies several scenic ridges and scenic waterways within the County. The closest identified scenic ridge is located approximately 3 miles south of the project site and it sits approximately 500 to 800 feet above the project site elevation; and therefore, the project would not impede views in the limited areas the ridge may be visible from surrounding properties. The Sacramento River is located approximately 2 miles north of the project site and is identified in the Contra Costa General Plan as a scenic waterway but is not visible from the project site.

Contra Costa County Municipal Code. The following Contra Costa County Municipal Codes are applicable to the project:

- Section 88-30.608 - Visibility

A commercial solar energy facility that is visible from any public right-of-way or other public space must be designed and installed to minimize visual and aesthetic impacts to the greatest extent feasible.

- Section 816-2.204 - Purpose and intent

The purposes of this chapter are to establish the right of a property owner to seek the restoration of views and sunlight that existed when the property owner purchased their property, and to establish a process by which property owners may seek restoration of these views and sunlight when they are unreasonably obstructed by the growth of trees on another property. This chapter establishes factors to be considered in determining appropriate actions to restore views or sunlight. This chapter acknowledges that trees and views, and the benefits derived from each, may come into conflict. This chapter provides a method for resolving these conflicts so as to provide a reasonable balance between tree-related values and view-related values.

- Section 816-2.206 - Objectives

One of the objectives and the justification for this chapter is to preserve and promote the aesthetic benefits provided by trees, views of surrounding locale, and access to light.

5.1.2 Environmental Impacts

For purposes of analyzing potential Aesthetic related impacts, it is not necessary or prudent to separate the potential impacts of the Pittsburg Backup Generating Facility (PBGF) and the PDH. Therefore, the following analysis uses the term "Project" which encompasses both construction and operation of the PBGF, the PDH and all related ancillary facilities.

a. Would the project have a substantial adverse effect on a scenic vista?

Construction and Operation

No Impact. There are no scenic vistas within the project area. The project, therefore, would not have a substantial adverse effect on a scenic vista.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Construction and Operation

No Impact. The site is not visible from a scenic highway. The project would not substantially damage scenic resources within a state scenic highway.

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an

urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Construction and Operation

Less Than Significant Impact. The project is in an urbanized area¹. The project does not conflict with any of the City of Pittsburg General Plan 2040 policies governing scenic quality because those policies apply to projects within designated viewsheds or ridgelines and hillside developments. The project is not within either designation nor is it a hillside development. In addition, the project site is an abandoned golf course and has no unique natural topographic rock outcropping or mature creeks. An arborist survey (see Appendix C of the SPPE application; TN 254729) was conducted for the project site, which concluded that the site also does not support any mature trees that can or should be preserved. The City adopted a Specific Plan for the project site and property to the north which authorizes development of a technology park on additional abandoned golf course property. The City will also have ultimate land use approval authority over the PDH and PBGF, should the Commission grant the SPPE, further ensuring the project complies with any of its requirements to protect scenic resources. **Figure 5.1-1** depicts an architectural rendering of the proposed project.

Staff concludes the construction and operation of the project would not conflict with applicable zoning and other regulations governing scenic quality in an urbanized area. The project would have a less than significant impact on the environment.

1 An "urbanized area" includes an incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons. (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons." (Pub. Res. Code § 21071[a]). The City of Pittsburg has over 74,000 residents and the contiguous City of Antioch has a population of over 100,000 residents (Antioch 2025).



Figure 5.1-1
Architectural Rendering

Sources: AVAIO Responses to CEC Data Request Set 2 – PBGF – Part II of II
(Attachment DR VIS-4 Photo Simulations, TN 261065)

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Construction and Operation

Less Than Significant Impact. Chapter 18 (Zoning) of Pittsburg Municipal Code, includes requirements for lighting and glass installation with the intent of minimizing the effects of lighting and glare.

Section 18.82.030, Glare, states:

- a) From Glass. Mirror or highly reflective glass may not cover more than 20 percent of a building surface visible from a street unless an applicant submits information demonstrating to the satisfaction of the city planner that use of such glass will not significantly increase glare visible from an adjacent street and property or pose a hazard for moving vehicles.
- b) From Outdoor Lighting. Parking lot lighting must comply with Pittsburg Municipal Code 18.78.050(F). Security lighting may be indirect or diffused, or be shielded or directed away from an R district within 100 feet. Lighting for outdoor court or field games within 300 feet of an R district requires approval of a use permit. The project is not incorporating large glass panels that would significantly increase glare.

The project includes pole mounted site light fixtures along the site perimeter, as well as along the perimeter of the PBGF utility yard, and outdoor security lighting along the PDH building and driveway entrances. Security lighting will be indirect and diffused, and parking lot lighting will comply with Pittsburg Municipal Code 18.78.05(F).

Building materials and lighting plans would be reviewed by the City through its Development Review process for issuance of building permits to ensure that the project would not create a substantial new source of light or glare. The project, therefore, would not create a new source of substantial light or glare, nor would it adversely affect day or nighttime views in the area.

5.1.3 Mitigation Measures

None required.

5.1.4 References

Antioch 2025 – Antioch California Website. Accessed online at:
https://www.antiochca.gov/?page_id=4652

Contra Costa County General Plan 2045. Available online at:
<https://www.contracosta.ca.gov/4732/General-Plan>

Contra Costa County Municipal Code. Available online at:
<https://www.contracosta.ca.gov/1210/Codes-Ordinances>

DayZenLLC 2024a – DayZenLLC (TN 254728). AVAIO SPPE Application Main Application and Appendix A - PBGF - Part I, dated February 29, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>

DayZenLLC 2024b – DayZenLLC (TN 254729). AVAIO SPPE Application Appendices B and C - PBGF - Part II, dated February 29, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>

DayZenLLC 2024c – DayZenLLC (TN 254730). AVAIO SPPE Application Appendices D through F - PBGF - Part III, dated February 29, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>

Pittsburg 2025 – Pittsburg California Website. Accessed online at: <https://www.pittsburgca.gov/services/economic-development>

Pittsburg 2024a – Pittsburg General Plan 2040, (Post Date 05/06/2024) Available online at: <https://www.pittsburgca.gov/services/community-development/planning/advanced-planning-special-projects/general-plan-update>

Pittsburg 2024b – Pittsburg Municipal Code Available online at: <https://www.pittsburgca.gov/how-do-i/get-building-permit-zoning-info/pittsburg-municipal-code>

5.2 Agriculture and Forestry Resources

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to agriculture and forestry resources.

AGRICULTURE AND FORESTRY RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental checklist established by CEQA Guidelines, Appendix G, Agriculture and Forestry Resources

5.2.1 Environmental Setting

The proposed Pittsburg Data Hub including the Pittsburg Backup Generating Facility (project) would be located within an urbanized area of the City of Pittsburg, within the Pittsburg Technology Park Specific Plan area. The project site is currently undeveloped and was formerly part of the Delta View Golf Course, which ceased operations in 2018. Surrounding land uses include medium-density residential development to the north at the southern edge of the city, additional open space supporting the PG&E transmission line corridor to the east, and additional portions of the former golf course to the south and west, which remain undeveloped as of 2024.

Regulatory Background

Federal

No federal regulations relating to agriculture and forestry resources apply to the proposed project.

State

Farmland Mapping and Monitoring Program. The California Department of Conservation (DOC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982 to assess the location, quantity, and quality of agricultural lands and conversion of those lands to other uses. The FMMP identifies and maps agricultural lands as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. The FMMP Important Farmland Map shows that the project site is classified as Urban and Built-Up Land and does not include Important Farmland (DOC 2022a).

Williamson Act. The California Land Conservation Act of 1965, or Williamson Act, is the principal method for encouraging the preservation of agricultural lands in California (Gov. Code, § 51200 et seq.). It enables local governments to enter into contracts with private landowners who agree to maintain specified parcels of land in agricultural or related open space use in exchange for tax benefits. The project site is not subject to a Williamson Act contract, and there are no lands near the project site that are enrolled in a Williamson Act contract (DOC 2022b).

Local

City of Pittsburg 2040 General Plan and Zoning Ordinance. The City of Pittsburg 2040 General Plan shows that the project site is within an area designated as Employment Center Industrial (ECI) in the Pittsburg 2040 General Plan and zoned as Planned Development (PD) (City of Pittsburg 2024a, 2024b). The project site does not include any parcels that are zoned for agricultural use (City of Pittsburg 2024b).

5.2.2 Environmental Impacts

- a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?**

Construction and Operation

No Impact. The project site is classified as “Urban and Built-Up Land” by the DOC’s FMMP. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is present within the project area (DOC 2022a). Furthermore, there is no DOC-designated Farmland adjacent to the project site that could be indirectly affected by project

construction or operation activities. The project would not result in the conversion of Farmland to non-agricultural use.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Construction and Operation

No Impact. The project site is located within an area designated for industrial development under the City of Pittsburg's General Plan and Zoning Ordinance (City of Pittsburg 2024a). It is not zoned for agricultural use, nor is it subject to a Williamson Act contract (DOC 2022b). Both construction and operational activities would take place within the project site. Consequently, the project would not contribute to any conflicts with agricultural zoning or Williamson Act contracts.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Construction and Operation

No Impact. The project site is located within the Pittsburg Technology Park Specific Plan area, which is designated for industrial development under the City of Pittsburg's General Plan (City of Pittsburg 2024a). The site is zoned PD and is not identified as forest land (per PRC §12220(g)), timberland (per PRC §4526), or a Timberland Production Zone (TPZ) (per Gov. Code §51104(g)). Furthermore, the City's General Plan and zoning maps confirm that there is no forest land, timberland, or TPZ designations within or adjacent to the project area (City of Pittsburg 2024a). Both construction and operational activities would occur within the project site. Therefore, the project would have no impact related to conflicts with zoning for forest land, timberland, or a TPZ.

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Construction and Operation

No Impact. The project site is located within an urbanized area of the City of Pittsburg and is designated for industrial development under the City's General Plan (City of Pittsburg 2024a). The site is not classified as forest land as defined by relevant State code (PRC §12220(g)), and there are no forest land designations adjacent to the project area. Both construction and operational activities would occur within the project

site. Therefore, the project would have no impact related to the loss or conversion of forest land.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Construction and Operation

No Impact. The project site is located within an urbanized area of the City of Pittsburg, designated as ECI in the Pittsburg 2040 General Plan and zoned as PD (City of Pittsburg 2024a, 2024b). The site does not contain Important Farmland or designated forest land, and there is no Important Farmland or forest land adjacent to the project area. Both construction and operational activities would occur within the project site. Therefore, the project would have no impact related to the loss or conversion of Farmland or forest land.

5.2.3 Mitigation Measures

None required.

5.2.4 References

- City of Pittsburg 2024a – City of Pittsburg (City of Pittsburg). City of Pittsburg 2040 General Plan. Adopted April 25, 2024. Available online at: <https://www.pittsburgca.gov/home/showpublisheddocument/16189/638499779715030000>
- City of Pittsburg 2024b – City of Pittsburg (City of Pittsburg). City of Pittsburg City Council/Agency Concurrent Meeting Minutes. Dated November 4, 2024. Available online at: <https://www.pittsburgca.gov/services/city-council/streaming-media>
- DOC 2022a – California Department of Conservation (DOC). California Important Farmland Finder. 2022. Accessed on January 29, 2025. Available online at: <https://maps.conservation.ca.gov/DLRP/CIFF/>
- DOC 2022b – California Department of Conservation (DOC). California Williamson Act Enrollment Finder. 2022. Accessed on January 29, 2025. Available online at: <https://maps.conservation.ca.gov/dlrp/WilliamsonAct/>

5.3 Air Quality

This section describes the environmental setting and regulatory background and discusses impacts specific to air quality associated with the demolition/construction, readiness testing and maintenance, and the potential for emergency operation of the Pittsburg Data Hub (PDH) and the associated Pittsburg Backup Generating Facility (PBGF), known together as the project.

AIR QUALITY				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Environmental checklist established by CEQA Guidelines, Appendix G, air quality.

5.3.1 Environmental Setting

The proposed project would be located at 2232 Gold Club Road, Pittsburg, California, in Contra Costa County in the San Francisco Bay Area Air Basin (SFBAAB), under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The air quality in the SFBAAB is generally better compared to other developed regions in California, such as the South Coast, San Joaquin Valley, and Sacramento air basin areas. This is largely due to the cooler temperatures and regional air flow patterns that help transport pollutants out of the basin. Despite air quality improvements, the SFBAAB still experiences violations and exceedances of state ozone and particulate matter (PM) standards, which pose ongoing challenges for the CARB and local air districts (CARB 2013).

The project area's proximity to both the Pacific Ocean and the San Francisco Bay has a moderating influence on the climate. This portion of the SFBAAB includes the Carquinez Strait that creates the only sea-level gap between the San Francisco Bay and the Central Valley. This subregion includes the lowlands bordering the strait and includes

the area adjoining Suisun Bay and the western part of the Sacramento-San Joaquin Delta. Prevailing winds are from the west in the Carquinez Strait. During the summer and fall months, high pressure offshore coupled with low pressure in the Central Valley causes marine air to flow eastward through the Carquinez Strait (BAAQMD 2017b).

Air pollutants can cause health problems, especially for children, the elderly, and people with heart or lung problems. Healthy adults may experience symptoms during periods of intense exercise. Pollutants can also cause damage to vegetation, animals, and property.

Staff analyzes two primary types of air emissions: (1) criteria pollutants, which have health-based ambient air quality standards; and (2) toxic air contaminants (TACs), which are identified as potentially harmful even at low levels and have no established safe levels of health-based ambient standards.

Criteria Pollutants

The U.S. Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for several pollutants based on their adverse health effects. The U.S. EPA has set National Ambient Air Quality Standards (NAAQS) for ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), particulate matter less than or equal to 10 microns (PM₁₀), particulate matter less than or equal to 2.5 microns (PM_{2.5}), sulfur dioxide (SO₂), and lead (Pb). These pollutants are commonly referred to as "criteria pollutants." Primary standards were set to protect public health; secondary standards were set to protect public welfare against visibility impairment, damage to animals, crops, vegetation, and buildings. In addition, CARB has established California Ambient Air Quality Standards (CAAQS) for these pollutants, as well as for atmospheric sulfates, visibility reducing particles, hydrogen sulfide (H₂S), and vinyl chloride. California standards are generally stricter than national standards. The SFBAAB is classified as attainment/unclassifiable for CO, NO₂, and SO₂ standards, but nonattainment for ozone, PM₁₀, and PM_{2.5} standards (CARB 2023a). The standards currently in effect in California and relevant to the project are shown in **Table 5.3-1**.

TABLE 5.3-1 NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS				
Pollutant	Averaging Time	California Standards ^a	National Standards ^b	
			Primary	Secondary
Ozone	1-hour	0.09 ppm (180 µg/m ³)	—	Same as Primary Standard
	8-hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	
PM ₁₀	24-hour	50 µg/m ³	150 µg/m ³	Same as Primary Standard
	Annual Mean	20 µg/m ³	—	
PM _{2.5}	24-hour	—	35 µg/m ³	Same as Primary Standard
	Annual Mean	12 µg/m ³	9.0 µg/m ³	15 µg/m ³

TABLE 5.3-1 NATIONAL AND CALIFORNIA AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards ^a	National Standards ^b	
			Primary	Secondary
CO	1-hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	—
	8-hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	—
NO ₂	1-hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³) ^c	—
	Annual Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary Standard
SO ₂ ^d	1-hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)	—
	3-hour	—	—	0.5 ppm (1,300 µg/m ³)
	24-hour	0.04 ppm (105 µg/m ³)	0.14 ppm (for certain areas) ^d	—
	Annual Mean	—	0.030 ppm (for certain areas) ^d	—

Notes: ppm=parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter; "—" = no standard

a California standards for ozone, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded.

b National standards (other than ozone, PM, NO₂ [see note c below], and those based on annual arithmetic mean) are not to be exceeded more than once a year. The 8-hour O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. The 24 hour PM₁₀ standard of 150 µg/m³ is not to be exceeded more than once per year on average over a 3-year period. The 24-hour PM_{2.5} standard is attained when the 3-year average of 98th percentile concentration is less than or equal to 35 µg/m³.

c To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 0.100 ppm.

d On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The previous SO₂ standards (24-hour and annual) will additionally remain in effect in certain areas: (1) any area for which it is not yet 1 year since the effective date of designation under the current (2010) standards, and (2) any area for which an implementation plan providing for attainment of the current (2010) standard has not been submitted and approved and which is designated nonattainment under the previous SO₂ standards or is not meeting the requirements of a SIP call under the previous SO₂ standards (40 CFR 50.4(3)). A SIP call is a U.S. EPA action requiring a state to resubmit all or part of its State Implementation Plan to demonstrate attainment of the required NAAQS.

e National standard of annual PM_{2.5} went into effect as of May 6, 2024 from 12 µg/m³ to 9 µg/m³.

Sources: BAAQMD 2025, U.S. EPA 2025

The ambient air quality conditions in the project area are shown in **Table 5.3-2**.

TABLE 5.3-2 AMBIENT AIR QUALITY MONITORING DATA				
Pollutant	Averaging Time	2021	2022	2023
O ₃ (ppm)	1-hour	0.096	0.079	0.065
	8-hour	0.077	0.062	0.055
PM ₁₀ (µg/m ³)	24-hour	25	24	38
	Annual	20.1	23.1	18.4
PM _{2.5} (µg/m ³)	24-hour (98th percentile)	22	26	23
	Annual	7	7.1	6.3
NO ₂ (ppb)	1-hour (maximum)	29	29	30
	1-hour (98th percentile)	25	26	25
	Annual	5.16	5.14	4.87
CO (ppm)	1-hour	0.9	1.1	1.1
	8-hour	0.8	0.7	0.7
SO ₂ (ppb)	1-hour (maximum)	6.8	13.2	5.5
	1-hour (99th percentile)	6	6	5
	24-hour	1.4	1.7	1.7

Notes: All data from Concord monitoring station 060130002.

Concentrations in bold type are those that exceed the limiting ambient air quality standard.

Sources: CARB 2023b, U.S. EPA 2023

The maximum concentration values listed in **Table 5.3-2** have not been screened to remove values that are designated as exceptional events. Monitoring data with high pollutant concentrations that are the result of exceptional events, such as wildfires, are normally excluded from consideration when assessing a region's attainment status (U.S. EPA 2023).

Health Effects of Criteria Pollutants

Below are descriptions of the health effects of criteria pollutants that are a concern in the regional study area. The California Health and Safety Code Section 39606 requires CARB to adopt ambient air quality standards at levels that adequately protect the health of the public, including infants and children, with an adequate margin of safety.

Ambient air quality standards define clean air (CARB 2025a).

Ozone. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. Ozone is not emitted directly into the atmosphere but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and NO_x, including NO₂. ROG and NO_x are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable atmosphere with strong sunlight.

Ozone can cause the muscles in the airways to constrict, trapping air in the alveoli, potentially leading to wheezing and shortness of breath. Ozone can make it more

difficult to breathe deeply and vigorously; cause shortness of breath and pain when taking a deep breath; cause coughing and sore or scratchy throat; inflame and damage the airways; aggravate lung diseases such as asthma, emphysema, and chronic bronchitis; increase the frequency of asthma attacks; make the lungs more susceptible to infection; continue to damage the lungs even when the symptoms have disappeared; and cause chronic obstructive pulmonary disease. Long-term exposure to ozone is linked to aggravation of asthma and may be one of many causes of asthma development. Long-term exposures to higher concentrations of ozone may also be linked to permanent lung damage, such as abnormal lung development in children. The inhalation of ozone causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms, and exposure to ozone can reduce the volume of air that the lungs breathe in and cause shortness of breath.

People most at risk for adverse health effects from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers. Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure. Studies show that children are no more or less likely to suffer harmful effects than adults; however, children and teens may be more susceptible to ozone and other pollutants because they spend nearly twice as much time outdoors and engaged in vigorous activities compared to adults. Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults and are less likely than adults to notice their own symptoms and avoid harmful exposures.

Particulate Matter. PM₁₀ and PM_{2.5} represent size fractions of particulate matter that can be inhaled into air passages and the lungs and can cause adverse health effects. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain absorbed gases (e.g., chlorides or ammonium) that may be injurious to health. The health effects of particulate matter may include cardiovascular effects, such as cardiac arrhythmias and heart attacks, and respiratory effects, such as asthma attacks and bronchitis. Particulates can also reduce visibility.

Nitrogen Dioxide. Breathing air with a high concentration of NO₂ can irritate airways in the human respiratory system. Such exposures over short periods (as represented by the 1-hour standards) can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms. Longer exposures to elevated concentrations of NO₂ (as represented by the annual standards) may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly are generally at greater risk for the health effects of NO₂. NO_x (includes NO₂ and NO) reacts with other chemicals in the air and sunlight to form both particulate matter and ozone.

Carbon Monoxide. CO is a pollutant that is a product of incomplete combustion and is mostly associated with motor vehicle traffic. High CO concentrations develop primarily

during winter when periods of light winds combine with the formation of ground level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia.

Sulfur Dioxide. SO₂ is produced through the combustion of sulfur or sulfur-containing fuels such as coal. SO₂ is also a precursor to the formation of atmospheric sulfate and particulate matter (PM₁₀ and PM_{2.5}) and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain.

Lead. Lead has a range of adverse neurotoxin health effects and was predominately released into the atmosphere primarily via the combustion of leaded gasoline. The phase-out of leaded gasoline has resulted in decreasing levels of atmospheric lead.

Toxic Air Contaminants

California Health and Safety Code, section 39655, defines a toxic air contaminant (TAC) as "an air pollutant which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health." In addition, substances which have been listed as federal hazardous air pollutants (HAPs) pursuant to 42 U.S.C. section 7412 are included as TACs under the state law pursuant to Health and Safety Code, section 39657 (b). CARB formally identified HAPs in California Code of Regulations, Title 17, section 93001 (OEHHA 2025).

TACs, or air toxics, are different from criteria pollutants such as ground-level ozone, particulate matter, carbon monoxide, nitrogen dioxide, sulfur dioxide, and lead. Criteria air pollutants are regulated using NAAQS and CAAQS, as noted above. However, there are no ambient standards for most TACs, therefore, site-specific health risk assessments (HRAs) are conducted to evaluate whether risks of exposure to TACs create an adverse impact. Specific TACs have known acute, chronic, and cancer health impacts. CARB has identified TACs in California Code of Regulations, Title 17, sections 93000 and 93001. The nearly 200 regulated TACs include asbestos, organic, and inorganic chemical compounds and compound categories, diesel exhaust, and certain metals. The requirements of the Air Toxic "Hot Spots" Information and Assessment Act of 1987 (Health and Saf. Code, §44300 et seq.) apply to facilities that emit these listed TACs above regulated threshold quantities.

Health Effects of TACs

The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. Exposure to TACs can cause serious health effects, including cancer and birth defects. Other adverse health effects can include damage to

the immune system, neurological, reproductive (reduced fertility), development, and respiratory problems (BAAQMD 2023). Numerous other health effects also have been linked to exposure to TACs, including heart disease, Sudden Infant Death Syndrome, respiratory infections in children, lung cancer, and breast cancer (OEHHA 2015).

The primary on-site TAC emission sources for the PBGF would be diesel engines, including engines in vehicles and equipment used during construction and stationary genset engines during readiness testing and maintenance. Diesel exhaust is a complex mixture of thousands of gases and fine particles and contains over 40 substances listed by the U.S. EPA as HAPs and by CARB as TACs. The solid material in diesel exhaust is known as DPM (CARB 2025b).

DPM has been the accepted surrogate for whole diesel exhaust since the late 1990's. CARB identified DPM as the surrogate compound for whole diesel exhaust in its Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant staff report in April 1998 (Appendix III, Part A, Exposure Assessment) (CARB 1998). DPM is primarily composed of aggregates of spherical carbon particles coated with organic and inorganic substances. Diesel exhaust deserves attention mainly because of its ability to induce serious noncancerous effects and its status as a likely human carcinogen. Diesel exhaust is also characterized by CARB as "particulate matter from diesel-fueled engines." The impacts from human exposure would include both short- and long-term health effects. Short-term effects can include increased coughing, labored breathing, chest tightness, wheezing, and eye and nasal irritation. Effects from long-term exposure can include increased coughing, chronic bronchitis, reductions in lung function, and inflammation of the lung. Epidemiological studies strongly suggest a causal relationship between occupational diesel exhaust exposure and lung cancer. Diesel exhaust is listed by the U.S. EPA as "likely to be carcinogenic to humans" (U.S. EPA 2002).

Sensitive Receptors

A valid CEQA analysis will take into consideration a project's impacts on the health of people. (See CEQA Appendix G, environmental checklist criterion "c.") People vary in their relative sensitivity to pollutants. Sensitive receptors are defined as groups of individuals that may be more susceptible to health risks due to chemical exposure. Sensitive individuals, such as infants, the aged, and people with specific illnesses or diseases, are the subpopulations that are more sensitive to the effects of toxic substance exposure. Examples of sensitive receptors include residences, schools and school yards, parks and playgrounds, daycare centers, nursing homes, and medical facilities. Residences could include houses, apartments, and senior living complexes. Medical facilities could include hospitals, convalescent homes, and health clinics. Acute receptor locations may include areas of intermittent public exposure, for example, at playgrounds, sports fields, dog walking areas, outdoor event pavilions (BAAQMD 2023, Appendix E). The potential sensitive receptor locations evaluated in the HRA for the project include (DayZenLLC 2024b, pg. 2):

- Residential dwellings, including apartments, houses, and condominiums.

- Schools, colleges, and universities.
- Daycare centers.
- Hospitals and health clinics.
- Senior-care facilities.

Sensitive Receptors Near the Project

BAAQMD CEQA Guidelines recommends that any proposed project, including the siting of a new TAC emissions source, assess associated community risks and hazards impacts within 1,000 feet of the proposed project and take into account both individual and nearby cumulative sources (that is, proposed project plus existing and foreseeable future projects). Cumulative sources represent the combined total risk values of each individual source within the 1,000-foot evaluation zone. A lead agency should enlarge the 1,000-foot radius on a case-by-case basis if an unusually large source or sources of risk or hazard emissions that may affect a proposed project is beyond the recommended radius (BAAQMD 2023, Appendix E). A detailed discussion of the sensitive receptors near the project is provided under CEQA environmental checklist criterion “c” below.

Overburdened Community

The BAAQMD’s Community Air Risk Evaluation Program (CARE Program) identifies areas where air pollution contributes most to health impacts and where populations are most vulnerable to air pollution.¹ The BAAQMD adopted regulations in 2021 to define Overburdened Communities and to provide greater protection for the communities that face disproportionate environmental or health impacts when BAAQMD permits new or modified stationary sources of air pollution. Overburdened Communities are locations that are especially vulnerable to air pollution impacts due to high background levels of air pollution or other environmental pollution burdens, presence of sensitive populations, and socioeconomic factors that may lead to inadequate health care or other health stressors.

The BAAQMD applies more stringent permitting requirements to protect Overburdened Communities according to BAAQMD Regulation 2, Rules 1 and 5. An Overburdened Community is defined in Regulation 2, Rule 1, Section 243.²

The proposed project would be located within 1,000 feet of an Overburdened Community, as defined in BAAQMD Regulation 2-1-243. As such, the BAAQMD

1Information on the BAAQMD Community Air Risk Evaluation Program is available at: <https://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program>.

2 Overburdened Community: An area located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0, as having an overall CalEnviroScreen score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract (BAAQMD Regulation 2-1-243).

permitting process would limit the project cancer risk to six in one million. This limit would be more stringent than the threshold for cancer risk of ten in one million in the BAAQMD CEQA Guidelines (BAAQMD 2023, Table 3-1). However, as noted in the risk assessment below, staff uses the risk threshold of six in one million to determine if mitigation is necessary for reducing impacts to worker and sensitive (residential) receptors. A hazard and chronic index of 1.0 is the target threshold for all areas, and these thresholds were not revised for Overburdened Communities (BAAQMD Regulation 2-1-243).

Regulatory Background

Federal

Federal Clean Air Act. The federal Clean Air Act (CAA) (42 U.S.C., § 7401 et seq.) establishes the statutory framework for regulation of air quality in the United States. Under the CAA, the U.S. EPA oversees the implementation of federal programs for permitting new and modified stationary sources, controlling TACs, and reducing emissions from motor vehicles and other mobile sources.

Title I (Air Pollution Prevention and Control) of CAA requires establishment of NAAQS, air quality designations, and plan requirements for nonattainment areas. States are required to submit a state implementation plan (SIP) to the U.S. EPA for areas in nonattainment with NAAQS. The SIP must demonstrate how state and local regulatory agencies will institute rules, regulations, and other programs to attain NAAQS. Once approved by the U.S. EPA and published in the Federal Register, the local air district rules contained in the SIP are federally enforceable.

Prevention of Significant Deterioration (PSD) is a federal program for federal attainment areas. The purpose of the federal PSD program is to ensure that attainment areas remain in attainment of NAAQS based upon a proposed facility's annual potential to emit (PTE). If the annual emissions of a proposed project are less than prescribed amounts, a PSD review is not required. The low annual emissions expected for this project indicate that the project is not expected to be subject to PSD, with a final determination made by BAAQMD at the time of permitting subsequent to the CEC determination.

New Source Performance Standard (NSPS) Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Clean Air Act section 111 (42 U.S.C., § 7411) authorizes the U.S. EPA to develop technology-based standards for specific categories of sources. Manufacturers of emergency stationary internal combustion engines (ICE) using diesel fuel must certify that new engines comply with these emission standards (40 C.F.R., § 60.4205). Under NSPS Subpart IIII, owners and operators of emergency engines must limit operation to a maximum of 100 hours per year for maintenance and testing, which allows for some use if necessary, to protect grid reliability; there is no time limit on the use of an emergency stationary ICE in emergency situations (40 C.F.R., § 60.4211(f)). The

project's Tier 4 diesel-fired gensets would be subject to and likely to comply with the requirements in NSPS Subpart IIII.

National Emission Standard for Hazardous Air Pollutants. The CAA, section 112 (42 U.S.C., § 7412) addresses emissions of HAPs. CAA defines HAPs as a variety of substances that pose serious health risks. Direct exposure to HAPs has been shown to cause cancer, reproductive effects or birth defects, damage to the brain and nervous system, and respiratory disorders. Categories of sources that cause HAP emissions are controlled through separate standards under CAA Section 112: National Emission Standards for Hazardous Air Pollutants (NESHAP). These standards are specifically designed to reduce the potency, persistence, or potential bioaccumulation of HAPs. New sources that emit more than 10 tpy of any specified HAP or more than 25 tpy of any combination of HAPs are required to apply Maximum Achievable Control Technology.

Asbestos is a HAP regulated under the NESHAP. The asbestos NESHAP is intended to provide protection from the release of asbestos fibers during activities involving the handling of asbestos. CAA air toxics regulations specify work practices for asbestos to be followed during demolitions and renovations. The regulations require a thorough inspection of the area where the demolition or renovation would occur and advance notification of the appropriate delegated entity. Work practice standards that control asbestos emissions must be implemented, such as removing all asbestos-containing materials (ACM), adequately wetting all regulated ACM, and sealing ACM in leak-tight containers and disposing of the asbestos-containing waste material as expeditiously as practicable.

State

Generally, state law designates local air districts as having primary responsibility for the control of air pollution from all sources other than mobile sources while the control of vehicular air sources is the responsibility of CARB. (Health and Saf. Code, §39002) CARB is also responsible for the state's overall air quality management, including, among other things, establishing CAAQS for criteria pollutants identifying TACs of statewide concern and adopting measures to reduce the emissions of those TACs through airborne toxic control measures (ATCM), and regulating emissions of GHGs.

Air Toxic "Hot Spots" Information and Assessment Act of 1987. The Air Toxic "Hot Spots" Information and Assessment Act of 1987 (Assembly Bill 2588 [Connelly, Statutes of 1987], and codified as Health and Safety Code, § 44300 and the following), identifies TAC hot spots where emissions from specific stationary sources may expose individuals to an elevated risk of adverse health effects, particularly cancer or reproductive harm. Many TACs are also classified as HAPs. AB 2588 requires that a business or other establishment identified as a significant stationary source of toxic emissions provide the affected population with information about the health risks posed by their emissions.

Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines, Emergency Standby Diesel-Fueled Compression Ignition Engines.

Statewide regulations govern the use of and emissions performance standards for emergency standby diesel-fueled engines, including those of the project. As defined in regulation (Cal. Code Regs., tit. 17, §93115.4(a)(29)), an emergency standby engine is, among other possible use, one that provides electrical power during an emergency use and is not the source of primary power at the facility and is not operated to supply power to the electric grid. The corresponding ATCM (Cal. Code Regs., tit. 17, CCR §93115.6) restricts each emergency standby engine to operate no more than 50 hours per year for maintenance and testing purposes. The ATCM establishes no limit on engine operation for emergency use or for emission testing to show compliance with the ATCM's standards.

Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations. CARB has adopted the Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations to minimize the generation of asbestos from earth disturbance or construction activities (Cal. Code Regs., tit.17 § 93105). The Asbestos ATCM applies to any project that would include sites to be disturbed in a geographic ultramafic rock unit area or an area where naturally occurring asbestos, serpentine, or ultramafic rocks are determined to be present. Based upon review of the U.S. Geological Survey map detailing natural occurrence of asbestos in California, naturally occurring asbestos is not expected to be present at the project site (Van Gosen and Clinkenbeard 2011).

Regional

Bay Area 2017 Clean Air Plan. The BAAQMD adopted the Bay Area 2017 Clean Air Plan on April 19, 2017 (BAAQMD 2017a). The 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. The 2017 Clean Air Plan updates the most recent Bay Area ozone plan, the 2010 Clean Air Plan, pursuant to air quality planning requirements defined in state law. The 2017 Clean Air Plan defines an integrated, multi-pollutant control strategy to reduce emissions of particulate matter, TACs, ozone and key ozone precursors, reactive organic gases (ROG) or volatile organic compounds (VOC) and NOx, and greenhouse gas emissions.

BAAQMD California Environmental Quality Act Guidelines. The BAAQMD publishes CEQA Air Quality Guidelines to assist lead agencies in evaluating a project's potential impacts on air quality. The BAAQMD published an updated version of its CEQA Air Quality Guidelines in April 2023 (BAAQMD 2023).

BAAQMD Regulation 2, Rule 2: New Source Review (NSR). This rule applies to all new or modified sources requiring an Authority to Construct permit and/or Permit to Operate. The NSR process requires the applicant to use the Best Available Control Technology (BACT) to control emissions if the source will have the PTE a BAAQMD BACT pollutant in an amount of 10 or more pounds per day (lbs/day). The NSR process

also establishes the requirements to offset emissions increases and to protect the NAAQS.

To prevent sources from worsening regional nonattainment conditions, the NSR rule requires offsets at a 1:1 ratio if more than 10 tpy of NO_x or precursor organic compounds (POC), or more than 100 tpy of PM_{2.5}, PM₁₀, or SO₂, are emitted. If the PTE for NO_x or POC is more than 10 tpy but less than 35 tpy, BAAQMD needs to provide any required offsets at 1:1 ratio from the Small Facility Banking Account in BAAQMD's Emissions Bank. If the PTE for NO_x or POC is 35 tpy or more, the offset ratio increases to 1.15:1, and offsets can no longer be obtained through the Small Facility Banking Account.

On June 3, 2019, the BAAQMD staff issued a policy to protect the Small Facility Banking Account from over-withdrawal by new emergency backup generator sources. The policy provides procedures, applicable to the determination of access to the Small Facility Banking Account only, for calculating a facility's PTE to determine eligibility for emission reduction credits (ERCs) from the Small Facility Banking Account for emergency backup generators (BAAQMD 2019). When determining the PTE for a facility with emergency backup generators, the PTE shall include as a proxy, emissions proportional to emergency operation for 100 hours per year per standby generator, in addition to the permitted limits for readiness testing and maintenance (generally 50 hours/year or less per standby or backup engine). BAAQMD would not allow an owner/operator to accept a permit condition to limit emergency operation to less than 100 hours per year to reduce the source's PTE for purposes of qualifying for the Small Facility Banking Account.

After comparing the PTE calculated to determine the account eligibility threshold, the amount of offsets required would be determined only upon the permitted emissions from readiness testing and maintenance and not the emissions from emergency operation. Emissions offsets represent ongoing emission reductions that continue every year, year after year, in perpetuity. BAAQMD requires the use of offsets to counterbalance increases in regular and predictable emissions, not increases in emissions occurring infrequently when emergency conditions arise. An owner/operator may reduce the hours of readiness testing and maintenance or install emissions controls to achieve a PTE of less than 35 tons per year (BAAQMD 2019).

BAAQMD Regulation 2, Rule 5: New Source Review of Toxic Air

Contaminants. This rule provides for the review of new and modified sources of TAC emissions to evaluate potential public exposure and health risk. Under this rule, a project would be denied an Authority to Construct permit if it exceeds any of the specified risk limits, which are consistent with BAAQMD's recommended project-level thresholds of significance for the CEQA process. With 2021 amendments to this rule, BAAQMD set more stringent health risk limits and public noticing requirements for projects located in areas defined by BAAQMD as an Overburdened Community (BAAQMD Regulation 2-1-243). In or within 1,000 feet of an Overburdened Community, the risk limit is reduced to be more health protective from ten in one million to six in

one million. The BAAQMD would deny a permit for a project exceeding this risk limit. Best Available Control Technology for Toxics (TBACT) would also be required for any new or modified source of TACs where the source has a cancer risk greater than 1.0 in 1 million or a chronic hazard index (HI) greater than 0.20. The specific toxicity values of each TAC for use in an HRA, as identified by California Office of Environmental Health Hazard Assessment (OEHHA), are listed in Table 2-5-1 of BAAQMD Rule 2-5.

BAAQMD Regulation 9, Rule 8: Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines. This rule limits NO_x and CO emissions from stationary internal combustion engines with an output rated by the manufacturer at more than 50 brake horsepower. This regulation (Rule 9-8-231) defines emergency use as “the use of an emergency standby or low usage engine during any of the following:”

- In the event of unforeseeable loss of regular natural gas supply;
- In the event of unforeseeable failure of regular electric power supply;
- Mitigation or prevention of an imminent flood;
- Mitigation of or prevention of an imminent overflow of sewage or waste water;
- Fire or prevention of an imminent fire;
- Failure or imminent failure of a primary motor or source of power, but only for such time as needed to repair or replace the primary motor or source of power; or
- Prevention of the imminent release of hazardous material.

Local

The City of Pittsburg 2040 General Plan (General Plan) includes actions to reduce exposure of the city’s sensitive population to the exposure of air pollution and TACs. The following City of Pittsburg air quality goals, policies, and actions are applicable to the project (City of Pittsburg 2024):

Air Quality Goals

- Goal-10-6: Support Federal, State, and regional efforts to reduce air pollution in order to protect human and environmental health and restore air quality in the area to a more healthful level.

Air Quality Policies

- 10-P-6.2: Ensure that new development is consistent with the energy objectives and targets identified by the City’s Sustainability Plan.
- 10-P-6.6: Reduce the generation of TACs such as ozone, carbon monoxide, lead, and particulate matter to work toward improving air quality and meeting all Federal and State ambient air quality standards.
- 10-P-6.7: Reduce the potential for human discomfort or illness due to local concentrations of toxic contaminants, odors, and dust.

Air Quality Actions

- 2-A-4.b: As part of the City's development review process, continue to ensure that employment-generating projects are designed to minimize conflicts with residential uses, sensitive receptors, and disadvantaged communities. Review of employment-generating projects should ensure that the following design concepts are addressed in projects that abut residential areas, sensitive receptors, or disadvantaged communities:
 - Appropriate building scale and/or siting;
 - Site design and features to protect residential uses and other sensitive receptors, developed or undeveloped, from impacts of non-residential development activities that may cause unwanted nuisances and health risks and to ensure that disadvantaged communities are not exposed to disproportionate environmental or health risks. The site design and features shall be based on best management practices as recommended by CARB, Bay Area Air Quality Management District (BAAQMD), and the California Attorney General [...]
- 2-A-4.c: When industrial projects and other higher intensity use projects, including warehouse projects, fulfillment centers, and other projects that may generate high volumes of truck trips and/or air quality emissions are proposed within 1,000 feet of existing or planned residential uses or other sensitive receptors, the City shall require:
 - (1) The preparation of a Health Risk Assessment (HRA) that meets the standards established by the Office of Environmental Health Hazard Assessment (OEHHA), and BAAQMD. Projects shall not be approved until it can be demonstrated that the project would not result in an exceedance of the established thresholds of significance for public health risks at nearby sensitive receptors; and
 - (2) The implementation of best management practices (BMPs) to reduce pollution exposure to sensitive receptors, particularly diesel particulate matter (DPM). The appropriate BMPs shall be established on a case-by-case basis, will be based on BMPs recommended by CARB, BAAQMD, and the California Attorney General, including the Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act and Good Neighbor Guidelines for Warehouse Distribution Facilities [...]
- 8-A-1.b: Review all development proposals, planning projects, and infrastructure projects to ensure that potential adverse impacts to disadvantaged communities, such as exposure to pollutants, including toxic air contaminants, are not disproportionate, and are reduced to the greatest extent feasible.

Significance Criteria

This air quality evaluation assesses the degree to which the project would potentially cause a significant impact according to the California Environmental Quality Act (CEQA) guidelines. BAAQMD is the local air district responsible for the attainment and maintenance of the federal and state ambient air quality standards and associated

program requirements at the project location. The analysis is based upon the methodologies and related thresholds of significance in the most recent BAAQMD CEQA Guidelines (BAAQMD 2023) to determine the significance of the potential air quality emissions and impacts. These methodologies include qualitative determinations and the quantification of whether project construction or operation, including readiness testing and maintenance, would exceed numeric emissions and health risk thresholds (BAAQMD 2023).

BAAQMD CEQA Guidelines project-level thresholds of significance (“BAAQMD significance thresholds”) for criteria pollutants and precursor pollutants and the health risks of TACs that apply during construction and operation are shown in **Table 5.3-3**. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the Bay Area region’s existing air quality conditions. Staff evaluates project emissions against the BAAQMD significance thresholds under CEQA environmental checklist criterion “b.”

For fugitive dust emissions during construction periods, the BAAQMD CEQA Guidelines do not have a significance threshold. Rather, BAAQMD recommends using a current Best Management Practices (BMPs) approach, which has been a pragmatic and effective approach to the control of fugitive dust emissions.

Staff also evaluates the project’s potential to expose sensitive receptors to substantial pollutant concentrations under CEQA environmental checklist criterion “c.” Staff addresses both the ambient air quality impacts of criteria pollutants, which have health-based standards, and the impacts of TACs, which are identified as potentially harmful even at low levels and have no established safe levels or health-based ambient air quality standards.

The analysis includes ambient air quality impact modeling for construction and operation, which consists of readiness testing and maintenance, of the proposed diesel-fueled gensets to estimate the air quality impacts caused by the emissions. The ambient air quality standards are health protective values, so staff uses these health-based regulatory standards to help define what is considered a substantial pollutant concentration for criteria pollutants.³ Staff’s analysis determines whether the project would be likely to exceed any or contribute substantially to an existing or projected air quality violation, and, if necessary, proposes mitigation to reduce or eliminate these pollutant exceedances or substantial contributions.

³ This approach provides a complete analysis that describes the foreseeable effects of the project in relation to all potential air quality related health impacts, including impacts of criteria pollutants to sensitive receptors; and therefore, addresses the California Supreme Court December 2018 *Sierra Club v. County of Fresno* opinion (<https://www.courts.ca.gov/opinions/archive/S219783A.PDF>).

TABLE 5.3-3 BAAQMD THRESHOLDS OF SIGNIFICANCE

Pollutant	Construction		Operation
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tpy)
ROG/VOC	54	54	10
NOx	54	54	10
PM10	82 (exhaust)	82	15
PM2.5	54 (exhaust)	54	10
PM10/ PM2.5 (fugitive dust)	Best Management Practices **	None	
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)	
Risk and Hazards for New Sources and Receptors (Individual Project)	Same as Operation Threshold	Increased cancer risk >10.0 in one million Increased non-cancer risk of > 1.0 Hazard Index (Chronic or Acute) Ambient PM2.5 increase: > 0.3 µg/m3 annual average OR Compliance with Qualified Community Risk Reduction Plan	
Risk and Hazards for New Sources and Receptors (Cumulative Threshold)	Same as Operation Threshold	Cancer Risk: > 100 in one million (from all local sources) Non-cancer: > 10.0 Hazard Index (Chronic, from all local sources) PM2.5: > 0.8 µg/m3 annual average (from all local sources) OR Compliance with Qualified Community Risk Reduction Plan	

Source: BAAQMD 2023, Table 3-1.

** PM10/PM2.5 (fugitive dust) is also recognized to impact local communities. The Air District strongly recommends implementing all feasible fugitive dust management practices especially when construction projects are located near sensitive communities, including schools, residential areas, or other sensitive land uses.

Significance criteria also include Significant Impact Levels (SILs) for the particulate matter portions of the analysis. Regulatory agencies have traditionally applied SILs as a *de minimis* value, which represents the off-site concentration predicted to result from a source's emissions that does not warrant additional analysis or mitigation. If a source's modeled impacts at any off-site location do not exceed relevant SILs, the source owner would typically not need to assess multi-source or cumulative air quality to determine whether or not that source's emissions would cause or contribute to a violation of the relevant NAAQS or CAAQS. The SFBAAB is classified as nonattainment for PM10 and PM2.5 NAAQS/CAAQS (CARB 2023a). Staff compares the project's contribution to local criteria pollutant concentrations to SILs to determine whether the project's emissions would contribute significantly to those regional exceedances.

BAAQMD does not have significance criteria in terms of PM10 concentrations or 24-hour concentrations of PM2.5. To determine if the project could contribute substantially to

the existing PM₁₀ exceedances, this analysis relies on the United States Environmental Protection Agency (U.S. EPA) PM₁₀ SILs established in federal regulations for non-attainment areas (40 CFR 51.165(b)(2)) for 24-hour impacts (5 µg/m³) and for annual impacts (1 µg/m³). The same federal regulation (40 CFR 51.165(b)(2)) also established the U.S. EPA PM_{2.5} SILs concentrations for 24-hour impacts (1.2 µg/m³).

The BAAQMD significance threshold for a project-level increase in annual PM_{2.5} concentrations is 0.3 micrograms per cubic meter (µg/m³), as shown in **Table 5.3-3**. However, with the revised 2024 annual PM_{2.5} NAAQS of 9.0 µg/m³, the U.S. EPA issued a recommendation to set the PM_{2.5} SIL value for annual impacts at 0.13 µg/m³ (effective May 6, 2024 [U.S. EPA 2024a]). It should be noted that the U.S. EPA SILs values are all based on the forms of the applicable NAAQS. For example, the 24-hour PM_{2.5} SILs of 1.2 µg/m³ is based on the 98th percentile 24-hour concentrations averaged over three years. The annual PM_{2.5} SILs of 0.13 µg/m³ is based on a three-year average of annual average concentrations. For this analysis, staff uses the U.S. EPA SILs as well as the BAAQMD CEQA Guidelines significance threshold to determine project impact significance of PM_{2.5} concentrations.

There are two kinds of thresholds for TACs: cancer risk and non-cancer risk. Cancer risk is expressed as excess cancer cases per one million exposed individuals, typically over a lifetime of exposure. Acute and chronic exposure to non-carcinogens is expressed as a hazard index (HI), which is the ratio of expected exposure levels to acceptable reference exposure levels (REL) for each of the TACs with acute and chronic health effects. The significance thresholds for TACs and PM_{2.5} are listed in **Table 5.3-3** and summarized in the following text (BAAQMD 2023).

The CEQA Guidelines require that the lead agency consider “whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable,” (CEQA Guidelines § 15064(h)(1)). Two sets of thresholds are used by staff in the assessment of: (1) whether the effects of the project are cumulatively considerable; and (2) the significance of the cumulative impact for public health.

The BAAQMD recommends that operational-related TAC and PM_{2.5} emissions generated by a single source would be a significant impact and a cumulatively considerable contribution to local community risk and hazard impacts if emissions would cause impacts or risks that exceed the following thresholds (BAAQMD 2023, pg.5-13 and 5-14):

The project-level threshold addresses the potential for an individual project to significantly elevate existing risks or hazards. A project would have a cumulatively considerable impact if it resulted in:

- An excess cancer risk level of more than 10 in one million; or
- A non-cancer HI greater than 1.0 (acute or chronic); or
- An incremental increase of greater than 0.3 µg/m³ annual average PM_{2.5}.

The cumulative threshold addresses the potential that a project would have a cumulative significant impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot radius (or greater where appropriate) results in:

- An excess lifetime cancer risk level of more than 100 in one million; or
- A non-cancer chronic HI greater than 10.0; or
- An annual average PM_{2.5} greater than 0.8 µg/m³.

Alternatively, a project that demonstrates compliance with an adopted Qualified Community Risk Reduction Plan may be found to have a less than significant impact, even if the above thresholds are met. Conversely, for projects in areas where a Community Risk Reduction Plan has been adopted, inconsistency with the Community Risk Reduction Plan would demonstrate a significant impact.

5.3.2 Environmental Impacts

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

a. **Would the project conflict with or obstruct implementation of the applicable air quality plan?**

Less Than Significant Impact. The applicable air quality plan (AQP) is the Bay Area 2017 Clean Air Plan (BAAQMD 2017a). A project would be consistent with the AQP if that project supports the primary goals of the AQP, includes applicable control measures from the AQP, and does not disrupt or hinder implementation of any AQP control measures (BAAQMD 2023, Chapter 5).

As explained in the discussions under environmental checklist criteria “b” and “c” of this air quality analysis, with the implementation of mitigation measure **AQ-1** and NO_x emissions fully offset through the permitting process with BAAQMD, the project would have less than significant impacts related to the BAAQMD significance thresholds. Since the project emissions comply with the significance thresholds, the project would have a less than significant impact related to the primary goals of the AQP.

The project would also include the implementation of applicable control measures from the AQP. The project-level applicable control measures set forth in the Bay Area 2017 Clean Air Plan include: Decarbonize Electricity Generation (EN1) and Green Buildings (BL1). The project would comply with these control measures through compliance with the City of Pittsburg 2040 General Plan as demonstrated in more detail in **Section 5.8, Greenhouse Gas Emissions**. The project design as proposed would not hinder the implementation of any AQP control measure.

Implementation of AQP control measures in the Bay Area 2017 Clean Air Plan depends on successful management of new or modified stationary sources through the

permitting process, including the NSR program. Staff expects the project to satisfy all applicable air quality requirements, including the provisions of the NSR program, as follows. If BAAQMD determines that NO_x emissions need to be offset, the NO_x emissions of the gensets during readiness testing and maintenance would be fully offset through the permitting process with BAAQMD. Final details regarding the calculation of the facility's PTE and the ultimate NSR permitting requirements under BAAQMD's Regulation 2, Rule 2, would be determined through the permitting process with BAAQMD.

For emergency-use diesel engines with output over 1,000 brake horsepower, BAAQMD updated the definition of BACT in December 2020 to reflect the use of engines achieving Tier 4 exhaust standards (BAAQMD 2020); this requires Tier 4-compliant engines, that may include Tier 2 engines abated by catalyzed diesel particulate filter (DPF) and selective catalytic reduction (SCR). Each of the 37 diesel back-up emergency generators proposed for this project would be equipped with SCR equipment and DPF to achieve compliance with Tier 4 emission standards. Staff expects the proposed generators would meet the current BAAQMD BACT requirements. However, BAAQMD would make the final determination of BACT during the permitting process.

For these reasons, the project would be consistent with the Bay Area 2017 Clean Air Plan and would have a less than significant impact related to implementation of the applicable AQP.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Construction

Less Than Significant with Mitigation Incorporated. Construction of the project facility, which includes the Pittsburg Data Hub (PDH), and the Pittsburg Backup Generating Facility (PBGF) would occur over about 18 months. Construction activities include grading of the entire site, installation of utility services, construction of an on-site substation, construction of the data center building, and paving of the site.

To determine average daily criteria pollutant emissions during construction, emissions from on- and off-road construction sources from each construction phase are added and then averaged over the total number of days of construction. **Table 5.3-4** shows the average daily emissions during construction.

TABLE 5.3-4 CRITERIA POLLUTANT EMISSIONS FROM PROJECT CONSTRUCTION

Construction	ROG/ VOC	NOx	PM10 ^b	PM2.5 ^b
Average Daily Emissions (lbs/day)	14	6	0.09	0.08
BAAQMD Significance Thresholds for Construction-related Average Daily Emissions (lbs/day)	54	54	82	54
Exceeds Threshold?	No	No	No	No

Notes:

a BAAQMD's thresholds are average daily thresholds for construction. Accordingly, the average daily emissions are the total estimated construction emissions averaged over total workdays.

b The average daily PM10 and PM2.5 exhaust emissions are compared to BAAQMD's significance thresholds for exhaust emissions. Fugitive emissions will be controlled with best management practices (BMPs), in accordance with the significance threshold.

Source: DayZenLLC 2024b, Table 7 and CalEEMod results (mitigated).

The average daily emissions shown in **Table 5.3-4** indicate that construction emissions would be lower than the applicable BAAQMD significance thresholds for all criteria pollutants.

BAAQMD has no numerical threshold for fugitive dust generated during construction and instead recommends the control of fugitive dust through BMPs to conclude that impacts from fugitive dust emissions are less than significant (BAAQMD 2023). The applicant proposed measures which include BAAQMD's recommended construction BMPs and exhaust emissions reduction measures. Staff generally concurs with the applicant's proposed measures and recommends its application as mitigation measure **AQ-1**. Mitigation measure **AQ-1** would ensure that PM10 and PM2.5 emissions are reduced to a level that would not result in a considerable increase of these pollutants. This impact would be reduced to less than significant with implementation of mitigation measure **AQ-1**.

Operation

Less Than Significant Impact. Operation emissions would result from diesel fuel combustion from the gensets, off-site vehicle trips for worker commutes and material deliveries, and facility upkeep, such as architectural coatings, consumer product use, landscaping, water use, waste generation, fuel storage and electricity use.

Operational emissions are quantified with the same methods as used by the applicant (DayZenLLC 2024b, Table 18). Electricity from the grid would provide the energy for onsite building heating and cooling, lighting, appliances and electronics; no natural gas use would occur (DayZenLLC 2024b, Table 18). The primary stationary sources are 37 individual gensets; the engines would be fueled on diesel from 37 individual storage tanks for a combined onsite diesel fuel storage capacity of approximately 191,860 gallons (DayZenLLC 2024c, Response to Data Request HAZ-7). Each of these emission sources is described in more detail below.

Stationary Sources – Generator Emissions. The project would include 37 gensets powered by 4,309-hp Cummins QSK95-G9 engines (DayZenLLC 2024b, Tables 10 and

11). Each engine would be equipped with SCR and diesel DPF to achieve compliance with Tier 4 emission standards.

All gensets would be operated for routine maintenance and readiness testing to ensure they would function during an emergency event. During routine readiness testing, criteria pollutants and TACs would be emitted directly from the gensets. Criteria pollutant emissions from generator testing were quantified using information provided by the manufacturer. In estimating the annual emissions, the applicant assumed that testing would occur for no more than 34 hours per year. The Airborne Toxic Control Measure for Stationary Compression Ignition Engines (Cal. Code Regs., tit.17, § 93115) limits testing to 50 hours per year per engine. Maintenance and readiness testing usually occurs at loads ranging from 25 to 100 percent load (DayZenLLC 2024c). When filing this application, emissions estimates were provided for engines operating at 100 percent load and settings at 75, 50, and 25 percent (DayZenLLC 2024b, DayZenLLC 2024c).

The applicant proposes to limit readiness and maintenance testing to single engine testing and cap testing to no more than 34 hours per engine per year (DayZenLLC 2024c, Responses to Data Requests AQ-4). Genset operation for emergency use and emission testing for compliance purposes is not limited. The emission calculations are based on the genset horsepower, hours of operation, and emission factors from Cummins QSK95-G9 Diesel Generator Specification Sheet (DayZenLLC 2024b, Tables 27, 28, 29).

The emission factors for sulfur dioxide (SO₂) are calculated with the assumption that the proposed genset will use ultra-low sulfur diesel fuel which contains 0.0015% sulfur as defined under 40 CFR 80, Subpart I. Per this assumption, the SO₂ emission rate uses load-specific fuel consumption and assumes 15 ppm fuel sulfur content (DayZenLLC 2024b, pg 187).

The applicant agreed that maintenance and readiness testing would occur with the following limitations: (1) enforceable limit on concurrent testing of engines so that only a single engine operates for maintenance and testing at any given time; (2) an enforceable limit that would allow no more than 34 hours per year per engine, for readiness and maintenance testing, (3) during annual generator testing, each single-engine run will begin with 15 minutes of operation at loads no greater than 25 percent to allow sufficient warm up of the SCR; (4) testing would be confined to within the 11-hour period of 7:00 am and 6:00 pm, daily (DayZenLLC 2024b; DayZenLLC 2024c, Responses to Data Requests AQ-2 to AQ-4).

Emergency Operations. Emissions that could occur in the event of a power outage or other disruption, upset, or instability that triggers emergency operations would not occur on a regular or predictable basis. However, the BAAQMD 2019 policy, Calculating Potential to Emit (PTE) for Emergency Backup Power Generators, requires a facility's PTE to be calculated based on emissions proportional to emergency operation for 100 hours per year per engine, in addition to the permitted limits for readiness testing and

maintenance (BAAQMD 2019). Emissions for both the 100 hours per year emergency operation and allowable hours for non-emergency testing and operation would be used to determine the applicability of District permitting regulations, however, the applicant would only be required to offset permitted emissions from readiness testing and maintenance and not the emissions from emergency operation. BAAQMD requires the use of offsets to counterbalance increases in regular and predictable emissions, not increases in emissions occurring infrequently when emergency conditions arise (BAAQMD 2019). The potential ambient air quality impacts of emissions during emergency operations are analyzed qualitatively under CEQA environmental checklist criterion “c” pertaining to pollutant concentrations.

Stationary Sources – Diesel Fuel Storage Tanks. Each stacked pair of the 36 generators would have a 9,800 gallon tank as the base for the bottom generator, and the top unit will have a 570 gallon free standing day tank that will be filled by the lower 48 hour tank. In total, for each generator pair there would be 10,370 gallons of fuel. The emissions from the 570-gallon free standing day tanks were assumed to be de minimis. The applicant estimated the VOC emissions from the 19 diesel storage tanks using U.S. EPA’s recommended methodology for liquid storage tanks. To estimate the annual fuel throughput of each tank, the applicant multiplied the hourly fuel usage rate for the generators at 100 percent load (205 gallons per hour) times the proposed maximum annual hours of operation for the generators (34 hours annually). This assumption would overestimate the annual fuel usage because the applicant anticipates the engines to operate at full load for only a fraction of their use in a given year (DayZenLLC 2024b, Table 18).

Miscellaneous Operational Emissions. Miscellaneous operational emissions would occur from mobile sources, area sources including landscaping maintenance equipment, water treatment and distribution, and wastewater usage. The mobile source emissions include each vehicle trip generated by employees and visitors, for approximately 463 daily vehicle trips (DayZenLLC 2024b, Table 16). Each generator would be air cooled independently, and there would be no common cooling system for the PBGF (DayZenLLC 2024a, pg. 2-7).

The PDH would be cooled with air cooled chillers, which would be sized to carry the full heat load without any water requirement. The air-cooled chillers also would have an optional “adiabatic precooling system”, where water would be sprayed onto the chiller coils, reducing electricity needed for the compressor and fans. When the adiabatic precooling system is used, recycled water would be utilized, however, water filtration would be required (DayZenLLC 2024a, pg. 2-11).

Table 5.3-5 provides the daily criteria pollutant emission estimates for project readiness testing and maintenance using the emissions source assumptions noted above. Additionally, the project’s potential obligations for emission offsets were estimated under BAAQMD Rule 2-2.

TABLE 5.3-5 CRITERIA POLLUTANT AVERAGE DAILY EMISSIONS FROM PROJECT READINESS TESTING AND MAINTENANCE (LBS/DAY)

Source Type	ROG/VOC	NOx	PM10	PM2.5
Architectural Coating	1.4	--	--	--
Consumer Products	10.6	--	--	--
Landscaping	1.7	0.09	0.02	0.01
Building Energy	--	--	--	--
Mobile Emissions	1.5	1.2	2.5	0.64
Diesel Storage Tanks	0.12	--	--	--
Standby Generators (Testing Only)	4.1	16.4	0.65	0.65
Stationary Source Offsets	--	-16.4	--	--
Total Net Emissions (excludes Emergency Use)	19.4	1.2	3.1	1.3
BAAQMD Significance Thresholds	54	54	82	54
Threshold Exceeded?	No	No	No	No

Source: DayZenLLC 2024b; CEC staff analysis.

Notes:

a. The average daily emissions from standby generators reflect 100 percent load and proposed abatement (warmed up) to achieve Tier 4 emissions standards.

Table 5.3-6 provides the annual criteria pollutant emission estimates for project readiness testing and maintenance using the emissions source assumptions noted above.

TABLE 5.3-6 CRITERIA POLLUTANT AVERAGE ANNUAL EMISSIONS FROM PROJECT READINESS TESTING AND MAINTENANCE (TPY)

Source Type	ROG/VOC	NOx	PM10	PM2.5
Architectural Coating	0.25	--	--	--
Consumer Products	1.9	--	--	--
Landscaping	0.31	0.02	0.003	0.003
Building Energy	--	--	--	--
Mobile Emissions	0.27	0.21	0.45	0.12
Diesel Storage Tanks	0.021	--	--	--
Standby Generators (Testing Only)	0.7	3.0	0.12	0.12
Stationary Source Offsets	--	-3.0	--	--
Total Net Emissions (excludes Emergency Use)	3.5	0.23	0.57	0.24
BAAQMD Significance Thresholds	10	10	15	10
Threshold Exceeded?	No	No	No	No

Source: DayZenLLC 2024b; CEC staff analysis.

Notes:

a. The annual non-emergency use of the standby generators, for readiness testing and maintenance would be limited to 34 hours per year per engine.

- b. Per BAAQMD 2019 policy, the assumption of 100 hours per year of annual emergency use of the standby generators determines the applicability of BAAQMD offset banking account eligibility. This assumption is not used to determine the quantity of emission offsets required.
- c. Annual emissions from standby generators reflect 100 percent load and proposed abatement (warmed up) to achieve Tier 4 emissions standards.

Table 5.3-5 and **Table 5.3-6** show that the project would not exceed any of the BAAQMD emissions significance thresholds.

The applicant evaluated the potential obligations for emission offsets by assuming 34 hours of operation for testing and maintenance purposes, plus an additional 100 hours of emergency operation. For the 100 hours of emergency operations (BAAQMD 2019), the applicant estimated the annual NO_x PTE as 12 tpy, which is greater than 10 tpy and less than 35 tpy (DayZenLLC 2024b, Table 11). Therefore, if offsets are required, the offset ratio would be 1:1 with the inclusion of emergency operation and the BAAQMD policy-required 100 hours. The exact amount and the source of the NO_x offsets would be confirmed through the permitting process with BAAQMD.

Annual and average daily rates of NO_x emissions shown in **Table 5.3-5** and **Table 5.3-6** were calculated using full load and fully controlled emission factors. During the BAAQMD's review, different scenarios of emissions calculations may be used assuming partial control to Tier 2 standards or assuming a warmup period before achieving full control to Tier 4 standards. Assuming 15 minutes of warmup with a partial control to Tier 2 standards, and 45 minutes of running with full control to Tier 4 standards, the resulting NO_x emissions would be 12 tpy. As a result, the offset required would be 12 tpy. Different scenarios would change the resulting NO_x emissions and as such could modify the offset requirement accordingly. Nonetheless, the NO_x emissions of the gensets during readiness testing and maintenance would be fully offset through the permitting process with BAAQMD, if BAAQMD determines that offsets are required.

In addition to the criteria air pollutant emissions shown above, ammonia would also be emitted from the urea used in the SCR system. Ammonia is considered a particulate precursor but not a criteria pollutant. Reactive with sulfur and nitrogen compounds, ammonia is common in the atmosphere primarily from natural sources or as a byproduct of tailpipe controls on motor vehicles. Currently, there are no BAAQMD-recommended models or procedures for estimating secondary particulate nitrate or sulfate formation from individual sources, such as the proposed project. BAAQMD CEQA Guidelines do not include a significance threshold for ammonia emissions. The applicant conservatively estimated the ammonia emissions of the project to be 0.26 tpy assuming the SCR is effective for a total of 34 hours per year per engine (DayZenLLC 2024b, Table 12). The primary emissions of particulate matter from this project are well below the BAAQMD significance threshold and do not require additional mitigation or trigger the need for offsets. Therefore, staff expects the secondary particulate matter impacts from ammonia emissions would be less than significant and would not require additional mitigation or offsets.

The project's operations would not result in a net increase of any criteria pollutant exceeding the significance thresholds for individual project level effects. Therefore, the impact of criteria pollutant emissions during operations would be less than significant and would not be cumulatively considerable.

Conclusion

According to the BAAQMD CEQA Guidelines (BAAQMD 2023, Chapter 5.2.1), in developing thresholds of significance for air pollutants (as shown in **Table 5.3-3**), BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions.

Table 5.3-5 and **Table 5.3-6** show that with NOx emissions from the readiness testing and maintenance of the gensets fully offset through the permitting process with BAAQMD, the project would not exceed any of the BAAQMD emissions significance thresholds. The BAAQMD CEQA Guidelines state that, if the project's daily average or annual emissions of operational-related criteria pollutants or precursors do not exceed the identified project-level thresholds of significance, its emissions would not make a cumulatively considerable contribution to the cumulative impact of nonattainment (BAAQMD 2023, Chapter 5). Therefore, **Table 5.3-5** and **Table 5.3-6** show that the project would not be expected to result in a cumulatively considerable net increase of criteria pollutants during the lifetime of the project, including the readiness testing and maintenance of the gensets. Construction impacts would be less than significant with mitigation incorporated, and operational related impacts would be less than significant.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

This section is comprised of separate discussions addressing impacts from criteria pollutants in staff's Air Quality Impact Analysis (AQIA) and impacts from TACs in staff's HRA. Staff's AQIA discusses criteria pollutant impacts from construction and operation. Staff's HRA discusses the results of TACs for both construction and operation (including readiness testing and maintenance) and cumulative sources. Finally, the section also discusses issues associated with potential emergency operations.

Air Quality Impact Analysis for Criteria Pollutants

Construction

Less Than Significant with Mitigation Incorporated. Construction emissions of criteria pollutants are shown in **Table 5.3-4** under criterion "b" of the CEQA environmental checklist. Emissions during project construction would not exceed significance thresholds for construction activities, as established in the BAAQMD CEQA Guidelines. With the implementation of the mitigation measure **AQ-1** to control fugitive dust and exhaust emissions (Section 5.3.3, Mitigation Measures), construction emissions would

not exceed the BAAQMD significance thresholds. Project construction would not expose sensitive receptors to substantial criteria pollutant concentrations, and this impact would be less than significant with mitigation incorporated.

Operation

Readiness Testing and Maintenance Criteria Pollutants

Less Than Significant Impact. The applicant provided an ambient air quality impact analysis to compare worst-case ground-level impacts resulting from the project's readiness testing and maintenance with established state and federal ambient air quality standards. The applicant used the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD [Version 23132]) with regulatory default options, as recommended in U.S. EPA's Guideline on Air Quality Models (Appendix W to 40 CFR Part 51).

The applicant's modeling analysis, described in more detail below, included the standby generator engines, but did not include other minor on-site emissions sources that emit at much lower levels. The applicant's modeling analysis included an ambient air quality impact analysis for readiness testing and maintenance.

Meteorological Data. A representative meteorological data set from the Pittsburg PG&E meteorological station (Site ID 2801) for the three-year period from January 2009 through December 2011 was used. The BAAQMD preprocessed the data with AERMET (Version 18081) for direct use in AERMOD (DayZenLLC 2024b).

Modeling Assumptions. Stack parameters (e.g., stack height, exit temperature, stack diameter, and stack exit velocity) were based on the parameters given by the engine manufacturer and the applicant. The dispersion modeling analysis for operation of the PBGF evaluated all discrete load levels for which generator emissions data was available (i.e., 25, 50, 75, and 100 percent loads) to identify the potential worst-case ambient air quality impacts (DayZenLLC 2024b).

At full buildout of the PBGF, there will be a single row of backup emergency generators in a double-stacked arrangement with 18 generators on each level, as well as 1 unstacked generator on the lower level. The release height for the upper and lower generators would be 18.16 meters. The stacks of the engines would be 0.75 meters in diameter (DayZenLLC 2024b, Table 26).

All engines could be tested or used at any load condition. The applicant's analysis modeled all engines at four different load conditions representing 25, 50, 75, and 100 percent load settings to determine the worst-case concentrations. Additionally, the modeling also presumes that routine readiness testing would be limited to occur within certain hours of the day. The applicant is committed to limiting readiness testing to only be allowed during a 11-hour period between 7:00 a.m. and 6:00 p.m. daily (DayZenLLC 2024c, Response to Data Requests Set 1). The annual average concentrations assume

up to 34 hours per generator per year for readiness testing and maintenance purposes (DayZenLLC 2024c, Response to Data Requests Set 1).

Table 5.3-7 shows that the impacts from standby generator engine readiness testing and maintenance during operation would not cause exceedances of the CO, NO₂, or SO₂ standards. The existing PM₁₀ 24-hour and PM_{2.5} annual background concentrations are shown in **bold** because they are above the limiting standards in the background conditions. In addition, even though the 24-hour PM_{2.5} background for the last three years of available data (2021-2023) was lower than the 24-hour PM_{2.5} NAAQS of 35 µg/m³, the SFBAAB is still classified as nonattainment for 24-hour PM_{2.5} NAAQS. The project would therefore contribute to existing regional exceedances of the PM₁₀ and PM_{2.5} standards. Modeling shows that the individual project impact would be limited. The modeled PM₁₀ concentrations from project standby generator engine testing are below the PM₁₀ SILs of 5 µg/m³ for 24-hour impacts and 1 µg/m³ for annual impacts (40 CFR 51.165(b)(2)). Similarly, the maximum modeled PM_{2.5} concentrations from project operation are well below the U.S. EPA PM_{2.5} SILs of 1.2 µg/m³ for 24-hour impacts, the project-level BAAQMD threshold for annual-average PM_{2.5} of 0.3 µg/m³ for risk and hazards, and the U.S. EPA PM_{2.5} SILs of 0.13 µg/m³ for annual impacts.

TABLE 5.3-7 PBGF MAXIMUM IMPACTS DURING READINESS TESTING AND MAINTENANCE (µg/m³)

Pollutant	Averaging Time	Project Impact	Background	Total Impact	CAAQS/NAAQS Limiting Standard (µg/m ³)	Above Limiting Standard ?
NO ₂	1-Hour	165	64	229	339	No
	Annual	0.29	11	11	57	No
CO	1-Hour	1440	3,436	4,876	23,000	No
	8-Hour	223	2,290	2,514	10,000	No
SO ₂	1-Hour	2.50	35	37	655	No
	24-Hour	0.05	7.1	7.1	105	No
PM ₁₀	Annual	0.19	18	18.4	20	No
	24-Hour	1.155	74	75.2	50	Yes
PM _{2.5}	Annual	0.088	11.1	11.2	9	Yes
	24-Hour	1.155	24	25.2	35	No

Notes:

The 3-year maximum background concentrations were calculated using 2020-2022 data collected from Monitor Site ID 060130002 located at 2956-A Treat Boulevard in Concord, California, as reported by the U.S. EPA.

Source: DayZenLLC 2024b, Table 34; DayZen LLC 2024c, Response to Data Request AQ-5 Table 1B.

The results provided in **Table 5.3-6** are the maximum impacts determined at any point at the project fence line or beyond. The impacts for sensitive receptors would be lower than these values because they are located further away from the stacks. The criteria pollutant concentrations in **Table 5.3-6** show that impacts during routine operation with readiness testing and maintenance would be below the limiting standards.

Accordingly, standby generator engine testing would not expose sensitive receptors to substantial pollutant concentrations, and this impact would be less than significant.

Localized CO Concentrations. Engine exhaust may elevate localized CO concentrations, resulting in “hot spots.” Receptors exposed to these CO hot spots may have a greater likelihood of developing adverse health effects. CO hot spots are typically observed at heavily congested intersections where a substantial number of vehicles idle for prolonged durations throughout the day. BAAQMD screening guidance indicates that a project would not exceed the CO significance threshold if projections indicate traffic levels would not increase at any affected intersection to more than 44,000 vehicles per hour, or at any affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (BAAQMD 2023, Chapter 4.2).

The proposed project would generate vehicle trips to the site. These trips would include workers and material and equipment deliveries. It is unlikely that the addition of vehicle trips from the project on any roadway in the vicinity of the project site would result in an exceedance of the BAAQMD screening threshold. As a result, the additional vehicle trips associated with the project would result in a negligible effect on CO concentrations in the vicinity of the project site. Localized CO impacts during construction and operation would not expose sensitive receptors to substantial pollutant concentrations, and this impact would be less than significant.

Conclusion for Criteria Pollutants

The conclusion for cumulative impacts to criteria air pollutant concentrations relies on the quantified emissions and the modeled concentrations presented above. Under CEQA environmental checklist criterion “b” above, staff concludes that the project emissions would not exceed the BAAQMD significance thresholds. Additionally, impacts to the general population and sensitive populations during construction would be reduced to less than significant levels with the implementation of mitigation measure **AQ-1**. The project’s NOx emissions would be fully offset for readiness testing and maintenance in accordance with existing BAAQMD rules. Therefore, the project would not result in a cumulatively considerable net increase of any criteria pollutant, and the project’s potential to contribute to the cumulative impact of criteria pollutant concentrations would be less than significant with mitigation incorporated.

Health Risk Assessment for Toxic Air Contaminants

The HRA provides three separate analyses, based on substantial evidence as described, that supports the conclusion that the project would not expose sensitive receptors to substantial pollutant concentrations of TACs. An analysis was conducted for (1) the period of project construction, (2) for the period of operation, which consists of readiness testing and maintenance, and (3) the cumulative risk and hazards for the project, including the project’s impact with the impacts of existing sources in the area.

The HRA estimated risks of excess lifetime cancer risk, chronic non-cancer HI, acute non-cancer HI, and annual PM2.5 concentration at the maximally exposed individual resident (MEIR), maximally exposed individual worker (MEIW), maximally exposed

school/daycare receptor (MESR/MEDR), and maximally exposed recreational receptor (MERR) (DayZenLLC 2024b, pg. 21):

- Point of maximum impact (PMI) – this receptor represents the highest concentration and risk point on the receptor grid for the analysis under consideration; for this project the PMI is typically along the eastern boundary of the project site.
- Maximum exposed individual residential receptor (MEIR) – this receptor represents the maximum impacted actual residential location on the grid for the analysis under consideration; for this project, the nearest residential properties are to the north of the proposed sources, near the intersection of West Leland Road and Golf Club Road, and the MEIR is along Orinda Circle approximately 800 feet to the east of the PBGF site boundary.
- Maximum exposed individual worker receptor (MEIW) – this receptor represents the maximum impacted actual worker location on the grid for the analysis under consideration; for this project, the MEIW is The Church of Jesus Christ of Latter-day Saints located on Golf Club Drive adjacent to the western edge of the Project boundary and north of the PBGF site.
- Maximally exposed school/daycare receptor (MESR/MEDR) – this receptor represents the maximum impacted location on the grid for a non-residential sensitive receptor, i.e., school, hospital, daycare center, convalescent home, etc. For this project the MESR/MEDR is Rancho Medanos Junior High School, 640 feet northwest of the PBGF site.
- Maximally exposed recreational receptor (MERR) – this receptor represents the maximum impacted location on the grid for a recreational, non-residential receptor; for this project, the MERR is John Henry Johnson Park on W Leland Rd, approximately 1,200 feet west of the PBGF site.
- Maximum exposed individual sensitive receptor (MEISR) – this receptor represents the maximum impacted location on the grid for the analysis under consideration; for this project, the MEISR is also the MEIR.

As required by the 2015 OEHHA Guidance, sensitive receptor (including residential) cancer risks were estimated assuming exposure beginning in the third trimester of pregnancy, and worker cancer risk was estimated assuming an 8-hour-per-day, 250 day-per-year exposure, beginning at the age of 16 (OEHHA 2015).

Air would be the dominant pathway for public exposure to chemical substances released by the project. Emissions to the air would consist primarily of combustion by-products produced by the diesel-fired emergency standby engines. Direct inhalation is considered the most likely exposure pathway. The HRA was conducted in accordance with guidance established by the OEHHA (OEHHA 2015).

Cancer Risk

Cancer risk is the probability or chance of developing cancer over a period of exposure normally defined as either 30 or 70-years depending on the project type and agency risk procedures. Carcinogens are not assumed to have a threshold below which there would be no human health impact. In other words, any exposure to a carcinogen is assumed to have some probability of getting cancer. Various state and local regulations use an excess cancer risk greater than 10-in-1 million as a level deemed unacceptable on a project basis (BAAQMD 2023, Appendix A and Appendix E).

Health risks potentially associated with concentrations of carcinogenic pollutants in air were calculated as estimated excess lifetime cancer risks. The excess lifetime cancer risk for a pollutant can be estimated as the product of the concentration in air and a unit risk factor. The unit risk factor is a cancer potency factor, developed by assuming constant exposure to an ambient concentration of 1 $\mu\text{g}/\text{m}^3$ of a given substance. In other words, it represents the increased cancer risk associated with continuous exposure to a concentration in air over a pre-defined exposure period, i.e., usually a 30 or 70-year lifetime (OEHHA 2015).

Non-Cancer Risk

Non-cancer health effects can be either chronic or acute. Assessing non-cancer hazards assumes that there is a dose of the chemical of concern below which there would be no impact on human health. The air concentration corresponding to this dose is called the Reference Exposure Level (REL). The REL is an airborne concentration level at or below which no adverse non-cancer health effects are anticipated. Non-cancer health risks are measured in terms of a hazard quotient (HQ), which is the calculated exposure of each contaminant divided by its REL. Hazard quotients for pollutants affecting the same target organ are typically summed with the resulting totals expressed as hazard indices (HIs) for each organ system (OEHHA 2015). A HI of less than 1.0 is considered to result in non-cancer chronic and acute health impacts that are less than significant (BAAQMD 2023, Appendix A).

Evaluation of potential non-cancer health effects from exposure to short-term and long-term concentrations in air was performed by comparing modeled concentrations in air with the RELs. RELs are based on the most sensitive adverse effects reported in the medical and toxicological literature. Chronic toxicity is defined as adverse health effects from prolonged chemical exposure, caused by chemicals accumulating in the body. The chronic hazard index was calculated using the hazard quotients calculated with annual concentrations. Acute toxicity is defined as adverse health effects caused by a brief chemical exposure of no more than 24 hours. One-hour average concentrations are divided by acute RELs to obtain a hazard index for health effects caused by relatively high, short-term exposure to air toxics.

Construction

Less Than Significant Impact. Onsite construction emissions from the construction of the project would result from site preparation and grading activities, building construction, and use of onsite construction equipment. Offsite construction emissions would be derived primarily from materials transport to and from the site, and worker travel (DayZenLLC 2024b, Tables 3, 4, 5). Emissions from the 16-month construction period were estimated using the CalEEMod program (DayZenLLC 2024b, pg.10).

Emissions of toxic pollutants during construction of the facility would be dominated by the effects of particulate matter from the onsite and offsite diesel-fueled engines. Construction health risk impacts include the effects of exhaust emissions from onsite construction and from the offsite on-road mobile sources up to 1,000 feet from the Project boundary, assuming a sixteen-month construction period. Construction health risk impacts are based solely on DPM emissions (DayZenLLC 2024b, Table 37). There are no acute non-cancer health risks analyzed for construction HRA because there is no acute inhalation REL for DPM, indicating that DPM is not known to result in acute health hazards.

The results of the HRA for construction activities are presented in **Table 5.3-8** (DayZenLLC 2024b, Table 43). It shows that the maximum cancer risk impact and chronic HIs at the MEIR, MEIW, MESR/MEDR, and MERR would be less than BAAQMD's significance thresholds. Annual average concentrations of PM_{2.5} are presented for these locations excluding fugitive dust and the result would be less than 0.3 µg/m³ and would not exceed BAAQMD's significance threshold for local risk. Therefore, staff concluded that the health risks of the project construction period would cause a less than significant impact.

Note that the risk values shown in **Table 5.3-8** are the highest of those modeled for each type of sensitive receptors. The risk values at other locations for each type of sensitive receptors would be lower than those shown in **Table 5.3-8**. Health risks at all sensitive receptors would be below the significance thresholds. The health risks from project construction would be less than significant, and no mitigation would be necessary. The health risks from project construction would be further reduced with the implementation of mitigation measure **AQ-1**.

TABLE 5.3-8 CONSTRUCTION – MODELED RECEPTOR MAXIMUM HEALTH RISK

Receptor Type	Cancer Risk Impact (in one million)	Chronic Non-Cancer Hazard Index (HI)	Acute Non-Cancer Hazard Index (HI)	PM _{2.5} Concentration (µg/m ³)
Residential, MEIR	0.31	0.00036	-	0.015
Worker, MEIW	0.019	0.00032	-	0.014
School/Daycare, MESR/MEDR	0.028	0.00010	-	0.0029
Recreational, MERR	0.097	0.0013	-	0.042
BAAQMD Threshold	10	1	1	0.3

Source: DayZenLLC 2024b, Table 42.

Operation

Less Than Significant with Mitigation Incorporated. Primary operation emissions would result from the 37 standby diesel generators. The only on-site emissions included in the applicant's HRA are the TAC emissions from testing and maintenance of the diesel-fueled emergency standby engines. Other on-site sources, including diesel storage tanks would be minor in comparison with the stationary sources and unlikely to pose substantial risks. Offsite vehicle trips for worker commutes and material deliveries were not included in HRA since the total number of vehicle trips were estimated to be less than 500 trips per day which BAAQMD has historically considered as a minor, low-impact source which does not pose a significant health risk. TAC emissions from the project's diesel storage tanks were not included in the analysis as they were found to be *de minimis* (DayZenLLC 2024b, pg 14).

Each of the proposed diesel engines would be equipped with SCR and DPF to meet the Tier 4 standards. DPM emissions resulting from diesel stationary combustion were assumed equal to PM10/2.5 emissions (DayZenLLC 2024b, Tables 8 through 11). Overall, testing in either the monthly or annual scenarios would occur for no more than 34 hours per year. The Airborne Toxic Control Measures (ATCM) for Stationary Toxic Compression Ignition Engines (Title 17, Section 93115, CCR) limits each engine to no more than 50 hours annually for reliability purposes (i.e., testing and maintenance). The applicant proposes a more-stringent limit to use each generator a maximum of 34 hours per year for non-emergency operations (testing and maintenance).

For purposes of this HRA, average daily and maximum annual emissions were assumed to occur at maintenance and readiness testing at 100% load (DayZenLLC 2024b, pg. 15). Annual emissions of TAC (DPM) for each engine are based on each engine in use up to 34 hours per year, at 100% load with DPF and SCR control devices (DayZenLLC 2024b, Table 10), and the applicant commits to restricting testing and maintenance of the generators to the hours of 7 a.m. to 6 p.m. (DayZenLLC 2024c, Response to Data Request AQ-8 and AQ-9).

The results of the applicant's HRA for project operation during a 100% load scenario are presented in **Table 5.3-9** (DayZenLLC 2024b, Table 43; DayZenLLC 2024c, Table 1D). With the commitment to restrict testing and maintenance to daytime hours, the maximum cancer risk impact, chronic hazard index, acute hazard index, and PM2.5 concentrations at the MEIR, MEIW, MESR/MEDR, and MERR during the operation of the project would be less than the BAAQMD's CEQA significance thresholds and the more health protective cancer risk limit of 6 in one million from BAAQMD Regulation 2, Rule 5.

TABLE 5.3-9 OPERATION – MODELED RECEPTOR HEALTH RISK AT 100% LOAD

Receptor Type	Cancer Risk Impact (in one million)	Chronic Non-Cancer Hazard Index (HI)	Acute Non-Cancer Hazard Index (HI)	PM2.5 Concentration (µg/m³)
Residential, MEIR	5.3	0.0025	0.041	0.012
Worker, MEIW	1.0	7.7E-04	0.036	0.0039
School/Daycare, MESR/MEDR	0.89	0.0005	0.021	0.0025
Recreational, MERR	2.3	0.0081	0.082	0.041
BAAQMD Threshold	6	1	1	0.3
Exceedance?	No	No	No	No

Note: For Overburdened Communities designated by BAAQMD, a cancer risk limit of 6 in one million applies to both worker and sensitive (residential) receptors.

Source: DayZenLLC 2024b, Table 43, updated for residential receptor in Response to Data Request AQ-9 (DayZenLLC 2024c, Table 1D).

It should be noted that the risk values shown in **Table 5.3-9** are the highest of those modeled for each type of sensitive receptor during a 100% load scenario. The risk values at other locations for each type of sensitive receptors would be lower than those shown in **Table 5.3-9**.

In response to staff's requests, the applicant also provided maximum cancer risk impacts for project operation during lower load scenarios. These results are presented in **Table 5.3-10**.

TABLE 5.3-10 OPERATION – MODELED CANCER RISK AT PARTIAL LOADS

Load Scenario	Project without Mitigation: Cancer Risk Impact at MEIR (in one million)	Project with Mitigation Measure AQ-2: Cancer Risk Impact at MEIR (in one million)
100%	5.3	5.3
75%	7.1	3.6
50%	10.0045	5.0
25%	10.45	5.2
BAAQMD Threshold	6	6
Exceedance?	Yes	No

Note: Mitigation measure **AQ-2** would ensure that all readiness and maintenance testing at partial engine loads (75% or lower) do not exceed 17 hours per year per engine.

Source: Partial load scenarios in Response to Data Request AQ-9 (DayZenLLC 2024c, Table 1D); with staff independent evaluation for 17 hours per year per engine.

Table 5.3-10 shows how lower load scenarios could exceed the BAAQMD CEQA significance threshold for cancer risk for the MEIR (DayZenLLC 2024c, Table 1D), and partial load operation would also exceed the more health protective cancer risk limit set by BAAQMD Regulation 2, Rule 5. Mitigation described below (**AQ-2**) would limit

readiness and maintenance testing to avoid the cancer risk impact during lower load scenarios.

To ensure that operation at lower load scenarios would not exceed the cancer risk significance threshold, the applicant assumes that the BAAQMD will include the following limitations as enforceable permit conditions (DayZenLLC 2024b; DayZenLLC 2024c). Staff believes the proposed project would be likely to achieve the BAAQMD CEQA significance thresholds with the following limits on readiness and maintenance testing to be adopted during the BAAQMD permitting process:

- Generator and engine readiness and maintenance testing shall only be allowed during the 11-hour period between 7:00 a.m. and 6:00 p.m. daily.
- Concurrent testing of engines shall be limited so that only a single engine operates for maintenance and testing at any given time.
- Readiness and maintenance testing shall be limited to no more than 34 hours per year per engine.
- Readiness and maintenance testing at generator loads less than or equal to 50 percent shall be limited to no more than 17 hours per year per engine.

The BAAQMD permitting process would limit the project cancer risk to a level that is more stringent than the BAAQMD CEQA significance threshold for cancer risk. The proposed project would be located within 1,000 feet of an Overburdened Community, as defined in BAAQMD Regulation 2-1-243. During the BAAQMD permitting process, the proposed project would be subject to the more health protective cancer risk limit of BAAQMD Regulation 2, Rule 5, which is 6 in one million because of the site being within an area defined as an Overburdened Community.

Staff recommends implementation of a mitigation measure to ensure all scenarios of readiness and maintenance testing do not exceed the cancer risk limit of 6 in one million for the protection of Overburdened Communities. Mitigation measure **AQ-2** would increase the stringency of the applicant's proposed operating limits to ensure that all readiness and maintenance testing at partial engine loads (75% or lower) do not exceed 17 hours per year per engine.

In conclusion, staff finds the health risks at sensitive receptor locations would be less than the BAAQMD CEQA Guidelines significance thresholds, and during operation of loads of 75% or lower, the project could exceed the BAAQMD cancer risk permitting limit of 6 in one million that applies for impacts to Overburdened Communities. The health risks from the project's construction would not exceed the significance thresholds and would be further reduced with the implementation of mitigation measure **AQ-1**. For routine operation, staff recommends mitigation measure **AQ-2** to ensure that the project's health risks and potential to expose sensitive receptors to substantial pollutant concentrations of TACs would be mitigated to a level that is less than significant.

Cumulative

Less Than Significant Impact. This discussion addresses the impacts from cumulative sources in comparison to the BAAQMD significance thresholds for risk and hazards from cumulative sources (BAAQMD 2023). The cumulative HRA is an assessment of the project's impact summed with the impacts of other sources within 1,000 feet of the project. The results of this cumulative HRA are compared to the BAAQMD's cumulative thresholds for new sources. As mentioned above, the cumulative local community risk and hazard impact is significant if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot distance from the fence line of a source and the contribution from the project, exceeds the following:

- An excess lifetime cancer risk level of more than 100 in one million.
- A non-cancer chronic HI greater than 10.0.
- An annual average PM2.5 concentration of greater than 0.8 µg/m³

The applicant provided a cumulative HRA and compared results with the BAAQMD thresholds for cumulative risk and hazards. The existing, background stationary sources were obtained from the BAAQMD's Permitted Stationary Source Risks and Hazards Screening Tool by querying the data for sources within 1,000 feet of each receptor of concern (DayZenLLC 2024b). Information on the cumulative health risk impacts at the MEIR, MEIW, MESR/MEDR, and MERR are provided separately for each receptor type (DayZenLLC 2024b).

The maximum cumulative cancer risk for any receptor type was found to be 8.0 in a million, lower than the threshold of 100 in a million. The maximum cumulative non-cancer chronic HI would be 0.0228, which is below the threshold of 10. The maximum cumulative PM2.5 concentration would be 0.29 µg/m³, which would not exceed the threshold of 0.8 µg/m³. (DayZenLLC 2024b; DayZenLLC 2024c).

The cumulative HRA in this analysis includes the proposed project with the following existing or background stationary sources: (1) background surrounding highways, main streets, and railways; (2) the City of Pittsburg Water Treatment Plant (Facility #13968); and (3) 9W Halo Western OpCo LP DBA Angelica (Facility #23648).

The results of the applicant's cumulative HRA are compared to the BAAQMD CEQA cumulative thresholds of significance (BAAQMD 2023) in **Table 5.3-10, Table 5.3-11, Table 5.3-12, and Table 5.3-13.**

TABLE 5.3-10 CUMULATIVE RISKS AND HAZARDS – RESIDENTIAL, MEIR

Contribution of Cumulative Sources	Cancer Risk Impact (in one million)	Chronic Non-Cancer Hazard Index (HI)	Acute Non-Cancer Hazard Index (HI)	PM2.5 Concentration (µg/m ³)
Project Operational Generators (100% Load)	5.3	0.0025	0.041	0.012

TABLE 5.3-10 CUMULATIVE RISKS AND HAZARDS – RESIDENTIAL, MEIR

Contribution of Cumulative Sources	Cancer Risk Impact (in one million)	Chronic Non-Cancer Hazard Index (HI)	Acute Non-Cancer Hazard Index (HI)	PM2.5 Concentration (µg/m³)
City of Pittsburg Water Treatment Plant (Facility #13968)	0.28	4.4E-04	NA	3.6E-04
Existing Rail and Roadway Sources	2.4	0.0087	0	0.076
Cumulative Impact at MEIR	8.0	0.0116	0.041	0.09
BAAQMD Threshold	100	10.0	No threshold	0.8
Exceedance?	No	No	No	No

Source: DayZenLLC 2024b; updated for residential receptor in Response to Data Request AQ-9 (DayZenLLC 2024c, Table 1D).

TABLE 5.3-11 CUMULATIVE RISKS AND HAZARDS – WORKER, MEIW

Contribution of Cumulative Sources	Cancer Risk Impact (in one million)	Chronic Non-Cancer Hazard Index (HI)	Acute Non-Cancer Hazard Index (HI)	PM2.5 Concentration (µg/m³)
Project Operational Generators (100% Load)	1.0	0.0008	0.036	0.0039
City of Pittsburg Water Treatment Plant (Facility #13968)	1.0	0.0015	NA	0.0013
Existing Rail and Roadway Sources	1.5	0.0054	0	0.044
Cumulative Impact at MEIR	3.5	0.0077	0.04	0.049
BAAQMD Threshold	100	10.0	No threshold	0.8
Exceedance?	No	No	No	No

Source: DayZenLLC 2024b.

TABLE 5.3-12 CUMULATIVE RISKS AND HAZARDS – SCHOOL/DAYCARE, MESR/MEDR

Contribution of Cumulative Sources	Cancer Risk Impact (in one million)	Chronic Non-Cancer Hazard Index (HI)	Acute Non-Cancer Hazard Index (HI)	PM2.5 Concentration (µg/m³)
Project Operational Generators (100% Load)	0.89	0.0005	0.028	0.0025
9W Halo Western OpCo LP DBA Angelica (Facility #23648)	0.045	0.0004	NA	0.11
Existing Rail and Roadway Sources	7.0	0.022	0	0.18
Cumulative Impact at MEIR	7.9	0.0228	0.028	0.29
BAAQMD Threshold	100	10.0	No threshold	0.8
Exceedance?	No	No	No	No

Source: DayZenLLC 2024b.

TABLE 5.3-13 CUMULATIVE RISKS AND HAZARDS – RECREATIONAL, MERR

Contribution of Cumulative Sources	Cancer Risk Impact (in one million)	Chronic Non-Cancer Hazard Index (HI)	Acute Non-Cancer Hazard Index (HI)	PM2.5 Concentration (µg/m³)
Project Operational Generators (100% Load)	2.3	0.0081	0.082	0.041
City of Pittsburg Water Treatment Plant (Facility #13968)	0.28	0.0004	NA	0.0004
Existing Rail and Roadway Sources	1.2	0.0039	0	0.032
Cumulative Impact at MEIR	3.8	0.013	0.082	0.073
BAAQMD Threshold	100	10.0	No threshold	0.8
Exceedance?	No	No	No	No

Source: DayZenLLC 2024b.

Table 5.3-10, Table 5.3-11, Table 5.3-12, and Table 5.3-13 summarize the results of the staff cumulative HRA and compares them to the BAAQMD significance thresholds for cumulative risk and hazards. The cumulative impact at each receptor shows that the project would not cause a cumulatively considerable contribution along with existing and foreseeable projects to cancer risk, non-cancer HI, or PM2.5. For cancer risk, non-cancer hazards, and PM2.5, staff finds that cumulative impacts at all sensitive receptor locations would be less than the BAAQMD significance thresholds. Therefore, the project's contribution to cumulative health risk impacts would be less than significant.

Emergency Operations

This section addresses the potential for emergency situations that could trigger unplanned operation of the project's diesel-fired generators. Emergency use of the generators could occur in the event of a power outage or other disruption, upset, or instability that triggers a need for emergency backup power at the data center.

The air quality/public health impacts of standby generator operation during emergencies are not quantified below because the impacts of emergency operations are typically not evaluated during facility permitting and local air districts do not normally conduct an air quality impact assessment of such impacts. CEC staff assessed the likelihood of emergency events but finds that modeling the air quality/public health impacts of emergency operations would require a host of unvalidated, unverifiable, and speculative assumptions about when and under what circumstances such a hypothetical emergency would occur. Such a speculative analysis is not required under CEQA (CEQA Guidelines, Cal. Code Regs., Tit.14, §§ 15064(d)(3) and 15145), and, most importantly, would not provide meaningful information by which to determine project impacts.

Emissions that occur during the emergency use of the generators would not occur on a regular or predictable basis. During the permitting process, the BAAQMD policy requires

facilities to presume that each of their backup power generators will experience 100 hours per year of emergency operation when calculating their PTE for determining the applicability of certain permitting regulations (BAAQMD 2019).

Scoping comments on a previous similar project (e.g. the CA3 Data Center project) from BAAQMD provided a review of data centers that initiated operation of diesel engines for “non-testing/non-maintenance” purposes, for the purpose of informing staff’s consideration of scenarios of backup power generation operations beyond routine testing and maintenance (BAAQMD 2021).

Staff reviewed these BAAQMD comments regarding the use of diesel engines for “non-testing/non-maintenance” purposes and confirmed that these types of events are infrequent, irregular, and unlikely and the resulting emissions are not easily predictable or quantifiable. The BAAQMD comments identified extended durations of standby generator engine use occurred for “non-testing/non-maintenance” purposes, mostly due to extreme events within the 13-month record of the data. The 13-month period of BAAQMD’s review (September 1, 2019 to September 30, 2020) included the implementation of PG&E’s Public Safety Power Shutoff (PSPS), severe wildfires, several California Independent System Operator (CAISO)-declared emergencies, and winter storms. Including usage during the extreme events, 1,877 engine-hours of diesel engine use occurred at 20 data centers for “non-testing/non-maintenance” purposes (less than half of the 45 facilities included in the review, and less than a third of such facilities under BAAQMD’s jurisdiction at the time of data collection) during the surveyed 13-month period. BAAQMD’s review covered 288 individual diesel engines that operated over a 13-month record. Because the backup generator engines were collectively available for over 2.74 million engine-hours during the 13-month period (288 engines * 9,504 hours in the 13-month record), and they were used for “non-testing/non-maintenance” purposes for 1,877 engine-hours, at those facilities where operation occurred, the engines entered into emergency operations during 0.07 percent of their available time (1,877 / 2.74 million). Staff’s analysis of the BAAQMD’s information found that the average runtime for each diesel backup generator engine per event in BAAQMD’s review was approximately 5.0 hours. Based on this data, staff determined that the emergency use of the standby generator engines was infrequent and of short duration.

Due to the number of factors that need to be considered, using an air quality model to evaluate ambient air quality impacts during emergency operations would require substantial and inappropriate speculation and would render the results of any such exercise too speculative to be meaningful. This remains especially true when neither the CEC nor any other agency known to CEC has established or used in practice a threshold of significance by which to interpret air quality modeling results from emergency operations. Emergency operation would be very infrequent, and emergency operations would not occur routinely during the lifetime of the facility. Accordingly, the potential for any adverse impacts to ambient air quality concentrations and public health would be a very-low probability event.

Thus, staff concludes that assessing the impacts of emergency operation of the gensets would be speculative due to the infrequent, irregular, and unplanned nature of emergency events. Emissions and impacts during emergency operation are not objectively predictable or quantifiable.

Because of the infrequent nature of emergency conditions and the reliability of the grid, the project's emergency operation would be unlikely to expose sensitive receptors to substantial concentrations of pollutants.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Construction

Less Than Significant Impact. Minor odor sources during construction activities include diesel exhaust from heavy-duty equipment. Odors from construction activities near existing receptors would be temporary in nature and dissipate as a function of distance. Accordingly, the construction of the project is not expected to result in substantial emissions that may lead to odor impacts or impacts of emissions other than those of criteria pollutants and TACs identified elsewhere in this analysis.

Fugitive dust emissions can also create a nuisance that can cause adverse effects. The project is proposing to comply with the BAAQMD construction fugitive dust control BMPs and so should not have substantial fugitive dust emissions during construction that could adversely affect a substantial number of people.

Therefore, the construction of the project would not result in other emissions, such as those leading to odors, that could adversely affect a substantial number of people, and construction activities would have a less than significant impact.

Operation

Less Than Significant Impact. Potential odor sources from project readiness testing and maintenance along with emergency operation would include diesel exhaust from genset readiness testing and maintenance, trash pick-up and other heavy-duty delivery vehicles, and the occasional use of architectural coatings during routine maintenance. When compared to existing odor sources near the project site, which include heavy and light industrial uses, odor impacts from project readiness testing and maintenance along with emergency operations would be similar.

Once built and operating, the project would have no notable emissions other than those of criteria pollutants and TACs identified elsewhere in this analysis. Therefore, nuisance impacts would not be likely to occur during operation, including readiness testing and maintenance or emergency operation. During readiness testing and maintenance and during emergency operation, the project would not result in odors or other emissions that could adversely affect a substantial number of people and would have a less than significant impact related to odors. In conclusion, staff finds that the project would not

likely create objectionable odors affecting a substantial number of people, and operation would have a less than significant impact.

5.3.3 Mitigation Measures

AQ-1. To ensure that fugitive dust impacts are minimized, the Project will implement the BAAQMD's recommended BMPs during the construction phase. A fugitive dust control plan shall be reviewed and approved by the director, or director's designee, of the City of Pittsburg Community and Economic Development Department prior to the issuance of any grading or building permits, whichever occurs earliest. These BMPs are incorporated into the design of the project and will include:

- Water all exposed areas (e.g. parking areas, graded areas, unpaved access roads) twice a day.
- Maintain a minimum soil moisture of 12% in exposed areas by maintaining proper watering frequency.
- Cover all haul trucks carrying sand, soil or other loose material.
- Suspend excavation, grading and/or demolition activities when average wind speed exceeds 20 miles per hour.
- Pave all roadways, driveways and sidewalks as soon as possible. Lay building pads as soon as grading is completed, unless seeding or soil binders are used.
- Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction with a maximum 50 percent air porosity.
- Use a power vacuum to sweep and remove any mud or dirt-track next to public streets, if visible soil material is carried onto the streets.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- Minimize idling time for all engines by shutting engines when not in use or limiting idling time to a maximum of 5 minutes. Provide clear signage for construction workers at all access points.
- Properly tune and maintain construction equipment in accordance with manufacturer's specifications. Check all equipment against a certified visible emissions calculator.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints.
- Install vegetative ground cover in disturbed areas as soon as possible and water appropriately until vegetation is established.
- Limit simultaneous occurrence of excavation, grading, and ground-disturbing construction activities.
- Install water washers to wash all trucks and equipment prior to leaving site.

- Treat site access to a distance of 100 feet from the paved road with a 6 to 12-inch compacted layer of wood chip, mulch or gravel.
- Install sandbag or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Minimize idling time of diesel-powered construction vehicles to two minutes
- Develop a plan demonstrating that off-road equipment (more than 50 horsepower) used for construction would achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent PM reduction compared to the most recent ARB fleet average. These include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available.
- Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings).
- All construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NO_x and PM.
- All contractors use equipment that meets CARB's most recent certification standard for off-road heavy-duty diesel engines.

AQ-2. To ensure that all readiness and maintenance testing at lower loads would not exceed the BAAQMD cancer risk permitting limit of 6 in one million that applies for impacts to Overburdened Communities, the Project will adopt the following limits on operation and will request that the BAAQMD adopt the following limits as permit conditions:

- Generator and engine readiness and maintenance testing shall only be allowed during the 11-hour period between 7:00 a.m. and 6:00 p.m. daily.
- Concurrent testing of engines shall be limited so that only a single engine operates for maintenance and testing at any given time.
- Readiness and maintenance testing shall be limited to no more than 34 hours per year per engine.
- Readiness and maintenance testing at generator loads less than or equal to 75 percent shall be limited to no more than 17 hours per year per engine.

5.3.4 References

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5.4 Biological Resources

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to biological resources that occur in the project area.

BIOLOGICAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☒	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☒	☐

Environmental checklist established by CEQA Guidelines, Appendix G, biological resources.

5.4.1 Environmental Setting

The proposed project site encompasses approximately 22.31 acres located at 2232 Golf Club Road in the city of Pittsburg, Assessor Parcel Numbers 095-160-001 and 095-160-002 (PBGF 2024). The project would be located south of the intersection of West Leland

and Golf Club Roads and within the eastern portion of the abandoned Delta View Golf Course.

The project site, previously owned by the City of Pittsburg, was historically operated as the Delta View Golf Course, which has been closed for over seven years. Existing structures are limited to a water storage tank and an associated one-story building located in the southeastern corner. The only remnants of the golf course include associated building foundations, concrete slabs, parking lot, driving range barrier netting, golf cart paths and fencing.

The project site is located within the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCC HCP/NCCP) Inventory Area. The ECCC HCP/NCCP protects and enhances ecological diversity and function within eastern Contra Costa County, and provides measures to avoid, minimize, and mitigate impacts on covered species and their habitats, while allowing for expansion of urban infrastructure.

Vegetation and Habitat

Existing Vegetative Communities

The project site is located at the south edge of the city of Pittsburg and located within the Honker Bay 7.5' United States Geological Survey topographic quadrangle map. The project site is bordered to the south and west by additional portions of the former golf course, which remain undeveloped as of 2025, to the east by open space supporting a PG&E transmission line corridor, and to the north by low-medium density residential housing. Within 1,000 feet of the project site is the entrance to the Delta De Anza Regional Trail, a multi-use hiking, bicycling, and equestrian trail accessed at Golf Club Road. Two remnant golf course ponds are located on the western portion of the site, outside of the project footprint; however, an emergency vehicle access road would be located between the two ponds connecting the project site to Leland Road. Stoneman Park and the John Henry Johnson Parkway are located to the west of the project site. The Contra Costa Canal, owned and operated by the U.S. Bureau of Reclamation as part of the federal Central Valley Project, bisects the southern portion of the 250-foot buffer of the project site. Chain link fencing surrounds the north, west, and southern boundaries of the project site, and along both sides of the Contra Costa Canal.

The 75.9-acre study area, which encompasses the project site and surrounding 250-foot-wide buffer, includes 68.9 acres of upland habitat. The majority of the project site supports 49.3 acres of annual grasslands that were subject to intensive management from the late 1940s until the golf course closed in 2018. During this period, native soils were replaced, or amended, and a wide range of trees, shrubs, and grasses were imported and maintained via irrigation, mowing, and pruning. Following closure of the golf course and cessation of management activities, invasive species have taken over the site. In June 2024, a wildfire burned to the west and southwest of the project site

but was contained prior to entering the site. The project site has also been used by the fire department for controlled burns and training.

The project site is currently dominated by non-native grasslands including wild oats and brome grasslands, upland mustard, and star-thistle (Sawyer et al. 2009). The oat and brome grasslands are dominated by non-native annual species, including Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), and soft chess (*B. hordeaceus*), as well as wild oat (*Avena fatua*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), wall barley (*H. murinum*), horseweed (*Erigeron canadensis*), Italian thistle (*Carduus pycnocephalus* ssp. *pycnocephalus*), and bristly ox-tongue (*Helminthotheca echioides*). The upland mustard or star-thistle fields are dominated by black mustard (*Brassica nigra*) with cheeseweed (*Malva parviflora*) and yellow star-thistle (*Centaurea solstitialis*). The areas within the 250-foot buffer of the study area, that were not managed as part of the former golf course, along the east and southwest edges of the project site support more diverse vegetation. This includes native wildflowers such as several species of lupine (*Lupinus affinis*, *L. bicolor*, *L. formosus* var. *formosus*, and *L. nanus*), California poppy (*Eschscholzia californica*), purple owl's clover (*Castilleja exserta* ssp. *exserta*), and common fiddleneck (*Amsinckia menziesii*). The wild oats and brome grasslands and upland mustards or star-thistle fields are also present in the 250-foot buffer of the project site.

Common Wildlife

The project site provides suitable habitat for nesting and foraging birds and some common wildlife species. Species detected during field surveys included common and special-status species, such as red-tailed hawk (*Buteo jamaicensis*), white-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperii*), turkey vulture (*Cathartes aura*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), great horned owl (*Bubo virginianus*) and wild turkey (*Meleagris gallopavo*). In addition, Anna's hummingbird (*Calypte anna*), killdeer (*Charadrius vociferus*), house finch (*Haemorhous mexicanus*), California towhee (*Melospiza crissalis*), northern mockingbird (*Mimus polyglottos*), red-winged blackbird (*Agelaius phoeniceus*), mallard (*Anas platyrhynchos*), California scrub-jay (*Aphelocoma californica*), rock pigeon (*Columba livia*), American kestrel (*Falco sparverius*), purple finch (*Haemorhous purpureus*), Bullock's oriole (*Icterus bullockii*), brown-headed cowbird (*Molothrus ater*), ash-throated flycatcher (*Myiarchus cinerascens*), band-tailed pigeon (*Patagioenas fasciata*), spotted towhee (*Pipilo maculatus*), bushtit (*Psaltiriparus minimus*), black phoebe (*Sayornis nigricans*), Say's phoebe (*Sayornis saya*), yellow-rumped warbler (*Setophaga coronata*), western bluebird (*Sialia mexicana*), Eurasian-collared dove (*Streptopelia decaocto*), western meadowlark (*Sturnella neglecta*), European starling (*Sturnus vulgaris*), tree swallow (*Tachycineta bicolor*), American robin (*Turdus migratorius*), Western kingbird (*Tyrannus verticalis*), mourning dove (*Zenaidura macroura*), golden-crowned sparrow (*Zonotrichia atricapilla*), and white-crowned sparrow (*Zonotrichia leucophrys*) (DayZenLLC2024b).

The project area likely supports a variety of common wildlife including coyotes (*Canis latrans*) and California ground squirrels (*Otospermophilus beecheyi*). Ground squirrel

burrows and complexes are present on gentle slopes within the former golf course and surrounding 250-foot buffer of the project site.

Sensitive Natural Communities/Aquatic Resources

The applicant conducted a total of ten surveys between February 6 and June 25, 2018, to document hydrologic conditions within the basins that hold ponded water (DayZenLLC 2024b). An initial field survey was conducted on April 19, 2019 (DayZenLLC 2024a). Reconnaissance-level habitat assessment surveys were conducted from April 2022 to July 2023. A formal wetland delineation of the project site was conducted on December 2, 2022, with an additional survey of the 250-foot buffer on July 10, 2023.

The site contains natural community vegetation alliances as described in A Manual of California Vegetation (Sawyer et al., 2009) or listed on the California Department of Fish and Wildlife (CDFW) California Natural Community List (CDFW 2025). The site supports several sensitive natural communities, including potentially jurisdictional waters, including wetlands, as well as riparian habitat consisting of Himalayan blackberry thickets and Valley Foothill Riparian areas.

Riparian Habitat

Riparian habitat in the study area totals approximately 1.87 acres, consisting of 0.44 acres of Himalayan blackberry thickets and 1.43 acres of Valley Foothill Riparian areas (DayZenLLC 2024b). The Himalayan blackberry thickets are located along the northeast portion of the study area adjacent to seasonal and perennial wetland drainages.

The Valley Foothill Riparian area is comprised of riparian trees along the seasonal wetlands and seasonal wetland drainages located in the eastern portion of the study area and is dominated by Fremont cottonwood (*Populus fremontii*), Siberian elm (*Ulmus pumila*), Mexican fan palm (*Washingtonia robusta*), northern California black walnut (*Juglans hindsii*), olive (*Olea europaea*), and occasional Bishop pine (*Pinus muricata*). Riparian areas in the south portion of the project site are primarily composed of Peruvian pepper trees (*Schinus molle*) (DayZenLLC 2024b).

Both the Himalayan blackberry thickets and Valley Foothill Riparian areas are classified sensitive natural communities and may be subject to CDFW jurisdiction under the California Fish and Game Code.

Aquatic Habitat, Wetlands, and Other Waters

The study area encompasses a variety of natural, created, and enhanced wetlands and other waters. While there are natural drainages, the study area has been significantly altered to support the former golf course landscaping.

There are a total of approximately 1.91 acres of potentially jurisdictional wetlands and waters, including wetlands identified during the 2023 wetland delineation surveys. In the northern portion of the study area there are 0.17 acres of perennial wetlands within an existing drainage. These wetlands are dominated by broad-leaved cattail (*Typha*

latifolia), curly dock (*Rumex crispus*), dallis grass (*Paspalum dilatatum*), alkali mallow (*Malvella leprosa*), and rescue grass (*Bromus catharticus* var. *catharticus*).

Throughout the study area there are three seasonal wetlands within existing drainages that total 0.95 acres. These wetlands are dominated by lamb's quarters (*Chenopodium album*), curly dock, cocklebur (*Xanthium strumarium*), tall annual willowherb (*Epilobium brachycarpum*), horseweed, dallis grass, tall flatsedge (*Cyperus eragrostis*), and barnyard grass (*Echinochloa crus-galli*).

A seasonal stream consisting of 0.787 acre of jurisdictional habitat runs along the eastern transmission corridor and southwestern portion of the study area. In addition, there is a short reach of unvegetated channel approximately 0.1 acre in size within the former golf course at the south edge of the project site (DayZenLLC 2024b). This area is south of the Contra Costa Canal and appears to be a natural feature modified for golf course construction.

These natural aquatic habitats are all considered to be sensitive communities by CDFW. These habitats may be subject to CDFW jurisdiction under the California Fish and Game Code. In addition, they may also be jurisdictional waters of the state under the Porter-Cologne Water Quality Act and jurisdictional waters of the United States under Section 401 and Section 404 of the Clean Water Act.

Artificial Features Constructed in Upland

Ponds. There are two ponds totaling 1.67 acres in the northwest portion of the project site that were constructed as part of the golf course landscaping (DayZenLLC 2024b). These ponds have transitioned into rain-fed seasonal features. Dominant species within the pond basins include dotted smartweed (*Persicaria punctata*), Mediterranean barley, knotweed (*Polygonum* sp.), and Italian rye grass. Other common species within the ponds include rattail sixweeks grass (*Festuca myuros*), stinkwort (*Dittrichia graveolens*), and lamb's quarters. The margins of the ponds have been invaded primarily by non-native species common in the annual grasslands on the project site.

Contra Costa Canal. The Contra Costa Canal parallels the south boundary of the project site. The canal is within the 250-foot survey buffer of the project site and comprises approximately 1.60 acres of the study area. This canal is an aqueduct constructed in the 1930s to 1940s. In the project site and immediate vicinity, the Contra Costa Canal is an open unvegetated trapezoidal channel about 25 feet wide at the top of the bank, bordered on its north bank by a public-access paved trail. The canal is fenced along both sides (DayZenLLC 2024b).

Special-Status Species

Special-status species are plant and wildlife species that have been afforded special recognition by federal, state, or local resource agencies or organizations. Staff reviewed the results of the biological surveys performed on the project site and surrounding 250-foot buffer of the project site and the results of queries from the U.S. Fish and Wildlife

Service (USFWS) Information for Planning and Consultation (IPaC) on-line database, California Natural Diversity Database (CNDDDB) RareFind 5, California Native Plant Society (CNPS) Rare Plant Inventory, California Consortium of Herbaria, iNaturalist, eBird, and species listed in the ECCC HCP/NCCP.

Special-status Plants

The project site provides little or no habitat for the special-status plant species known to be present in the region. With the exception of a few planted oaks (*Quercus* spp.) and remnant cottonwoods and willows (*Salix* spp.), all of the dominant plant species throughout the area are exotic.

Protocol-level surveys for plants and a floristic inventory of the project site and a 250-foot buffer of the project site were conducted on April 12, May 19, and July 12, 2023. Surveys were conducted within the known blooming period for special-status plants with the potential to occur in the project vicinity. No special-status plants were found within the study area during surveys.

Special-status Wildlife

The applicant conducted planning surveys based on the requirements of the ECCC HCP/NCCP, which requires surveys be conducted for all covered projects to identify the resources (species and habitats) potentially affected by the project. Planning surveys were conducted between 2018 through 2024 (February, June and November 2018, April and June 2019, April and December 2022, April, May and July 2023). In addition, reconnaissance-level habitat assessment surveys were conducted from April 2022 to July 2023. These surveys were conducted to assess the location, quantity, and quality of suitable habitat for ECCC HCP/NCCP covered wildlife species, special-status non-covered animal species and sensitive habitats within the study area. Additionally, CEC staff conducted a site visit and field review on June 18, 2024. The Planning Survey Report was submitted to the Conservancy in September 2025.

Trees and nearby transmission line towers within the project area also provide potential nesting habitat for birds, including special-status species and those protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code, sections 3503, 3503.5, 3513, and 3800. The following special status birds have a low potential to nest or forage either in or near the project site. These include tricolored blackbird (*Agelaius tricolor*; state threatened), grasshopper sparrow (*Ammodramus savannarum*; CDFW species of special concern), golden eagle (*Aquila chrysaetos*; state fully protected species), short-eared owl (*Asio flammeus*; CDFW species of special concern), burrowing owl (*Athene cunicularia*; state candidate species), ferruginous hawk (*Buteo regalis*; CDFW watch list), northern harrier (*Circus hudsonius*; CDFW species of special concern), California horned lark (*Eremophila alpestris actia*; CDFW watch list), merlin (*Falco columbarius*; CDFW watch list), prairie falcon (*Falco mexicanus*; CDFW watch list), and American peregrine falcon (*Falco peregrinus anatum*; CDFW special animal list previously delisted). The applicant stated that Swainson's hawk (*Buteo swainsoni*) is not expected within the study area; however, CEC staff determined that while Swainson's

hawk are not common breeders in Contra Costa County, there are CNDDDB occurrences to the east and south of the project area and therefore, there is potential for Swainson's hawk to forage or migrate through the project site. Two special-status wildlife species have been observed foraging in the vicinity of the study area. These include white-tailed kite (CDFW fully protected), and Cooper's hawk (CDFW watch list) which were detected during the applicant's surveys.

In addition, the project area has the potential to support a variety of special status amphibians. One of the remnant golf course ponds may provide potential breeding habitat for California tiger salamander (*Ambystoma californiense*; state and federally threatened). The project site also provides suitable migration and aestivation habitat for both California tiger salamander and California red-legged frog (*Rana draytonii*; federally threatened and CDFW species of special concern). Although no western pond turtles (*Emys marmorata*) were observed during surveys, suitable habitat is present and the species has the potential to occur on site.

No suitable habitat is present for Townsend's western big-eared bat (*Corynorhinus townsendii*), Longhorn fairy shrimp (*Branchinecta longiantenna*), Vernal pool fairy shrimp (*Branchinecta lynchi*), Midvalley fairy shrimp (*Branchinecta mesovallensis*), Vernal pool tadpole shrimp (*Lepidurus packardii*), or giant garter snake (*Thamnophis gigas*), which are all covered under the ECCC HCP/NCCP. This is due to a lack of suitable caves or other roosting habitat or aquatic habitats, such as freshwater marshes or vernal pools.

Critical Habitat

Critical habitat is a specific geographic area designated by the USFWS or National Marine Fisheries Service (NMFS) that contains physical or biological features essential to the conservation of a federally listed species. The project site is located within designated critical habitat for Delta smelt (*Hypomesus transpacificus*). However, the project site provides no habitat suitable for the species, as Delta smelt require year-round flow and the drainages on site are seasonal or ephemeral. No other designated or proposed critical habitat for federally listed species is identified within the project site by the USFWS or NMFS (USFWS 2025).

Wildlife Movement and Nursery Sites

Wildlife Corridors

As per the California Essential Habitat Connectivity Project (Spencer et al., 2010) accessed through CDFW BIOS, the nearest Natural Landscape Block is approximately 3 miles to the southeast. A designated Small Natural Area is located approximately 0.4 miles to the southwest. The project site is separated from these areas by the Contra Costa Canal. According to the CDFW BIOS Terrestrial Connectivity layer, the project site and surrounding vicinity are located in a Limited Connectivity Opportunity area and

provides limited potential for wildlife movement across the landscape due to existing development and infrastructure constraints.

The project site is located at the south edge of the urbanized city of Pittsburg. To the north is suburban development and State Route (SR) 4. Immediately to the south and west of the project site is the Contra Costa Canal and the southwest extent of the former golf course. The project site is surrounded by fencing from the former golf course and the Contra Costa Canal is fenced precluding wildlife movement from adjacent open areas to the south. Remnant golf course netting still remains on site towards the eastern portion of the project site.

The PG&E Pittsburg-Eastshore 230 kilovolt (kV) transmission line corridor to the east is accessible from the project site. This corridor provides direct connectivity from the Diablo Range hills to the edge of Suisun Bay. As such, it represents a potentially important wildlife movement corridor. Other than this corridor, the project site itself provides little opportunity for wildlife movement due to the barriers along the north, west, and south. The north-south habitat connectivity is partially obstructed by the Contra Costa Canal, which has relatively few crossings accessible to wildlife. One of the largest crossings is present where the PG&E transmission corridor crosses the Canal. This crossing may provide important opportunities for wildlife movement along the transmission corridor, such as San Joaquin kit fox, American badger, ground squirrels, coyotes, and western pond turtle. The project as designed would avoid new structures or barriers to movement near this crossing.

Wildlife Nursery Sites

Nursery sites are locations or areas where animals breed, lay eggs, or rear their young, such as rookeries, fawning areas, or fish spawning habitats. Wildlife nursery sites also may include amphibian breeding ponds or bat maternity roosts. At least one of the constructed golf course ponds to the northeast provides potential breeding habitat for California tiger salamander. Hydrologic surveys conducted during the 2018 wet season found that the pond retained water from February through June. This long hydroperiod, combined with the presence of potential prey species for California tiger salamander and a lack of predator species, suggests that the pond could support breeding California tiger salamander. The second pond provides sub-optimal breeding conditions for the species as it does not hold water long enough (well under 3 months) and supports dense vegetation and/or predators such as non-native mosquitofish (*Gambusia affinis*) or bullfrogs (*Lithobates catesbeianus*). The study area lacks ponds or pools that hold water long enough to support breeding California red-legged frog. Trees in the project area as well as an existing one-story mechanical equipment storage building located in the southeastern corner of the site may also offer maternity roost opportunities for bats. The existing building would remain on site. No other wildlife nursery sites are present within the study area.

Existing Trees

Trees in the study area consist primarily of non-native species that were originally planted as part of the golf course landscaping. Trees throughout the surveyed areas are in varying degrees of decline, dead, or are overgrown. Fire damage and water deprivation have caused distress and/or death to a vast number of trees (Anderson's 2023). A total of 75 living and dead standing trees were inventoried by the applicant. Of these 75 trees inventoried, 25 of them are considered protected trees by the City of Pittsburg tree ordinance.

The dominant species identified is the non-native Peruvian pepper tree. Also identified were several pine species, including Bishop pine, lodgepole pine (*P. contorta* ssp. *murrayana*) and ponderosa pine (*P. ponderosa*), which while native to California, are not native to the project region. Other species present include shamel ash (*Fraxinus uhdei*), Italian stone pine (*P. pinea*), deodar cedar (*Cedrus deodara*), and gum trees (*Eucalyptus camaldulensis* and *E. globulus*). A few coast live oaks (*Quercus agrifolia* var. *agrifolia*) and valley oaks (*Q. lobata*) were also identified; however historic aerial photography suggests these oaks may not have been present prior to development of the golf course.

Regulatory Background

Federal

Endangered Species Act (16 U.S.C., § 1530 et seq., and 50 C.F.R., part 17.1 et seq.). The Endangered Species Act (ESA) designates and provides for protection of threatened and endangered plant and animal species, and their critical habitat. Its purpose is to protect and recover imperiled species and the ecosystems for which they depend. It is administered by the USFWS and the NMFS. The USFWS is responsible for terrestrial and freshwater organisms while NMFS is responsible for marine wildlife such as whales and anadromous fish (such as salmon). Species may be listed as endangered or threatened. All species of plants and animals, except pest insects, are eligible for listing. Species are defined to include subspecies, varieties, and for vertebrates, distinct population segments. The ESA protects endangered and threatened species and their habitats by prohibiting the "take" of listed animals and the interstate or international trade in listed plants and animals, including their parts and products, except under federal permit. "Take" is broadly defined in ESA to include "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct" (16 U.S.C., §1532 (19)). Take can also include significant habitat modification or degradation that directly results in death or injury to a listed wildlife species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering (50 C.F.R., §17.3). Take of federally listed species as defined in the ESA is prohibited without incidental take authorization, which may be obtained through Section 7 consultation (between federal agencies) or a Section 10 Habitat Conservation Plan. The administering agencies are the USFWS, National Oceanic Atmospheric Administration /NMFS.

The Bald and Golden Eagle Protection Act (16 U.S.C. § 668–668c). The Bald and Golden Eagle Protection Act (BGEPA) prohibits the “taking” of bald and golden eagles, including their parts, nests, or eggs. To take is defined as to “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, destroy, molest, or disturb” any bald or golden eagle, whether “alive or dead...unless authorized by permit”. The administering agency is USFWS.

Migratory Bird Treaty Act (16 U.S.C., §§ 703–711). The Migratory Bird Treaty Act makes it illegal to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid federal permit. The USFWS has authority and responsibility for enforcing the MBTA. The administering agency is USFWS.

Clean Water Act Sections 401 and 404 (33 U.S.C., §§ 1251–1376). The Clean Water Act requires the permitting and monitoring of all discharges to surface water bodies. Section 404 (33 U.S.C., § 1344) requires a permit from the United States Army Corps of Engineers for a discharge from dredged or fill materials into a water of the United States, including wetlands. Section 401 (33 U.S.C., § 1341) requires a permit from the regional water quality control board for the discharge of pollutants. By federal law, every applicant for a federal permit or license for an activity that may result in a discharge into a California water body, including wetlands, must request state certification that the proposed activity will not violate state and federal water quality standards. The administering agency is the U.S. Army Corps of Engineers (Section 404) and the State or Regional Water Quality Control Board (Section 401).

State

California Endangered Species Act (Fish and G. Code, §§ 2050–2098). The California Endangered Species Act (CESA) of 1984 states that all native species of fish, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation, will be protected and preserved. CESA prohibits the take of any species of wildlife designated by the California Fish and Game Commission as endangered, threatened, or candidate species. The CDFW may authorize the take of any such species if certain conditions are met. These criteria are listed in Title 14 of the California Code of Regulations, Section 783.4 subdivisions (a) and (b). For purposes of CESA “take” means to hunt, pursue, catch, capture, or kill (Fish and G. Code, § 86). The administering agency is CDFW.

Fully Protected Species (Fish and G. Code, §§ 3511, 4700, 5050, and 5515). These sections designate certain species as fully protected and prohibit the take of such species or their habitat unless for scientific purposes (see also Cal. Code Regs., tit. 14, §670.7). The incidental take of fully protected species may also be authorized in an approved natural community conservation plan (Fish and Game Code, § 2835). The administering agency is CDFW.

California Fish and Game Code, Subsections 3503, 3503.5, 3513, and 3800

The following sections of the Fish and Game Code designate protections for birds and/or their nests or eggs. The administering agency is CDFW.

Section 3503: This section makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.

Section 3503.5: This section makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes and Strigiformes or to take, possess, or destroy the nest or eggs of any such bird.

Section 3513: This section protects California's migratory birds by making it unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame birds.

Section 3800: All birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds are nongame birds. It is unlawful to take any nongame bird except as provided in this code or in accordance with regulations of the commission or, when relating to mining operations, a mitigation plan approved by the department.

California Lake and Streambed Alteration Notification/Agreement (Fish and G. Code, §§ 1600 et seq.). These sections stipulate that an entity shall not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. The administering agency is CDFW.

Native Plant Protection (Fish and G. Code, § 1900 et seq.). The Native Plant Protection Act was enacted in 1977 and designates state rare and endangered plants and provides specific protection measures for identified populations. Those laws prohibit the take of endangered or rare native plants but include some exceptions for agricultural and nursery operations; for emergencies; after properly notifying CDFW, for vegetation removal from canals, roads, and other sites; due to changes in land use; and in certain other situations. The administering agency is CDFW.

Porter-Cologne Water Quality Control Act. The State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over all surface water and groundwater in California, including wetlands, headwaters, and riparian areas. The SWRCB or applicable RWQCB must issue waste discharge requirements for any activity that discharges waste that could affect the quality of waters of the state.

Local

Pittsburg Municipal Code, Chapter 15.108, Sections 15.108.040 through 15.108.070 (Habitat Conservation Plan/Natural Community Conservation Plan Ordinance). The City of Pittsburg (City) Habitat Conservation Plan/Natural Community Conservation Plan Implementation Ordinance (ECCC HCP/NCCP Ordinance; Municipal Code Chapter 15.08), establishes procedures to implement the ECCC HCP/NCCP at the City level. It applies to all development projects within the City's urban development area, with the exception of those that:

- Would result in permanent disturbance of less than 1 acre
- Are entirely within an area mapped by the ECCC HCP/NCCP as urban, turf, landfill and/or aqueduct
- Are not "covered projects" as defined by the ECCC HCP/NCCP
- Are exempt under any provision of law

Under the ECCC HCP/NCCP Ordinance, the City Planner administers ECCC HCP/NCCP implementation, reviews applications for completeness, and verifies fee payments (Municipal Code Section 15.108.040). All development applications for non-exempt projects must include an HCP application that includes the following (Municipal Code Sections 15.108.050-060).

- The City's standard ECCC HCP/NCCP application form, completed for the project
- A written description of the project (including construction and O&M), a grading plan, and a site plan
- A survey report summarizing the results of the planning surveys required by the ECCC HCP/NCCP
- Evidence of compliance with ECCC HCP/NCCP avoidance and minimization measures
- Quantification of permanent project-related land disturbance
- Estimated ECCC HCP/NCCP development and wetland mitigation fees due, and/or documentation of alternate approaches to offset these fees, plus an administrative fee to cover the City's review and processing costs (Municipal Code Section 15.108.070).

City of Pittsburg 2040 General Plan. The Pittsburg City Council adopted the 2040 General Plan and certified the Final Environmental Impact Report on May 6, 2024 under resolution 24-14463 and 24-14464. The goals and policies applicable to biological resources and natural habitats and relevant to the project include the following:

- **Goal-10-2:** Conserve biological and ecological resources, particularly the health of Suisun Bay and Marsh (Bay) and the Sacramento-San Joaquin Delta (Delta), special status species, including species that are State and Federally listed as endangered, threatened, or rare, habitats that support special status species, and sensitive habitats.

- **Policy 10-P-2.8:** Require new development projects and expansion of existing uses to conserve sensitive habitat, including special status species.
- **Policy 10-P-2.11:** Encourage the preservation of wildlife corridors to ensure the integrity of habitat linkages.
- **Policy 10-P-2.12:** Continue to support and implement the East Contra Costa County Habitat Conservation Plan (ECCC HCP/NCCP)
- **Policy 10-P-2.15:** Protect and restore threatened natural resources, such as wildlife, estuaries, tidal zones, marine life, wetlands, and waterfowl habitat.
- **Policy 10-P-2.18:** Recognize that climate change impacts may influence future guidance, and best available data, and continue to ensure that up-to-date information is consulted when reviewing projects for potential impacts to biological resources, including the Bay, Delta, and sensitive habitats.

City of Pittsburg Tree Preservation and Protection

The City regulates tree preservation, removal, and replacement through its Tree Preservation and Protection Code (Pittsburg Municipal Code, Title 18, Chapter 18.84, Article XIX, Section 18.84.835). The code is administered by the City's Planning Division.

Protected Tree Definition (Pittsburg Municipal Code § 18.84.835). A tree is classified as a Protected Tree under any of the following conditions:

- A California native tree, as identified in the Calflora online database of wild California plants, that measure at least 50 inches in circumference (15.6 inches diameter) at 4.5 feet above grade, regardless of location or health; or
- A tree of a species other than a California native that measures at least 50 inches in circumference at 4.5 feet above grade and is either on undeveloped property, located on public property or within the right-of-way, or located on private property and is found to provide benefits to the subject property as well as neighboring properties, subject to determination by the city planner; or
- A tree required to be planted, relocated, or preserved as a condition of approval of a tree removal permit or other discretionary permit, and/or as environmental mitigation for a discretionary permit.

Section 18.84.845 Permit Required. The removal or relocation of a Protected Tree on private property or non-City public property within City limits requires a Tree Removal Permit unless it is an emergency posing immediate danger or was previously approved under an existing development entitlement or permit.

Section 18.84.850 Tree Removal Permit Procedure and Requirements. The removal of Protected Trees requires a permit, submitted with development applications, if applicable. The application process includes submission of an arborist report, site

plan, justification for removal, and may require public notice and review by the Planning Division.

Section 18.84.855 Replacement Trees. If tree removal is approved, the applicant must provide replacement trees per City standards. Options include planting new trees (at 4-to-1 or 12-to-1 ratios depending on tree size), paying in-lieu fees, or a combination of both. Trees should be planted on-site unless that's not feasible, and native trees must be replaced with the same species when possible. Any in-lieu fees collected must be used for tree planting and maintenance in public areas.

5.4.2 Environmental Impacts

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Construction

Less Than Significant with Mitigation Incorporated. Based on the review of the ECCC HCP/NCCP and on the results of the database searches and conditions observed during field surveys, 199 special-status species (97 plants, 102 wildlife species) were evaluated as potentially occurring on or in the vicinity of the project. Suitable habitat within the proposed project site includes primarily non-native annual grassland.

The ECCC HCP/NCCP does not require a determination of presence/absence for covered species because under the ECCC HCP/NCCP covered species are assumed to occupy suitable habitat in impact areas, and mitigation is based on the assumption of take. Activities covered under the ECCC HCP/NCCP are considered to have received Incidental Take authorization from the USFWS and CDFW. Results of the planning surveys were used to determine which preconstruction and construction monitoring surveys were necessary (see Section 5.4.3). The proposed project and any impacts to covered species would be covered by the ECCC HCP/NCCP; therefore, measures from ECCC HCP/NCCP would be used to mitigate impacts to covered species. The ECCC HCP/NCCP Appendix D distribution maps of the covered species were reviewed as part of this analysis. Analysis and mitigation measures for special-status species not covered under the ECCC HCP/NCCP are also provided.

Plants

A literature review of the project site and adjoining area, including a nine-quad search of CNDDDB (CNDDDB 2025), IPaC (USFWS 2025), and CNPS (CNPS 2023, CNPS 2024), determined there are 97 special-status plant species that potentially occur regionally within the greater Pittsburg area surrounding the project site. Of these 97 species, 73 were determined to have no potential to occur due to a lack of suitable habitat within

the site (e.g., forest, scrub, prairie, chaparral or cismontane woodland, soil types, vernal pools, etc.), or because they are considered extirpated from the vicinity. Potentially suitable habitat is present for 24 special-status plant species. Most of these species are associated with the valley and foothill grassland found in the project vicinity.

The study area is dominated by the former golf course site, which was intensively managed for more than 70 years and features amended or imported soils over extensive areas. In addition, following the cessation of golf course management, much of the formerly groomed and managed turf area was colonized by invasive non-native weedy vegetation, which now forms tall, dense stands. Steeper slopes within the fenced portion of the study area, which were never managed as part of the golf course, feature semi-natural habitats, with scattered planted trees and annual grassland. These areas support tall, dense growth of exotic grasses with scattered invasive weeds. Where native soils remain, heavy clay soils are present, but in general soils on the site are not derived from serpentine or limestone rock, and are not sandy, gravelly, or alkaline.

No special-status plants were found during protocol-level surveys or the floristic inventory conducted for the study area. Although protocol-level surveys conducted during the 2023 blooming period did not identify any special-status plants within the study area, and the study area is considered generally unlikely to support special-status plants, several species may have some potential to occur. The species with the greatest potential to be present are big tarplant (*Blepharizonia plumosa*), Mt. Diablo fairy-lantern (*Calochortus pulchellus*), and Diablo helianthella (*Helianthella castanea*). None of these plants are state or federally listed or candidate for listing, but all are assigned California Rare Plant Rank (CRPR) 1B by the CNPS, indicating they are rare throughout their native ranges. Although the loss of a small number of individuals might not increase risks to these or other special-status plants substantially, removal of an entire occurrence could represent a threat to the population at a regional level and thus would represent a significant impact.

The project would incorporate all applicable ECCC HCP/NCCP requirements, and proposes to implement a measure that includes seeking coverage under the ECCC HCP/NCCP (with payment of development fees to support long-term habitat conservation), conducting an updated survey for special-status plants, and coordinating with the East Contra Costa County Habitat Conservancy (Conservancy), to allow for salvage, replanting, and active monitoring of any special-status plants affected by the project.

In addition, the applicant has proposed to implement a measure that would explicitly prohibit removal of plants considered “no take” under the ECCC HCP/NCCP due to their extreme rarity. These include, large-flowered fiddleneck (*Amsinckia grandiflora*), alkali milkvetch (*Astragalus tener* ssp. *tener*), Mt. Diablo buckwheat (*Eriogonum truncatum*), diamond-petaled poppy (*Eschscholzia rhombipetala*), Contra Costa goldfields (*Lasthenia conjugens*), and caper-fruited tropidocarpum (*Tropidocarpum capparideum*). If detected, the applicant would be required to initiate prompt consultation with the

Conservancy to determine next steps and to define the applicant's responsibility in the unlikely event one of these species is observed on site.

Staff evaluated these measures and determined that they are adequate to reduce impacts to less than significant. Staff proposes mitigation measure **BIO-1** (Project Coverage under ECCC HCP/NCCP), which would require the applicant to obtain coverage for the project under the ECCC HCP/NCCP and implement ECCC HCP/NCCP measures. In addition, staff proposes **BIO-5** (Rare Plant Survey & and Protection), which would prohibit take of "no take" species.

Implementation of mitigation measures **BIO-1** and **BIO-5** would reduce potential impacts to protected plant species to less than significant.

Wildlife

A literature review of the project site and adjoining area, including a nine-quad search of CNDDDB (CNDDDB 2025) and IPaC (USFWS 2025) determined there are 102 special-status wildlife species that potentially occur regionally within the greater Pittsburg area surrounding the project site. Of these 102 species, 73 were determined to have no potential to occur due to a lack of suitable habitat within the site (e.g., forest, tidal, brackish marsh, etc.), or because they are considered extirpated from the vicinity. Potentially suitable habitat is present for 29 special-status wildlife species. Most of these species are associated with the valley and foothill grassland and trees found in the project vicinity.

ECCC HCP/NCCP Covered Species

All special-status wildlife species covered under the ECCC HCP/NCCP that may be affected by the project have impact avoidance, minimization, and mitigation measures that have already been determined through prior consultation with the USFWS and the CDFW under the ECCC HCP/NCCP. Those measures applicable to the project, as well as any other necessary avoidance or minimization efforts for non-covered species are provided below.

California Tiger Salamander

California tiger salamander, a state and federal threatened species, has the potential to be present within the study area, including the project site. The study area offers both aquatic breeding habitat and upland migration/aestivation habitat for California tiger salamander. Hydrologic surveys conducted in 2018 found that this pond retained water from February through June. The long hydroperiod, combined with the presence of potential prey species and absence of known predators, suggests it could support California tiger salamander reproduction. A second pond provides suboptimal conditions because it does not hold water long enough (less than three months) and/or supports dense vegetation and non-native predators such as mosquitofish (*Gambusia affinis*) or bullfrogs (*Lithobates catesbeianus*). In addition to aquatic breeding habitat, the project

site provides suitable upland habitat for California tiger salamander migration and aestivation.

Direct injury or mortality affecting California tiger salamander would be considered a significant impact. In addition, the loss or degradation of suitable habitat, including aquatic breeding areas, upland migration and aestivation sites, and habitat connectivity, would also be considered a significant impact.

California tiger salamander is a covered species under the ECCC HCP/NCCP. The ECCC HCP/NCCP considers the needs of California tiger salamander in allocating use of development fees paid under the ECCC HCP/NCCP and preserve lands are selected and managed for the long-term success of the species. This regional approach is generally held to be more effective in addressing the needs of at-risk species than isolated permittee-responsible mitigation projects.

The applicant proposed to implement several measures to offset and minimize project impacts to California tiger salamander. The applicant's payment of ECCC HCP/NCCP fees would provide an offset for project impacts to habitat and species. The applicant also proposes to implement a project-specific Worker Environmental Awareness Program (WEAP), which requires all construction and operation personnel and project staff to undergo environmental awareness training prior to conducting work on the project. In addition, the applicant proposes adherence to species-level avoidance and minimization measures for California tiger salamander.

Staff evaluated these measures and determined that they are adequate to reduce potential impacts to California tiger salamander. Staff proposes mitigation measures **BIO-1** (Project Coverage under ECCC HCP/NCCP), **BIO-2** (WEAP), and **BIO-4** (Adherence to ECCC HCP/NCCP Requirements), which include measures to ensure the project would comply with regulatory permit requirements under the ECCC HCP/NCCP.

With the implementation of mitigation measures **BIO-1**, **BIO-2**, and **BIO-4** impacts to California tiger salamander would be less than significant.

California Red-legged Frog

California red-legged frog, a state species of special concern and a federal threatened species, has the potential to be present within the study area, including the project site. While the study area includes appropriate upland aestivation habitat for California red-legged frog, it does not contain aquatic features capable of supporting breeding. The study area lacks ponds or pools holding water long enough to support breeding California red-legged frog. Direct injury or mortality affecting California red-legged frog would be considered a significant impact. In addition, the loss of habitat, including out-migration, aestivation, and habitat connectivity would also be considered a significant impact.

The California red-legged frog is a covered species under the ECCC HCP/NCCP. The ECCC HCP/NCCP considers the needs of the species in allocating use of development

fees paid under the ECCC HCP/NCCP and preserve lands are selected and managed for the long-term success of the species.

The applicant proposed to implement several measures to offset and minimize project impacts to California red-legged frog. The applicant's payment of ECCC HCP/NCCP fees would provide an offset for project impacts to habitat and species. The applicant also proposes to implement a project-specific WEAP, which requires all construction and operation personnel and project staff to undergo environmental awareness training prior to conducting work on the project. In addition, the applicant proposes adherence to the ECCC HCP/NCCP requirements which include avoidance and minimization measures for the species.

Staff evaluated these measures and determined that they are adequate to reduce potential impacts to California red-legged frog. Staff proposes mitigation measures **BIO-1** (Project Coverage under ECCC HCP/NCCP), **BIO-2** (WEAP), and **BIO-4** (Adherence to ECCC HCP/NCCP Requirements) which include measures to ensure the project would comply with regulatory permit requirements under the ECCC HCP/NCCP.

With the implementation of **BIO-1**, **BIO-2** and **BIO-4**, impacts on California red-legged frog would be less than significant.

San Joaquin Kit Fox

San Joaquin kit fox, a state threatened and federal endangered species, has the potential to occur within the study area, including the project site. The study area is located just north of the known range of San Joaquin kit fox; however, the ECCC HCP/NCCP identifies the project area and vicinity as suitable core habitat for the species. While it is unlikely that the species would occur within the study area, there is potential for San Joaquin kit fox to wander outside its expected range and to occur within the project site. No individuals were observed and no evidence of resident or breeding use was found during surveys. If individuals move through the project area during construction, they may be injured or killed by equipment or vehicle traffic. Although unlikely, kit foxes could also temporarily occupy a den within the study area, making them vulnerable to disturbance or direct harm. Beyond the potential for temporary or permanent habitat loss, the presence of San Joaquin kit fox during construction could result in the mortality of individual animals. These would be potentially significant impacts.

The applicant proposed to implement several measures to offset and minimize project impacts to San Joaquin kit fox. To reduce impacts to this species the applicant is seeking coverage under the ECCC HCP/NCCP. The applicant's payment of ECCC HCP/NCCP fees would provide an offset for project impacts to habitat and species. In addition, information on the San Joaquin kit fox would be included in a project-specific WEAP, and the applicant would adhere to species-level measures for San Joaquin kit fox under the ECCC HCP/NCCP. As part of the ECCC HCP/NCCP requirements, if preconstruction surveys determine that the species is present on the site or within a

distance they could be disturbed by construction activity, the approved biologist may recommend construction monitoring as per Section 6.3.3 of the ECCC HCP/NCCP. This includes the submittal of a Construction Monitoring Plan (CMP) to the Conservancy for approval. The CMP must be submitted and approved prior to issuance of the grading permit, or, if no grading permit is required, the building permit, for the project.

Staff evaluated these measures and determined that they are adequate to reduce potential impacts to San Joaquin kit fox. Staff proposes mitigation measures **BIO-1** (Project Coverage under ECCC HCP/NCCP), **BIO-2** (WEAP), and **BIO-4** (Adherence to ECCC HCP/NCCP Requirements), which include measures to ensure the project would comply with regulatory permit requirements under the ECCC HCP/NCCP.

With the implementation of **BIO-1**, **BIO-2** and **BIO-4** impacts on San Joaquin kit fox would be less than significant.

Golden Eagle

Golden eagle, a fully protected species protected by the federal BGEPA and, has the potential to be present within the study area, including the project site. The study area provides suitable foraging habitat, but no natural nesting habitat is present. However, golden eagles have been documented nesting on transmission towers in neighboring counties, and similar structures within the study area could provide potential nesting opportunities. The site is mapped as suitable habitat in the ECCC HCP/NCCP.

Construction activities could impact golden eagle through noise, vibration, and increased human presence, which may disrupt foraging behavior or displace individuals from the area. If golden eagles were to establish a nest on nearby transmission towers, construction could result in nest disturbance or abandonment, which would be a significant impact given the species' protected status.

The applicant proposed to implement several measures to offset and minimize project impacts to golden eagle. To reduce impacts to this species, the applicant is seeking coverage under the ECCC HCP/NCCP. The applicant's payment of ECCC HCP/NCCP fees would provide an offset for project impacts to habitat and species. In addition, information on the golden eagle would be included in a project-specific WEAP, and the applicant would adhere to species-level measures for golden eagle under the ECCC HCP/NCCP. The ECCC HCP/NCCP includes specific measures to avoid impacts on migratory birds, including Conservation Measure 1.11. As part of the ECCC HCP/NCCP requirements, if preconstruction surveys determine that the species is present on the site or within a distance they could be disturbed by construction activity, the approved biologist may recommend construction monitoring as per Section 6.3.3 of the ECCC HCP/NCCP. This includes the submittal of a CMP to the Conservancy for approval. The CMP must be submitted and approved prior to issuance of the grading permit, or, if no grading permit is required, the building permit, for the project.

Staff evaluated these measures and determined that they are adequate to reduce potential impacts to golden eagle and comply with the ECCC HCP/NCCP requirements. Staff proposes mitigation measures **BIO-1** (Project Coverage under ECCC HCP/NCCP), **BIO-2** (WEAP), and **BIO-4** (Adherence to ECCC HCP/NCCP Requirements).

With the implementation of **BIO-1**, **BIO-2** and **BIO-4** impacts on golden eagle would be less than significant.

Western Burrowing Owl

Western burrowing owl (*Athene cunicularia*) is a CDFW candidate species for listing under CESA. The project site is located within modeled habitat by the ECCC HCP/NCCP and this species is covered under the ECCC HCP/NCCP. Ground squirrel complexes within the project study area could provide suitable habitat. No evidence of burrowing owls was observed during field surveys. The nearest known occurrence is approximately 2.2 miles west of the study area.

Construction activities could impact western burrowing owl through direct disturbance or destruction of potential burrow sites, temporary or permanent loss of foraging habitat, and increased human presence that may reduce site suitability. If individuals were to occupy burrows within the study area prior to or during construction, impacts could include nest abandonment, reduced reproductive success, or direct mortality which would be a potentially significant impact.

The applicant proposed to implement several measures to offset and minimize project impacts to western burrowing owl. To reduce impacts to this species the applicant would seek coverage under the ECCC HCP/NCCP. The applicant's payment of ECCC HCP/NCCP fees would provide an offset for project impacts to habitat and species, including loss of potential habitat. In addition, information on the western burrowing owl would be included in a project-specific WEAP, and the applicant would adhere to species-level measures for burrowing owl under the ECCC HCP/NCCP. The ECCC HCP/NCCP includes specific measures to avoid impacts on migratory birds, including Conservation Measure 1.11. As part of the ECCC HCP/NCCP requirements, if preconstruction surveys determine that the species is present on the site or within a distance they could be disturbed by construction activity, the approved biologist may recommend construction monitoring as per Section 6.3.3 of the ECCC HCP/NCCP. This includes the submittal of a CMP to the Conservancy for approval. The CMP must be submitted and approved prior to issuance of the grading permit, or if no grading permit is required, the building permit, for the project.

Staff evaluated these measures and determined that they are adequate to reduce potential impacts to western burrowing owl and comply with the ECCC HCP/NCCP requirements. Staff proposes mitigation measures **BIO-1** (Project Coverage under ECCC HCP/NCCP), **BIO-2** (WEAP), and **BIO-4** (Adherence to ECCC HCP/NCCP Requirements).

With the implementation of **BIO-1**, **BIO-2**, and **BIO-4** impacts on western burrowing owl would be less than significant.

Swainson's Hawk

Swainson's hawk, a state threatened species, has the potential to be present within the study area, including the project site. The study area provides suitable foraging habitat for Swainson's hawk, however no suitable nesting habitat is present in the project study area. The site is not mapped as suitable nesting or foraging habitat in the ECCC HCP/NCCP. Construction activities could impact Swainson's hawk through temporary or permanent loss of foraging habitat and increased disturbance from human presence, equipment operation, and noise, which may disrupt foraging behavior or displace individuals from the area. Although the project site does not support nesting habitat, if Swainson's hawks are foraging nearby, construction-related habitat disturbance could reduce prey availability and foraging efficiency. These would be significant impacts.

The applicant proposed to implement several measures to offset and minimize project Swainson's hawk. To reduce impacts to this species the applicant is seeking coverage under the ECCC HCP/NCCP. The applicant's payment of ECCC HCP/NCCP fees would provide an offset for project impacts to habitat and species. In addition, information on the Swainson's hawk would be included in a project-specific WEAP, and the applicant would adhere to species-level measures for Swainson's hawk under the ECCC HCP/NCCP. The ECCC HCP/NCCP includes specific measures to avoid impacts on migratory birds, including Conservation Measure 1.11. As part of the ECCC HCP/NCCP requirements, if preconstruction surveys determine that the species is present on the site or within a distance they could be disturbed by construction activity, the approved biologist may recommend construction monitoring as per Section 6.3.3 of the ECCC HCP/NCCP. This includes the submittal of a CMP to the Conservancy for approval. The CMP must be submitted and approved prior to issuance of the grading permit or, if no grading permit is required, the building permit for the project.

Staff evaluated these measures and determined that they are adequate to reduce potential impacts to Swainson's hawk and comply with the ECCC HCP/NCCP requirements. Staff proposes mitigation measures **BIO-1** (Project Coverage under ECCC HCP/NCCP), **BIO-2** (WEAP), and **BIO-4** (Adherence to ECCC HCP/NCCP Requirements).

With the implementation of **BIO-1**, **BIO-2** and **BIO-4** impacts on Swainson's hawk would be less than significant.

Western Pond Turtle

Western pond turtle, a state species of special concern and a federal proposed threatened species, has the potential to be present within the study area, including the project site. The ECCC HCP/NCCP models the former golf course ponds as core habitat for western pond turtle. However, site-specific studies conducted for the project determined that the ponds provide low-quality habitat for the species (DayZenLLC

2024b). There would be no direct impacts to aquatic habitat for this species as neither pond would be directly affected by construction. However, construction of an emergency road between the ponds could indirectly impact the western pond turtle, including potential mortality from vehicle collisions if individuals are present.

The seasonal stream corridors in the study area also provide low-quality habitat for the species. The ECCC HCP/NCCP identifies a movement corridor for the species via the stream within the PG&E transmission line corridor along the east edge of the study area. The habitat within the transmission line corridor is not high quality but it is important since it represents the only through-going habitat corridor for the species within the project vicinity. The project effects on the transmission line corridor would be minimal and does not involve impacts to the stream. No western pond turtles were observed during field surveys. Due to the low quality of available habitat, the species is not expected to occur on the project site. However, if individuals were to occur within the project site during construction, they could still be subject to disturbance, displacement, or direct mortality, particularly from vehicle traffic associated with construction of the emergency access road. This would be a significant impact.

The applicant proposed to implement several measures to offset and minimize project impacts to western pond turtle. The applicant's payment of ECCC HCP/NCCP fees would provide an offset for project impacts to habitat and species. In addition, information on the western pond turtle would be included in a project-specific WEAP. The applicant also proposed a measure for a qualified biologist to implement pre-construction surveys for the western pond and relocate any individuals detected on site, as necessary. In addition, the proposed measures specify that, if the biologist determines that it is warranted, exclusion measures would be put in place to prevent individuals from returning to the active work area.

Staff evaluated these measures and determined that they are adequate to reduce potential impacts to western pond turtle. Staff proposes mitigation measures **BIO-1** (Project Coverage under ECCC HCP/NCCP), **BIO-2** (WEAP), and **BIO-8** (Western Pond Turtle Avoidance and Minimization Measures).

With implementation of **BIO-1**, **BIO-2** and **BIO-8**, impacts western pond turtle would be less than significant.

Non ECCC HCP/NCCP Covered Species

The applicant proposed measures for potential impacts to American bumble bee (*B. pensylvanicus*). However, CEC staff and CDFW concluded that this species is not present within the project vicinity and therefore it is not included in this analysis (CDFW 2025). Therefore, the following measures are limited to addressing obscure bumble bee and Crotch's bumble bee.

Obscure Bumble Bee

Obscure bumble bee (*Bombus caliginosus*), a CDFW Special Animals species, has the potential to be present within the study area. The nearest documented occurrence is approximately 9 miles to the east near Mount Diablo. Potential pollinator resources present within the study area are milkweed (*Asclepias* sp.), lupines (*Lupinus* sp.), and great valley gumweed (*Grindelia camporum*). Construction activities could impact this species through temporary loss of foraging habitat, reduction of nectar resources, and disturbance from vegetation removal if individuals are present during project implementation.

The applicant proposed to implement several measures to offset and minimize project impacts to obscure bumble bee. This includes providing information on the obscure bumble bee in a project-specific WEAP to ensure construction personnel are informed of the species and the need to avoid injury or mortality if individuals are encountered onsite. The applicant also proposed protocol-level surveys by a qualified entomologist to identify the species during peak activity periods and establish avoidance buffers if nests or colonies are found.

Staff evaluated these measures and determined that they are adequate to reduce potential impacts to obscure bumble bee with additional modifications. These modifications include adopting new CDFW survey methodology if available. Staff proposes mitigation measures **BIO-2** (WEAP) and **BIO-6** (Crotch's Bumble Bee and Obscure Bumble Bee Avoidance and Minimization Measures).

With implementation of **BIO-2** and **BIO-6**, impacts on obscure bumble bee would be less than significant.

Crotch's Bumble Bee

Crotch's bumble bee (*B. crotchii*), a state candidate species, has the potential to be present within the study area. The study area provides suitable grassland habitat for the species and plants accessible to short-tongued bees. Specifically, milkweed and multiple species of lupine provide food for the bee. Though there are historical occurrences from 1926 and 1951 with the closest being 7.7 miles south of the study area, both areas have similar habitat to the study area and the plant species present could provide foraging habitat for Crotch's bumble bee. Crotch's bumble bee nest in underground colonies or above ground in tufts of grass, old bird nests, rock piles, and cavities in dead trees. Ground disturbing activities and loss of annual grassland habitat could negatively impact nesting bees.

The applicant proposed to implement several measures to offset and minimize project impacts to Crotch's bumble bee. This includes incorporating information on Crotch's bumble bee into a project-specific WEAP. The applicant also proposed protocol-level surveys by a qualified entomologist to evaluate habitat suitability, survey for foraging individuals, and identify any active nests or colonies. If any nests are found, they will be avoided and protected through the active season.

Staff evaluated these measures and determined that they are adequate to reduce direct and indirect impacts to Crotch's bumble bee to the extent feasible and in a manner consistent with current best practices for the species conservation. However, revisions were made by staff, in coordination with CDFW, that recommend milkweed removal be avoided until after the plant goes to seed in order to further reduce impacts, that the project adopt new CDFW survey methodology if available; consulting with CDFW if Crotch's bumble bees are located during surveys, rather than if nests, which are difficult to detect, are located; and requiring photo vouchers of bumble bees. Staff proposes mitigation measures **BIO-2** (WEAP) and **BIO-6** (Crotch's Bumble Bee and Obscure Bumble Bee Avoidance and Minimization Measures).

With the implementation of **BIO-2** and **BIO-6**, impacts to the Crotch's bumble bee would be avoided and reduced to less than significant.

Monarch Butterfly

The monarch butterfly (*Danaus plexippus*) is a candidate for federal listing as threatened. The monarch feeds on various flowers and lays eggs on milkweed (*Asclepias sp.*) stands. They can be found roosting in eucalyptus, Monterey pines and Monterey cypress trees. In grasslands they prefer to be in areas with predominately grass and forbs. The study area could provide spring/summer breeding habitat based on the presence of milkweed and flowering plants. However, the project site and surrounding areas do not provide the microclimates necessary for overwintering. Because the monarch feeds on various flowers and lays eggs on milkweed (*Asclepias sp.*) stands and since milkweed is present in the study area, there is a potential for monarch butterflies and their larvae to be present. Construction activities could impact monarch butterflies through removal of nectar sources and milkweed host plants, leading to temporary loss of foraging and breeding habitat if individuals are present.

The applicant proposed to implement several measures to offset and minimize project impacts to monarch butterfly. This includes incorporating information on monarch butterfly into a project-specific WEAP. The applicant also proposed pre-construction surveys for the species' larval host plants, followed by inspection for eggs, larvae, and pupae if the larval host plant is present. If eggs, larvae, or pupae are observed, the host plants would be protected in place until the approved biologist has determined that the breeding season has concluded and no more eggs, larvae, or pupae are present. Workers would be directed to avoid injury and mortality to monarch butterfly. If pre-construction surveys are positive for monarch butterflies, the applicant would coordinate with the city of Pittsburg and USFWS.

Staff evaluated these measures and determined that they are adequate to reduce potential direct and indirect impacts to the monarch butterfly to the extent feasible and consistent with current best practices. However, revisions were made by staff, in coordination with CDFW, that recommend milkweed removal be avoided until after the plant goes to seed in order to further reduce impacts. Staff proposes mitigation

measures **BIO-2** (WEAP) and **BIO-7** (Monarch Butterfly Avoidance and Minimization Measures).

With the implementation of **BIO-2** and **BIO-7**, impacts to monarch butterflies would be less than significant.

San Joaquin Pocket Mouse

San Joaquin pocket mouse (*Perognathus inornatus*), a CDFW species of special concern, inhabits grasslands and scrub areas, often favoring friable soils for burrowing. While the study area does not contain the characteristic friable soils typically associated with this species, suitable habitat may still be present. Overall, soils within the project area are not considered highly suitable; however, the species has been documented in the immediate vicinity. Therefore, the potential for the San Joaquin pocket mouse to occur on site is considered low. Impacts could include temporary disturbance or displacement from vegetation clearing, ground disturbance, and construction noise associated with project construction. If individuals are present, these activities could result in direct mortality, reduced foraging opportunities, or loss of burrow sites.

The applicant proposed to implement several measures to offset and minimize project impacts to San Joaquin pocket mouse. This includes incorporating information on the species into a project-specific WEAP. The applicant also proposed measures requiring vegetation removal, clearing, grubbing, and grading which could result in injury or mortality of San Joaquin pocket mouse to be conducted in a manner that allows the species to escape into adjacent undisturbed habitat outside the construction area. It would also prohibit the creation of fragmented areas of remaining habitat where mice could become isolated and trapped.

Staff evaluated these measures and determined that they are adequate to reduce direct and indirect impacts to San Joaquin pocket mouse and determined that they are adequate to reduce potential impacts. Staff proposes mitigation measures **BIO-2** (WEAP) and **BIO-12** (San Joaquin Pocket Mouse Protection).

With the implementation of **BIO-2** and **BIO-12**, impacts to San Joaquin pocket mouse would be less than significant.

American Badger

American badger (*Taxidea taxus*), a CDFW species of special concern, inhabits grasslands, open scrub, and agricultural areas where it relies on loose soils for digging burrows and foraging. No individuals or dens were observed during field surveys; however, the species is known to occur within the region, and suitable habitat conditions are present, indicating some potential for American badger to den on site. Soils in the study area are not highly suitable and the species has not been documented in the immediate vicinity of the project site. There is a low potential for this species to be present.

To reduce potential project impacts on the American badger, the applicant has proposed several avoidance and minimization measures. This includes incorporating information on the species into a project-specific WEAP and requiring a qualified biologist to conduct pre-construction surveys for dens prior to ground-disturbing activities. If active dens are identified, avoidance measures would be implemented to prevent disturbance. Should occupied dens be found but young are not present, badgers may be excluded or may be trapped and relocated to suitable habitat. The applicant would coordinate with the City and CDFW prior to implementation. If young are present, exclusion or relocation would not occur, and a biologist would establish a 50-foot buffer until the biologist has determined that young are no longer dependent on the mother and the den site.

Staff evaluated these measures and determined that they are adequate to reduce potential impacts to the species. Staff proposes mitigation measures **BIO-2** (WEAP) and **BIO-13** (American Badger Survey and Protection).

With the implementation of **BIO-2** and **BIO-13**, impacts to American badger would be less than significant.

Cooper's Hawk

Cooper's hawk, a CDFW Watch List species, was observed foraging in the vicinity of the study area during field surveys. Scattered landscape trees within the study area could provide nesting opportunities. This species is tolerant of suburban development and may nest in the project vicinity. Trees located within the study area provide potential nesting habitat for numerous bird species protected under the MBTA, including this species. Construction activities could impact this species, and other protected bird species, through disturbance or loss of potential nesting trees if clearing occurs during the breeding season.

The applicant proposed to implement several measures to offset and minimize project impacts to Cooper's hawk. This includes incorporating information on the species into a project-specific WEAP. The applicant also proposed a measure which requires pre-construction surveys by a qualified biologist to identify potential nesting sites prior to the initiation of work. If active nests are detected, avoidance measures would be implemented to prevent disturbance during the breeding season.

Staff evaluated this measure and determined that minor revisions were necessary to reduce potential impacts to Cooper's hawk. The timing of the measure was revised from August 31 to September 15 to account for species that may attempt multiple nesting efforts, and the buffer distance was increased from 300 to 500 feet following coordination with CDFW to provide additional protection for nesting birds. Staff proposes mitigation measures **BIO-2** (WEAP) and **BIO-9** (Nesting Bird Protection).

With implementation of **BIO-2** and **BIO-9**, impacts to Cooper's hawk would be less than significant.

Loggerhead Shrike

Loggerhead shrike (*Lanius ludovicianus*), a CDFW species of special concern was not observed during field surveys; however, suitable nesting and foraging habitat is present. Trees located within the study area provide potential nesting habitat for numerous bird species protected under the MBTA, including this species. Construction activities could impact this species through disturbance or loss of potential nesting trees if clearing occurs during the breeding season.

The applicant proposed to implement several measures to offset and minimize project impacts to loggerhead shrike. This includes incorporating information on the species into a project-specific WEAP. The applicant also proposed a measure which requires pre-construction surveys by a qualified biologist to identify potential nesting sites prior to the initiation of work. If active nests are detected, avoidance measures would be implemented to prevent disturbance during the breeding season.

Staff evaluated this measure and determined that minor revisions were necessary to reduce potential impacts to loggerhead shrike. The timing of the measure was revised from August 31 to September 15 to account for species that may attempt multiple nesting efforts, and the buffer distance was increased from 300 to 500 feet following coordination with CDFW to provide additional protection for nesting birds. Staff proposes mitigation measures **BIO-2** (WEAP) and **BIO-9** (Nesting Bird Protection).

With the implementation of **BIO-2** and **BIO-9**, impacts to loggerhead shrike would be less than significant.

White-Tailed Kite

White-tailed kite, a fully protected species, was observed foraging in the vicinity of the study area during field surveys. Suitable nesting and foraging habitat is present within the study area. Trees located within the study area provide potential nesting habitat for numerous bird species protected under the MBTA, including this species. Construction activities could impact this species through disturbance or loss of potential nesting trees if clearing occurs during the breeding season.

The applicant proposed to implement several measures to fully avoid impacts to the species. This includes incorporating information on the species into a project-specific WEAP. The applicant also proposed a measure which requires pre-construction surveys by a qualified biologist prior to the initiation of work.

Staff evaluated this measure and determined that minor revisions were necessary to reduce potential impacts to white-tailed kite. The applicant identified the nesting/breeding season as February 1 to August 31; however, CEC staff, in coordination with CDFW, extended the window to September 15 to account for species

known to attempt multiple nesting efforts, such as the white-tailed kite. In addition, the buffer distance was increased from 300 to 500 feet to provide greater protection for nesting birds. Staff proposes mitigation measures **BIO-2** (WEAP) and **BIO-9** (Nesting Bird Protection).

With the implementation of **BIO-2** and **BIO-9**, impacts to white-tailed kite would be less than significant.

Bald Eagle

Bald eagle, a fully protected species protected by the federal BGEPA and state listed as endangered, has low potential to be present within the study area, including the project site. No large bodies of water are within the study area, and no suitable nesting habitat is present in the project study area except for transmission towers, which are rarely as a nesting substrate. No CNDDDB occurrences of bald eagle are within ten miles of the project site, however bald eagles are wide-ranging predators and may intermittently forage within or pass through the project area. As such, despite the low probability of occurrence, the applicant has proposed avoidance and minimization measures.

Direct impacts to eagles could include disruption of foraging activity or loss or degradation of foraging habitat due to increased dust, noise and disturbance, and the release of hazardous materials. Work conducted in proximity to active nests can also result in nest failure or added vigilance which may limit the foraging time of these species. Indirect impacts include habitat removal and degradation of adjacent habitat due to increased human presence.

The applicant proposed to implement several measures to avoid and minimize impacts to bald eagle. These include incorporating information on bald eagle into a project-specific WEAP and requiring pre-construction surveys by a qualified biologist prior to the initiation of project activities. If active nests are identified, avoidance and protection measures would be implemented.

Staff evaluated these measures and determined that they are adequate to reduce potential impacts to bald eagle. Staff proposes mitigation measures **BIO-1** (Project Coverage under ECCC HCP/NCCP), **BIO-2** (WEAP) and **BIO-4** (Adherence to ECCC HCP/NCCP Requirements), and **BIO-10** (Nesting Bird Protection (Bald Eagle)).

With the implementation of **BIO-1**, **BIO-2**, **BIO-4**, and **BIO-10**, impacts on bald eagle would be less than significant.

Other Nesting Birds

Trees and other vegetation on site provide potential nesting habitat for numerous bird species protected under the MBTA and the California Fish and Game Code. Construction activities could impact protected bird species through disturbance or loss of potential nesting trees if clearing occurs during the breeding season.

The applicant proposed to implement several measures to avoid and minimize impacts to nesting birds. These include incorporating information on special-status birds into a project-specific WEAP and requiring pre-construction surveys by a qualified biologist prior to the initiation of project activities. If active nests are identified, avoidance and protection measures would be implemented.

Staff evaluated this measure and determined that minor revisions were necessary to reduce potential impacts to nesting birds. In coordination with CDFW, the nesting season window was extended from August 31 to September 15, and the buffer distance was increased from 300 to 500 feet to provide additional protection. Staff therefore proposes mitigation measures **BIO-1** (Project Coverage under ECCC HCP/NCCP), **BIO-2** (WEAP) and **BIO-4** (Adherence to ECCC HCP/NCCP Requirements), and **BIO-9** (Nesting Bird Protection).

With the implementation of **BIO-1**, **BIO-2**, **BIO-4**, and **BIO-9** impacts on nesting birds would be less than significant.

Operation

Direct impacts from operation and maintenance activities, which include noise and lighting from operation of the data center, human presence, and site maintenance such as landscape, irrigation, and building maintenance, may result in an increase in disturbance relative to existing conditions. The site has been unused for approximately seven years, during which reduced human activity may have allowed wildlife to utilize portions of the property. However, the site is located within a developed residential neighborhood, where ambient noise, lighting, and human activity are already present. Given the site's past use as a golf course, its existing disturbed condition, and the surrounding residential areas, operation activities are not expected to result in significant impacts on biological resources.

PG&E would construct a "looped" transmission interconnection to the existing Pittsburg-Eastshore 230 kV transmission line located to the east of the project site. This would involve two overhead transmission line extensions from the PG&E switching station to two new steel monopoles installed within the existing PG&E right-of-way and that will replace one of the existing steel lattice towers. The PG&E switching station would be constructed adjacent to the project substation and will be built in a Breaker and a Half configuration. Access to the switching station would be from a separate entrance from the public right-of-way on Golf Club Road. (PBGF 2024).

Bird collisions typically occur when transmission lines intersect flight paths at low altitudes, especially in poor lighting, strong winds, or near wetlands and valleys (Brown 1993; APLIC 1994). The project site is not immediately adjacent to known flight paths or geographic features that increase collision risk. In addition, bird electrocution risk is highest for lines energized between 1 kV and 60 kV, while 230 kV lines typically provide sufficient phase-to-phase and phase-to-ground clearance to prevent electrocutions

(APLIC 2006). Based on these factors, avian collision and electrocution impacts are not likely to occur. Therefore, there would be a less than significant impact.

Operational impacts that could potentially affect biological resources are indirect impacts resulting from project-related nitrogen deposition on nitrogen-sensitive habitats.

Nitrogen Emission and Deposition Impacts. The project would include 37 2.75-MW diesel fired backup generators. Operation of these generators would result in the emission of oxides of nitrogen (NO_x) and ammonia (NH₃).

Nitrogen deposition is the input of NO_x and ammonia (NH₃) "atmospherically derived pollutants", primarily nitric acid (HNO₃), from the atmosphere to the biosphere. The primary sources of these pollutants are vehicle and industrial emissions, including power generation. Increased nitrogen deposition in nitrogen-poor habitat allows the proliferation of non-native species, which crowds out native species (Fenn et al. 2003; Weiss 2006). Nitrogen fertilization has the potential to exacerbate threats to sensitive species habitat, and the deposition of additional nitrogen in an already stressed ecosystem would be a potentially significant indirect impact.

For power generation projects, staff evaluates nitrogen deposition impacts by considering protected areas within a 6-mile radius of the project site. These areas include CDFW sensitive natural communities and USFWS designated critical habitat. CEC staff have found that by the time the emissions plume from a utility-scale power plant has traveled this distance, in-plume concentrations become indistinguishable from background concentrations. In addition, for backup generators associated with a data center, the plume(s) often touches down immediately adjacent to the site since the stacks are low, depending on the terrain and other factors. Due to the small generation capacity and low stacks of the proposed on site generators, nearly all nitrogen deposition is expected to occur in the immediate vicinity of the project (DayZenLLC 2024b). Reports on similar projects have found that any nitrogen plume produced would quickly dilute and become indistinguishable from background levels by the time it reaches 6 miles from the site (CEC 2022). In addition, data centers are relatively well controlled for NO_x and operate under restricted runtimes, limited to readiness testing, maintenance, and emergency use.

Staff considers habitat modification to protected areas and designated critical habitat to be a potentially significant effect if these communities are known to be sensitive to nitrogen deposition. In previous Northern California power plant cases licensed by the Energy Commission (e.g., CEC 2007) as well as a California-wide study of nitrogen deposition (Weiss 2006), 5 kilograms per hectare per year (kg/ha/yr) has been used as a benchmark for analyzing nitrogen deposition impacts to plant communities. In nitrogen sensitive communities, exceeding 5 kg/ha/yr of nitrogen deposition can cause adverse biological effects, including loss of native plant diversity and shifts in community composition.

There is designated or proposed critical habitat for several federally listed species within 6 miles of the project site. This includes USFWS-designated critical habitat for Delta smelt (*Hypomesus transpacificus*), Alameda whipsnake (*Masticophis lateralis euryxanthus*), and the federally listed species at the USFWS Antioch Dunes National Wildlife Refuge. Critical load estimates for aquatic habitats such as those supporting Delta smelt are relatively high (30–40 kg N/ha/yr or greater), while critical load for Alameda whipsnake habitat is lower, ranging from approximately 7.8–14 kg N/ha/yr (Pardo et al. 2010). The listed species at the Antioch Dunes are considered sensitive to nitrogen deposition and would have a critical load of 5 kg/ha/yr.

For a baseline nitrogen deposition estimate, CEC staff used the Community Multiscale Air Quality (CMAQ) modeling system, which provides estimates of ozone, particulates, toxics, and acid deposition. Staff considered the most recent CMAQ-predicted value (CMAQ 2019) as the best available data to determine baseline nitrogen deposition, which ranges from 4.52 kg/ha/yr to 8.01 kg/ha/yr within 6 miles of the project area. Potentially significant impacts could occur if nitrogen deposition from the project in conjunction with existing baseline deposition exceeded the critical load for sensitive communities.

Project-related nitrogen deposition is expected to occur within approximately 0.5 miles of the project. Conservative modeling for comparable projects before the CEC (e.g., CA3, McLaren, and Laurelwood data centers) found nitrogen deposition contributions ranging from 0.01 to 0.20 kg N/ha/yr at distances up to 5 miles. The addition of the proposed project-related deposition of up to up to 0.2 kg/ha/yr would result in a combined deposition rate far below the conservative critical load estimates (30–40 kg N/ha/yr) of any of the sensitive aquatic habitats in the region. While baseline critical load exceeds 5 kg/ha/yr at critical habitat for Alameda whipsnake as well as the listed species at the Antioch Dune National Wildlife Refuge, their locations are well outside the range of where impacts could occur from this project, with Alameda whipsnake critical habitat at 5.92 miles and Antioch Dunes National Wildlife Refuge at 5.97 miles from the project site.

As a result, the project would not affect nearby critical habitat or sensitive natural communities. Therefore, impacts would be less than significant.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Construction

Less Than Significant with Mitigation Incorporated. The study area includes 1.87 acres of riparian habitat. This includes 0.44 acres of Himalayan blackberry thickets and 1.43 acres of Valley Foothill Riparian habitat. Both areas are classified as a sensitive habitat due to their status as riparian areas and may be subject to CDFW jurisdiction under the

California Fish and Game Code. These habitats occur along the stream located within the PG&E transmission line corridor along the eastern edge of the project site. The project may result in direct impacts to 0.03 acre of Himalayan blackberry thickets. There would be no impact to Valley Foothill Riparian habitat.

The applicant proposed to implement several measures to offset and minimize project impacts to riparian habitat. This includes implementation of WEAP training and compliance with all applicable requirements of the ECCC HCP/NCCP. The applicant would follow the ECCC *HCP/NCCP Conservation Measure 2.12 (Wetland, Pond, and Stream Avoidance and Minimization)* which requires riparian areas to be staked and delineated for avoidance by a qualified biologist before the construction contractor mobilizes, and WEAP training will be provided to ensure all construction staff understands the importance of avoiding damage to the riparian habitat.

Staff evaluated these measures and determined that they are adequate to reduce impacts to riparian habitat. Staff proposes mitigation measures **BIO-2** (WEAP and **BIO-4** (Adherence to ECCC HCP/NCCP Requirements).

In addition, the project may require a Section 404 U.S. Army Corps of Engineers (USACE) permit, a Section 401 RWQCB certification, and a CDFW Lake and Streambed Alteration Agreement. These permits are expected to include measures such as delineating work boundaries, ensuring equipment is cleaned prior to use, and implementing best management practices to prevent siltation, pollution, and the spread of invasive weeds. Staff has proposed a measure, **BIO-3** (Regulatory Permits for Jurisdictional Waters), which requires the applicant to obtain any necessary permits from the USACE, RWQCB, and CDFW, and to implement all associated conditions to avoid or minimize impacts to riparian habitats.

With implementation of **BIO-2**, **BIO-3**, and **BIO-4**, impacts to riparian habitat during construction are expected to be less than significant.

Operation

Less Than Significant with Mitigation Incorporated. The project has the potential to increase degradation of the riparian habitat due to human incursions, windblown trash, and other effects of nearby development over the long term. Coverage under the ECCC HCP/NCCP would require the project to implement ECCC *HCP/NCCP Conservation Measure 1.7 (Establish Stream Setback)*, which requires maintenance of a protective buffer between new development and existing stream corridors. This measure would protect the riparian corridor at the east edge of the study area by decreasing the potential for damaging incursions and trash accumulation. In addition, the San Francisco Bay Regional Water Quality Control Board requires new development projects that disturb one or more acres of land to contain and treat stormwater runoff from the site.

The project would construct a new stormwater outfall directed toward the stream. The existing undersized pipe (22-inch diameter corrugated metal pipe that discharges upslope from the stream) would be replaced with dual pipes sized appropriately for site flows to the existing stormwater drainage outlet (DayZenLLC 2024g). The outfall would be located fully in upland areas, and rip-rap or other stabilization materials would be installed at the discharge point to prevent erosion and minimize the potential for sediment transport into the stream. The project's stormwater infrastructure would be configured to ensure that flows delivered offsite are not increased by comparison with existing conditions. This would include stormwater retention features incorporated into landscaping, and would include trash racks or other capture devices to prevent trash entering the stream and riparian corridor. With this design approach, the replacement stormwater system would avoid worsening discharge impacts on the riparian corridor and would likely provide improvements compared to existing conditions.

Staff evaluated these measures and determined that they are adequate to reduce impacts to riparian habitat. Staff proposes mitigation measures **BIO-2** (WEAP) and **BIO-4** (Adherence to ECCC HCP/NCCP Requirements), as discussed above under construction impacts. In addition, as discussed in **Section 5.10, Hydrology and Water Quality**, the project design would adhere to Contra Costa Clean Water Program (CCCWP) hydromodification requirements in compliance with the Municipal NPDES permit, per staff's proposed mitigation measure **HYD-1**.

With the implementation of **BIO-2** and **BIO-4**, the ECCC HCP/NCCP conservation measures, design features discussed above, and **HYD-1**, the impacts on riparian habitat during operation activities would be less than significant.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Construction

Less Than Significant with Mitigation Incorporated. The study area includes a total of 0.17 acres of perennial wetlands within an existing drainage, and a total of 1.73 acres of seasonal wetlands. The project would result in a permanent impact of 0.12 acres of seasonal wetlands and 0.15 acres of perennial wetlands (DayZenLLC 2024b).

The applicant has proposed to implement several measures to offset and minimize project impacts to wetlands. This includes seeking coverage under the ECCC HCP/NCCP which requires a per-acre fee for wetland impacts in addition to a per-acre development fee, which helps to support acquisition, restoration, and long-term management of aquatic resources on compensatory preserve lands.

In addition, wetland impacts may also require resource and regulatory agency authorization; including, Section 404 USACE permit, Section 401 RWQCB certification, and a CDFW Lake and Streambed Alteration Agreement.

The applicant would also implement WEAP training, seek resource agency permits and implement their conditions, and comply with to the ECCC HCP/NCCP requirements. In addition, the ECCC HCP/NCCP *Conservation Measure 2.12 (Wetland, Pond, and Stream Avoidance and Minimization)* would be implemented to reduce impacts.

Staff reviewed these measures and determined they are adequate to reduce potential impacts to wetlands. Staff therefore proposes mitigation measures **BIO-1** (Project Coverage under ECCC HCP/NCCP), **BIO-2** (WEAP), **BIO-3** (Resource Agency Permits), and **BIO-4** (Adherence to ECCC HCP/NCCP Requirements).

With the implementation of **BIO-1**, **BIO-2**, and **BIO-4**, and with the applicant obtaining any necessary permits, impacts to wetlands are expected to be less than significant.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

Construction and Operation

Less Than Significant with Mitigation Incorporated.

Wildlife Corridors

Less than Significant. The project site offers limited, if any, wildlife passage due to remaining golf course fencing along the north, west and southern boundaries of the project site, and the presence of the Contra Costa Canal.

The most important movement corridor for wildlife in the project vicinity is the PG&E transmission line corridor immediately to the east of the project site. This corridor is generally open, contains a through-flowing ephemeral stream and provides direct connectivity to the edge of Suisun Bay. This corridor connects to the south via a crossing over the Contra Costa Canal at the southeast corner of the study area which is also fenced.

The ECCC HCP/NCCP identifies a movement corridor for western pond turtle via the stream in the PG&E transmission line corridor at the east edge of the study area (HCP/NCCP 2006), and while this habitat is not of high quality, it is important since it represents the only through-going habitat corridor for western pond turtle in the project vicinity.

The applicant proposed to implement several measures to offset and minimize project impacts from the project, including wildlife corridors. The applicant would seek coverage under the ECCC HCP/NCCP which would offset project impacts to habitat and species. The applicant also proposes to implement a project-specific WEAP which requires all construction and operation personnel and project staff to undergo environmental awareness training prior to conducting work on the project. In addition, the applicant proposes to adhere to avoidance and minimization measures for covered species as well as conduct pre-construction surveys of the site and adjacent corridor for western pond turtle.

The project would result in a minor encroachment on the corridor with the replacement of the existing stormwater drainage pipe. Replacing the storm drainage pipe would not alter the existing canal crossing. *ECCC HCP/NCCP Conservation Measure 1.7 (Establish Stream Setback)*, stipulates maintenance of a protective buffer between new development and existing stream corridors. These setback buffers are intended primarily to protect water quality and instream habitat, but would also protect the riparian corridor at the east edge of the study area by decreasing the potential for damaging incursions and trash accumulation.

Staff evaluated these measures and determined they are adequate to reduce impacts to wildlife corridors. Staff proposes mitigation measures **BIO-1** (Project Coverage under ECCC HCP/NCCP), **BIO-2** (WEAP), **BIO-4** (Adherence to ECCC HCP/NCCP Requirements), and **BIO-8** (Western Pond Turtle Avoidance and Minimization Measures).

With the implementation of **BIO-1**, **BIO-2**, **BIO-4**, and **BIO-8** impacts to wildlife corridors are expected to be less than significant.

Wildlife Nursery Sites

The former golf course pond located in the northeast portion of the project site provides potential breeding habitat for California tiger salamander. Hydrologic surveys conducted during the wet season found that this pond retained water from February through June. This long hydroperiod, combined with the presence of potential prey species for California tiger salamander and a lack of predator species, suggests the pond could support breeding California tiger salamander. Other ponded basins within the study area provide sub-optimal breeding conditions for California tiger salamander either because they do not hold water long enough (hydroperiods under 3 months) or because they support dense vegetation and/or predators such as non-native mosquitofish or bullfrog (DayZenLLC 2024b). The study area lacks ponds or pools holding water long enough to support breeding California red-legged frog. There would be no direct impacts to aquatic habitat for this species as neither pond would be directly affected by construction.

Trees and an existing single-story building which will remain in place, may also offer potential maternity roost opportunities for bats, and the project area contains suitable

foraging habitat. Several special-status bat species may be present in the study area, including pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus frantzii* [*L. blossevillei*]), and hoary bat (*L. cinereus*). None of these species are covered by the ECCC HCP/NCCP. No suitable habitat is present for Townsend's big-eared bat; therefore, no preconstruction surveys or construction monitoring are required for this species.

The applicant proposed to implement measures to avoid and minimize potential impacts to special-status bats. This includes incorporating information on bat species into a project-specific WEAP. In addition, the applicant proposed a measure that requires a qualified biologist to conduct habitat evaluations and focused pre-construction roost surveys where suitable habitat is present. If suitable roosting habitat is identified, a qualified biologist shall conduct focused occupancy surveys at least two weeks prior to construction. Surveys would include daytime visual inspections, evening emergence counts, and acoustic monitoring. If roosting bats are confirmed, the species, number of individuals, and roost type (maternity vs. non-maternity) shall be documented and reported to the City and CDFW.

For non-maternity roosts, a non-disturbance buffer would be established based on species and construction activity. If a buffer cannot be maintained, construction within the buffer will be limited to daylight hours when the biologist has confirmed the roost is unoccupied. The biologist would remain on site during construction to monitor and ensure that bats are not disturbed or harmed.

For maternity roosts, a non-disturbance buffer appropriate to the species and type of construction would be implemented for the duration of the breeding/non-volant season (April–August). If a buffer cannot be maintained, the applicant would coordinate with the City and CDFW to develop and implement additional protective measures.

Staff evaluated these measures and determined that they are adequate to reduce potential impacts to special-status bats. Staff therefore proposes mitigation measures **BIO-2** (WEAP) and **BIO-11** (Special Status Bat Survey and Protection).

With the implementation of **BIO-2** and **BIO-11**, impacts to bat species are expected to be less than significant.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Construction and Operation

Less Than Significant. A tree survey was conducted by Dave Laczko, ISA Certified Arborist #1233A PN with Anderson's Tree Care Specialists on February 10, and November 28, 2023 (DayZenLLC 2024b). In addition, a follow up survey for two additional trees near the entrance of the project site was conducted by Kaitlyn Shelton,

ISA Certified Arborist #WE-12733A, on August 13, 2024 (DayZenLLC 2025a). The surveyors inventoried 75 living and dead standing trees on the project site. Of these, only three were native tree species, including one living valley oak and two dead cottonwood trees. Nearly one quarter of the total inventoried trees were documented as dead standing trees. All 75 trees would be removed as part of the project, subject to City of Pittsburg Municipal Code (PMC) 18.84.850 Tree Removal Permit Procedure and Requirements, subsection (E)(1)(a-c).

For the removal of 58 living trees, the applicant has proposed to replace them with 232 24-inch boxed specimen trees. The final number of replacement trees is subject to Chapter 18.84.855 Replacement trees (A), (B), (C), and (D). Some portion of the 58 living trees planned for removal may prove to be suitable for preservation. Suitability for preservation would be determined for individual trees after final grading, drainage, and infrastructure plans are reviewed by a certified arborist. The certified arborist would review final plan sets depicting beginning and finished grade elevations, changes to existing drainage characteristics, as well as exact locations of proposed structures and associated infrastructure.

Should particular trees be deemed suitable for preservation, an addendum to the Arborists report would be required to be submitted to the City of Pittsburg Community Development Director recommending specific tree protection and preservation efforts as part of review and approval of tree removal permit.

The applicant has committed to replacing 58 living trees that would be removed by the project with 232 24-inch boxed specimen trees. Replacement requirements would be enforced pursuant to Chapter 18.84 Special Land Use Regulations Applicable to Specific Uses, Article XIX Tree Preservation and Protection, Chapter 18.84.855 Replacement trees (A-D). If any replacement tree fails to survive for a period of one year from the date of installation, then the applicant shall replace the tree at the applicant's expense.

Therefore, since the applicant would adhere to tree removal permit conditions and municipal code requirements, project construction would not conflict with local policies or ordinances protecting biological resources and impacts would be less than significant.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Construction and Operation

Less Than Significant with Mitigation Incorporated. The project is located within the planning area for the ECCC HCP/NCCP. The Final ECCC HCP/NCCP was approved by seven member agencies, including the City of Pittsburg and Contra Costa County, in October 2006. In 2007, the City of Pittsburg approved ordinances requiring future development projects to comply with the ECCC HCP/NCCP. It intended to provide an

effective framework to protect natural resources in eastern Contra Costa County, while improving and streamlining the environmental permitting process for impacts on endangered species. The ECCC HCP/NCCP also provides for comprehensive species, wetlands, and ecosystem conservation and contribute to the recovery of endangered species in northern California. A total of 28 species are covered under the ECCC HCP/NCCP, including California tiger salamander, California red-legged frog, Western burrowing owl, Swainson's hawk, San Joaquin kit fox, among others. The ECCC HCP/NCCP provides streamlined permits from the USFWS and CDFW for covered species.

The applicant would be seeking coverage under the ECCC HCP/NCCP and, as such, would be required to pay development fees, implement avoidance and minimization measures, and adhere to species-level requirements established in the plan. The project would not conflict with the provisions of an adopted Habitat Conservation Plan (HCP/NCCP), Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan, or result in a significant direct or indirect impact after mitigation. Therefore, impacts would be less than significant.

5.4.3 Mitigation Measures

BIO-1: Project Coverage under ECCC HCP/NCCP. The applicant shall obtain coverage for the project under the ECCC HCP/NCCP. This shall include the submittal of all required application materials per ECCC HCP/NCCP Section 6.2.1 and payment of a Development Fee consistent with current ECCC HCP/NCCP requirements. Alternatively, the applicant may, in accordance with the terms of the Pittsburg Municipal Code Chapter 15.108, offer to dedicate land in lieu of some or all of the ECCC HCP/NCCP Development Fee.

All applicable fees shall be paid, and/or an "in-lieu-of-fee" agreement fully executed, prior to the issuance of a grading permit for the project. If a grading permit is not required, fee payment and/or an "in-lieu-of-fee" agreement shall be fully executed prior to issuance of the project's building permit. Proof of applicable fees and/or "in-lieu-of-fee" agreement shall be provided to the City of Pittsburg Community Development Director or Director's designee.

BIO-2: Worker Environmental Awareness Program (WEAP). The applicant shall develop and implement a project-specific WEAP. The WEAP shall include a presentation on sensitive habitats on the project site, special-status species known or potentially present on the site, including their listing status and causes of decline, their habitat preferences and any distinguishing physical characteristics. In addition, the measures required to protect sensitive habitats and special-status species shall be explained, including next steps and notifications in the event of a special-status species sighting.

The WEAP shall include a hard copy handout that summarizes information presented in the training and include photographs of habitat resources and species to facilitate identification in the field by construction personnel.

The applicant shall ensure that all construction personnel undergo WEAP training before they begin work. Training shall be delivered by a qualified biologist approved by the City of Pittsburg Community Development Director or Director's designee and shall be provided bilingually in English and Spanish, if appropriate. The WEAP shall include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines.

The applicant shall secure approval for the WEAP from the City of Pittsburg Community Development Director or Director's designee. The applicant shall also provide the Conservancy a copy of all portions of the WEAP for review and comment.

BIO-3: Regulatory Permits for Jurisdictional Waters. Prior to project activities that would result in impacts to jurisdictional waters, the applicant shall seek a Section 404 permit from the U.S. Army Corps of Engineers (USACE), a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), and a Lake or Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW). The project shall be constructed and operated in compliance with all terms and conditions of these permits, if issued.

BIO-4: Adherence to ECCC HCP/NCCP Requirements. The applicant shall ensure that the project adheres to all applicable ECCC HCP/NCCP requirements. Planning surveys per ECCC HCP/NCCP Section 6.3.1 were completed in 2018 to 2023 and copies shall be submitted to the Conservancy. Based on the outcomes of the planning surveys, preconstruction surveys by USFWS and CDFW-approved biologists shall be conducted for the following species per ECCC HCP/NCCP Sections 6.3.2 and 6.3.4: Golden eagle (*Aquila chrysaetos*); Western burrowing owl (*Athene cunicularia*); Swainson's hawk (*Buteo swainsonii*) and San Joaquin kit fox (*Vulpes macrotis mutica*).

If pre-construction surveys determine that any of the above species is present on the site (or, for the bird species, within a distance where they could be disturbed by construction activity – see **BIO-8**), the Best Management Practices and Construction Monitoring requirements in the ECCC HCP/NCCP Table 6-1 shall apply. The applicant shall ensure that construction monitoring is conducted per ECCC HCP/NCCP Section 6.3.3 (ECCC HCP/NCCP pages 6-12 to 6-13). This shall include the submittal of a Construction Monitoring Plan (CMP) to the City of Pittsburg Community Development Director or Director's designee for approval. The CMP must be submitted and approved prior to site mobilization.

The applicant shall also comply with all applicable provisions of the ECCC HCP/NCCP Section 6.4, Specific Conditions on Covered Activities (beginning on ECCC HCP/NCCP page 6-14), as follows.

Section 6.4.1: Landscape-Level Measures:

- Conservation Measure 1.7 - Establish stream setbacks (ECCC HCP/NCCP pages 6-15 – 6-18)

- Conservation Measure 1.10 - Maintain hydrologic conditions and minimize erosion (ECCC HCP/NCCP pages 6-21 – 6-22)
- Conservation Measure 1.11 - Avoid direct impacts on extremely rare plants, fully protected wildlife species and covered migratory birds (ECCC HCP/NCCP pages 6-23 – 6-25)

Section 6.4.2: Natural Community-Level Measures:

- Conservation Measure 2.12 - Wetland, pond and stream avoidance and minimization (ECCC HCP/NCCP pages 6-33 – 6-35)

Section 6.4.3: Species-Level Measures for the following species:

- California tiger salamander (begins on ECCC HCP/NCCP page 6-45; see also Table 6-1)
- California red-legged frog (begins on ECCC HCP/NCCP page 6-46; see also Table 6-1)
- Burrowing Owl (begins on ECCC HCP/NCCP page 6-39; see also Table 6-1)
- Golden Eagle (begins on ECCC HCP/NCCP page 6-38; see also Table 6-1)
- Swainson's Hawk (begins on ECCC HCP/NCCP page 6-41; see also Table 6-1)
- San Joaquin kit fox (begins on ECCC HCP/NCCP page 6-37; see also Table 6-1)

BIO-5: Rare Plant Survey and Protection. An updated protocol-level rare plant survey shall be conducted by a qualified biologist/botanist who is familiar with the rare plants of the project region and has been approved by the City of Pittsburg Community Development Director or Director's designee. Surveys shall be conducted prior to construction, with enough lead time to allow for the follow-up actions described below, if they are warranted. Surveys shall be conducted during the peak blooming periods of the target species and shall cover all potentially suitable habitats within the project site and surrounding 250-foot-wide buffer. If no special-status plants are documented within the area to be disturbed for project construction (including staging and access), no further action is required.

If special-status plants covered by the ECCC HCP/NCCP, or plants designated as "no take" by the ECCC HCP/NCCP, are present on the site, the relevant survey report(s) shall be submitted to the Conservancy per ECCC HCP/NCCP Section 6.3.1 (see page 6-9).

If any of the following species covered by the ECCC HCP/NCCP is found to be present, the applicant shall promptly notify the Conservancy of the species' presence and the planned construction schedule, to enable the Conservancy to salvage the occurrence(s) in accordance with ECCC HCP/NCCP Conservation Measure 3.10 (Plant Salvage when Impacts are Unavoidable). The applicant shall confirm with the Conservancy that the

take limits established by the ECCC HCP/NCCP for the species in question have not been breached:

- Big tarplant (*Blepharizonia plumosa*)
- Mount Diablo fairy lantern (*Calochortus pulchellus*)
- Diablo helianthella (*Helianthella castanea*)
- Showy golden madia (*Madia radiata*)
- Adobe navarretia (*Navarretia nigelliformis* ssp. *nigelliformis*)

Under no circumstance shall any of the following ECCC HCP/NCCP “no-take” plants be harmed:

- Large-flowered fiddleneck (*Amsinckia grandiflora*)
- Alkali milkvetch (*Astragalus tener* ssp. *tener*)
- Mt. Diablo buckwheat (*Eriogonum truncatum*)
- Diamond-petaled poppy (*Eschscholzia rhombipetala*)
- Contra Costa goldfields (*Lasthenia conjugens*)
- Caper-fruited tropidocarpum (*Tropidocarpum capparideum*)

Due to their extreme rarity, none of these species is expected to be present on the project site, but if any of them are found, the applicant shall notify the Conservancy immediately and shall work with the Conservancy to determine and execute the appropriate course of action.

If any special-status plant not covered by the ECCC HCP/NCCP is found to be present, the plant(s) shall be avoided and protected in place to the extent feasible. If the occurrence(s) cannot be entirely avoided, then a Plant Salvage and Mitigation Plan shall be prepared and submitted to the City of Pittsburg Community Development Director or Director’s designee. The plan shall be prepared by a qualified biologist/botanist who is familiar with the rare plants of the project region and has experience conducting rare plant salvage operations. Plant salvage techniques shall be consistent with those outlined in ECCC HCP/NCCP Conservation Measure 3.10. The plan shall, at a minimum, include the following:

- Quantity and species of plants to be planted or transplanted
- Location of the mitigation/transplant site(s)
- Salvage methods, such as relocation/transplantation, seed collection, etc., including storage locations and methods to preserve the plants
- Procedures for propagating collected seed, including storage methods
- Planting procedures, including the use of soil preparation and irrigation

- Schedule and action plan to maintain and monitor the mitigation/transplant site for a minimum 3-year period
- Interim and final success criteria and corrective action thresholds (e.g., growth, plant cover, survivorship)
- Potential corrective actions/contingency measures in the event interim success criteria are not being met (e.g., weed removal, supplemental irrigation, supplemental plantings, etc.)
- Reporting requirements and procedures, including the contents of annual progress reports, report submittals, review/approval responsibilities, etc.

The applicant shall implement the Plant Salvage and Mitigation Plan. The Plan shall be implemented under the oversight of the biologist/botanist who prepared it or another individual with equivalent qualifications. The biologist shall be approved by the City of Pittsburg Community Development Director or Director's designee.

BIO-6: Crotch's Bumble Bee and Obscure Bumble Bee Avoidance and Minimization Measures. No more than 1 year prior to the initiation of vegetation removal and grading at the project site, the applicant shall retain an appropriately qualified biologist (see next paragraph) who has been approved by the City of Pittsburg Community Development Director or Director's designee to conduct surveys for Crotch's bumble bee and obscure bumble bee. CDFW has issued preliminary survey guidance for candidate bumble bee species in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023). Consequently, there are no official requirements for bumble bee surveyor qualifications. If CDFW issues new guidance or protocol for bumble bee surveys, then biologist qualifications and survey methodology for bumble bee surveys shall conform to the CDFW guidance published at the time surveys are performed.

Surveys shall be performed by a qualified biologist or entomologist familiar with the species' behavior and life history and shall include both habitat evaluations and foraging bee surveys consistent with the recommendations in Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023). Surveys shall be conducted during the Crotch's bumble bee colony active period of April 1 to September 31 and the obscure bumble bee colony active period of April 20 to August 20, and shall be conducted during the active period prior to the initiation of vegetation removal and grading at the project site. Surveys shall cover all areas of onsite habitat determined by the biologist to be suitable for any of the two target bumble bee species, based on habitat mapping conducted for the project to date. A minimum of 3 to 4 surveys shall be conducted, spaced 2 weeks apart; the total number, timing, and duration of surveys performed shall depend on the biologist's judgment, in consideration of weather, site conditions, and protocol requirements. Surveys shall be designed to identify all foraging bumble bees to species level.

If Crotch's bumble bee individual or multiple bees are observed onsite during the surveys, the applicant shall consult with CDFW to determine additional measures necessary for full avoidance of Crotch's bumble bee or to seek an Incidental Take Permit under CESA for take authorization. Additional measures may include an additional survey or surveys to be conducted to determine whether a nest or colony is present. All workers shall be required to avoid injury and mortality to bumble bees they may encounter; this requirement shall be discussed during the WEAP training (Mitigation Measure BIO-2) and shall be reiterated to all workers if special-status bumble bees are confirmed onsite.

If a Crotch's bumble bee nest or colony is present onsite, the applicant shall consult with CDFW to determine appropriate next steps, and shall ensure that the City of Pittsburg Community Development Director or Director's designee is informed of consultation outcomes. At a minimum, the biologist shall establish an avoidance buffer of 100 feet in diameter. No entry into the buffer shall be permitted. The buffer shall be delineated in the field using orange construction fencing or another appropriate medium, under the biologist's oversight, and shall remain in place until the end of the nesting species' gyne flying season, or until the qualified biologist determines that the nest has been abandoned. If the nest cannot be avoided the applicant shall coordinate with the City of Pittsburg Community Development Director or Director's designee and CDFW to obtain an Incidental Take Permit under CESA for take authorization.

Survey results, including negative findings, shall be submitted to the City of Pittsburgh Community Development Department and CDFW at least 30 days prior to implementing project-related ground-disturbing activities. At a minimum, the survey report shall include the following information.

- (1) A description and map of the survey area
- (2) A habitat assessment focusing on areas that could provide suitable foraging, nesting, and overwintering habitat for Crotch bumble bee or obscure bumble bee
- (3) Field survey conditions, including name(s) of qualified entomologist(s) and brief qualifications; date(s) and time(s) of survey; survey duration; number of surveyors per acre; number of acres surveyed; amount of time of focused survey; general weather conditions; survey goals; species observed; and photo vouchers of bumble bees
- (4) Map(s) showing the location of nests/colonies, if any; a description of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found, including native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species)
- (5) The measures that will be implemented to avoid adverse effects on the bumble bee species present
- (6) An assessment of potential project effects on special-status bumble bees during project construction and project operation/maintenance.

BIO-7: Monarch Butterfly Avoidance and Minimization Measures. No more than 2 days prior to the initiation of construction-related vegetation trimming or removal, the applicant shall ensure that a qualified biologist approved by the City of Pittsburg Community Development Director or Director's designee surveys all areas of potentially suitable habitat for monarch butterfly larval host plants. If host plants are found, the biologist shall survey all host plants for monarch eggs, larvae, and pupae. If no eggs, larvae, or pupae are found, plants may be removed within 2 days. If eggs, larvae, or pupae are present, host plants shall be protected in place until the biologist has determined that the breeding season has concluded, or coordination with the City and USFWS occurs. It is recommended that milkweed removal should be avoided until after the plant has gone to seed.

BIO-8: Western Pond Turtle Avoidance and Minimization Measures. Prior to the start of construction activities, the applicant shall ensure that a qualified biologist approved by the City of Pittsburg Community Development Director or Director's designee conducts a preconstruction survey of the project site and adjacent suitable habitat for western pond turtle. The survey shall be conducted no more than 24 hours prior to the start of work. If individuals are found, the biologist shall relocate them to suitable habitat outside the disturbance area and far enough away that they would not be expected to return. If the biologist determines that exclusion measures are warranted, exclusion measures identified by the biologist shall be implemented to prevent individuals from returning to the project site.

BIO-9: Nesting Bird Protection. If project-related disturbance (e.g., vegetation removal or trimming, clearing/grubbing, grading) commences any time during the nesting/breeding season of native bird species potentially nesting in or near the study area (February 1 through September 15 for most species; January 1 through August 31 for golden eagle; March 15 through September 15 for Swainson's hawk), a qualified biologist approved by the City of Pittsburg Community Development Director or Director's designee shall conduct a preconstruction survey using binoculars. The survey shall take place no more than 2 weeks prior to the initiation of work. If active nests are found in areas that could be directly affected or are within 500 feet of disturbance activities and would be subject to prolonged construction-related noise, a no disturbance buffer zone shall be created around active nests for the remainder of the breeding season or until the biologist determines that all young have fledged or that the nest has been abandoned. No entry into the no-activity buffer zone shall be permitted. The no-activity buffer zone shall be delineated in the field by or under the supervision of the biologist, using temporary construction fencing or another suitable low-impact medium. The size of the buffer zone(s) shall be determined by the biologist based on the species involved, the amount of vegetative and other screening between the nest and areas where construction activity shall take place, and, if appropriate, other site-specific factors. The minimum buffer width shall be 50 feet for species other than raptors, and a minimum of 500 feet for raptor species. The biologist may enlarge the minimum buffer width by taking into account factors such as the following:

- Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity
- Sensitivity of nesting species and behaviors of the individual nesting birds

If nesting Swainson's Hawk or Golden Eagle are observed, buffers and other avoidance measures shall conform to Species-Level Measures for these species as laid out in ECCC HCP/NCCP Section 6.4.3. Buffers stipulated in the ECCC HCP/NCCP for these species are as follows.

- Swainson's Hawk: nest survey – 1,000 feet; no-project-activity nest protection buffer – 1,000 feet.
- Golden Eagle: nest survey – not specified; no-project-activity nest protection buffer – 0.5 mile.
- If site-specific conditions (e.g., steep topography, dense vegetation) or the nature of the covered activity (e.g., limited activities or limited potential for disturbance due to low noise levels) indicate that a smaller nest protection buffer could be used, the applicant will coordinate with the Conservancy as the ECCC HCP/NCCP Implementing Entity (for both species). The City of Pittsburg will be notified of any resulting adjustments to nest protection buffers.

BIO-10: Nesting Bird Protection (Bald Eagle). The applicant shall retain a qualified biologist approved by the City of Pittsburg Community Development Director or Director's designee to conduct a preconstruction survey for nesting Bald Eagles prior to the initiation of work at the site (including vegetation removal or trimming, clearing/grubbing, grading, etc.). The survey shall be conducted using binoculars and shall take place no more than 2 weeks prior to the initiation of work.

If an occupied or active nest is present, construction-related activity shall be prohibited within 0.5 mile of the nest unless the biologist determines that site-specific conditions or the nature of the construction activity (e.g., dense vegetation, limited noise generation, limited activities) indicate that a smaller buffer could be appropriate or that a larger buffer should be implemented. The biologist shall coordinate with CDFW and/or USFWS to determine the appropriate buffer size.

The buffer shall be delineated in the field using temporary construction fencing or another suitable low-impact medium. Construction shall be monitored by the qualified biologist to ensure the buffer remains in place and that no construction activities occur within the buffer zone until the biologist has determined that the young have fledged or that the nest has been abandoned.

BIO-11: Special Status Bat Survey and Protection. Prior to the initiation of construction activities that could disturb roosting bats (including vegetation trimming/removal), a qualified biologist shall conduct a habitat evaluation for special-status bats, focusing on the needs of pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus frantzii* [*L. blossevillei*]), and hoary bat (*L. cinereus*), the species identified by

planning surveys as having potential to be present on the site. Surveys shall include the entirety of the project site plus a 400-foot wide buffer. If no roosting habitat suitable for these species is present, no further action shall be required.

If roosting habitat is present, the following additional requirements shall apply. Any potential roost trees or other potential roosting habitat shall also be considered potential bat maternity roosts.

- Before the initiation of construction activities with the potential to disturb roosting bats, a City and CDFW-approved biologist shall conduct focused surveys for roost occupancy. These shall be conducted at least 2 weeks prior to the start of work and shall include
 - Daytime visual surveys for bats and evidence of bat presence such as guano or urine staining
 - Evening emergence and acoustic surveys

If bat presence is confirmed, the species, number of individuals, and roost type (maternity/non-maternity) shall be documented and reported to the CNDDDB. Bats shall not be disturbed or relocated during the surveys.

- Confirmed non-maternity roosts shall be protected by buffers determined by the biologist in accordance with the matrix that follows. Buffers shall be delineated in the field with temporary construction fencing or another suitable measure, installed under the qualified biologist oversight. Note that buffer distances vary depending on the species and the type of noise/disturbance involved. The biologist shall coordinate with construction staff to determine the appropriate buffer width; if there is uncertainty, the more conservative buffer width shall prevail.

Disturbance Source	Pallid Bat	Other Bat Species
Construction trucks and heavy equipment	120 feet	100 feet
Smaller vehicles	90 feet	65 feet
Drilling, trenching, and small equipment	150 feet	150 feet
Unshielded light source	400 feet	300 feet
Pedestrian traffic	65 feet	65 feet
Stationary source of diesel/gasoline exhaust operating for more than 2 minutes	250 feet	250 feet
Any equipment generating high-frequency (20 kHz – 50 kHz) sound (laser survey transits, drilling, etc.), as identified by the biologist	Buffer shall be determined on a case-by case basis by identifying the distance at which high-frequency sound generated by the equipment becomes indistinguishable from background levels, using one of the acoustic methods described on pp. 7-16 – 7-18 of the California Department of Transportation bat mitigation guidelines (H.T. Harvey & Associates 2019), or updated equivalent.	

- If a confirmed roost must be removed or trimmed for construction, or if work must occur within the buffers laid out above, work shall be restricted to daylight hours when the qualified biologist has confirmed that the roost is not occupied and work

shall be overseen by the biologist to prevent injury or mortality. The biologist shall have authority to divert or stop work in the event of excessive risk to bats.

- Confirmed maternity roosts shall be protected by the same buffers identified above. Maternity roosts shall not be removed unless removal cannot be avoided, and in no case shall a confirmed maternity roost be removed during the breeding/non-volant season (April – August). If removal of a maternity roost is necessary, the applicant shall consult with the City and CDFW to determine appropriate compensatory mitigation such as the provision of bat boxes and shall submit a Bat Habitat Mitigation Plan (Plan) for City and CDFW approval. Consultation and submittal of the Plan shall occur prior to the removal, and the removal shall not take place until the City and CDFW has approved the Plan. The applicant shall then be responsible for implementing City and CDFW-approved mitigation for removal of bat maternity roost habitat.

BIO-12: San Joaquin Pocket Mouse Protection. All vegetation removal, clearing/grubbing, and grading activities shall be conducted in a uniform direction to allow mobile animals such as San Joaquin pocket mouse the ability to escape the disturbed area into adjacent undisturbed habitat. Project construction activities shall avoid the creation of fragmented islands of habitat where individuals may become trapped, isolated from resources, and at risk from eventual clearing/grading activities.

BIO-13: American Badger Survey and Protection. No more than 4 weeks before the commencement of ground disturbance at the site, a qualified biologist approved by the City of Pittsburg Community Development Director or designee shall conduct a survey for American badger den sites. If an occupied den is found, and young are not present, any badgers present shall be removed from the den either by the use of appropriate exclusionary devices or by trapping and relocation. The removal method shall be approved by CDFW prior to implementation. If trapping and relocation are necessary, it shall be carried out by biologist(s) with all required permits for badger handling. Any trapped badgers shall be relocated to other suitable habitat at least 500 feet outside the project site boundary. Once any badgers are excluded or trapped and relocated, den(s) shall be excavated by hand and backfilled to prevent reoccupation. Exclusion shall continue until the badgers are successfully removed from the site, as determined by the biologist.

Badgers shall not be excluded or relocated if it is determined by the biologist that young are or may be present. Any occupied dens shall be protected by a 50-foot-wide non-disturbance buffer. The buffer shall be delineated in the field by a qualified biologist, using temporary construction fencing or another appropriate low-impact medium, and shall remain in place until the biologist has determined that the young are no longer dependent on their mother and den site. No entry into the buffer area shall be permitted.

5.4.4 References

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- CNDDDB 2025 – California Department of Fish and Wildlife. Biogeographic Data Branch. California Natural Diversity Database. RareFind v. 5. Accessed January 24, 2025. Accessed online at: [https:// wildlife. ca. gov/ Data/ CNDDDB/ Maps-and-Data](https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data)

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- DayZenLLC 2024a – DayZenLLC (TN 254728). AVAIO SPPE Application Main Application and Appendix A - PBGF - Part I, dated February 29, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>
- DayZenLLC 2024b – DayZenLLC (TN 254729). AVAIO SPPE Application Appendices B and C - PBGF - Part II, dated February 29, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>
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5.5 Cultural and Tribal Cultural Resources

This section describes the environmental setting and regulatory background and discusses the impacts associated with the construction and operation of the proposed project with respect to cultural and tribal cultural resources.

CULTURAL AND TRIBAL CULTURAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐
b. Would the project cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐
d. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Environmental checklist established by CEQA Guidelines, Appendix G, cultural resources and tribal cultural resources.

5.5.1 Environmental Setting

This section assesses the potential impacts of the proposed project upon cultural and tribal cultural resources. The section considers four broad classes of cultural resources: Native American, ethnographic, historic-period, and tribal cultural resources. The subsequent paragraphs briefly describe these classes of resources along with the definitions of project area of analysis and the project study Area. Afterward, this section presents the environmental setting pertinent to these resources. The rest of this section covers:

- Native American archaeological, ethnographic, and historic contexts - generally describes who lived in the project vicinity, the timing of their occupation, and what uses they made of the area.
- Methods of analysis - establishes what kinds of physical traces (cultural and tribal cultural resources) past peoples might have left in the project site, given the project vicinity's Native American archaeological, ethnographic, and historic contexts.
- Results ensuing from those methods - identifies the specific resources present or expectable in the project site.
- Regulatory setting - presents the criteria for identifying significant cultural and tribal cultural resources under the California Environmental Quality Act (CEQA) and other applicable authorities, as well as criteria for identifying significant impacts on these resources.
- Impacts - identifies any impacts on cultural and tribal cultural resources, along with the severity of any such impacts.
- Mitigation measures - proposes measures to avoid, minimize, rectify, reduce or eliminate, or compensate for identified impacts.

Native American archaeological resources are those materials relating to Native American occupation and use of a particular environment. These resources may include sites and deposits, structures, artifacts, rock art, trails, and other traces of Native American activity. In California, Native American archaeology began more than 12,000 years ago and extended through the eighteenth century until A.D. 1769, when Europeans first settled in California.

Ethnographic resources are those materials important to the heritage of a particular ethnic or cultural group, such as Native Americans or African, European, Asian or other immigrants. They may include traditional resource collecting areas, ceremonial sites, topographic features, value-imbuend landscapes, cemeteries, shrines, or neighborhoods and structures. Ethnographic resources are variations of natural resources and standard cultural resource types. They are subsistence and ceremonial locales and sites, structures, objects, and rural and urban landscapes assigned cultural significance by traditional users. The decision to call resources "ethnographic" depends on whether associated peoples perceive them as traditionally meaningful to their identity as a group and the survival of their lifeways.

Historic-period resources are those materials, archaeological and architectural, usually but not necessarily associated with Euro-American exploration and settlement of an area and the beginning of a written historical record. They may include archaeological deposits, sites, structures, trail and road corridors, artifacts, or other evidence of historic human activity. Under federal and state requirements, historic period cultural resources must be 50 years or older to be considered of potential historic importance. A resource less than 50 years of age may be historically significant if the resource is of exceptional importance. The Office of Historic Preservation (OHP 1995, page 2) endorses recording and evaluating resources 45 years or older to accommodate a five-year lag in the planning process.

Tribal cultural resources are a category of historical resources introduced into CEQA by Assembly Bill 52 (Statutes 2014). Tribal cultural resources are resources that are any of the following: sites, features, places, cultural landscapes, sacred places, or objects that are included in or determined eligible to the California Register of Historical Resources (CRHR) or are included on a local register of historical resources as defined in Public Resources Code, section 5020.1(k). Tribal cultural resources can be prehistoric, ethnographic, or historic.

The analysis of potential impacts of the project upon cultural and tribal cultural resources includes a detailed description of the project site (area of direct construction related ground disturbance) and surrounding vicinity, collectively referred to as the project area of analysis (PAA). The project Study Area, synonymous with the built environment PAA defined later in this section, is generally used for the analysis of built environment features, which includes a buffer around the project site. To meet CEC's requirements, ECORP, the applicant's consultant, applied a hybrid strategy to ensure adequate consideration of architectural resources. Substantial residential and commercial growth is present immediately north and northwest of the project site; therefore, ECORP established a one-parcel-width buffer. Rural lands are present immediately adjacent to the project site to the south, east, and southwest; therefore, a 0.25-mile buffer was included to the south, east, and southwest.

California Native American Archaeological Context

Based on previous research in Central California, the Bay region can be divided into two major periods: the Archaic Period, which includes the Lower, Middle, and Upper Archaic, and the Emergent Period. We skip the discussion of Clovis early occupation during the 11,500 to 8000 calibrated years before the current era (cal. BCE) because evidence of that period has not yet been discovered in the Bay area, presumably due to archaeological sites eroding away by stream action, becoming buried by recent alluvium, or being submerged by rising sea levels. (Milliken et al. 2007, page 114.).

The archaeological record in the Bay Area began with the Lower Archaic Period between 8000 to 3500 cal. BCE with assemblages characterized by milling slab and handstone technology and a wide range of stemmed and leaf shaped projectile points. Assemblages suggest a mobile forager economic pattern. In the hills east of Mount

Diablo, the earliest recorded Bay Area date for this period (a milling stone component) is 7920 cal. BCE, obtained through radiocarbon dating charcoal found beneath an overturned milling slab. At this same site, archaeobotanical remains suggest an emphasis on gathering acorns and wild cucumbers. (Milliken et al. 2007, page 114).

The Middle Archaic Period ranged from 3500 to 500 cal. BCE and exhibits shifts in groundstone technology (i.e., increased use of mortars and pestles), less movement of entire communities, regional symbolic integration between cultural groups, and increased trade (Milliken et al. 2007, pages 114–115). This cultural pattern lasted until cal. 500 BCE., when the Lower Middle Period began with a “major disruption in symbolic integration systems.” (Milliken et al. 2007, page 115). Archaeological assemblages from the Lower Middle Period include more *Olivella* shell saucer beads and circular abalone shell ornaments (and the disappearance of the rectangular shell beads), as well as bone tools and whistles (Milliken et al. 2007, page 115).

The Upper Middle Period began about 1520 before present (B.P., or 1950) with the most significant changes being a disruption of the *Olivella shell* bead trade network, abandonment of some village sites, and changes in shell bead manufacture. Some South Bay burials from this period were extended rather than flexed as in previous periods and lacked associated items. (Milliken et al. 2007, page 116).

The Emergent Period, also known as the Late Period, began about 900 B.P., with an increased sedentism. Groups intensified the use of wealth or status objects, as seen in burials. Cremations also appeared or reappeared in some areas and were associated with the wealthiest of offerings. Smaller projectile points for use in the bow and arrow emerged during this period and assemblages began to include toggle harpoons, hopper mortars, clam shell disc beads and magnesite tube beads (Milliken et al. 2007, pages 116-117).

Ethnographic Context

The Bay Miwok, who inhabited the Mount Diablo and Delta region at the time of Spanish contact in the 1770s, were part of a broader group that included Plains Miwok to the northeast, Ohlone to the south and west, and Northern Valley Yokuts to the east. The Bay Miwok were skilled hunters and gatherers who managed a variety of environments, allowing some areas to be continuously occupied for thousands of years. Despite relatively low population densities, the Delta was one of the most densely populated regions of pre-contact California. The Miwok thrived in both abundant areas with permanent villages and less productive regions that encouraged a more mobile lifestyle (ECORP 2024, page 13; Levy 1978, pages 398-413).

Acorns were a dietary staple, supplemented by other plant and animal resources, particularly grass seeds. The Miwok actively managed their environment, using controlled burns to enhance local fauna, maintain open landscapes, and improve resource productivity (ECORP 2024, page 13; Levy 1978, pages 398-413).

Bay Miwok society was organized into "tribelets," small groups of related families occupying specific territories and speaking the same language or dialect. Tribelets ranged from 100 to 400 people, with inter-tribelet relationships essential for trade and marriage. Social roles were generally divided by gender, with women focused on plant harvesting, cooking, weaving baskets, and child-rearing, while men hunted, fished, traded, and when needed engaged in warfare (ECORP 2024, page 13; Levy 1978, pages 398-413).

Historic Context

Three major periods in California history define overarching periods of territorial control over the PAA and surrounding vicinity. These are the Spanish Period from 1769 to 1821, the Mexican Period spanning 1821 to 1848, and the American Period 1848 to Present.

Spanish Period (1769-1821)

Spanish colonization of Alta California began in 1769 with the Portolá land expedition. Led by Captain Gaspar de Portolá and Father Junipero Serra, the expedition proceeded north from San Diego on foot to the Santa Clara Valley, where an advance party of scouts led by José Ortega became the first Europeans to observe San Francisco Bay. Spain subsequently established a string of 21 Franciscan missions, 4 presidios (forts), and 4 pueblos (towns) in coastal regions of Alta California. In 1808, the explorer Gabriel Moraga led an expedition from San Jose pueblo into the Central Valley. Moraga named the valley's major rivers, including the Sacramento and San Joaquin, but made no attempt to establish missions, presidios, or pueblos in Alta California's interior (ECORP 2024, page 14).

Mexican Period (1821-1848)

The Republic of Mexico achieved independence from Spain in 1821. A year later, Alta California became a territory of Mexico with its capital at Monterey. In 1827, the American fur trapper Jedediah Smith led a party of Rocky Mountain Fur Company trappers across the Mojave Desert to Southern California, north up the Central Valley, and east into Nevada, demonstrating the possibility of overland travel across the Sierra Nevada (ECORP 2024, page 14).

During the 1830s, the Mexican government confiscated mission lands and expelled Alta California's Franciscan friars. Former mission lands, along with unclaimed lands in the Sacramento and San Joaquin valleys, became granted to retired soldiers and other Mexican citizens. Vast swaths of Alta California's coastal regions and interior valleys became private ranchos, or cattle ranches. Three of the region's Spanish pueblos—Los Angeles, San Jose, and Sonoma—survived as Mexican towns. Other settlements developed around presidios at San Francisco, Monterey, Santa Barbara, and San Diego. Many rancho owners, called Californios, maintained residences in town, while hired vaqueros and unpaid Native American laborers worked on ranchos to produce cow hides and tallow, commodities prized by foreign merchants (ECORP 2024, page 14).

American Period (1848-Present)

In February 1848, California became a U.S. holding with the signing of the Treaty of Guadalupe Hidalgo. This treaty ended the Mexican American War and ceded much of the southwest (California, Nevada, Utah, and portions of Arizona, New Mexico, Colorado, and Wyoming) to the U.S.

In January 1848, one of John Sutter's hired laborers, James Marshall, discovered gold in the flume of a lumber mill at Coloma on the South Fork of the American River. News of Marshall's discovery spread around the world, leading to the California Gold Rush. Tens of thousands of prospectors arrived in the Sierra Nevada foothills in 1849, prompting the creation of hundreds of small mining camps along streambeds. The cities of Marysville, Sacramento, and Stockton sprang up along the Feather, Sacramento, and San Joaquin rivers as supply centers for the mines; San Francisco became California's largest city and the focal point for Gold Rush economic activity. In 1850, following a year of rapid growth, Congress admitted California as the 31st U.S. state (Ecorp 2024, page 15).

In 1859, the discovery of coal in the Mount Diablo foothills sparked the rise of a booming coal industry in the region, leading to the area being called "Black Diamond" due to the Black Diamond Coal Company. By 1870, the town of Nortonville, located in the foothills, became the largest in the county. In the 1870s, commercial fishing became a major industry, and by 1927, approximately 3 million pounds of fish were exported annually from six local companies. This era saw Pittsburg develop the largest Delta fishing community in California, made up primarily of Sicilian immigrants (ECORP 2024, pages 15-16).

In 1900, lumber baron Charles Appleton Hopper purchased the Rancho Los Medanos land grant and additional land, bringing industrial development to the area. In 1903, he founded the Industrial Center of the West, a manufacturing initiative that marked the beginning of significant industrial growth. Hopper also financed Bowers Rubber Works in 1906, and in 1910, Columbia Steel opened, becoming the largest foundry of its kind on the West Coast. The industrial boom created thousands of jobs, and in 1911, the town officially changed its name to "Pittsburg" in recognition of Pittsburgh, Pennsylvania's steel heritage (ECORP 2024, page 16).

The creation of Camp Stoneman in 1942, which served as a key embarkation point for troops during World War II, further boosted the city's growth and diversity. After the Korean War ended in 1954, the camp was closed and repurposed for school, commercial, and residential development. In 1957, the closure of the Sacramento Delta to fishing brought an end to one of Pittsburg's traditional industries. Despite this, the city remained an industrial powerhouse, with US Steel purchasing Columbia Steel in the 1930s and expanding its foundry to support large public works projects, such as the construction of the San Francisco Bay Bridge. Today, the steel industry continues to play a significant role in Pittsburg's economy (ECORP 2024, page 16).

Delta View Golf Course

The western most portion of the Delta View Golf Course, west of the project site, is located on the southern section of the former Camp Stoneman Rifle Range. Delta View Golf Course opened in 1947, following the closure of Camp Stoneman. It was originally a nine-hole course. The back nine was not constructed until 1991. Although urban legend says that the golf course was designed by famed golf course architect Alister MacKenzie, the course was not built until ten years after Mackenzie's death. The course was actually designed by San Francisco-based architect John Fleming, who drew much of his inspiration from MacKenzie.

The original 9-hole Delta View Golf Course designed by Fleming offered a challenging golf course on rolling terrain with beautiful views of the Delta as well as Mt. Diablo. Being the first golf course in Contra Costa County to have a sprinkler system, the Delta View Golf Course had complete grass fairways. The course became popular with golfers, also holding small tournaments and other events.

In 1991, Delta View was expanded to an 18-hole golf course, with the additional course being designed by Robert Muir Graves. The rolling terrain of the expanded 18-hole, 6,317-yard Delta View course allowed for elevated tees and undulating greens. Delta View Golf Course rented the land from the City of Pittsburg and was responsible for the upkeep and maintenance of the property. Although popular for decades, many golf courses, including Delta View Golf Course, suffered in more recent years due to changing economics, decline in the popularity of golf, and increasing water costs. On March 1, 2018, Delta View Golf Course closed due to legal and economic factors. In June 2022, a 19-acre grassfire burned the golf course and its remaining buildings (ECORP 2024, page 17).

Methods of Analysis

The methods employed for the cultural resources analysis include determining the PAA; reviewing records and other documents provided by a literature search and other historical sources as needed, such as historical aerial photographs, historic maps, and historic newspapers; consultation with California Native American tribes; and review of historic architectural and archaeological survey methodology and results.

Project Area of Analysis

The PAA defines the geographic area in which the proposed project has the potential to affect cultural or tribal cultural resources. Effects may be immediate, further removed in time, or cumulative. They may be physical, visual, audible, or olfactory in character. The PAA may, or may not, be one uninterrupted expanse. It could include the site of the proposed project (project site), the routes of requisite transmission lines and other offsite ancillary facilities, in addition to one or several discontinuous areas where the project could arguably affect cultural or tribal cultural resources. The PAA has archaeological, ethnographic, and historic built environment components, as described in the following paragraphs.

The California Energy Commission (CEC) staff defines the archaeological component of the PAA as all areas where the applicant proposes ground disturbance to construct and operate the proposed project. This includes the proposed site grading, construction, and installation of the three story data center building, staging areas, and access roads. The project description describes estimated excavation depths for the proposed project elements, such as grading, excavations and trenching of up to four feet deep, primarily for the installation of piping, electrical conduit and utility duct banks, and foundations. Excavations may be up to 15-feet below the surface in the area of the proposed stormwater infrastructure for the bioretention basin (DayZen LLC 2024, page 2.15).

For ethnographic resources, the PAA considers sacred sites, tribal cultural resources, traditional cultural properties (places), and larger areas such as ethnographic landscapes that can be vast and encompassing, including view sheds that contribute to the historical significance of such resources. The Native American Heritage Commission (NAHC) assists cultural resources consultants and agency staff in identifying these resources, and consultation with Native Americans and other ethnic or community groups may contribute to defining the PAA. In the case of the project site, a large portion at the north has been previously developed, as well as smaller portions to the south and will therefore be treated the same as the archaeological component.

The historic built environment (architectural) PAA for this project is the same as the project study area as defined earlier in this document. It includes the project site plus a one-parcel width buffer along the north and northwest, and a 0.25-mile buffer along the south, east, and southwest of the project site.

Record Search and Literature Review

The literature review for this analysis consisted of a records search at the California Historical Resources Information System (CHRIS), and examination of pertinent literature concerning cultural resources in Contra Costa County.

On behalf of the applicant, ECORP Consulting, Inc. (ECORP) requested a records search on June 15, 2023, at the Northwest Information Center (NWIC) of the CHRIS. The NWIC is the State of California's official repository of cultural resource records, previous cultural resources studies, and historical information concerning cultural resources for 18 counties, including Contra Costa County. The records search area included the project site and a one-mile buffer. In addition to the NWIC maps of known cultural resources and previous cultural resources studies, the records search included a review of historic maps, aerial photographs and the OHP's Archaeological Determinations of Eligibility.

In addition, CEC Staff also reviewed the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), the Office of Historic Preservation Built Environment Resource Directory, historic aerial photos, and topographic maps.

Tribal Consultation

Applicant's Correspondence

ECORP, on behalf of the applicant, contacted the Native American Heritage Commission (NAHC) on June 15, 2023, to request a search of the Sacred Lands File (SLF) and a list of tribes that might be interested in the proposed project. The NAHC responded on July 5, 2023, and provided a list of 10 California Native American tribes to contact:

- Amah Mutsun Tribal Band of Mission Indians San Juan Bautista
- Chicken Ranch Rancheria of Me-Wuk Indians
- Confederated Villages of Lisjan Nation
- Guidiville Rancheria of California
- Indian Canyon Mutsun Band of Costanoan
- Muwekma Ohlone Indian Tribe of the San Fransico Bay Area
- Nashville Enterprise Miwok-Madiu-Nishinam Tribe
- North Valley Yokuts Tribe
- The Ohlone Indian Tribe
- Wilton Rancheria

On December 18, 2023, ECORP sent letters via certified mail and email to the potentially interested tribes that were identified by the NAHC (ECORP 2024, pages 31-32 and Appendix B).

CEC Consultation

CEQA requires lead agencies to consult with all California Native American tribes that have traditional and cultural affiliation with the geographic area of a project, and that have previously requested consultation. To invoke an agency's requirement to consult under CEQA, a tribe must first send the lead agency a written request for formal notification of any projects within the geographic area with which they are traditionally and culturally affiliated (Pub. Resources Code, § 21080.3.1(b).) Currently none of the tribes on either of the NAHC's tribal contact lists have formally requested AB 52 consultation.

Additionally, consistent with the CEC's tribal consultation policy (CEC 2024), CEC staff contacted the NAHC on April 16, 2024, to request a search of the SLF and a list of California Native American tribes that might be interested in the proposed project. The NAHC responded on April 23, 2024, and provided a list of 14 California Native American tribes to contact:

- Buena Vista Rancheria of Me-Wuk Indians
- Calaveras Band of Me-Wuk Indians
- California Valley Miwok Tribe

- Chicken Ranch Rancheria of Me-Wuk Indians
- Confederated Villages of Lisjan Nation
- Guidiville Rancheria of California
- Ione Band of Miwok Indians
- Jackson Rancheria Band of Miwok Indians
- Muwekma Ohlone Indian Tribe of the San Francisco Bay Area
- Nashville Enterprise Miwok-Maidu-Nishinam Tribe
- Northern Valley Yokut/Ohlone Tribe
- Pakan'yani Maidu of Strawberry Valley Rancheria
- The Ohlone Indian Tribe
- Wilton Rancheria

CEC staff mailed initial consultation letters to these 14 tribes on December 11, 2024. See the following subsection, "Results," for tribal responses and lead agency follow-up.

Archaeological and Built Environment Survey

On September 26th, 2023, ECORP surveyed the project site for archaeological resources, which corresponds to the staff defined archaeological PAA, plus a 200-foot buffer to meet CEC guidelines (ECORP 2024, page 32). ECORP's archaeologist completed an intensive pedestrian survey using 15-meter transects in a north-south direction. ECORP staff examined 100 percent of all exposed ground surface (including rodent disturbances) within the project site for the presence of historic or prehistoric site indicators (ECORP 2024, page 32).

ECORP also conducted a survey to identify architectural resources within 0.25 mile or one parcel width of the project site (architectural PAA). ECORP applied a hybrid strategy to ensure adequate consideration of architectural resources. Substantial residential and commercial growth is present immediately north and northwest of the project site; therefore, a one-parcel-width buffer was established. Rural lands are present immediately adjacent to the project site to the south, east, and southwest; therefore, a 0.25-mile buffer was established (ECORP 2024, page 32).

Standard professional practice and CEC guidelines require that all cultural resources encountered during the survey be recorded using Department of Parks and Recreation (DPR) 523-series forms approved by the California OHP. The resources are usually photographed, mapped using a handheld Global Positioning System receiver, and sketched as necessary to document their presence using appropriate DPR forms (ECORP 2024, page 24).

Results

Record Search and Literature Review

The NWIC records search indicates that 35 previous cultural resources studies, or previous projects subject to a cultural study, occurred within one mile of the PAA (Table 5.5-1), of which 8 studies cross over into the PAA, which are shown in bold below. The NWIC also identified 20 previously recorded cultural resources within one mile of the project, mostly consisting of historic-age built environment resources, one of which is within the PAA (Table 5.5-2), shown in bold below. No additional previously recorded resources were identified through reviews of any of the national or state registers.

TABLE 5.5-1 PREVIOUS STUDIES WITHIN ONE MILE OF THE PAA (BOLD=WITHIN PAA)

Report #	Authors	Year	Report Title	Company
S-006987	Melinda Peake	1984	Cultural Resources Assessment of Baliey Road Sanitary Landfill Project, Contra Costa County, California	Peak & Associates, Inc.
S-006987A	Peter Banks	1985	Review of "Cultural Resources Assessment of Baliey Road Sanitary Landfill Project, Contra Costa County, California"	California Archaeological Consultants, Inc.
S-007647	N/A	1985	Cultural Resource Investigation of Proposed Pittsburg Marina Expansion Project	Woodward-Clyde Consultants
S-010268	David Chavez and Salley B. Woodbridge	1988	Cultural Resources Evaluations for the Pittsburgh Antioch Alternatives Analysis, Contra Costa County, California	David Chave & Associates
S-010724	N/A	1986	Report of the Cultural Resources Assessment of the Proposed San Joaquin	Peak & Associates, Inc.
S-011353	Sara A. Scott	1989	A Cultural Resources Survey of the Proposed Keller Landfill Site	CH2M Hill
S-011355	Rand F Herbert and Stephen D Mikesell	1989	Historic Resources Report: Keller Landfill Project, Contra Costa County, California	N/A
S-017893	David Chavez	1995	Archaeological Resources Investigation for the Pittsburg Conveyance system Improvements Project (87.9191), Contra Costa County, California	David Chavez & Associates
S-017993	Brian Hatoff, Barb Voss, Sharon Waechter, Stephen Wee, and Vance Bente	1995	Cultural Resources Inventory Report for the Proposed Mojave Northward Expansion Project	Woodward-Clyde Consultants
S-018352	N/A	1976	East/Central Contra Costa County Wastewater Management Plan, California: Cultural Resources Survey	Arthur D. Little, Inc.
S-018352A	Adam Cvijanovic and Larry Aull	1976	Assessment of Historical and Architectural Resources	American Institute of Architects

TABLE 5.5-1 PREVIOUS STUDIES WITHIN ONE MILE OF THE PAA (BOLD=WITHIN PAA)

Report #	Authors	Year	Report Title	Company
S-018352B	Colin I Busby	1976	Assessment of Archaeological Resources: East/Central Contra Costa County Wastewater Management Plan	University of California, Berkeley, Department of Anthropology
S-018440	G. James West and Patrick Welch	1996	Class II Archaeological Survey of the Contra Costa Canal, Contra Costa County, California	U.S. Bureau of Reclamation, Mid-Pacific Region
S-020405	Laurence H Shoup and Ward Hill	1996	Historic Architectural Survey Report, Route 4 East Project, Contra Costa County, California (04-CC-4, PM R14.6-24.-0, KP 23.5-38.6, EA 228260)	Archaeological/Historical consultants
S-020405A	Laura June Melton	1996	Archaeological Survey Report, Route 4 East Project Contra Costa County, California	Woodward-Clyde Consultants
S-021142	Stuart A Guedon and Colin I Busby	1996	Archaeological Survey Report, Delta De Anza Trail located between Loftus Road/State Highway 4 to Railroad Ave, City of Pittsburg, Contra Costa County, California	Basin Research Associates, Inc.
S-022464	N/A	1996	Cultural Resource Inventory Report for the Williams Communications, Inc. Fiber Optic Cable System Installation Project, Pittsburg to Sacramento, California	Jones & Stokes Associates, Inc.
S-023202	Janice C. Calpo	2000	Addendum Historic Property Survey Report and Finding of No Historic Property Affected, State Route 4 Widening/Railroad Avenue Interchange, Pittsburg, Contra Costa County, 04-CC-04/ KP 35.7/38.5 (PM 22.19/23.1) / EA 04-209-228770	Jones & Stokes Associates, Inc.
S-023202a	Cherilyn Widell and Susan Simpson	1996	FHWA960812A: 04-CC-4-14.6/23.0, Widen for (HOV) Lanes, Route 4 East, Contra Costa County	Office of Historic Preservation: Department of Transportation
S-023202b	Janic Calpo	2000	Addendum Historic Architectural Survey Report, State Route 4, Widening/Railroad Avenue Interchange, Pittsburg, Contra Costa County, 04-CC-04 / KP 35.7/38.5 (PM 22.19/23.1) / EA 04-209-228770	Jones & Stokes
S-023202c	Sara M. Atchley	2000	Addendum Archaeological Survey Report, State Route 4, Widening/Railroad Avenue Interchange, Pittsburg, Contra Costa County, 04-CC-04 / KP 35.7/38.5 (PM 22.19/23.1) / EA 04-209-228770	Jones & Stokes
S-024015	Shahira Ashkar	2001	Cultural Resource Inventory Report for the Montezuma Enhancement Site,	Jones & Stokes

TABLE 5.5-1 PREVIOUS STUDIES WITHIN ONE MILE OF THE PAA (BOLD=WITHIN PAA)

Report #	Authors	Year	Report Title	Company
			Southern Energy's Multispecies habitat Conservation Plan for Pittsburg and Contra Costa Power Plants, Solano and Contra costa Counties, California	
S-024986	N/A	2000	Cultural Resources Assessment, PG&E Proposed Tri-Valley 2002 Electric Power Capacity Increase Project	Basin Research Associates, Inc.
S-025642	N/A	2000	Draft Inventory and Evaluation of NRHP Eligibility of California Army national Guard Armories	Jones & Stokes
S-026421	Lorna Billat	2003	Historic Properties Survey Report Netxel Project: N Kirker Pass/CA-2175E	EarthTouch, Inc.
S-027445	Joseph Giliberti	2002	A Cultural Resources Reconnaissance Survey of Proposed Removal of the Tracy-Contra Costa- Ygnacio 69 kV Transmission Line, Contra Costa and Alameda Counties, California	Western Area Power Administration
S-027445a	Knox Mellon and James Keselburg	2002	WAPA020617A: Transmission Line Removal in Contra Costa and Alameda Counties, California	California Office of Historic Preservation, western Area Power Administration
S-029583	William Self	2004	Archaeological Survey and cultural Resources Assessment of the Proposed Alternative 3A Route for the City of Pittsburg Recycled Water Project, Pittsburg, contra costa county, California (Letter Report)	William Self Associates, Inc.
S-030387	Bai Tang, Michael Hogan, Josh Smallwood, and Terri Jacumain	2005	Historical Resources Compliance Report, Burlington Northern Santa Fe Railway Double Track Project (Segment 2), Oakley (MP 1146.1) to Port Chicago (MP 1164.4), In and Near the Cities of Oakley, Antioch, and Pittsburg, and the Port Chicago naval Weapons Station, Contra Costa County, California	CRM Tech
S-030387a	Bai Tang, Michael Hogan, Josh Smallwood, and Terri Jacumain	2005	Archaeological Survey Report/Historical Resource Evaluation	CRM Tech
S-030785	Carolyn Losee	2005	Collocation ("CO") Submission Packet FCC form 621, 2222 Gold Club Road, Pittsburg, contra Costa County, California	Archaeological Resources Technology
S-032573	Sean Michael Jensen	2006	Archaeological Inventory Survey, Pittsburg Middle School Project, c. 39-acres, Adjacent to West Leland Road,	Genesis Society

TABLE 5.5-1 PREVIOUS STUDIES WITHIN ONE MILE OF THE PAA (BOLD=WITHIN PAA)

Report #	Authors	Year	Report Title	Company
			Pittsburg, Contra Costa County, California	
S-034093	Kyle Kearney, David Buckley, Allen Estes, James Allan, and William Self	2006	Cultural Resources Assessment, Delta Diablo Sanitation district and the City of Pittsburg, Recycled water Pipeline Extension Project, Pittsburg, contra Costa County, California	William Self Associates, Inc.
S-034093a	Susan K. Strattor and Susan M. Fry	2007	BUR0704016A: Delta Diablo Sanitation District and City of Pittsburg Recycled water Pipeline Extension Project, Contra Costa County, California (Project #07-SCAO-174)	Office of Historic Preservation: United States Department of Interior
S-034187	Miley Paul Holman	2006	Cultural Resources study of the Pittsburg New Middle School Site and Adjacent School Sites, Range Road at Leland Road, Pittsburg, Contra costa County, California (Letter Report)	Holman & Associates
S-035244	Suzanne baker and Laurence H. Shoup	2006	eBart Project EIR, Archaeological Survey Report: eBart Project, Contra Costa County, California	Archaeological/Historical Consultants
S-035244a	Laurence H. Shoup	2007	eBart transit corridor EIR/EIS, Historic Resources Evaluation Report: San Pablo & Tulare Railroad/Central Pacific Railroad (Southern Pacific Railroad/Union Pacific Railroad), eBart Project, Contra Costa County, California	Archaeological/Historical Consultants
S-035244b	Ward Hill, Laurence H. Shoup, Marjorie Dobkin, and Suzanne Baker	2007	DRAFT #2, eBART Transit Corridor EIR/EIS, Historic Resources Evaluation Report: Historic Architecture of the eBART Project, Contra Costa County, California	Archaeological/Historical Consultants
S-035244c	Suzanne baker and Laurence H. Shoup	2007	eBart Transit Corridor EIR/EIS, Positive Archaeological survey Report: eBart Project, Contra Costa County, California (Union Pacific Moccoc Line Alternative)	Archaeological/Historical Consultants
S-035796	Barbra Siskin, Cassidy DeBaker, and Jennifer Lang	2009	Cultural Resources Investigation and Architectural Evaluation of the Pittsburg-Tesla transmission Line, Contra costa and Alameda Counties, California	Garcia and Associates
S-035861	Bai Tang	2009	Historic Property Survey Report, proposed undertaking to upgrade the capacity of the Burlington Northern Santa Fe (BNSF) Railway's mainline from Mile Post (MP) 1146.1 to MP 1164.4, between the City of Oakley and the Port	CRM Tech

TABLE 5.5-1 PREVIOUS STUDIES WITHIN ONE MILE OF THE PAA (BOLD=WITHIN PAA)

Report #	Authors	Year	Report Title	Company
			of Chicago naval Weapons Station in Contra Costa County	
S-035861a	Bain Tang, Michael Hogan, Josh Smallwood, and Terri Jacquemain	2009	Archaeological Survey Report/Historical Resources Evaluation Report, Burlington Northern Santa Fe Railway Double Track Project (Segment 2), In and near the Cities of Oakley, Antioch and Pittsburg and the Port of Chicago naval Weapons station, Contra Costa County, California	CRM Tech
S-038082	N/A	2011	Determination of Effect for the Installation of a Water Pipeline over the Contra Costa canal, Pittsburg, Contra Costa, California	Peak & Associates, Inc.
S-038082a	Susan K. Stratton and Anatasia Leigh	2011	BUR110610B: MP – 153, ENV – 3.00; Redundant Emergency Water Delivery Line for the City of Pittsburg, California (Tracking #11-SCAO-095)	Office of Historic Preservation; United States Department of the Interior
S-039031	Sunshine Psota	2012	Historic Property Survey report, North Parkside Drive and Willow Pass Road Bicycle and Pedestrian Improvements project in the City of Pittsburg	Holman & Associates
S-039031a	Sunshine Psota	2012	ASR Short Form for Local Assistance Project, North Parkside Drive and Willow Pass Road Bicycle and Pedestrian Improvements project in the City of Pittsburg	Holman & Associates
S-044218	Virginia Hagensieker and Janine M. Origer	2013	A Cultural Resources Study for the Wastewater Infrastructure Repair and Rehabilitation Project, within the cities of Bay Point, Pittsburg, and Antioch, Contra Costa County, California	Tom Origer & Associates
S-046909	Aisha Rahimi-Fike	2015	Delta Diablo Recycled Water System Expansion Project, Historical Resources Inventory and Evaluation Report, Contra Costa County, California	ICF International
S-046909a	N/A	2015	Delta Diablo Recycled Water System Expansion Project, Archaeological Inventory Report, Contra Costa County, California	ICF International
S-048702	Sunshine Psota and John Schlagheck	2016	Archaeological Survey Report & Extended Phase 1 Work Plan for Montreux Residential Subdivision city of Pittsburg & Contra Costa County, CA	Holman & Associates
S-049678	Aimee Arrigoni	2016	Historic Property Survey Report for the SR-4/Bailey Road Interchange Pedestrian & Bicycle Improvement Project, Pay Point, Contra Costa,	California Department of Transportation, District 4

TABLE 5.5-1 PREVIOUS STUDIES WITHIN ONE MILE OF THE PAA (BOLD=WITHIN PAA)

Report #	Authors	Year	Report Title	Company
			California CCPWD Project: 0662-6R4121, EA; 04-3G840, EFIS: 04-1300-0199	
S-049678a	Teresa Bulger	2013	Archaeological Survey Report for the SR-4/Bailey Road Interchange Pedestrian & Bicycle Improvement Project, Pay Point, Contra Costa, California CCPWD Project: 0662-6R4121, EA; 04-3G840, EFIS: 04-1300-0199	WSA, Inc.
S-049678b	Aimee Arrigoni	2016	Finding of No Adverse Effect-Non-Standard Conditions for the SR-4/Bailey Road Interchange Pedestrian & Bicycle Improvement Project, Pay Point, Contra Costa, California CCPWD Project: 0662-6R4121, EA; 04-3G840, EFIS: 04-1300-0199	WSA, Inc.
S-049678c	Kelly Hobbs and Julianne Polanco	2016	FHWA_2016_0419_001, Finding of No Adverse Effect for the Proposed State Route 4/Bailey Road Interchange Pedestrian & Bicycle Improvement Project, Contra Costa County, CA	California Department of Transportation: California Office of Historic Preservation
S-050871	Douglas Bright	2012	Historic Property Survey Report, proposed Freeway Performance Initiative (FPI) undertaking (project) on 04-CCO-242 (PM0.0/3/4), within the Cities of Martinez, Pacheco, Concord and Pittsburg in contra Costa County, EFIS No. 0400020911	California Department of Transportation, District 4

TABLE 5.5-2 PREVIOUSLY RECORDED RESOURCES WITHIN ONE MILE OF THE PAA

Primary No.	Trinomial	Age ¹	Description	Most Recent Recording Event
P-07-002695	N/A	H	Contra Costa Canal	Ric Windmiller (2010)
P-07-002956	N/A	H	Pittsburg-Tesla Transmission Line	Dana E. Supernowicz (2017)
P-07-000504	N/A	H	Southern Pacific Railroad-Northern Contra Costa Route	Hatoff et al. (1994)
P-07-000806	CA-CCO-732H	H	Atchison, Topeka and Santa Fe Railroad	Polly S. Allen (2016)
P-07-000813	CA-CCO-733H	H	Southern Pacific Railroad Spur Line	Ric Windmiller (2014)

1 NA = Native American, H = Historic, MC = Multi-Component, M = Modern
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TABLE 5.5-2 PREVIOUSLY RECORDED RESOURCES WITHIN ONE MILE OF THE PAA

Primary No.	Trinomial	Age¹	Description	Most Recent Recording Event
P-07-001920	N/A	H	Shell Chemical electric Utility Tower	Laurence H. Shoup and Ward Hill (1995)
P-07-002501	N/A	H	Single Family Property	Janice Calpo (2000)
P-07-002502	N/A	H	Single Family Property	Janice Calpo (2000)
P-07-002503	N/A	H	Single Family Property	Janice Calpo (2000)
P-07-002504	N/A	H	Single Family Property	Janice Calpo (2000)
P-07-002505	N/A	H	Single Family Property	Janice Calpo (2000)
P-07-002506	N/A	H	Single Family Property	Janice Calpo (2000)
P-07-002507	N/A	H	Single Family Property	Janice Calpo (2000)
P-07-002508	N/A	H	Single Family Property	Janice Calpo (2000)
P-07-002509	N/A	H	Single Family Property	Janice Calpo (2000)
P-07-002510	N/A	H	National Guard Armory	Janice Calpo (2000)
P-07-002573	N/A	H	Fort Knox Storage	Loma Billat (2003)
P-07-002648	N/A	H	Contra Costa Canal Road Bridge	Jeremy Adams (2014)
P-07-004702	N/A	H	Parkside Elementary School	Aisha Fike (2014)
N/A	N/A	H	Delta View Golf Course	Ludwig and Coleman (2023)

Tribal Consultation

Applicant's Correspondence

ECORP's June 15th, 2023, request to the NAHC, to search its SLF returned negative results, indicating that the NAHC does not have records of Native American cultural resources in the search area (ECORP 2024, page 31).

On December 18, 2023, ECORP sent letters via certified mail and email to the potentially interested tribes that were identified by the NAHC. Andrew Galvan of the Ohlone Indian Tribe responded on December 18, 2023, and requested the results and list of contacts provided by the NAHC. ECORP responded and forwarded the results on December 19, 2023. On January 11, 2024, The Confederated Villages of Lisjan Nation

responded requesting a copy of the records search results, EIR, and results of the SLF search. ECORP replied with a copy of the SLF and record search results on January 15, 2024, and informed the Lisjan representative that their request would be included in the cultural resources report and continued consultation would be under AB 52 conducted by the lead agency. ECORP has not received any other responses from the potentially interested tribes (ECORP 2024, page 32 and Appendix B).

CEC Consultation

The CEC's April 16, 2024, request to the NAHC for a search of the SLF returned negative results. However, the Native American contacts list differed from the one sent to ECORP the previous year. The list included six additional tribes and excluded two.

On December 11, 2024, the CEC sent formal consultation request letters via certified mail to the tribes identified by the NAHC. Wilton Rancheria responded by e-mail on January 13, 2025, confirming that the project is in Wilton's ancestral territory, however, they currently have no concerns with the project. The CEC responded back on January 13, 2025, stating that they will keep Wilton Rancheria updated if there are any changes to the project or if any cultural materials are encountered.

On January 23, 2025, e-mail copies of the letters were sent to the remaining tribes that had not yet responded. Additionally, on January 24, 2025, letters were e-mailed to the two tribes that did not appear on the CEC's contact list. On January 23, 2025, Buena Vista Rancheria of Me-Wuk Indians responded via e-mail informing the CEC that there is a new Chairwoman.

On January 24, 2025, the Confederated Villages of Lisjan Nation responded via e-mail requesting consultation. They also asked for copies of all cultural reports, the records search results, and results of the SLF search. The CEC responded via e-mail on January 24, 2025, acknowledging their request to consult.

On January 26, 2025, the Muwekma Ohlone Tribe of the San Francisco Bay Area e-mailed with interest in consultation and offering monitoring services if needed. The CEC replied via e-mail on January 27, 2025, letting the tribe know we received and acknowledged their desire to consult.

On January 27, 2025, the Northern Valley Yokut/Ohlone Tribe responded and would like to consult and schedule a meeting to discuss the project. The CEC responded with an e-mail on January 30, 2025, acknowledging the tribes desire to consult and requesting dates and times for a meeting.

On January 27, 2025, the Amah Mutsun Tribal Band of San Juan Bautista sent an e-mail stating the tribe has interest in the project and provided recommendations. The CEC responded with an e-mail on January 30, 2025, acknowledging their interest in consulting on the project.

Consultation efforts have not identified any additional archaeological resources or tribal cultural resources, however, several tribes expressed concerns for the sensitivity for cultural resources within the project area and a desire to monitor during construction. Consultation is ongoing.

Archaeological Survey

The archaeological survey did not identify archaeological or ethnographic resources in the PAA. Ground surface visibility ranged greatly (0% to 100%) due to thick vegetation and paved areas (ECORP 2024, page 32).

In compliance with CEC guidelines, ECORP surveyed an additional 200-foot buffer around the project site for archaeological resources on September 26, 2023. The eastern portion of the buffer was covered in short, dense grasses, while the western side was paved with asphalt and contained modern residences and a church. To the north, an asphalt-paved access road was present, with the area north of it covered by short, dense grasses. A buried pipeline ran east to west in the northern buffer of the project site, north of the parking lot (ECORP 2024, page 32).

Built Environment Survey

On September 26, 2023, ECORP conducted a cultural resources survey of the entire architectural PAA. The survey identified remnants of the Delta View Golf Course (PT-01), Pittsburg-Tesla transmission and distribution line (P-07-002956), a telephone line (PT-02), and the Conta Costa Canal (P-07-002695) located within the project site or directly adjacent to it (ECORP 2024, pages 33-47). Additionally, 41 individual residences, which are part of larger subdivisions, and a water treatment plant were identified within the buffer areas of the architectural PAA.

The 41 documented residences are located in largescale subdivisions with common styles of homes and the water treatment facility has undergone substantial modernization in the late 1980's early 1990's. CEC Staff conducted an independent analysis of these resources and based on the feature descriptions and information provided by ECORP (ECORP 2024, pages 44-47), CEC Staff determined these resources to not be eligible to CRHR and are therefore not considered historical resources under CEQA.

The remaining built environment resources that fall within the PAA or are directly adjacent include the Delta View Golf Course (PT-01), Pittsburg-Tesla transmission and distribution line (P-07-002956), a telephone line (PT-02), and the Conta Costa Canal (P-07-002695), two of which, the Contra Costa Canal and the Pittsburg-Tesla Transmission and Distribution line are considered historical resources under CEQA. The following subsections include descriptions and evaluations for these four built environment resources as presented in ECORP 2024, pages 36–47.

P-07-002956 Pittsburg-Tesla Transmission and Distribution Line

Resource P-07-002956 (also recorded as P-1-10947 in Alameda County) is a 31-mile-long 230kV electrical distribution and transmission line passing through Pittsburg. Constructed in stages between 1920 and 1960, the portion within the project site spans approximately 650 feet and includes one transmission tower. This section was constructed later, between 1959 and 1960, following the initial construction of the line.

Significance Evaluation

In 2017, the segment of the line just south of the project site was revisited by Dana Supernowicz, which connects to the segment that passes through the project site. This portion was constructed between 1920 and 1955 and was determined to be individually ineligible for the National Register of Historic Places (NRHP) and the CRHR but could be a contributing element to early power distribution systems in Northern California. SHPO concurred with the evaluation and the resource is listed as Appears eligible for NR as a contributor to a NR eligible multicomponent resource through survey evaluation (3D). Therefore, this resource is considered a historical resource under CEQA (ECORP 2024, page 34).

PT-01 Delta View Golf Course

The Delta View Golf Course is situated on rolling hills and borders residential neighborhoods to the north, east, and west. The Contra Costa Canal is oriented east-west and bisects the golf course when the golf course was expanded in 1991, when an additional 9-holes were added. Steep hillsides along the golf course give sweeping overviews of the surrounding delta area.

The Delta View Golf Course was an approximately 6,317-acre golf course that included turf areas, maintenance spaces, and a clubhouse area. Historically, the golf course included tees, fairways and rough, putting greens, sand bunkers, ponds and connecting ditches, gravel roads, and golf cart paths. It also had a maintenance facility, open space, a driving range/practice area, and a clubhouse. Each of these major features complement each other to comprise one or more of the major landscape characteristics of the Golf Course (ECORP 2024, pages 36-37).

The Delta View Golf Course has been closed since 2018. As of its closing, the entirety of the former golf course is not actively mowed or irrigated. Due to lack of irrigation, the former water features have reverted to dry pits. The cart paths remain paved. No information was available in the archival record to specifically show the evolution of the course or its alterations over time. Descriptive information of each feature and its changes were taken from a review of aerial images. Other than some alterations by PG&E in c. 1950, when they built the distribution line (P-07-002956) along the eastern edge, the design of the golf course did not substantially change until they added the additional nine holes in 1991 (ECORP 2024, page 37).

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

According to archival research, the original Delta View Golf Course was completed in c. 1949. The golf course was constructed and incorporated into the Pittsburg community as a recreational focal point for the city. Pittsburg became a thriving industrial center that grew in size and population during the second half of the 20th century. Though the Delta View Golf Course was built to serve as recreation for the burgeoning community of Pittsburg at the time, it was not a centerpiece to the master plan of the community as envisioned by city developers. Further, the Delta View Golf Course is not associated with any historical events in golfing, practice or concepts in golfing, or other related context. Therefore, the Delta View Golf Course is not individually related to the broad patterns of history associated with Pittsburg and Contra Costa County and is not eligible under Criterion 1.

Criterion 2: Associated with the lives of persons significant in our past.

The archival research for the Delta View Golf Course revealed that it is not significantly associated with any important person who contributed to local, state, or national history. The archival record does not show any names or individual owners from the period of its construction who gained historical significance as a result of the Delta View Golf Course. Its existence is not associated with any Master Plan designers and is not associated or representative of the life of any significant golfer. Therefore, the Delta View Golf Course does not have an important association with the lives of persons significant in the past and is not eligible under Criterion 2.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The Delta View Golf Course was designed as an executive golf course by master course designers John Fleming and Muir Graves. The layout possesses the typical aspects of a golf course, including the fairway, dunes, greens, ponds, and waterways. It was built to be integrated with open space areas and the surrounding environments. It contains fairways, open space, and built features such as the cart paths that encourage circulation along the course. The Delta View Golf Course is situated to balance the scenic tranquility of the area and the challenge and fluidity of the game itself. The features of the course were similar to other golf courses of the period and particularly those by Fleming; this golf course was a modest example of nine-hole courses and his work. Though the course was designed by Fleming, it does not appear to exhibit any of his artistic touches that helped his most famous courses gain notoriety or maintain relevancy in the changing environments of golf. Though it was designed with balance among the adjoining open space, it was not known to be an extravagant or beautiful example of a golf course.

Fleming built many golf courses in Northern California, but he did not gain notoriety from the design of the Delta View Golf Course. His best works—Sierra View, Sharon Heights, Boulder Creek, and Adams Springs—are still well-known and used today. Overall, his master craftsmanship in the planning of golf course design and contributions to course construction techniques are not apparent in this course.

The Delta View Golf Course, as a historic district comprising a landscape, does not embody the distinctive characteristics of design or construction techniques of John Fleming and does not provide a good representation of his artistic embellishments or philosophy in course design, as described in the historic context. The golf course, as an historic district comprising buildings and a landscape, including the landscape characteristics, is not eligible under Criterion 3.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

The Delta View Golf Course does not have the potential to yield information important in prehistory or history. Archival research potential for the golf course has been exhausted, and the property's history is well documented in the archival record. The Delta View Golf Course cannot provide additional historically important information, and there is no potential for the property to provide additional information that is not already represented in the archival record. As a result, the Delta View Golf Course is not eligible under Criterion 4.

PT – 02 Telephone Line

ECORP recorded PT-02, a telephone line built before 1973, based on aerial photograph analysis. The recorded segment spans approximately 0.5 miles, running parallel to residences on the western side and a gravel road on the northern side before turning west into the project site. PT-02 consists of wooden poles with crossarms supporting distribution wires (ECORP 2024, page 42).

Significance Evaluation

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of our history.

PT-02 provided telephone service to local landowners. However, as a simple telephone line, it did not transmit enough electrical signal to shape the development of the region. There is nothing in the archival record to suggest that PT-02 is associated with events that have made a significant contribution to the broad patterns of Contra Costa County's history. It is not eligible for the CRHR under Criterion 1.

Criterion 2: Associated with the lives of persons significant in our past.

Local utility crews built and maintained PT-02. However, there is nothing in the archival record to suggest that it is associated with the lives of persons significant in Contra Costa County's past. It is not eligible for the CRHR under Criterion 2.

Criterion 3: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

As a conventional telephone line, indistinguishable from multiple similar telephone lines in Contra Costa County, PT-02 lacks any character-defining features. It does not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction. It is not eligible for the CRHR under Criterion 3.

Criterion 4: Yielded, or may be likely to yield, information important in prehistory or history.

The information potential of PT-02 is expressed in its built form, alignment, and in the historical record. It has not yielded, nor is it likely to yield, information important in history or prehistory. It is not eligible for the CRHR under Criterion 4. CEC staff agrees with this recommendation of ineligibility.

P-07-002695 Contra Costa Canal

Resource P-07-002695 (Contra Costa Canal) parallels the southern boundary of the project area. This aboveground, concrete-lined canal borders the southern portion of the project area and flows underground at the southeasternmost portion. JRP Historical Consulting, Inc. (JRP) recorded and evaluated the easternmost portion of the canal, which is southeast of the project area, in 1993; the canal was piped underground at the location of recording. JRP determined that segment, the portion that flows underground, of the canal to be ineligible for the NRHP. Through research, JRP determined that the Contra Costa Canal is part of a much larger system, the Central Valley Project, which should be considered during evaluation.

Significance Evaluation

In 2002, the entire 40-mile-long canal was recorded and evaluated by Rand Herbert of JRP. It was determined to be eligible to the NRHP under Criterion A for its important contribution to the economic and industrial development of eastern Contra Costa County. The State Historic Preservation Office (SHPO) concurred with this evaluation in September of 2003 (ECORP 2024, page 44). Therefore, this resource is considered a historical resource under CEQA.

Archaeological Sensitivity

The San Francisco Bay region's geology is shaped by tectonic activity, with a basin formed during the Late Cenozoic era. Rising sea levels in the Early Holocene flooded river channels and filled the bays, leading to the development of tidal marshes. The area's underlying geology includes oceanic crust, sedimentary rocks, and blueschist, with deposits dating to the Pliocene-Pleistocene. The region is bordered by the Hayward

Zone Fault to the east and the San Andreas Fault to the west (ECORP 2024, pages 9 and 10).

Buried archaeological resources are a real possibility in the Bay Area. The melting of the ice sheets during the late Pleistocene Epoch caused the sea level to rise rapidly, submerging much of the western shoreline in this resource-rich area. Sea level rise along with the combined runoff from the Sacramento and San Joaquin rivers deeply buried much of the later archaeological resources in the region. According to a buried site potential model developed in 2017 for Caltrans District 4, the Pittsburg area has a moderate to high buried site potential (Byrd et al. 2017, pages 4.7-4.10).

The project site contains two primary soil types: Capay Clay and Rincon Clay Loam, both considered prime farmland if irrigated. The underlying geology consists of loosely consolidated sandstone, shale, and gravel deposits (ECORP 2024, pages 9 and 10).

The northern portion of the project site has a moderate potential for containing intact buried deposits, especially near seasonal streams. These areas are more likely to hold pre-contact resources, as they are typically found near natural waterways. The hillsides have a low potential for buried archaeological sites.

Regulatory Background

Federal

No federal regulations related to cultural or tribal cultural resources apply to the project.

State

California Environmental Quality Act. Various laws apply to the evaluation and treatment of cultural resources. CEQA requires lead agencies to evaluate cultural resources by determining whether they meet several sets of specified criteria that make such resources eligible to the CRHR. Those cultural resources eligible to the CRHR are historical resources. The evaluation then influences the analysis of potential impacts to such historical resources and the mitigation that may be required to reduce any such impacts.

CEQA, and the State CEQA Guidelines, define significant cultural resources under two regulatory definitions: historical resources and unique archaeological resources. A historical resource is defined as a "resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources", or "a resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code," or "any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the agency's determination is

supported by substantial evidence in light of the whole record.” (Cal. Code Regs., tit. 14, § 15064.5[a]). Historical resources that are automatically listed in the CRHR include California historical resources listed in or formally determined eligible for the NRHP and California Registered Historical Landmarks from No. 770 onward (Pub. Resources Code, § 5024.1(d)).

Under CEQA, a resource is generally considered historically significant if it meets the criteria for listing in the CRHR. In addition to being at least 50 years old, a resource must meet one or more of the following four criteria (Pub. Resources Code, § 5024.1):

- Criterion 1, is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- Criterion 2, is associated with the lives of persons important in our past;
- Criterion 3, embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Criterion 4, has yielded, or may be likely to yield, information important in prehistory or history.

In addition, historical resources must also possess integrity of location, design, setting, materials, workmanship, feeling, and association (Cal. Code Regs., tit. 14, § 4852(c)).

Even if a resource is not listed or determined to be eligible for listing in the CRHR, CEQA requires the lead agency to determine whether the resource is a historical resource as defined in Public Resources Code, sections 5020.1(j) or 5024.1.

In addition to historical resources, archaeological artifacts, objects, or sites can meet CEQA’s definition of a unique archaeological resource, even if the resource does not qualify as a historical resource (Cal. Code Regs., tit. 14, § 15064.5(c)(3)).

Archaeological artifacts, objects, or sites are considered unique archaeological resources if it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that the resource meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person. (Pub. Resources Code, § 21083.2[g]).

To determine whether a proposed project may have a significant effect on the environment, the project’s potential to cause a substantial adverse change in the significance of historical or unique archaeological resources was analyzed. The magnitude of an impact depends on:

- The affected historical resource(s);
- The specific historic significances of any potentially impacted historical resource(s);
- How the historical resource(s) significance is manifested physically and perceptually;
- Appraisals of those aspects of any historical resource's integrity that figure importantly in the manifestation of the resource's historical significance; and
- How much the impact will change historical resource integrity appraisals.

Title 14, California Code of Regulations, section 15064.5(b) defines a "substantial adverse change" as the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired."

California Native American Tribes, Lead Agency Tribal Consultation Responsibilities, and Tribal Cultural Resources

CEQA provides definitions for California Native American tribes, lead agency responsibilities to consult with California Native American tribes, and tribal cultural resources. A "California Native American tribe" is a "Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission (NAHC) for the purposes of Chapter 905 of the Statutes of 2004" (Pub. Resources Code, § 21073). Lead agencies implementing CEQA are responsible for consultation with California Native American tribes about tribal cultural resources within specific timeframes, observant of tribal confidentiality, and if tribal cultural resources could be impacted by a CEQA project, are to exhaust the consultation to points of agreement or termination.

Tribal cultural resources are either of the following:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - a. Included or determined to be eligible for inclusion in the CRHR.
 - b. Included in a local register of historical resources as defined in the Public Resources Code, section 5020.1(k).
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in the Public Resources Code, section 5024.1(c). In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe. (Pub. Resources Code, § 21074[(a)]).

A cultural landscape that meets the criteria of Public Resources Code, section 21074(a), is a tribal cultural resource to the extent that the landscape is geographically defined in terms of its size and scope (Pub. Resources Code, § 21074(b)). Historical resources, unique archaeological resources, and non-unique archaeological resources, as defined at Public Resources Code, sections 21084.1, 21083.2(g), and 21083.2(h), may also be

tribal cultural resources if they conform to the criteria of Public Resources Code, section 21074(a).

CEQA also states that a project with an impact that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (Pub. Resources Code, § 21084.2).

Local

Contra Costa County General Plan, Cultural Resources Element (Section 9-3).

The Cultural Resources Element of Contra Costa County's General Plan (Section 9-3) emphasizes the protection of cultural, archaeological, and historical resources during development projects. This section mandates that cultural resource assessments be conducted when projects have the potential to affect resources of cultural significance. The assessments must consider resources such as historic buildings, archaeological sites, and tribal cultural resources (identified under Public Resources Code Section 5024.1). The General Plan stipulates that a literature review and a field survey be conducted to determine the presence of such resources within the project's Area of Potential Effects (APE). In addition, the General Plan mandates that if any significant historical or archaeological resources are identified, mitigation measures must be implemented. These measures may include preservation, reduction of impact, or relocation of resources. Furthermore, the county requires coordination with Native American tribes for any tribal cultural resources, as outlined in Public Resources Code Section 21074. Compliance with these measures ensures that cultural resources are preserved while allowing for development to proceed (Contra Costa County General Plan, 2019).

City of Pittsburg General Plan, Cultural and Historic Resources (Section 10-7). The Cultural and Historic Resources section of the City of Pittsburg 2040 General Plan (Section 10.7) outlines the procedures for identifying and evaluating the impact of development on historic and cultural resources within the city. The section requires a detailed cultural resource assessment for projects located in areas with known historical or archaeological significance. This includes the review of historical districts, archaeological sites, and tribal cultural resources. The General Plan mandates that if significant cultural resources are identified within the project's Area of Potential Effects (APE), the project must implement appropriate mitigation measures to avoid or reduce any potential adverse effects. These measures can include preserving the resource in place, relocating resources, or documenting the resource before construction begins. This process ensures that the city complies with the Public Resources Code Section 21074, which requires consideration of tribal cultural resources (City of Pittsburg 2040 General Plan, 2024).

5.5.2 Environmental Impacts

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5??

Construction

Less Than Significant with Mitigation Incorporated. Two built environment resources meeting CEQA's criteria for historical resources are in the PAA (Pittsburg-Tesla Transmission and Distribution Line and the Contra Costa Canal). No archaeological or ethnographic resources meeting CEQA's criteria for historical resources occupy the surface of the PAA and an analysis of geology information and previous disturbance in the project site, indicate that the PAA has a low to moderate potential for buried archaeological deposits.

The first historical resource in the PAA is the Pittsburg-Tesla Transmission and Distribution Line (P-07-002956), which is a 31-mile 230kV transmission/distribution line, with a 650-foot segment and one tower located in the project site. The proposed project will not interconnect with this existing transmission/distribution line. The proposed project is not proposing to change the alignment of the resource, the line will continue to be used as it was originally intended. Therefore, the proposed project will not impact the overall setting of the line and will have a less than significant impact on the Pittsburg-Tesla Transmission and Distribution Line (P-07-002956).

The second historical resource within the PAA is the Contra Costa Canal (P-07-002965) located to the south, outside of the project site, within an easement. The proposed project will not cross into this existing easement. Additionally, adding a data center building to a relatively built-up environment will not impact the overall setting or cause significant visual impacts to the resource. Therefore, the proposed project will have a less than significant impact on the Contra Costa Canal (P-07-002965).

Although the PAA has been partially disturbed by construction of a golf course, telephone line, and the Pittsburg-Tesla Transmission/Distribution Line, geologic research indicates that there is a low-moderate potential that the project site could contain buried archaeological resources. The northern portion of the project site has a moderate potential to contain these resources due to its proximity to seasonal streams and waterways (ECORP 2024, page 9).

The ground disturbance required to construct the proposed project, specifically grading and installation of utilities, would extend as deep as 15-feet below grade. If unknown buried resources were to be damaged during construction, it would be considered a significant impact, particularly because most of the later period archaeological sites are only found in a buried context.

Given the sensitivity of the PAA and surrounding region, CEC staff proposes mitigation measures (MM) that require a worker awareness program (**CUL-1**), the development of a cultural resources monitoring plan (CRMP) to outline monitoring procedures (**CUL-2**), Archaeological Monitoring (**CUL-3**), and procedures in the event that unknown archaeological resources are encountered during excavation or grading of the project site (**CUL-4**), which will reduce impacts to unknown buried historical resources. It is

staff's conclusion that with implementation of MM CUL-1 through MM CUL-4, impacts to unknown buried historical resources would be reduced to a less-than-significant level.

Operation

No Impact. Ground-disturbing activities are not part of the operational or maintenance profile of the proposed project. Impacts on historical resources are therefore not expectable during operation and maintenance.

b. Would the project cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?

Construction

Less Than Significant with Mitigation Incorporated. See the response to CEQA checklist criterion "a" above, which includes a discussion of historic, archaeological, and ethnographic resources.

An analysis of geology information and previous disturbance in the project site, indicate that the PAA has a low to moderate potential for buried archaeological deposits (ECORP 2024, page 9). The northern portion of the project site has a moderate potential to contain these resources due to its proximity to seasonal streams and waterways (ECORP 2024, page 9).

The ground disturbance required to construct the proposed project, specifically grading and installation of utilities and stormwater infrastructure, would extend as deep as 15-feet below grade. If unknown buried resources were to be damaged during construction, it would be considered a significant impact, particularly because most of the later period archaeological sites are only found in a buried context within the Bay Area. Implementation of mitigation measures **CUL-1** through **CUL-4** would reduce impacts on buried, unique archaeological resources to a less than significant level.

Operation

No Impact. Ground-disturbing activities are not part of the operational or maintenance profile of the proposed project. Impacts on unique archaeological resources are therefore not expectable during operation and maintenance

c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Construction

Less Than Significant with Mitigation Incorporated. No archaeological or ethnographic resources containing human remains including those interred outside of dedicated cemeteries occupy the surface of the PAA and an analysis of geology information and previous disturbance in the project site, indicate that the PAA has a low to moderate

potential for buried archaeological deposits (ECORP 2024, page 9). The northern portion of the project site has a moderate potential to contain these resources due to its proximity to seasonal streams and waterways (ECORP 2024, page 9).

The ground disturbance required to construct the proposed project, specifically grading and installation of utilities and stormwater infrastructure, would extend as deep as 15-feet below grade. If unknown buried resources, including human remains, were to be damaged during construction, it would be considered a significant impact, particularly because most of the later period archaeological sites are only found in a buried context within the Bay Area.

Given the sensitivity of the PAA, CEC staff proposes mitigation measures (MM) requiring a worker awareness program (**CUL-1**), development of a CRMP (**CUL-2**), Archaeological Monitoring (**CUL-3**), procedures in the event that unknown Native American archaeological or historic resources are encountered during excavation or grading of the site (**CUL-4**), and procedures in the event that unknown human remains are discovered (**CUL-5**), which will reduce impacts to unknown buried resources including human remains. It is staff's conclusion that with implementation of **MM CUL-1** through **MM CUL-5**, impacts to human remains would be reduced to a less-than-significant level.

Operation

No Impact. Ground-disturbing activities are not part of the operational profile of the proposed project. Impacts on human remains are therefore not expectable during operation and maintenance.

d. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or**

Construction

No Impact. There are no tribal cultural resources listed or eligible for listing in the CRHR or other state registers, NRHP, or local register of historical resources in the PAA. Therefore, no impacts would occur during construction.

Operation

No Impact. Ground-disturbing activities are not part of the operational profile of the proposed project. Therefore, impacts on tribal cultural resources listed or eligible for listing in the CRHR or other state registers, NRHP, or local register of historical resources would not occur during operation or maintenance.

- ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Construction

Less Than Significant with Mitigation Incorporated. Although no known tribal cultural resources have been identified to date on or directly adjacent to the proposed site, ground disturbance associated with the proposed project could result in the exposure and destruction of buried, as-yet unknown Native American archaeological resources that could qualify as tribal cultural resources. If such resources were to be exposed or destroyed, it would be a significant impact without mitigation. Implementation of MM CUL-1 through MM CUL-5 would reduce impacts on buried, tribal cultural resources to a less-than-significant level.

Operation

No Impact. Ground-disturbing activities are not part of the operational profile of the proposed project. Impacts on tribal cultural resources listed or eligible for listing in the CRHR or other state registers, NRHP, or local register of historical resources are therefore not expected during operation and maintenance.

5.5.3 Mitigation Measures

CUL-1: Worker Environmental Awareness Program. Prior to the commencement of construction, the applicant shall retain a qualified archaeological specialist to prepare a Worker Environmental Awareness Program (WEAP). The name and credentials of the Secretary of the Interior qualified archaeological specialist shall be submitted to the Director or Director's designee of the City of Pittsburg Planning Division for review and approval no less than 14 days prior to the commencement of the preparation of the WEAP.

The WEAP shall be designed to assure that construction workers are aware of the obligation to protect and preserve valuable archaeological and Native American resources.

The WEAP training shall be submitted to the Director or Director's designee of the City of Pittsburg Planning Division at least 60 days prior to the start of construction for review and approval. This program will be provided to all construction workers via a recorded presentation and will include a discussion of applicable laws and penalties under the laws; samples or visual aids of resources that could be encountered in the project site and vicinity; instructions regarding the need to halt work in the vicinity of any potential archaeological and Native American resources encountered; and measures to notify their supervisor, the applicant, and the archaeological specialist.

CUL-2: Cultural Resources Monitoring Plan. Prior to commencement of construction, the qualified archaeological specialist will develop a Cultural Resources Monitoring Plan (CRMP) to guide the procedures and protocols of a mitigation-monitoring program that shall be implemented within the project boundaries during all ground disturbing activities. The CRMP will outline the project schedule; address the methodology for grading activity observation by the monitors; and shall include a treatment plan, based on the project mitigation measures and conditions of approval, should any cultural resources be identified. The extent of the monitoring program will be dependent upon the project duration and complexity of ground disturbing activities. The CRMP shall be submitted to the Director or Director's designee of the City of Pittsburg Planning Division at least 60 days prior to the start of construction for review and approval.

CUL-3: Archaeological Monitoring. Prior to commencement of construction, the applicant will secure the services of a qualified archaeological specialist to observe all new ground disturbing activity. Additionally, if requested by a consulting tribe, the applicant will secure the services of a Native American monitor to observe all new ground disturbing activity. Preference in selecting Native American monitors shall be given to members of a local consulting tribe.

CUL-4: Unanticipated Discovery. If archaeological resources are encountered during excavation or grading of the site, all activity within a 100-foot radius of the find shall be stopped, the Director or Director's designee of the City of Pittsburg Planning Division shall be notified, and a qualified archaeologist will examine the find. The qualified archaeologist will evaluate the find to determine if they meet the definition of a historical, unique archaeological, or tribal cultural resource and make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits for any construction occurring within the above-referenced 100-foot radius. If the finds do not meet the definition of a historical, unique archaeological, or tribal cultural resource, no further study or protection is necessary prior to project implementation. If the find does meet the definition of a historical, unique archaeological, or tribal cultural resource, then it will be avoided by project activities. If avoidance is not feasible, adverse effects to such resources will be mitigated in accordance with the recommendations of the qualified archaeologist. Recommendations may include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to the Director or

Director's designee of the City of Pittsburg Planning Division, Native American Heritage Commission (tribal cultural resources), and the Northwest Information Center.

CUL-5: Treatment of Human Remains. If human remains are discovered during excavation or grading of the site or other construction activities, all activity within a 100-foot radius of the find will be stopped. The Contra Costa County Coroner shall be notified immediately and will make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendant(s) (MLD), the descendant(s) will make recommendations regarding the treatment and disposition with appropriate dignity of the Native American human remains (including the treatment of grave goods), which will be implemented in accordance with section 15064.5(e) of the California Code of Regulations, Title 14.

The Secretary of the Interior-qualified archaeologist will recover scientifically valuable information, as appropriate and in accordance with the recommendations of the MLD. A report of findings documenting any data recovery shall be submitted to the CEC and the Northwest Information Center.

5.5.4 References

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5.6 Energy and Energy Resources

This section describes the environmental and regulatory setting and discusses impacts associated with the construction and operation of the proposed project specific to energy and energy resources¹.

ENERGY	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Environmental checklist established by CEQA Guidelines, Appendix G.

5.6.1 Environmental Setting

The project site would be developed on an abandoned golf course with a total site area of approximately 22.31 acres (DayZenLLC 2024a, Section 2.2.1). The only remaining structures after demolition of other structures within the site are a water storage tank and a one-story mechanical equipment storage building.

Regulatory Background

Federal

Energy Star and Fuel Efficiency. At the federal level, energy standards set by the United States Environmental Protection Agency (EPA) apply to numerous consumer products and appliances. The EPA and Department of Transportation's National Highway Traffic and Safety Administration also set fuel efficiency standards for automobiles and other modes of transportation.

State

California 2022 Energy Efficiency Standards for Residential and Nonresidential Buildings—Green Building Standards Code, California Code of Regulations, Title 24. The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11) applies to the planning, design, operation,

¹ This section includes staff's analysis of the project's potential impact on Energy Resources, as required by Public Resources Code section 25541 when considering a Small Power Plant Exemption

construction, use, and occupancy of newly constructed buildings and requires the installation of energy- and water-efficient indoor infrastructure.

Senate Bill 100—The 100 Percent Clean Energy Act of 2018. Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. This requirement applies to Pittsburg Power Company (PPC), the primary provider of energy for the data center. The bill also requires the Public Utilities Commission, California Energy Commission, and State Air Resources Board to utilize programs authorized under existing statutes to meet the state policy goal of 100 percent of total retail sales of electricity in California provided by eligible renewable energy resources and zero-carbon resources by December 31, 2045.

Local

City of Pittsburg 2040 General Plan. The General Plan was adopted by the Pittsburg City Council in May 2024 (Pittsburg 2024). The General Plan Resource Conservation & Open Space Element describes the City's approach to the conservation and enhancement of Pittsburg's natural resources including energy resources. The applicable policies to the proposed project are summarized below:

- 10-P-6.2: Ensure that new development is consistent with the energy objectives and targets identified by the City's Sustainability Plan.
- 10-P-6.10: Require and condition all new public and privately constructed buildings to exceed, where feasible, and comply with construction and design standards that promote energy conservation, including the most current "green" development standards in the California Green Building Standards Code.
- 10-P-6.13: Require construction standards which promote energy conservation; Require best practices in selecting construction methods, building materials, project appliances and equipment, and project design.

5.6.2 Environmental Impacts

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

Less Than Significant Impact. Construction vehicles and equipment would consume nonrenewable energy resources, primarily fossil fuels (oil, gasoline, and diesel) during short-term and temporary project construction activities. It is anticipated that these

nonrenewable energy resources would be used efficiently during construction activities and would not result in significant long-term depletion of these energy resources or permanently increase the project's reliance on them. Under mitigation measure AQ-1, the proposed project would implement measures to minimize the idling (e.g., limit idling to 5 minutes or less) of construction equipment and would require all such equipment to be maintained and properly tuned (see **Section 5.3, Air Quality** for more discussion). This would ensure that fuel consumed during construction would not be wasted through unnecessary idling or the operation of poorly maintained equipment, and not add to unnecessary air emissions. Additionally, as a requirement by the City's construction and/or demolition permit, the project would participate in the Construction and Demolition Debris Recycling Program by recycling or diverting materials generated for discard by the project to reduce the amount of demolition and construction waste going to the landfill (DayZenLLC 2024a, Section 4.6.3.1). Diversion saves energy by reusing and recycling materials for other uses (instead of landfilling materials and using additional nonrenewable resources).

Therefore, the construction phase of the proposed project would create a less-than-significant impact on local and regional energy supplies and a less-than-significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.

Operation

Less Than Significant Impact. The proposed project would consist of a three-story data center building, a substation, a Pacific Gas and Electric (PG&E) switching station, thirty-seven (37) 3-megawatt (MW) diesel-fired backup generators (gensets), and a genset equipment yard (DayZenLLC 2024a, Sections 2.2.1, 2.2.2, 2.3.2, and 2.3.3). Gensets would be located in a secure genset yard west of the data center building. Thirty-six (36) of the gensets would provide emergency backup power for the data center's Information Technology (IT) and mechanical systems, while one (1) genset would serve ancillary building loads such as administrative offices and life safety systems (DayZenLLC 2024a, Sections 2.1, 2.2.2 and 2.2.5).

The thirty-seven (37) gensets would supply backup power to the data center suites, as well as general office functions and life safety services, during emergency outages when electrical service from PPC is unavailable. The gensets would be electrically isolated from PPC's transmission grid, with no means of exporting electricity offsite (DayZenLLC 2024a, Sections 2.2.2, 2.2.5).

Each of the thirty-seven (37) backup gensets would be Cummins Model C3000 D6e units, Tier 4-compliant and rated at 3 MW of peak standby output, with a fuel consumption rate of approximately 205 gallons per hour (gal/hr) at full load. The gensets are intended for use only during emergency outages and are capable of operating on renewable diesel or ultra-low sulfur diesel (DayZenLLC 2024b, Appendix B). The maximum electrical load requirement of the data center would be 92 MW,

which includes the electrical power load of the IT servers, the cooling load of the data center buildings, as well as the facility's ancillary loads (DayZenLLC 2024a, Section 2.2.3.2). See **Section 3.8, Project Description** for further information. For the purposes of testing and maintenance, only one genset would run at any given time.

The backup gensets would operate for short periods for testing and maintenance purposes and otherwise would not operate unless there is a disturbance or interruption of the utility supply. Bay Area Air Quality Management District's (BAAQMD) Authority to Construct and the California Air Resources Board's Airborne Toxic Control Measures (ATCM) limits each engine to no more than 50 hours annually for reliability purposes (i.e., testing and maintenance). However, actual testing and maintenance of each genset is anticipated not to exceed 34 hours per year (DayZenLLC 2024a, Section 2.2.12). The primary fuel for the gensets would be renewable diesel (to the maximum extent feasible), with ultra-low sulfur diesel (ULSD or conventional) as backup fuel (DayZenLLC 2024a, Section 2.2.6). Renewable diesel is a direct replacement alternative to conventional diesel fuel for the project's gensets. It is not a fossil fuel and is made of nonpetroleum renewable resources (vegetable oil or other biomass feedstock such as wood, agricultural waste, garbage, etc.). Renewable diesel is produced through various thermochemical processes, such as hydrotreating, gasification, and pyrolysis. Please note that renewable diesel is not the same as biodiesel and has different fuel properties than biodiesel. Biodiesel is produced through transesterification, which is a chemical process that converts fats and oils into fatty acid methyl esters.

The total quantity of renewable diesel or ULSD diesel fuel used for all the gensets operating at full load would be approximately 6,140 barrels per year (bbl/yr).² California has a renewable diesel and ULSD fuel supply of approximately 27,200,000 bbl/yr³ and 229,000,000 bbl/yr,⁴ respectively. The project's use of fuel constitutes a small fraction of the renewable diesel and ULSD's available resources (less than 0.023 and 0.003 percent, respectively)—the supply from the combination of these two resources is more than sufficient to meet the project's necessary demand. Moreover, the current supply of renewable diesel does not account for more refineries that are coming online, and any import supply. Future and import supply would bolster renewable diesel's available resource.

2 Calculated as: 34 hr/yr x (205 gal/hr x 37 generators) = 257,890 gallons per year = 6,140 bbl/yr.

3 This is the annual production of 1,143,000,000 gallons obtained from the U.S. Energy Information Administration's U.S. Renewable Diesel Fuel and Other Biofuels Plant Production Capacity as of January 1, 2024.

4 This is the sum of the annual production of 77,900,000 bbl and available stocks of 151,100,000 bbl obtained from the Energy Commission's Weekly Fuels Watch Report for 2024.

Since the project would use renewable diesel, with ULSD as backup supply, the project's use of fuel on energy resources would be less than significant.

It is important to note that maintenance and readiness testing of the gensets are crucial to the project's viability. The most important data center criterion is reliability. Crucial public services, such as 911, Offices of Emergency Management, and utility infrastructure, are increasingly using data centers for their operation. The reliability and data security requirements of a data center would be compromised by limiting or reducing fuel consumption for maintenance and readiness testing. This includes both the primary and redundant gensets. Even though the gensets are arranged in redundant configurations (6-to-make-5), their operational reliability is equally important, and they are designed to start up simultaneously during emergency operations, with each genset running at 80 percent capacity (DayZenLLC 2024a, Section 2.2.4.1). If any genset fails to operate, the remaining ones must be immediately ready to take up the lost load. So, it is crucial that all gensets be regularly tested and maintained according to the same testing and maintenance requirements and the manufacturer's warranty conditions. Therefore, the use of diesel fuel for the gensets for readiness testing and maintenance would not be wasteful, inefficient, or unnecessary.

The gensets would use diesel and lubricating oils. However, the use of the standby gensets for emergency purposes would be limited to times when there is an interruption of PPC's delivery of electric service or other rare emergencies that would require the facility to switch to genset use. Under emergency conditions, defined as the loss of electrical power to the data center, which are infrequent and short-duration events, the gensets could operate and use diesel fuel, as necessary, to maintain data center operations. Data centers, such as this one, could voluntarily participate in California Public Utility Commission's Emergency Load Reduction Program or in California Energy Commission's Demand Side Grid Support Program, in which case, they would disconnect from the grid and use their on-site gensets to supply their own electricity in the event of an energy shortage emergency. However, based on data between 2001 and 2020, energy shortages are rare events. Such events are rare and staff expects their effects to decrease over time; see **Appendix B, Project Substation and Electrical Reliability Supporting Information**, for more discussion.

The Cummins genset models selected for this project have an efficiency rating comparable to other Tier 4 commercially available diesel-fueled gensets of similar generating capacity (DayZenLLC 2024a, Section 22.2.5).

Power Usage Effectiveness (PUE) is a metric used to compare the energy efficiency of facilities that house computer servers. It is a common metric for determining how effectively a data center's infrastructure systems can deliver power to the computer systems it houses. PUE was published in 2016 as a global standard under the International Organization for Standardization, the International Electrotechnical Commission, as well as the European Standards (ISO 2016, European Standards 2016). It is defined as the ratio of total facility energy draw (including the facility's mechanical

and electrical loads) to IT server electrical power draw (PUE = total facility source energy [including the IT source energy]/IT source energy). This approach to calculating a data center's energy efficiency is similar to the American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE) Energy Standard for Data Centers (ASHRAE 90.4). However, there is a notable difference: ASHRAE 90.4, which intends to tackle and regulate poorer performers, calculates energy efficiency by providing an alternative path that allows tradeoffs between mechanical and electrical loads, particularly within existing, older data centers, while the PUE is a more appropriate path to determining a new data center's energy efficiency.

A PUE of 2 means that the data center must draw two watts of electricity for each watt of power consumed by the IT server equipment. While the PUE is always greater than 1, the closer it is to 1, the greater the portion of the power drawn by the facility that goes to the IT server equipment.

The PUE has been used as a guideline for assessing and comparing energy and power efficiencies associated with data centers since 2007 (ASHRAE 2016). It must be noted that the PUE metric was designed to compare facilities of similar size and within similar climatic conditions. PUE factors started around 2.0, but values have since been migrating down to 1.25 or lower, demonstrating a significant improvement in efficient energy usage over the years. A facility with a PUE of 1.5-2.0 is considered "efficient" while one with a PUE of 1.2-1.5 is considered "very efficient."

The peak PUE for the project would be 1.51, and its annual average PUE would be 1.17 (DayZenLLC 2024a, Section 4.6.3.2). The project's peak operation PUE estimate is based on design assumptions and represents the worst case; that is, the hottest day with all server bays occupied and all servers operating at 100 percent capacity.

The proposed project would be constructed in accordance with the 2022 California Green Building Standards Code and would include green building measures to reduce energy consumption (DayZenLLC 2024a, Sections 2.3.2.2 and 4.8.3.1). Examples of these measures include:

- Utilizing LED lighting fixtures and occupancy sensors to reduce energy usage;
- Reflective roof surface to reduce heat gain and cooling load; and
- Using air-cooled chillers with optional adiabatic pre-cooling to improve cooling efficiency.

The proposed project's consumption of energy resources during operation would not be wasteful, inefficient, or unnecessary. Thus, project operation would have a less-than-significant adverse effect on local or regional energy supplies and resources.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Construction and Operation

No Impact. During operation, the project would use energy resources in PPC's portfolio of resources. However, the project would also interconnect to a PG&E-operated switching station, and PG&E's 2022 Integrated Resource Plan identifies that it expects to meet or exceed 70 percent of eligible renewable resource procurement by 2030.

PG&E's 2022 Integrated Resource Plan identifies that it expects to meet or exceed 70 percent of eligible renewable resources by 2030 (PG&E 2022a). PG&E's 2022 power mix was composed of approximately 38.3 percent eligible renewable, 7.6 percent large hydroelectric, 4.8 natural gas, and 49.3 percent nuclear power. In addition, PG&E offers customers 100 percent carbon-free renewable electricity (PG&E 2022b).

The proposed project would not obstruct compliance with any applicable state plan for renewable energy, as it would not interfere with any utility's procurement obligations or clean energy targets (DayZenLLC 2024a, Section 2.2.3).

In addition, the proposed project's use of ULSD as a backup fuel for the gensets' primary fuel would not obstruct or inhibit the state from achieving its energy-related goals. As previously mentioned, the gensets would operate only during routine testing and maintenance (limited to 50 hours per genset), and in the rare case of emergencies to serve the project and not the wider electric grid. See **Section 5.3, Air Quality**, and **Section 5.8, Greenhouse Gas**, for more discussion.

The proposed project through energy-efficient design and use of renewable diesel fuel would neither conflict with, nor obstruct state or local plans for renewable energy or energy efficiency. Therefore, the proposed project would have no impact on those plans.

5.6.3 Mitigation Measures

None required.

5.6.4 References

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5.7 Geology and Soils

This section describes the environmental setting and regulatory background and discusses impacts, associated with the construction and operation of the project with respect to geology and soils.

GEOLOGY AND SOILS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☒	☐	☐
ii. Strong seismic ground shaking?	☐	☒	☐	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☒	☐	☐
iv. Landslides?	☐	☒	☐	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c. Be located on geologic units or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐
d. Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code, creating substantial direct or indirect risks to life or property?*	☐	☒	☐	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

*Geology and Soils question (d) reflects the current 2022 California Building Code (CBC 2022), which is based on the International Building Code (IBC) (2021).

Environmental checklist established by CEQA Guidelines, Appendix G.

5.7.1 Environmental Setting

CEC staff analyzed existing datasets, including publicly available literature, geologic and hazard mapping, satellite imagery, and documents. The geologic map review of the

project area included Dibblee and Minch (2006) and CDOC (2009). The hazard map review of the project area included California Department of Conservation (CDOC) (2011, 2019ab, 2022, 2024, 2025ab) and United States Geological Survey (USGS) (2015, 2016, 2017, 2018). A paleontological record search of the University of California Museum of Paleontology, Berkeley online paleontological database was conducted for the project site and within 10 miles of the project (UCMP 2025). Staff reviewed the application's geologic and paleontological information (DayZenLLC 2024a), along with a preliminary site-specific geotechnical investigation prepared on behalf of the applicant (DayZenLLC 2024c).

The regional and local potential for the occurrence of geologic hazards and geological and paleontological resources are discussed in this section.

Geological Hazards and Resources

Regional Geologic Setting

The proposed project is in the northern terminus of the Diablo Range, south of San Pablo Bay, Suisun Bay, and the Sacramento River (**Figure 5.7-1**). The Diablo Range is a northwest-trending mountain range in the central Coast Ranges geomorphic province (CDOC 2002). Surface Quaternary deposits within two miles of the project include Holocene alluvium, artificial fill, bay mud, and Pleistocene alluvial fans. Bedrock within two miles of the project includes Pliocene volcanic rocks, Pleistocene to Miocene continental and marine sedimentary rocks, and Eocene marine sedimentary rocks (Dibblee and Minch, 2006; CDOC 2009).

The North American and Pacific transform tectonic plate boundary, which contains major subparallel NW-SE striking dextral faults, such as the San Andreas, Rodgers Creek-Hayward, Calaveras, and Clayton-Marsh Creek-Greenville fault zones, travel through, and create, the central Coast Ranges (CDOC 2022.)



○ City/Town/Populated Place

Figure 5.7-1
Geomorphic Provinces

E-Eureka	F-Fresno	N-Needles
R-Redding	B-Bakersfield	K-Kelso
S-Sacramento	SB-Santa Barbara	SD-San Diego
SF-San Francisco	LA-Los Angeles	
M-Monterey	PS-Palm Springs	

Sources: California Department of Conservation,
California Geological Survey, 2002

Local Geology

The project site is about two miles south of Suisun Bay. The proposed project site is a golf course in the City of Pittsburg, CA that closed in 2018. The Contra Costa Canal borders the proposed project site on the south. The canal's embankment is 120 feet above mean sea level (amsl). Hills on the south, west, and east boundaries of the project are 230 to 250 feet amsl. Streams flow from south to north through the project. At the project site, terrain is relatively flat to slightly undulating. The lowest ground surface elevation is 80 feet amsl (DayZenLLC 2024ac).

The geologic units described below are mapped at the surface within two miles of the project.

- Quaternary surficial deposits underlay parts the project site and are found within two miles of the project. These deposits are recent in age, presumably Holocene to Pleistocene, and unconformably overlie older rock formations (Dibblee and Minch, 2006; CDOC 2009; DayZenLLC 2024c). Staff used geologic mapping and unit descriptions in CDOC (2009) because CDOC (2009) is more recent than Dibblee and Minch (2006).
 - Historic artificial fill (af) occurs at the surface of project site (DayZenLLC 2024c). CDOC (2009) described the map unit as potentially engineered deposits that may include artificial dam fill and tailings associated with dredge mining.
 - Historic artificial fill placed over bay mud (adbm) occurs less than two miles north of the project (CDOC 2009). CDOC (2009) described the map unit as potentially engineered.
 - Late Holocene to modern (<150 years) stream channel deposits (Qhc) are mapped in stream channels that flow through the project site (CDOC 2009). CDOC (2009) described the map unit as deposits in active, natural stream channels. Deposits consist of loose alluvial sand, gravel, and silt (CDOC 2009). Dibblee and Minch (2006) and (DayZenLLC 2024ac) identified this map unit as Holocene young alluvium (Qa) and mapped more of it at the surface within the project site.
 - Holocene bay mud (Qhbm) is mapped at the surface less than two miles north of the project (CDOC 2009). CDOC (2009) described the map unit as estuarine silt, clay, peat, and fine sand deposited at or near sea level in the San Francisco Bay estuary (CDOC 2009).
- Latest Pleistocene alluvial fan deposits (Qpf) are mapped at the surface less than one mile from the project (CDOC 2009). CDOC (2009) described the map unit as dissected deposits of sand, gravel, silt, and clay that are moderately to poorly sorted and bedded.
 - Early to late Pleistocene alluvial fan deposits (Qof) are mapped at the surface of the project and underlying Holocene stream channel deposits and artificial fill (CDOC 2009; TN 254730). CDOC (2009) described the map unit as deeply

dissected deposits of sand, gravel, silt, and clay that form moderately rolling topography. The original alluvial surfaces are mostly eroded (CDOC 2009). Dibblee and Minch (2006) and (DayZenLLC 2024ac) identified this map unit as Pleistocene old alluvium (Qoa).

- Pliocene Tehama Formation (Pth) is mapped at the surface in hills that are less than two miles south of the project (CDOC 2009). CDOC (2009) described the map unit as poorly consolidated, nonmarine, gray to maroon siltstone, quartz arenite, sandstone, tuff, and pebble to cobble conglomerate (CDOC 2009). Dibblee and Minch (2006) and (DayZenLLC 2024ac) identified this map unit as the Tertiary Oro Lima Formation.
- Pliocene Lawlor Tuff (Plt) is mapped at the surface in hills that are less than two miles south of the project (CDOC 2009). CDOC (2009) described the map unit as nonmarine, pumiceous, andesitic ash-flow tuff. Ar/Ar geochronology calculated an age of 4.83 ± 0.04 Ma (CDOC 2009).
- Late Miocene Neroly Formation (Mnr) is mapped at the surface in hills that are less than two miles south of the project (CDOC 2009). CDOC (2009) described the map unit as blue-gray, fine to coarse-grained lithic sandstone.
- Late Miocene Cierbo Formation (Mc) is mapped at the surface in hills that are less than two miles south of the project (CDOC 2009). CDOC (2009) described the map unit as light-gray, light-blue, and black, massive to bedded quartz-mica-lithic arenite, conglomerate, siltstone, and tuff.
- Eocene Markley Sandstone (Emk) is mapped at the surface in hills that are less than two miles south of the project (CDOC 2009). CDOC (2009) described the map unit as yellow- and tan-weathering, white to light-gray quartz-muscovite and quartz lithic sandstone and siltstone. The upper member (Emku) is a brownish gray shale with thin sandstone beds. The lower member (Emkl) is a brownish gray silty shale (CDOC 2009).

Subsurface Soils

The applicant completed a preliminary site-specific geotechnical investigation. The purpose of the geotechnical investigation was to evaluate shallow soil and rock at the project site, identify potential geologic hazards, and make preliminary facility design recommendations. The investigation included four Multichannel Analysis of Surface Waves (MASW) soundings, four Wenner 4-pin method electrical resistivity tests, and 20 exploratory borings (DayZenLLC 2024c).

The four MASW surveys calculated time-average shear wave velocity of subsurface materials from the ground surface to 100 feet below the ground surface (bgs). The time-average shear wave velocity ranged from 936 to 1,018 feet/sec, with an average of 981 feet/sec (DayZenLLC 2024c).

The four electrical resistivity surveys calculated resistivity values for near-surface onsite soils. Resistivity values ranged from 650 to 1,690 ohm-cm, with an average of 1,100 ohm-cm. Most values were between 900 and 1300 ohm-cm (DayZenLLC 2024c).

The preliminary geotechnical investigation advanced 20 borings to depths of 5.0 to 51.5 feet bgs. Geotechnical laboratory tests were performed on selected samples (DayZenLLC 2024c).

Artificial fill was observed at the surface and encountered in borings. The deposits were up to 10 to 15 feet thick. Artificial fill varied in composition, consistency, moisture content, and compaction. Artificial fill was mostly loose to medium dense sand and soft to medium stiff clay. Other materials were observed in artificial fill, including gravel, organic-rich topsoil, trash, glass, and construction debris (DayZenLLC 2024c).

Holocene stream channel deposits were observed at the surface, in stream channels, and encountered in borings. The deposits were about three to five feet thick. Most Holocene stream channel deposits were medium stiff to stiff lean sandy lean clay. Some Holocene stream channel deposits were soft, moist, compressible, and had low undrained shear strength (DayZenLLC 2024c).

Pleistocene alluvial fan deposits were observed at the surface and encountered in borings. Most Pleistocene alluvial fan deposits were very stiff to hard lean sandy lean clay and dense to very dense clayey sand. The sediments are over-consolidated (DayZenLLC 2024c).

Other Quaternary sedimentary deposits and Neogene rock formations are mapped within two miles of the project (Dibblee and Minch 2006; CDOC 2009; DayZenLLC 2024c). At the project site, the geotechnical investigation did not observe these map units at the surface nor encounter them during borings (DayZenLLC 2024c).

Groundwater

Groundwater in the project area has been historically high. The applicant's preliminary site-specific geotechnical investigation did not encounter groundwater during exploratory borings at the project site. However, groundwater levels are expected to fluctuate due to precipitation and seasonality, leakage from the adjacent Contra Costa Canal, and other artificial and natural influences (DayZenLLC 2024c).

Faulting and Seismic Hazards

The San Francisco Bay Region, including, Contra Costa County, is in a tectonic plate boundary containing many active faults that produce high-magnitude earthquakes. There is a 72 percent chance of a magnitude (M) ≥ 6.7 earthquake during 2014 to 2043 in the San Francisco Bay Region (USGS 2016). The potential for seismic hazards to impact the project depends on the proximity to, and length, of nearby active faults, the local geologic and topographic conditions, and earthquake magnitudes. Potential

seismic hazards include ground rupture along fault traces, strong ground motion, seismically-induced ground failure, including liquefaction, and landslides (CBC 2022).

In accordance with the 1972 Alquist-Priolo Earthquake Fault Zone Act, the California Geological Survey (CGS) delineates Earthquake Fault Zones to prevent the construction of buildings for human occupancy on Holocene-active faults and fault zones. Earthquake Fault Zones are regulatory boundary zones surrounding well defined Holocene-active faults or fault zones. Holocene-active faults are those that have ruptured in the past 11,700 years (CDOC 2018). For the evaluation in this section, Holocene-active faults and fault zones are termed “active faults”.

Pre-Holocene faults show evidence of rupture in the past 1.6 million years, but do not show evidence of rupture in the past 11,700 years. Evidence that Pre-Holocene faults may rupture in the future should be considered (CDOC 2018). For the evaluation in this section, Pre-Holocene faults showing evidence of rupture in the past 1.6 million years, but not in the past 11,700 years, are termed “potentially active”.

In accordance with the 1972 Alquist-Priolo Earthquake Fault Zone Act and 1990 Seismic Hazards Mapping Act, the CGS delineates Zones of Required Investigation to reduce human and property losses from fault rupture, liquefaction, and earthquake-induced landslides (CDOC 2008, 2018, 2024). The CGS published a map of Earthquake Zones of Required Investigation for the Honker Bay 7.5' topographic quadrangle, which contains the project site. The investigation did not evaluate Alquist-Priolo Earthquake Fault zones (CDOC 2019ab).

According to the USGS Quaternary Fault and Fold Database of the United States and the CGS Fault Activity Map of California, there are no active nor potentially active faults intersecting the project site. At about 1.5 to two miles north of the project, the Rio Vista fault is the closest potentially active fault to the project. Numerous active and potentially active faults exist within 25 miles of the project site (**Figure 5.7-2**). Table 5.6-1 lists significant active faults within 25 miles of the project (USGS 2017; CDOC 2022).

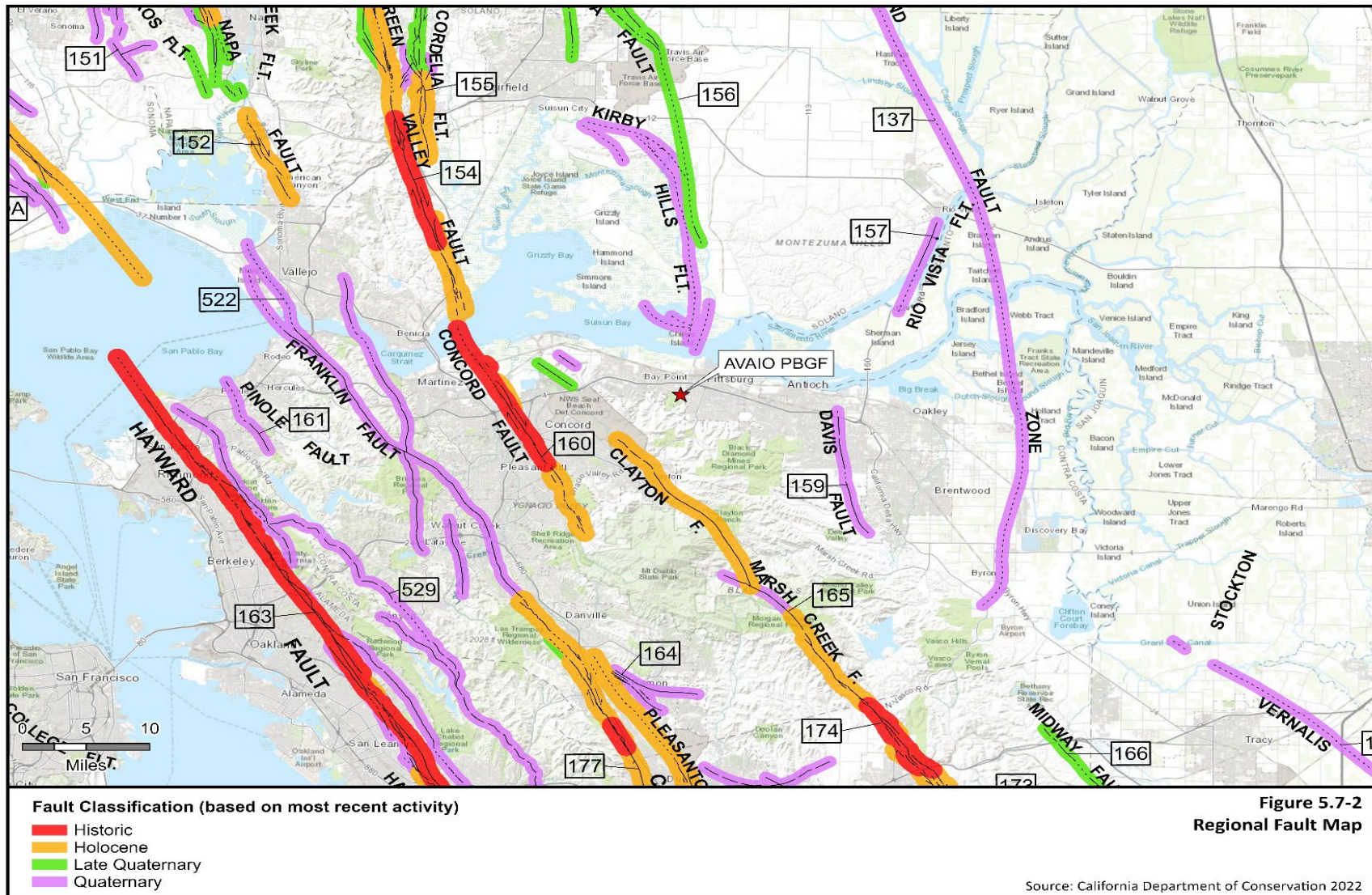


TABLE 5.6-1 ACTIVE FAULTS WITHIN 25 MILES TO THE PROJECT SITE

Fault	Status	Approximate Distance from the Project Site (Miles)
Rio Vista fault	Potentially active	1.5
Clayton-Marsh Creek-Greenville fault zone	Active	4
Concord fault	Active	7
Green Valley fault zone	Active	11
Calaveras fault zone	Active	13
Cordelia fault	Active	17
West Napa fault	Active	20
Hayward fault zone	Active	21
Las Positas fault	Active	25

Sources: USGS 2017; CDOC 2022

Strong Ground Motion

The intensity of ground motion depends upon the magnitude of an earthquake, the distance from the epicenter, and the geology between the epicenter and the site. In softer materials, such as unconsolidated soil, ground motion is likely to amplify because the seismic wave velocity decreases and the wave amplitude increases. In comparison, in harder materials, such as bedrock, ground motion may lessen because seismic wave velocity increases, wave amplitude decreases, and ground shaking intensity decreases.

Numerous active faults in Contra Costa County and the San Francisco Bay Region have ruptured in the recent past and will produce significant earthquakes again (USGS 2015, 2016). Earthquake rupture modeling predicts high probabilities that one or more significant earthquakes will impact the San Francisco Bay Region, including Contra Costa County, between 2014 and 2043. Modeling predicts probabilities of 98 percent for a $M \geq 6.0$, 72 percent for a $M \geq 6.7$, 51 percent for a $M \geq 7.0$, and 20 percent for a $M \geq 7.5$ (USGS 2016).

CGS Map Sheet 48: Earthquake Shaking Potential for California shows the level of shaking with a 2 percent probability of being exceeded in 50 years, which is equivalent to a 2,475-year average recurrence interval (CDOC 2025b). CDOC (2025b) predicts devastating to extreme shaking will impact northern Contra Costa County.

Devastating shaking, defined as intensity of 11 on the Modified Mercalli Intensity (MMI) scale, leaves few remaining standing structures, destroys bridges, fissures the ground, breaks pipes, and triggers landslides. Extreme shaking, an intensity of 10 on the MMI scale, destroys most masonry and frame structures, cracks the ground, and triggers landslides (CDOC 2025b).

Results from geophysical testing classified the project site as Seismic Site Class D. For seismic design, the mapped maximum considered earthquake geometric mean peak ground acceleration (PGA_M) was calculated as 0.83 units of gravity (g) (DayZenLLC 2024c).

Liquefaction and Lateral Spreading

Liquefaction is a geologic hazard that causes potentially damaging ground deformation. Liquefaction occurs when dynamic forces, such as intense and prolonged ground shaking, cause saturated and cohesionless soils, such as sand, silt, and gravel, to temporarily lose their strength and act as a fluid. Liquefaction potential depends on the depth to water, grain size distribution, relative soil density, degree of saturation, and intensity and duration of the earthquake. Soils most susceptible to liquefaction are loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface (Youd and Idriss 2001).

The term liquefaction is typically used to describe materials that spread vertically. Lateral spreading is a type of liquefaction in which liquefied materials spread horizontally toward a free face (Youd and Idriss 2001).

The CGS published a Seismic Hazard Zone Report (CDOC 2019b) and map of Zones of Required Investigation for the Honker Bay 7.5' topographic quadrangle, which contains the project (CDOC 2019a). The project site is in a Zone of Required Investigation for liquefaction (CDOC 2019ab). The preliminary site-specific geotechnical investigation observed predominantly clayey subsurface materials and an absence of shallow groundwater. The geotechnical investigation also observed artificial fill deposits that are up to 10 to 15 feet thick (DayZenLLC 2024c).

Landslides

Mass wasting, including landslides or slope creep, is a mass of rock, soil, or debris that slides, flows, or falls downslope. Slope creep is a slow-moving type of mass wasting that occurs when plastic soils, such as clays, shrink and swell with seasonally changes in saturation and move slowly downslope.

The potential for naturally occurring landslides or slope creep depends on the shear strength of soil and rock in natural and cut slopes, saturation, and the occurrence of triggering events. Shear strength of slopes decreases if soil and rock are saturated. Seismic shaking and saturation, such as intense precipitation, can trigger landslides.

The project site is not in a Zone of Required Investigation for landslides (CDOC 2019ab). According to the CGS Landslide Maps and Reports online mapping application, the CGS has not published a landslide inventory for the Honker Bay 7.5' topographic quadrangle (CDOC 2025b).

The CGS Map Sheet 58: Deep-Seated Landslide Susceptibility online mapping application classifies the landslide susceptibility of areas, from class 0 to 10, low to high. The landslide susceptibility rankings are based on rock strength and slope steepness. Terrain at the project site is relatively flat to slightly undulating and is rated class 0 for low susceptibility to landslides (CDOC 2011; DayZenLLC 2024c).

The preliminary site-specific geotechnical investigation did not observe evidence of slope failure or slope failure deposits at the project site. Adjacent to the project, there are hillslopes and the embankment of the Contra Costa Canal (DayZenLLC 2024c). Some slopes near the project site are rated class 3 to 7 for landslide susceptibility (CDOC 2011).

Soil Erosion

Two stream channels flow through the project site. Construction can increase the potential for water and wind to erode subsurface materials, including soil. During construction, the removal of vegetation, removal or replacement of soil, and modification of slopes may decrease soil resources' resistance to erosion and alter local water drainage. The subsurface materials observed at the project site, artificial fill, alluvium, and alluvial fan deposits, are susceptible to erosion during construction (DayZenLLC 2024c).

Subsidence

Subsidence is the gradual settling of the ground surface in response to the movement of material belowground. Natural processes that may cause subsidence include soil compaction, sinkhole formation, and earthquakes. Artificial activities that may cause subsidence include removal or addition of material belowground, such as groundwater pumping, hydraulic fracturing, oil extraction, and mining.

According to the USGS (2018) Areas of Land Subsidence in California online mapping application, the project site is not a location where artificial subsidence has occurred or is occurring.

Paleontological Resources

Paleontological resources are fossils and fossiliferous deposits consisting of vertebrate fossils, invertebrate fossils, plant, trace fossils and other data. Paleontological resources are older than recorded human history or middle Holocene (approximately 5,000 radiocarbon years) (SVP 2010).

Fossils are important scientific and educational resources because of their use in documenting the present and evolutionary history of particular groups of now-extinct organisms. Fossils are important in reconstructing the environments in which those organisms lived; in determining the relative ages of the strata in which they occur; and the geologic events that resulted in the deposition of the sediments that buried them. Fossils are considered a nonrenewable scientific resource and are afforded protection under several federal, state, and local laws, ordinances, and regulations because most, if not all, of the organisms they represent no longer exist (SVP 2010).

Paleontological Potential

Society of Vertebrate Paleontology

The paleontological potential of a geologic unit exposed in a project area is inferred from the abundance of fossil specimens and previously recorded fossil sites in exposures of the unit, or of similar units in similar geological settings. The underlying assumption is that a geologic unit is likely to yield fossil remains in a quantity and of a quality similar to those previously recorded from the unit elsewhere in the region (SVP 2010).

As described in SVP (2010), the paleontological potential of a geologic unit reflects:

- The potential for yielding abundant or significant vertebrate fossils or for yielding a few significant vertebrate, invertebrate, plant, or trace fossils.
- The importance of recovered evidence for proper stratigraphic interpretation, age determination of a geologic unit, paleoenvironmental and paleoclimatic reconstructions, or for understanding evolutionary processes.

Determining the paleontological potential of a geologic unit helps to determine which units may require mitigation to reduce potential impacts to paleontological resources during the development of the project. In its guidelines for assessment and mitigation of adverse impacts to paleontological resources, the Society of Vertebrate Paleontology (SVP) established the following four categories of paleontological potential of geologic units: high, low, undetermined, and none. These categories are described in more detail in **Table 5.6-2** (SVP 2010).

TABLE 5.6-2 DEFINITIONS OF PALEONTOLOGICAL POTENTIAL

Rating	Definition
High	Geologic units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered are considered to have a high potential for containing additional scientifically important paleontological resources. Geologic units that contain potentially datable organic remains older than late Holocene, including deposits associated with animal nests or middens, and geologic units which may contain new vertebrate deposits, traces, or trackways, are also classified as having High Potential.
Low	Geologic units with low potential are known to produce significant fossils only on rare occasions, and only preserve fossils in rare circumstances such that the presence of fossils is the exception not the rule, for example, basalt flows or recent colluvium.
Undetermined	Geologic units for which little information is available concerning their geologic context (depositional environment, age) and potential to contain paleontological resources are considered to have undetermined potential. The paucity of data is usually from a lack of study in that unit or because of high variability in the unit's lithology. Typically, further study is necessary to determine whether these units have high, low, or no potential to contain scientifically significant paleontological resources. In cases where no subsurface data are available, paleontological potential can sometimes be determined by strategically located excavations into subsurface stratigraphy.

TABLE 5.6-2 DEFINITIONS OF PALEONTOLOGICAL POTENTIAL

Rating	Definition
None	Geologic units with no potential are those that formed at high temperatures and pressures, deep within the Earth, such as plutonic igneous rocks, and high-grade metamorphic rocks. Since the environment in which these rocks formed is not conducive to the preservation of biological remains, they do not contain fossils. Manmade fill also is considered to possess no paleontological potential.

Source: SVP 2010

Regulatory Background

The project should comply with all applicable federal, state, and local laws and regulations and would need to obtain building permits from the project's permitting agency. The issuance of the building permits and oversight provided by the City of Pittsburg would confirm that the project complies with the applicable regulatory framework.

Federal

The following federal laws, ordinances, regulations, and standards related to geologic hazards, and geologic and paleontological resources, may apply to the proposed project.

Federal Clean Water Act and California's Porter-Cologne Water Quality

Control Act. The State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCB) are responsible for the regulation and enforcement of the water quality protection requirements of the federal Clean Water Act (CWA) and the state's Porter-Cologne Water Quality Control Act (Porter-Cologne) (SWRCB 2025).

As required under Section 402 of the CWA and implemented in the Code of Federal Regulations (CFR), Title 40, Chapter I, Subchapter D, Part 127, the National Pollutant Discharge Elimination System (NPDES) is the permitting program that requires point source dischargers to comply with the CWA and Porter-Cologne laws. This regulatory framework protects the beneficial uses of the state's surface and groundwater resources for public benefit and environmental protection. Compliance with applicable NPDES permits from the SWRCB or local RWQCB ensures the proposed project protects water quality (CFR 2019; SWRCB 2025).

As required under Section 404(a) of the CWA and implemented in the CFR, Title 40, Chapter I, Subchapter D, Part 121, the U.S. Army Corp of Engineers is the authority to issue permits for the discharge of fill and dredging material into navigable waters, defined as waters of the United States (CWA Section 502). Under Section 401(a) of the CWA, any applicant of a permit under the CWA must provide a State certification to the Federal permitting agency. In California, the local RWQCB is the Section 401 certifying agency (CFR 2023, SWRCB 2025).

As required under Section 303(d) of the CWA and implemented in the CFR, Title 40, Chapter I, Subchapter D, Part 127, states are required to identify impaired surface water bodies and develop total maximum daily loads (TMDLs) for contaminants of concern. The TMDL is the quantity of pollutant that can be assimilated by a water body without violating water quality standards. Listing of a water body as impaired does not necessarily suggest that the water body cannot support the beneficial uses. The intent is to identify the water body as requiring future development of a TMDL to maintain water quality and reduce the potential for future water quality degradation (CFR 2017; SWRCB 2025).

State

The following state laws, ordinances, regulations, and standards related to geologic hazards and resources apply, or may apply, to the proposed project.

Alquist Priolo Earthquake Fault Zoning Act. The California Public Resources Code (PRC), Division 2, Chapter 7.5, the 1972 Alquist-Priolo Earthquake Fault Zone Act requires the California Geological Survey (CGS) to delineate Earthquake Fault Zones to prevent the construction of buildings for human occupancy on active faults. Earthquake Fault Zones are regulatory boundary zones surrounding well defined Holocene-active faults or fault segments (CDOC 2018; CPRC 2024).

The Alquist-Priolo Earthquake Fault Zone Act recognizes three types of faults. Holocene-active faults are those that have ruptured in the Holocene Epoch, or past 11,700 years. Pre-Holocene faults have not ruptured in the past 11,700 years and not regulated under the Alquist-Priolo Earthquake Fault Zone Act. Evidence that Pre-Holocene faults may rupture in the future should be considered. Age-undetermined faults are those in which the most recent rupture is unknown. The Alquist-Priolo Earthquake Fault Zone Act considers age-undetermined faults as Holocene-active faults, until proven otherwise (CDOC 2018; CPRC 2024).

California Building Code. The 2022 California Building Code (CBC) prescribes standards for constructing safer buildings. The 2022 CBC, Title 24, Part 2 (Volumes 1 & 2) contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC is updated every three years, with the 2022 CBC effective on January 1, 2023 and updated with a July 2024 Supplement (CBC 2022).

The 2022 CBC, Title 24, Part 2 (Volumes 1 & 2), Chapter 18, Section 1803 requires that a geotechnical and geohazard report be prepared for most development projects to evaluate seismic and geologic conditions, such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. These reports help determine the final grading, engineering, and building design (CBC 2022).

California Division of Occupational Safety and Health. As required in the California Code of Regulations (CCR), Title 8, Division 1, Chapter 3.2, Subchapter 2, Article 2. Permits-Excavations, Trenches, Construction, and Demolition and the Underground Use of Diesel Engines in Work in Mines and Tunnels, the Division of Occupational Health and Safety prescribes occupational safety standards and requires permits for projects that include excavation, shoring, and trenching activities that are deeper than five feet. These regulations minimize the potential for instability and collapse that could injure construction workers on the site (CCR 2006).

Seismic Hazards Mapping Act. The PRC, Division 2, Chapter 7.8, the 1990 Seismic Hazards Mapping Act requires the CGS to publish maps identifying Zones of Required Investigation that are subject to the effects of strong ground shaking, such as liquefaction, landslides, tsunamis, and seiches. The Seismic Hazards Act requires a geotechnical report be prepared that defines and delineates any seismic hazard prior to approval of a project in a seismic hazard zone (CDOC 2008; CPRC 2017).

State Paleontological Laws, Ordinances, Regulations, and Standards. The CEQA lead agency having jurisdiction over a project is responsible for ensuring that paleontological resources are protected in compliance with CEQA and other applicable statutes. The project's permitting agency will be CEQA lead agency with the responsibility to ensure that fossils are protected during project construction and operation (CPRC 2025).

The PRC, Division 13, Chapter 2.6, section 21081.6 requires that the CEQA lead agency demonstrate project compliance with mitigation measures developed during the environmental impact review process (CPRC 1994).

Local

The following local laws, ordinances, regulations, and standards related to geologic hazards and geologic and paleontological resources apply, or may apply, to the proposed project.

County of Contra Costa General Plan. The Contra Costa County 2045 General Plan includes goals, policies, and actions that are relevant to the project. Chapter 7: Conservation, Open Space, and Working Lands Element states policy guidance for geologic hazards, paleontological resources, and geologic resources of recreational, commercial, and scientific value (Contra Costa County 2024).

The purpose of Goal COS-5 is to protect and restore natural streams and wetlands. The following policies in Goal COS-5 are related to geologic hazards, such as soil erosion (Contra Costa County 2024).

- Policy COS-P5.1. Support protection, restoration, and enhancement of wetlands, marshes, sloughs, tidelands, natural watercourses, and riparian corridors, and

emphasize the role of these features in climate change resilience, air and water quality, and wildlife habitat.

- Policy COS-P5.2. Require public infrastructure and private development projects to preserve, and whenever possible restore and enhance, natural watercourses, floodplains, and riparian habitat.
- Policy COS-P5.3. Require avoidance, minimization, and/or compensatory mitigation for development that would impact a wetland, wetland species, or adjacent upland habitat areas. Where feasible, compensation shall be in-kind (i.e., the same type of habitat), provided on-site, and based on a ratio that provides a margin of safety reflecting the expected degree of success and accounting for the relative functions and values of the lost and created wetlands.
- Policy COS-P5.4. Require new buildings and structures on private property be set back at least 75 feet from the edge of any wetland area, unless a peer-reviewed, site-specific evaluation indicates that a different setback is appropriate for protecting the wetland and adjacent upland habitat areas. Allow encroachment into a required wetland setback area only when a parcel would otherwise be rendered unbuildable or impacts have been adequately mitigated.
- Policy COS-P5.7. Acquire deeded development rights to setback areas surrounding wetlands, floodplains, and natural watercourses to ensure preservation of the resource and protect adjacent improvements.
- Policy COS-P5.6. Identify and pursue funding opportunities to acquire, protect, and maintain open space around existing flood control channels to facilitate implementation of Contra Costa County's 50-Year Plan "From Channels to Creeks."
- Policy COS-P.5-8. Discourage ornamental landscaping within setback areas along natural watercourses and require use of California native plant species when revegetating those areas.
- Policy COS-P.5-11. Prohibit direct runoff of pollutants and siltation into marsh, creek, and wetland areas from outfalls serving urban development.

The purpose of goal COS-6 is to preserve and enhance native upland habitat, including woodlands, grasslands, and rangelands. The following policies in goal COS-6 are related to geologic hazards, such as soil erosion:

- Policy COS-P6.1. Preserve natural woodlands and significant trees, particularly mature native species, intact coastal scrub and chaparral, and grasslands, especially those with native grass and wildflower populations.
- Policy COS-P6.2. Encourage planting and propagation of California native trees and habitat-supporting native shrubs, forbs, and grasses throughout the county to enhance the natural landscape, provide shade (especially in riparian areas), sustain wildlife, absorb stormwater, and sequester carbon.

- Policy COS-P6.3. Support protection of native trees, especially oaks, in foothill woodlands and agricultural areas by encouraging voluntary installation of fencing around individuals or clusters of trees to prevent grazing and promoting replanting of native species.
- Policy COS-P6.4. Support removal of invasive, non-native trees, shrubs, and grassland weeds, especially those that are ecologically harmful or pose threats to public safety.

The purpose of Goal COS-7 is to sustainably manage surface water and groundwater. The following policy in Goal COS-7 is related to geologic hazards, such as soil erosion (Contra Costa County 2024).

- Policy COS-P7.7. Require landscaping for new development to filter and retain runoff, and support flood management and groundwater recharge.

The purpose of Goal COS-8 is to protect surface water and groundwater quality. The following policies in Goal COS-8 are related to geologic hazards, such as soil erosion (Contra Costa County 2024).

- Policy COS-P8.1. Protect public water supplies by denying applications for projects that would introduce significant new pollution sources in groundwater basins and watersheds feeding major reservoirs, and support efforts to acquire and permanently protect reservoir watersheds.
- Policy COS-P8.2. Coordinate with other agencies to control point and non-point sources of water pollution and maintain water quality standards.
- Policy COS-P8.4. Require new development to retain natural vegetation and topography whenever feasible and require projects involving erosion-inducing activities to use best management practices to minimize erosion.

The purpose of Goal COS-10 is to identify and preserve archaeological, cultural, and historic resources. The following policies in Goal COS-10 are related to paleontological resources (Contra Costa County 2024).

- Policy COS-P10.6. Upon discovery of significant historic or prehistoric archaeological artifacts or fossils during project construction, require ground-disturbing activities to halt within a 50-foot radius of the find until its significance can be determined by a qualified historian, archaeologist, or paleontologist and appropriate protection and preservation measures developed.
- Policy COS-P10.7. Require significant historic, archaeological, and paleontological resources to be either preserved onsite or adequately documented as a condition of removal. Any documentation of historic resources shall be conducted in accordance with Historic American Building Survey (HABS) Level III standards, as defined by the US Secretary of the Interior.

The purpose of Goal COS-12 is to protect natural features with high scenic value, such as visual landmarks, major ridges, prominent hillsides, and stands of mature trees. The following policies in Goal COS-12 are related to geologic hazards and geologic resources of commercial, scientific, and recreational value (Contra Costa County 2024).

- Policy COS-P12.1. Deny applications for development that would destroy unique and irreplaceable natural features, such as distinctive rock formations.
- Policy COS-P12.4. Preserve the scenic qualities of hillsides by encouraging designs that are sensitive to a site's topography and prohibiting unnecessary grading and vegetation removal.
- Policy COS-P12.5. Require restoration of natural contours and vegetation after grading and other land disturbances.
- Policy COS-P12.6. Prohibit extreme topographic modification, such as filling canyons or removing prominent hilltops. Exemptions may be considered for landfills, mining operations, and public or semi-public projects that necessitate such modifications.
- Policy COS-P12.7. Support preservation and enhancement of natural and human-made features that contribute to the scenic quality of the landscape and viewshed along designated scenic routes, and discourage projects that interfere with public views of those features.

Chapter 9: Health and Safety Element states policy guidance for tsunami, seismic, and geologic hazards. The purpose of Goal HS-5 is to minimize the risk that flood hazards pose to life, injury, and property. The following policy in Goal HS-5 is related to tsunami hazards (Contra Costa County 2024).

- Policy HS-P5.8. Require new development in designated tsunami hazard zones to be designed to withstand anticipated tsunami forces, based on county-prepared studies conducted pursuant to Action HS-A5.4.

The purpose of Goal HS-11 is to protect communities and infrastructure from seismic and geologic hazards, including fault rupture, severe ground shaking, liquefaction, landslides, and unstable slopes. The following policies in Goal HS-11 are related to geologic hazards (Contra Costa County 2024).

- Policy HS-P11.1. For projects in Alquist-Priolo Earthquake Fault Zones or Seismic Hazard Zones (areas considered to be at risk of earthquake triggered liquefaction or landslide displacement) delineated by the CGS, as well as any other areas of steep slopes or areas of suspected ground failure known to the county, require submittal of appropriately detailed engineering geologic or geotechnical investigations. The reports must be compliant with State guidelines and include:
 - A map showing the outline of any geologic or potentially hazardous soil condition and areas subject to inundation.
 - Recommended means of mitigation of any adverse condition representing a hazard to improvements.

- Recommendations to assure proper implementation of mitigation measures during construction.
- Policy HS-P11.2. Prohibit construction of buildings intended for human occupancy in areas where seismic and other geologic hazards (e.g., landslides, liquefaction, and fault lines) cannot be adequately mitigated.
- Policy HS-P11.3. Discourage construction of critical facilities and buildings intended for human occupancy in Alquist-Priolo Fault Zones and encourage earthquake retrofitting where such development already exists. If there is no feasible alternative to siting critical facilities and buildings intended for human occupancy in the Fault Zones, buildings must be sited, designed, and constructed to withstand the anticipated seismic stresses.
- Policy HS-P11.4. Refer geotechnical and engineering geologic reports to the Contra Costa County Peer Review Geologist for evaluation of their adequacy, as required by State Law for projects in State-designated hazard zones. Reports deemed inadequate will require further engineering analysis and revision until the findings/opinions of the Peer Review Geologist have been addressed to the county's satisfaction.
- Policy HS-P11.5. Discourage development on slopes exceeding 15 percent, and prohibit development on slopes of 26 percent or greater, to avoid slope instability, unnecessary grading, and extensive land disturbance, and facilitate long-term control of erosion and sedimentation. Exceptions may be considered for infrastructure projects and development on existing legal lots where no other feasible building sites exist.
- Policy HS-P11.6. Require projects to form a Geologic Hazard Abatement District (GHAD) or join an existing GHAD whenever necessary to adequately mitigate anticipated or residual geologic hazards.
- Policy HS-P11.7. Do not accept public road dedications or allow construction of private roads on unstable hillsides or in landslide hazard areas unless potential hazards have been mitigated to the county's satisfaction. All private roads constructed in such areas must be fully compliant with private road standards adopted by the county and fire protection district with jurisdiction.

County of Contra Costa Municipal Code. The 2025 Contra Costa County Municipal Code, Title 7 – Buildings Regulations applies to all buildings and structures in the unincorporated territory of Contra Costa County. The proposed project is in the City of Pittsburg, not in an unincorporated territory of Contra Costa County (Contra Costa 2025).

City of Pittsburg General Plan. The City of Pittsburg's (City or Pittsburg) 2040 General Plan includes goals, policies, and actions that are relevant to the project. Chapter 4: Urban Design Element states policy guidance for geologic hazards and geologic resources of recreational, commercial, and scientific value (Pittsburg 2024).

The purpose of Goal 4-2 is to encourage preservation of Pittsburg's unique natural environment, including hillsides, distinct geologic and topographic landforms, open space, and the waterfront, through a built environment that respects Pittsburg's natural features and viewsheds. The following policies in Goal 4-2 are related to geologic hazards and geologic resources of commercial, scientific, and recreational value (Contra Costa County 2024).

- Policy 4-P-2.1: Encourage development that preserves unique natural features, such as topography, rock outcroppings, mature trees, creeks, and designated major and minor ridgelines in the design of hillside neighborhoods.
- Policy 4-P-2.2: In areas not addressed under Policy 4-P-2.1, encourage development that preserves unique natural features, such as topography, rock outcroppings, mature trees, creeks, designated major and minor ridgelines, and views of such areas...in new development as well as redeveloped sites.
- Policy 4-P-2.5: Ensure that hillside development enhances the built environment, improves safety through slope stabilization, is respectful of topography and other natural constraints, and preserves ridgelines and viewsheds..
- Policy 4-P-2.10: Use revegetation as an erosion control measure to maintain the natural character of a hillside; utilize hydro-seed, silt traps, and other engineering solutions where erosion potential exists during development.

Chapter 10: Resource Conservation and Open Space Element states policy guidance related to geologic hazards, paleontological resources, geologic resources of recreational, commercial, and scientific value.

The purpose of Goal 10-3 is to protect and preserve the availability and quality of soil as a resource to sustain healthy plant, animal, and human life. The following policies in Goal 10-3 are related to geologic hazards, such as soil erosion (Pittsburg 2024).

- Policy 10-P-3.1: Require development to use best management practices (BMPs) to minimize impacts related to runoff and erosion caused by earth movement.
- Policy 10-P-3.2: Encourage preservation of natural creeks and riparian habitat as best as possible.

The purpose of Goal 10-4 is to promote the conservation and efficient use of surface water and groundwater and to protect the quality of local and regional waterways, water supply, and groundwater resources. The following policies in Goal 10-4 are related to geologic hazards, such as soil erosion (Pittsburg 2024).

- Policy 10-P-4.3: Comply with Regional Water Quality Control Board regulations and standards to maintain and improve the quality of both surface water and groundwater resources.
- Policy 10-P-4.4: Address soil and groundwater pollution during development, redevelopment, and reuse projects.

- Policy 10-P-4.5: Reduce sedimentation and erosion of waterways by minimizing site disturbance and vegetation removal.
- Policy 10-P-4.6: Encourage rehabilitation and revegetation of riparian corridors and wetlands throughout the City to contribute to bioremediation and improved water quality.
- Policy 10-P-4.9: Require projects to comply with best management practices for development and construction on sites where the erosion potential is moderate to severe or which may affect riparian areas, which may include:
 - Use of bench terraces where areas of long slopes may create a stormwater gradient flow;
 - Construction of berms between any riparian corridor and the construction site to preclude sediment in stormwaters and sheetfloods from entering riparian zones; and
 - Completing the storm drainage system in the early phase of construction to manage stormwater runoff during construction.

The purpose of Goal 10-7 is to encourage municipal and community awareness, appreciation, and support for the City's historic, cultural, and archaeological resources. The following policy in Goal 10-7 is related to paleontological resources (Pittsburg 2024).

- Policy 10-P-7.3: Protect archaeological/paleontological sites from destruction in order to preserve and interpret them for future scientific research, and public educational programs.

Chapter 11: Safety Element states policy guidance related to geologic hazards. The purpose of Goal 11-4 is to minimize the risk that geologic and seismic hazards pose to life and property. The following policies in Goal 11-4 are related to geologic hazards (Pittsburg 2024).

- Policy 11-P-4.1: Regulate development in areas of seismic and geologic hazards to reduce risks to life and property associated with earthquakes, liquefaction, erosion, landslides, and expansive soils, and require new development redevelopment and infrastructure projects to avoid unreasonable exposure to seismic and geologic hazards.
- Policy 11-P-4.2: Limit urban development in high-risk areas (such as landslide areas, flood zones, and areas subject to liquefaction) to low occupancy or open forms of land use.
- Policy 11-P-4.3: Limit development on slopes greater than 30 percent (as delineated on Figure 11-3) to lower elevations, foothills, and knolls, unless it can be demonstrated that appropriate soil stability techniques can be implemented.

- Policy 11-P-4.4: Regulate the grading and development of hillside areas for new urban land uses. Ensure that such new uses are constructed to reduce erosion and land sliding hazards:
 - Limit cut slopes to 3:1, except where an engineering geologist can establish that a steeper slope would perform satisfactorily over the long term.
 - Encourage use of retaining walls or rock-filled crib walls as an alternative to high cut slopes. Ensure revegetation of cut-and-fill slopes to control erosion.
 - Ensure blending of cut-and-fill slopes within existing contours, and provision of horizontal variation, in order to mitigate the artificial appearance of engineered slopes.
- Policy 11-P-4.5: Limit future extension of development into the southeast hills, where there are high levels of risk due to previous coal mining.
- Policy 11-P-4.6: Continue to require geotechnical review of projects located in areas of steep slopes, unstable soils, or other areas of geologic or seismic risks.
- Policy 11-P-4.7: Ensure that Bay Area Air Quality Management District requirements are implemented in construction projects to reduce soil and particulate matter transport.
- Policy 11-P-4.8: Ensure geotechnical studies prior to development approval in geologic hazard areas.... Comprehensive geologic and engineering studies of critical structures shall be required regardless of location.
- Policy 11-P-4.9: Ensure that public and critical use buildings shall not be located in areas susceptible to potential natural hazards. Require geotechnical investigations to be completed prior to approval of any public safety or critical facilities, in order to ensure that these critical facilities are constructed in a way that mitigates site-specific seismic and/or geologic hazards.
- Policy 11-P-4.10: Form geological hazard abatement districts...prior to development approval in unstable hillside areas...to ensure that geotechnical mitigation measures are maintained over the long-term, and that financial risks are equitably shared among owners and not borne by the City of Pittsburg.

Chapter 12: Community Facilities Element states policy guidance related to geologic hazards. The purpose of Goal 12-7 is to provide an adequate level of service in the City's drainage system to accommodate runoff from existing and projected development, prevent flooding damage to property, and ensure that storm drainage and runoff does not negatively impact waterways and the Contra Costa Canal. The following policies in Goal 12-7 are related to geologic hazards, such as soil erosion (Pittsburg 2024).

- Policy 12-9-P-7.1: Require all development projects to demonstrate how storm water runoff will be detained or retained on-site and/or conveyed to the nearest drainage facility as part of the development review process, including consideration of the

near-term and cumulative capacity of the system serving the drainage area, and as required by the City's NPDES Municipal Regional Permit. Project applicants shall mitigate any drainage impacts as necessary and shall demonstrate that the project will not result in any increase in off-site runoff during rain and flood events.

- Policy 12-9-P-7.2: Assure through the City standards, including the Master Drainage Plan and development ordinances, that proposed new development (residential, commercial, or industrial) adequately provides for on-site and downstream mitigation of potential flood hazards, including construction of required drainage improvements.
- Policy 12-9-P-7.3: Ensure adequate minimum setbacks to reduce potential for property damage from storm flooding.
- Policy 12-9-P-7.4: Reduce the risk of localized and downstream flooding and runoff through the use best management practices to minimize runoff from the site to the storm drainage system, including
 - High infiltration measures, including the maximization of permeable landscape,
 - Using permeable surfaces for parking lots, sidewalks, and bike paths,
 - Where feasible, using roof runoff as irrigation.
- Policy 12-9-P-7.5: During the review of development plans, require all commercial projects to construct on-site retention facilities. Such facilities could be in the form of landscape features or underground swells.

City of Pittsburg Municipal Code. The 2025 Pittsburg Municipal Code, Title 15, Chapter 15.08 largely adopts the 2022 California Building Code, with amendments (CBC 2022; Pittsburg 2025). The 2025 Pittsburg Municipal Code includes requirements for all new construction, including the proposed project, to mitigate geologic hazards (Pittsburg 2025).

The 2025 Pittsburg Municipal Code, Title 15, Chapter 15.88 includes requirements for grading, erosion, and sediment control includes requirements for all new construction, including the proposed project, to mitigate geologic hazards (Pittsburg 2025).

Professional Standards

The following professional standards apply to this project.

Paleontological Resources

SVP, an international organization of professional paleontologists, has established guidelines and standard procedures that outline acceptable professional practices in the conduct of paleontological resource assessments and surveys, monitoring and mitigation, data and fossil recovery, sampling procedures, and specimen preparation, identification, analysis, and curation (SVP 2010).

5.7.2 Environmental Impacts

- a. **Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**
- i. **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Construction and Operation

Less Than Significant Impact with Mitigation. The CGS published a map and report of Earthquake Zones of Required Investigation for the Honker Bay 7.5' topographic quadrangle, which contains the project site (CDOC 2019ab). CDOC (2019ab) did not evaluate the Honker Bay 7.5' topographic quadrangle for Alquist-Priolo Earthquake Fault zones. Regional geologic mapping does not show evidence that known faults intersect project site. However, an approximately N-S striking strand of the potentially active Rio Vista fault is mapped terminating 1.5 miles north of the project (USGS 2017; CDOC 2022). If the fault does continue south, onshore through the City of Pittsburg, it may intersect the project site.

To inform the project's final design, CEC staff recommends compliance with **MM GEO-1**. **MM GEO-1** requires the applicant to complete and submit a geotechnical and geohazard report and submit to the project's permitting agency for approval. The report should include a site-specific evaluation of fault rupture potential at the project site. If a fault rupture hazard is identified on the project site, the report should include final grading and facility design refinements to reduce hazards from surface fault rupture.

Due to the distance to known and mapped active and potentially active faults, the construction and operation of the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving fault rupture. With proposed mitigation, impacts from rupture of a known active or potentially active fault on the project during construction and operation, including on human life and property, would be less than significant.

ii. Strong seismic ground shaking?

Construction and Operation

Less Than Significant Impact with Mitigation. Numerous active faults near the project have ruptured in the recent past and will produce significant earthquakes again (USGS 2016). The project is classified as Seismic Site Class D and may experience a PGA_M of 0.83.

A preliminary site-specific geotechnical investigation was conducted for the project pursuant to the requirements of the 2022 CBC Section 1803 (DayZenLLC 2024c). The preliminary site-specific geotechnical investigation proposed potential design, grading, and construction methods to mitigate strong seismic ground shaking.

To inform the project's final design, CEC staff recommends compliance with **MM GEO-1**. **MM GEO-1** requires the applicant to complete and submit a geotechnical and geohazard report and submit to the project's permitting agency for approval. The report should include final grading and facility design refinements to reduce, to the extent feasible, hazards from strong seismic ground shaking.

During project construction and operation, compliance with **MM GEO-1**, the 2022 CBC, and all applicable laws, ordinances, regulations, and standards (LORS) would ensure the project's potential impacts from strong seismic ground shaking, including on human life, property, would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

Construction and Operation

Less Than Significant Impact with Mitigation. The project site is in a Zone of Required Investigation for liquefaction (CDOC 2019ab). The preliminary site-specific geotechnical investigation conducted for the project pursuant to the requirements of the 2022 CBC Section 1803 concluded that liquefaction potential at the site is negligible because native subsurface materials are predominantly unsaturated clay. The preliminary site-specific geotechnical investigation also proposed potential design, grading, and construction methods to mitigate the potential for seismic-related ground failure (DayZenLLC 2024c). CEC staff presume that artificial fill deposits at the project site are composed of potentially liquefiable materials and should be mitigated.

To inform the project's final design, CEC staff recommends compliance with **MM GEO-1**. **MM GEO-1** requires the applicant to complete and submit a geotechnical and geohazard report to the project's permitting agency for approval. The report should include final grading and facility design refinements to reduce, to the extent feasible, hazards from seismically induced ground failure, including liquefaction.

During project construction and operation, compliance with **MM GEO-1**, the 2022 CBC, and all applicable LORS would ensure the project's potential impacts from seismically induced ground failure, including on human life and property, would be less than significant.

iv. Landslides?

Construction and Operation

Less Than Significant Impact with Mitigation Incorporated. Topography at the project is nearly flat to slightly undulating (DayZenLLC 2024c). The site has very low susceptibility

to deep-seated landslides (CDOC 2011). No evidence of past slope failure was observed at the project site. Hillslopes and the embankment of the Contra Costa Canal are adjacent to the project site (DayZenLLC 2024c). Some hillslopes near the project site are rated class 3 to 7 for landslide susceptibility (CDOC 2011).

The preliminary site-specific geotechnical investigation mentioned above proposed potential design, grading, and construction methods to mitigate landslide potential (DayZenLLC 2024c).

To inform the project's final design, CEC staff recommends compliance with **MM GEO-1**. **MM GEO-1** requires the applicant to complete and submit a geotechnical and geohazard report to the project's permitting agency for approval. The report should include final grading and facility design refinements to reduce, to the extent needed, hazards to the project from naturally occurring mass wasting, such as landslides and slope creep. For example, the report should include minimum setback distances from adjacent hillslopes.

During project construction and operation, compliance with **MM GEO-1**, the California Building Code, and all applicable LORS would ensure the project's potential impacts from mass wasting, including on human life and property, would be less than significant.

b. Would the project result in substantial soil erosion or the loss of topsoil?

Construction and Operation

Less Than Significant Impact with Mitigation Incorporated. Two streams flow through the project site. During project construction, surface and subsurface materials at the project site are susceptible to erosion from surface runoff and wind. Construction impacts on soil erosion depend on soil erodibility, construction methods, and schedule (DayZenLLC 2024c).

During operation, there is ongoing potential for soil erosion to occur because the project is sited on existing stream channels. The preliminary site-specific geotechnical investigation referenced above recommends best management practices to mitigate soil erosion potential during construction and operation (DayZenLLC 2024c).

The applicant proposed best management practices to address water quality degradation, including soil erosion, due to construction-related stormwater runoff through **PD-HYD-1.1**, which is described in **Section 5.10, Hydrology and Water Quality**).

During project construction and operation, compliance with **PD-HYD-1.1**, the 2022 CBC, and all applicable LORS would mitigate potential impacts related to soil erosion to less than significant.

c. Would the project be located on geologic units or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Construction and Operation

Landslide

Less Than Significant with Mitigation Incorporated. As discussed earlier, the project site is relatively flat to undulating. There is potential for naturally occurring mass wasting, including landslides and slope creeps, to occur on hillslopes adjacent to the project.

The preliminary site-specific geotechnical investigation conducted for the project pursuant to the requirements of the 2022 CBC Section 1803 proposed potential design, grading, and construction methods to mitigate the potential for failure of natural and artificial slopes at the project site (DayZenLLC 2024c).

To inform the project's final design, CEC staff recommends compliance with **MM GEO-1**. **MM GEO-1** would require the applicant to complete and submit a geotechnical and geohazard report to the project's permitting agency for approval. The report should include final grading and facility design refinements to further reduce, to the extent feasible, hazards from project construction and operation on landslides. New permanent slopes should be designed, graded, and constructed for slope stability, including appropriate minimum safety factors during static and seismic conditions.

During project construction and operation, compliance with **MM GEO-1**, the 2022 CBC, and all applicable LORS would ensure the project's potential impacts on landslide hazards would be less than significant.

Liquefaction and Lateral Spreading

Less Than Significant with Mitigation Incorporated. As discussed earlier, the preliminary site-specific geotechnical investigation conducted for the project site concluded that the predominantly clayey subsurface materials have a negligible liquefaction risk (DayZenLLC 2024c). CEC staff conservatively assumes that artificial fill deposits at the project site are liquefiable.

The preliminary geotechnical investigation conducted for the project pursuant to the requirements of the 2022 CBC Section 1803 proposed potential design, grading, and construction methods to mitigate potential project impacts on liquefaction and lateral spreading hazards (DayZenLLC 2024c).

To inform the project's final design, CEC staff recommends compliance with **MM GEO-1**. **MM GEO-1** requires the applicant to complete and submit a geotechnical and geohazard report to the project's permitting agency for approval. The report should

include final grading and facility design refinements to further reduce, to the extent feasible, hazards from lateral spreading and liquefaction.

During project construction and operation, compliance with **MM GEO-1**, the 2022 CBC, and all applicable LORS would ensure the project's potential impacts on lateral spreading and liquefaction hazards would be less than significant.

Soil Settlement

Less Than Significant with Mitigation Incorporated. Soil settlement, including differential soil settlement, is a geologic hazard where soils compress by varying amounts across a site during static or dynamic loads. Differential settlement can damage a site's foundation, utilities, and more. Seismic shaking may cause differential soil settlement because soils and engineered fill across a site may experience varying seismic shaking, or dynamic loads. The potential for soil settlement depends on soil thickness, soil characteristics, including stiffness modulus and compression indices, design, grading, and construction methods, and static and dynamic loading.

The preliminary site-specific geotechnical investigation conducted for the project pursuant to the requirements of the 2022 CBC Section 1803 proposed design, grading, and construction methods to mitigate potential seismic soil settlement hazards. For example, the geotechnical investigation recommended constructing remedial earthworks and replacing subsurface materials with engineered fill. In addition, the investigation concluded the early to late Pleistocene alluvial fan deposits that underlay the site have negligible seismic settlement hazard (DayZenLLC 2024c).

To inform the project's final design, CEC staff recommends compliance with **MM GEO-1**. **MM GEO-1** would require the applicant to complete and submit a geotechnical and geohazard report to the project's permitting agency for approval. The report should include final grading and facility design refinements to further reduce, to the extent feasible, hazards from static and seismic soil settlement.

During project construction and operation, compliance with **MM GEO-1**, the 2022 CBC, and all applicable LORS, would ensure the project potential impacts from, and on, soil settlement hazards would be less than significant.

Subsidence

Less Than Significant Impact. The project site is not in an area where natural or artificial subsidence is observed (USGS 2018). Extraction of belowground resources, such as groundwater, petroleum, and minerals, is not occurring at or near the project site. Construction of the proposed project would not include installation, or use of existing, groundwater extraction wells for any purposes (DayZenLLC 2024c). During project construction and operation, potential impacts on, and from, subsidence hazards would be less than significant.

d. Would the project be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2022), creating substantial direct or indirect risks to life or property?

Construction and Operation

Less Than Significant Impact with Mitigation Incorporated. Expansive soil behavior is a condition where clay soils react to changes in moisture content by expanding or contracting. Poorly drained soils have greater shrink-swell potential. Potential causes of moisture fluctuations include drying during construction, and subsequent wetting from rain, capillary rise, landscape irrigation, and type of plant selection. Untreated expansive soil may damage future buildings and pavements on the project site.

The preliminary site-specific geotechnical investigation concluded that the low to high plasticity clays and clayey sands that underlay the project site are expansive. Wetting and drying of these expansive clays and sands could cause moderate to high damage to the project.

The geotechnical investigation conducted for the project pursuant to the requirements of the 2022 CBC Section 1803 proposed design, grading, and construction methods for the project that would mitigate seismic soil settlement hazards. For example, the report recommended constructing remedial earthworks and replacing subsurface materials with engineered fill. The site's underlying early to late Pleistocene alluvial fan deposits have negligible seismic settlement hazard (DayZenLLC 2024c).

To inform the project's final design, CEC staff recommends compliance with **MM GEO-1**. **MM GEO-1** requires the applicant to complete and submit a geotechnical and geohazard report to the project's permitting agency for approval. The report should include final grading and facility design refinements to further reduce, to the extent feasible, hazards from expansive soils.

During project construction and operation, compliance with **MM GEO-1**, the 2022 CBC, and all applicable LORS would ensure the project's potential impacts from, and on, expansive soil hazards would be less than significant.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Construction and Operation

No Impact. The proposed project would connect to an existing city provided sanitary sewer connection. The project would not need to support septic tanks or alternative wastewater disposal systems. Therefore, there would be no impact on soils related to sanitary waste disposal from the project during construction or operation.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Construction and Operation

Less Than Significant with Mitigation Incorporated. Ground-disturbing activities have the potential to impact undiscovered paleontological resources. A search of the University of California Museum of Paleontology database did not identify any paleontological resources at the project site. The database search indicated fossil discoveries have been documented in geologic formations that are within two miles of the project, such as the Neroly Formation (UCMP 2025).

Historic artificial fill has no paleontological potential. Late Holocene to modern (<150 years) stream channel deposits are classified as low sensitivity at the surface, increasing to high sensitivity with depth. Early to late Pleistocene alluvial fan deposits are classified as high paleontological sensitivity.

The project application proposed mitigation to reduce impacts to unique paleontological resources. The measure includes protocols for training, identification of paleontological resources, and preparing a salvage plan, including treatment and reporting (DayZenLLC 2024a).

During construction and operation of the project, CEC staff recommends compliance with MMs **PAL-1** through **PAL-8** to address the potential for the discovery of paleontological resources during excavation in native subsurface materials. MMs **PAL-1** through **PAL-8** include more actions compared to the applicant's proposed mitigation for impacts related paleontological resources, PDM GEO-2 (DayZenLLC 2024a). For example, **MM PAL-3** recommends the development of a Paleontological Resource Mitigation Plan. **MM PAL-6** recommends paleontological resource monitors be onsite during grading and construction in paleontologically sensitive geologic formations. With mitigation incorporated, potential impacts from construction and operation on paleontological resources would be less than significant.

Geological features are the result of geological processes, or actions that occur above and below the Earth's surface. Geological features that are unusual or out of the ordinary are unique. No unique geologic features are mapped or identified at the project site. The Quaternary sedimentary deposits at the project site are common in northern Contra Costa County (Dibblee and Minch 2006; CDOC 2009). Potential impacts from construction and operation on unique geological resources of recreational, commercial, and scientific value would be less than significant.

5.7.3 Mitigation Measures

The following mitigation measures (MMs) are proposed for Geology and Soils for the proposed project. A description of the applicant proposed **PD-HYD-1.1** is in **Section 5.10, Hydrology and Water Quality**. The engineering-related MMs primarily ensure

the project is appropriately designed to withstand geologic hazards impacting the project and ensure that the project does not exacerbate existing geologic hazards. For purposes of these MMs, references to the California Building Code means the code in force at the time the project starts ground disturbing activities.

GEO-1. As required in the CBC Sections 1803.2 to 1803.5, the project applicant shall conduct a geotechnical investigation for the project site. In accordance with the California Business and Professions Code and CBC Section 1803.1, the geotechnical investigations shall be conducted by a registered design professional.

As described in the CBC Section 1803.6, the applicant shall write a geotechnical report that documents the results from the geotechnical investigations and provides project design recommendations to mitigate geologic hazards. In accordance with the CBC Section 1803.1, the geotechnical report shall be prepared and signed by a California registered geotechnical engineer, certified engineering geologist, and a registered geophysicist, where applicable.

In accordance with the CBC Section 1803.7, the geotechnical investigation report shall include a geohazards report that considers seismic hazards. The geohazard report shall identify site-specific geologic and seismic conditions that may require mitigation.

The report shall recommend project design criteria to mitigate geologic and seismic hazards. The applicant shall incorporate recommendations for project design criteria into the final project design. An appropriately qualified California-certified licensed engineering geologist, in consultation with a California registered geotechnical engineer, shall prepare the geohazards portion of the geotechnical report.

PAL-1. The applicant shall provide the City of Pittsburg's Planning Development Director, or designee, with the resume, qualifications, and contact information of its paleontological resource specialist (PRS) for review and approval. The PRS's resume shall demonstrate to the satisfaction of the City of Pittsburg's Planning Development Director, or designee, the appropriate education and experience to accomplish the required paleontological resource tasks. The PRS's resume shall also include the names and phone numbers of references that can be contacted to verify information.

As determined by the City of Pittsburg's Planning Development Director, or designee, the PRS shall meet the minimum qualifications for a Qualified Professional Paleontologist as defined in the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010). The qualifications of the PRS shall include the following:

1. A graduate degree in paleontology or geology, and/or a publication record in peer reviewed journals; and demonstrated competence in field techniques, preparation, identification, curation, and reporting in the state or geologic province in which the project occurs. An advanced degree is less important than demonstrated competence and regional experience.

2. At least three years of paleontological resource mitigation and field experience in California and at least one year of experience leading paleontological resource mitigation and field activities.
3. Proficiency in recognizing fossils in the field and determining their significance.
4. Expertise in local geology, stratigraphy, and biostratigraphy.
5. Experience collecting vertebrate fossils in the field.

The applicant shall ensure that the PRS obtains qualified paleontological resource monitors (PRMs) to monitor as they deem necessary on the project. PRMs shall have the equivalent of the following qualifications:

1. B.S. or B.A. degree in geology or paleontology and a minimum of one year of relevant paleontological resource monitoring experience in California; or
2. A.S. or A.A. in geology, paleontology, or biology and a minimum of four years of relevant paleontological resource monitoring experience in California; or
3. Enrollment in upper division classes pursuing a bachelor's degree or a more advanced degree in the field of geology or paleontology and a minimum of three years of relevant paleontological resource monitoring experience in California.
4. Demonstrated proficiency in recognizing various types of fossils, in collection methods, and in other paleontological field techniques.

If the approved PRS is replaced prior to completion of project mitigation and submittal of the paleontological resources report (PRR), the applicant shall obtain CITY OF PITTSBURG'S PLANNING DEVELOPMENT DIRECTOR, OR DESIGNEE, approval for the replacement PRS. The applicant shall keep resumes on file for the qualified PRSs and PRMs.

The PRM's resume shall include the names and contact information of references. If a PRM is replaced, the resume of the replacement PRM shall also be provided to the City of Pittsburg's Planning Development Director, or designee, for review and approval.

PAL-2. The applicant shall provide the PRS and the City of Pittsburg's Planning Development Director, or designee, for review and approval, maps and drawings showing the footprint of the power plant, construction laydown areas, and all related facilities. Maps shall identify all areas of the project where ground disturbance is anticipated. If the PRS requests enlargements or strip maps for linear facility routes, the applicant shall provide copies to the PRS and City of Pittsburg's Planning Development Director, or designee. The site grading plan and the plan and profile drawings for the utility lines would be acceptable for this purpose. The plan drawings must show the location, depth, and extent of all ground disturbances and be at a scale between 1 inch = 40 feet (1:480) and 1 inch = 100 feet (1:1,200). If the footprint of the project or its linear facilities change, the applicant shall provide maps and drawings reflecting those changes to the PRS and City of Pittsburg's Planning Development Director, or designee.

If construction of the project proceeds in phases, maps and drawings may be submitted prior to the start of each phase. A letter identifying the proposed schedule of each project phase shall be provided to the PRS and City of Pittsburg's Planning Development Director, or designee. Before work commences on affected phases, the applicant shall notify the PRS and City of Pittsburg's Planning Development Director, or designee, of any construction phase scheduling changes.

At a minimum, the applicant shall ensure that the PRS or PRM consults weekly with the project superintendent and construction field manager to confirm area(s) to be worked the following week, until ground disturbance is completed.

PAL-3. The applicant shall ensure that the PRS prepares a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) and submits it to the City of Pittsburg's Planning Development Director, or designee, for review and approval. Approval of the PRMMP by the City of Pittsburg's Planning Development Director, or designee, shall occur prior to any ground disturbance. The PRMMP shall function as the formal guide for monitoring, collecting, sampling, and reporting activities, and may be modified with City of Pittsburg's Planning Development Director, or designee, approval. The PRMMP shall be used as the basis of discussion when on-site decisions or changes are proposed. Copies of the PRMMP shall include all updates and reside with the PRS, each PRM, the project's on-site manager, and the City of Pittsburg's Planning Development Director, or designee.

The PRMMP shall be developed in accordance with the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010). The PRMMP shall include, but not be limited to, the following:

1. Procedures for, and assurance, that those procedures would be followed in the performance and sequence of project-related tasks, such as any literature searches, pre-construction surveys, worker environmental training, field work, flagging or staking, construction monitoring, mapping and data recovery, fossil preparation and collection, identification and inventory, preparation of final reports, and transmittal of materials for curation.
2. Identification of the person(s) expected to assist with each of the tasks required by the PRMMP and these MMs.
3. A thorough discussion of the geologic units expected to be encountered, the location and depth of the units relative to the project when known, and the known sensitivity of those units based on the occurrence of fossils either in that unit or in correlative units.
4. An explanation of why sampling is needed, a description of the sampling methodology, and how much sampling is expected to take place and in which geologic units. This should include descriptions of the sampling procedures that shall be used for fine-grained and coarse-grained units.

5. A discussion of the locations where monitoring of project construction activities is deemed necessary, and a proposed plan for monitoring and sampling at these locations.
6. A discussion of procedures to be followed: (a) in the event of a significant fossil discovery, (b) stopping construction, (c) resuming construction, and how notifications shall be performed.
7. A discussion of equipment and supplies necessary for collection of fossil materials and any specialized equipment needed to prepare, remove, load, transport, and analyze large-sized fossils or extensive fossil deposits.
8. Procedures to inventory, prepare, and deliver fossil materials for curation in a retrievable storage collection at a public repository or museum that meet the Society of Vertebrate Paleontology's standards and requirements for the curation of paleontological resources.
9. Identification of the institution that has agreed to receive data and fossil materials collected, requirements or specifications for materials delivered for curation and how they shall be met, and the name and phone number of the contact person at the institution.
10. A copy of the paleontological resources MMs.
11. A copy of the daily monitoring log form.

PAL-4. Prior to ground disturbance the applicant and the PRS shall prepare a City of Pittsburg's Planning Development Director, or designee, approved Worker Environmental Awareness Program (WEAP).

The WEAP shall address the possibility of encountering paleontological resources in the field, the sensitivity and importance of these resources, and legal obligations to preserve and protect those resources. The purpose of the WEAP is to train project workers to recognize palaeontologic resources and identify procedures they must follow to ensure there are no impacts to sensitive palaeontologic resources.

The WEAP shall include:

1. A discussion of applicable laws and penalties under the law.
2. Good quality photographs or physical examples of fossils expected to be found in units of high palaeontologic sensitivity at, or near, the project site.
3. Information that the PRS and PRM have the authority to stop or redirect construction in the event of a discovery or unanticipated impact on a paleontological resource.
4. Instruction that employees are to stop or redirect work in the vicinity of a find and to contact their supervisor and the PRS or PRM.

5. An informational brochure that identifies reporting procedures in the event of a discovery.
6. A WEAP certification of completion form signed by each worker indicating that they have received the training.
7. A sticker that shall be placed on hard hats indicating that environmental training has been completed.

The applicant shall submit the training script and, if the applicant is planning to use a video for training, a copy of the training video, with the set of reporting procedures for workers to follow that shall be used to present the WEAP and qualify workers to conduct ground disturbing activities that could impact paleontological resources.

PAL-5. No worker shall excavate or perform any ground disturbance activity prior to receiving approved WEAP training by the PRS, unless specifically approved by the City of Pittsburg's Planning Development Director, or designee.

Prior to project ground disturbance, the following workers shall be WEAP trained by the PRS in-person: project managers, construction supervisors, foremen, and all general workers involved with or who operate ground-disturbing equipment or tools. Following the start of ground disturbing activities and after the initial WEAP training conducted prior to ground disturbance, approved video or in-person training may be used for new employees. If a video is used a qualified trainer shall be present to monitor training and respond to questions.

The training program may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or other areas of interest or concern. A WEAP certification of completion form shall be used to document who has received the required training.

PAL-6. The applicant shall ensure that the PRS and PRM(s) monitor, consistent with the PRMMP, all construction-related grading and excavation in areas where potential fossil-bearing materials were identified, both at the site and along any constructed linear facilities associated with the project. If the PRS determines full-time monitoring is not necessary in locations that were identified as potentially fossil bearing in the PRMMP, the applicant shall notify and seek the concurrence with the City of Pittsburg's Planning Development Director, or designee.

The applicant shall ensure that the PRS and PRM(s) have the authority to stop or redirect construction if paleontological resources are encountered. The applicant shall ensure that there is no interference with monitoring activities unless directed by the PRS. Monitoring activities shall be conducted as follows:

Any change of monitoring from the accepted schedule in the PRMMP shall be proposed in a letter or email from the PRS and the applicant to the City of Pittsburg's Planning Development Director, or designee, prior to the change in monitoring. The letter or

email shall include the justification for the change in monitoring and be submitted to the City of Pittsburg's Planning Development Director, or designee, for review and approval.

The applicant shall ensure that the PRM(s) keep a daily monitoring log of paleontological resource activities. The name and contact information of PRM(s) and PRS who were making field observations shall be included in the daily log. The PRS may informally discuss paleontological resource monitoring and mitigation activities with the City of Pittsburg's Planning Development Director, or designee, at any time.

The applicant shall ensure that the PRS notifies the City of Pittsburg's Planning Development Director, or designee, within 24 hours of the occurrence of any incidents of non-compliance with any paleontological resources MMs. The PRS shall recommend corrective action to resolve the issues or achieve compliance with the MMs.

For any significant paleontological resources encountered, either the applicant or the PRS shall notify the City of Pittsburg's Planning Development Director, or designee, within 24 hours. If the resources are encountered on a weekend or holiday, notification shall occur on the morning of the next business day. In the event construction has been stopped because of a paleontological find, such notification shall be provided as soon as practical, but not later than 24 hours after a stop work order has been issued.

For excavations planned in material that is classified as having a moderate to high paleontological sensitivity prior to construction additional precautions may be required. Should excavation methods be proposed that would preclude effective monitoring and examination of paleontological resources encountered during excavation, appropriate mitigation involving education of the public about the lost resources shall be proposed in the PRMMP.

PAL-7. The applicant shall ensure preparation of a paleontological resources report (PRR) by the designated PRS. The PRR shall be prepared following the completion of ground-disturbing activities. The PRR shall include an analysis of the collected fossil materials and related information and shall be submitted to the City of Pittsburg's Planning Development Director, or designee, for approval.

The report shall include, but not be limited to, a description and inventory of recovered fossil materials, a map showing the location of paleontological resources encountered and the PRS's description of sensitivity and significance of those resources, and notes regarding if and how the fossil material was curated in accordance with **MM PAL-3**.

Any portions of this report that involve any independent judgment or analysis of the earth's crust, and the rocks and other materials which compose it, must be done by or under the responsible charge of a California licensed Professional Geologist.

PAL-8. The applicant, through the designated PRS, shall ensure that all components of the PRMMP are adequately performed, including collection of fossil material, preparation

of fossil material for analysis, analysis of fossils, identification and inventory of fossils, preparation of fossils for curation, and delivery for curation of all significant paleontological resource materials encountered and collected during project construction. The applicant shall pay all curation fees charged by the museum for fossil material collected and curated because of paleontological mitigation. The applicant shall also provide the curator with documentation showing the applicant irrevocably and unconditionally donates, gives, and assigns permanent, absolute, and unconditional ownership of the fossil material.

5.7.4 References

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5.8 Greenhouse Gas Emissions

This section describes the environmental and regulatory setting and discusses greenhouse gas (GHG) emissions impacts associated with the demolition/construction, direct “stationary source” emissions from emergency backup generators, and indirect and “non-stationary source” emissions from the operation of the project.

GREENHOUSE GAS EMISSIONS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☒	☐	☐

Environmental checklist established by CEQA Guidelines, Appendix G, greenhouse gas emissions.

5.8.1 Environmental Setting

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of GHGs have a much broader, global impact. Global warming associated with the “greenhouse effect” is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the Earth's atmosphere. The principal GHGs that contribute to global warming and climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), black carbon, and fluorinated gases (F-gases) (hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF₆]).¹ Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors.²

Each GHG has its own potency and effect upon the Earth's energy balance, expressed in terms of a global warming potential (GWP), with CO₂ being assigned a value of 1. Specifically, the GWP is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given time relative to the emissions of 1 ton of CO₂. The larger the

1 U.S. EPA. Overview of Greenhouse Gases, which is available online at:
<https://www.epa.gov/ghgemissions/overview-greenhouse-gases>

2 U.S. EPA. Sources of Greenhouse Gas Emissions, which is available online at
<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

GWP, the more that a given gas warms the Earth compared to CO₂ over that time. The time usually used for GWPs is 100 years.³

For example, CH₄ has a GWP of 28 over 100 years from the Fifth Assessment Report (AR5)⁴ of the Intergovernmental Panel on Climate Change (IPCC 2013), which means that it has a global warming effect 28 times greater than CO₂ on an equal-mass basis. The F-gases are sometimes called high-GWP gases because, for a given amount of mass, they trap substantially more heat than CO₂. The GWPs for these gases can be in the thousands or tens of thousands. The carbon dioxide equivalent (CO₂e) for a source is obtained by multiplying each quantity of GHG by its GWP and then adding the results together to obtain a single, combined emission rate representing all GHGs in terms of CO₂e.

Existing Conditions

California is a contributor to global GHG emissions. The largest category of GHG emissions in California is transportation, followed by industrial activities and electricity generation in state and out of state. In 2022, the total gross California GHG emissions were 371.1 million metric tons of CO₂e (MMTCO₂e) (CARB 2024). In 2022, the total gross U.S. greenhouse gas emissions were 6,343.2 MMTCO₂e, or 5,489.0 MMTCO₂e after accounting for sequestration from the land sector (U.S. EPA 2024). The City of Pittsburg's community-wide GHG emission inventory in 2016 was 428,563 metric tons of CO₂e (MTCO₂e) (City of Pittsburg 2019).

Regulatory Background

Federal

The project would not be subject to any federal requirements for GHGs.

State

California Global Warming Solutions Act of 2006. In 2006, the state Legislature passed the California Global Warming Solutions Act of 2006 (Assembly Bill 32, Núñez, Chapter 488, Statutes of 2006), codified as Health and Safety Code, Section 38500 and the following, which provided the initial framework for regulating GHG emissions in California. This law required the California Air Resources Board (CARB) to design and implement GHG emissions limits, regulations, and other measures such that statewide GHG emissions are reduced in a technologically feasible and cost-effective manner to 1990 levels by 2020. AB 32 also required CARB to implement a mandatory GHG

3 U.S. EPA. Understanding Global Warming Potentials, which is available online at <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>

4 The GWP values have been refined in the 2021 IPCC Sixth Assessment Report (AR6), which is available online at: <https://www.ipcc.ch/report/ar6/wg1/>. The GWP for CH₄ has been updated to 29.8 from fossil fuel sources and 27.0 from non-fossil sources.

emissions reporting program for major sources, which includes electricity generators, industrial facilities, fuel suppliers, and electricity importers.

CARB Scoping Plan. Part of the Legislature’s direction to CARB under AB 32 was to develop a scoping plan that serves as a statewide planning document to coordinate the main strategies California will use to reduce GHG emissions that cause climate change. CARB approved the AB 32 Climate Change Scoping Plan (Scoping Plan) in 2008 and released updates in 2014, 2017, and 2022. The Scoping Plan includes a range of GHG emissions reduction actions, which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based compliance mechanisms, such as the cap-and-trade program. In December 2007, CARB set the statewide 2020 emissions limit, defined as reducing emissions to 1990 levels, at 427 million metric tons of CO₂e (MMTCO₂e). The 2014 Scoping Plan adjusted the 1990 emissions estimate and the statewide 2020 emissions limit goal to 431 MMTCO₂e (CARB 2014). The 2017 Scoping Plan (CARB 2017a) demonstrates the approach necessary to achieve California’s 2030 target, which is to reduce GHG emissions 40 percent below 1990 levels to 260 MMTCO₂e. On November 16, 2022, CARB published the 2022 Scoping Plan for Achieving Carbon Neutrality (CARB 2022), which lays out a path to achieve targets for carbon neutrality by 2045.

Mandatory Reporting of Greenhouse Gas Emissions. AB 32 also required CARB to adopt regulations to require the reporting and verification of statewide greenhouse gas emissions (Health and Safety Code, section 38530). CARB’s Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (Cal. Code Regs., tit. 17 §§95100 to 95163), which took effect January 2009, requires annual GHG emissions reporting from electric power entities, fuel suppliers, CO₂ suppliers, petroleum and natural gas system operators, and industrial facilities that emit at least 10,000 MTCO₂e/yr from stationary combustion and/or process sources. The project would not be impacted by this regulation because stationary source testing and maintenance combustion GHG emissions are expected to be below the reporting threshold of 10,000 MTCO₂e/yr, as shown in **Table 5.8-2**.

Cap-and-Trade Program. CARB’s cap-and-trade program (Health and Saf. Code, § 38562; 17 Cal. Code Regs., §§95801 to 96022) took effect January 1, 2012. The cap-and-trade program establishes a declining limit on major sources of GHG emissions by sector throughout California, and it creates economic incentives for sources to invest in cleaner, more efficient technologies. The current version of the regulation, effective April 2019, established the increasingly stringent compliance obligations for years 2021 to 2030. The cap-and-trade program applies to covered entities that fall within certain source categories, including first deliverers of electricity (such as fossil fuel power plants) and electrical distribution utilities; in this case, the project would obtain electrical service from PG&E. Covered entities in the cap-and-trade program, including PG&E, must hold compliance instruments sufficient to cover their actual GHG emissions, as set and verified through the CARB’s Mandatory Reporting regulation. For the electricity supplied to the project from the grid, PG&E bears the GHG emissions

compliance obligation under the cap-and-trade program for delivering electricity to the grid from its power plants and for making deliveries to end-users, such as the project.

Executive Order B-30-15. On April 29, 2015, former Governor Brown issued Executive Order B-30-15, directing state agencies to implement measures to reduce GHG emissions 40 percent below their 1990 levels by 2030 and to make it possible to achieve the previously stated goal of an 80 percent GHG emissions reduction below 1990 GHG emissions by 2050 (CARB 2017a).

Statewide 2030 GHG Emissions Limit. On September 8, 2016, Senate Bill (SB) 32 (Pavley, Chapter 249, Statutes of 2016), codified as Health and Safety Code, Section 38566, extended California's commitment to reduce GHG emissions by requiring the state to reduce statewide GHG emissions by 40 percent below 1990 levels by 2030 (CARB 2017a).

Renewable Energy Programs. In 2002, California initially established the Renewables Portfolio Standard (RPS) with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent by 2017. State energy agencies recommended accelerating that goal, and former Governor Schwarzenegger's Executive Order S-14-08 (November 2008) required California utilities to reach the 33 percent renewable electricity goal by 2020, consistent with the CARB's 2008 Scoping Plan. In April 2011, Senate Bill X1-2 (Simitian, Chapter 1, Statutes of 2011) of the First Extraordinary Session was signed into law. SB X1-2 expressly applied the 33 percent RPS by December 31, 2020, to all retail sellers of electricity and established renewable energy standards for interim years prior to 2020.

- Clean Energy and Pollution Reduction Act (Senate Bill 350, De León, Chapter 547, Statutes of 2015): Beginning in 2016, SB 350 took effect as the Clean Energy and Pollution Reduction Act of 2015, declaring it the intent of the Legislature to acknowledge Governor Brown's clean energy, clean air and greenhouse gas emissions reduction goals for 2030 and beyond. SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030.
- The 100 Percent Clean Energy Act of 2018 (Senate Bill 100, De León, Chapter 312, Statutes of 2018): Beginning in 2019, the RPS deadlines advanced to 50 percent renewable resources by December 31, 2026, and 60 percent by December 31, 2030. In addition, SB 100 establishes policy that renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity by December 31, 2045.
- Clean Energy, Jobs, and Affordability Act of 2022 (Senate Bill 1020, Laird, Chapter 361, Statutes of 2022): Accelerates the timelines set forth in SB 100 to provide that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use

customers by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2035, as specified.

Short-Lived Climate Pollutant Strategy. To best support the reduction of GHG emissions consistent with AB 32, CARB released the Short-Lived Climate Pollutant (SLCP) Strategy, under Health and Safety Code, section 39730, in March 2017. Health and Safety Code, section 39730, defined SLCPs as having lifetimes in the atmosphere ranging from “a few days to a few decades.” Then beginning in 2017 under Health and Safety Code, section 39730.5, CARB was directed to set targets to reduce SLCP emissions 40 percent below 2013 levels by 2030 for CH₄ and HFCs and 50 percent below 2013 levels by 2030 for anthropogenic black carbon (CARB 2017b). The SLCP Strategy was integrated into the 2017 update to CARB’s scoping plan. To help meet the HFC reduction goal, California adopted Prohibitions on Use of Certain Hydrofluorocarbons in Stationary Refrigeration, Stationary Air-conditioning and Other End-Uses (Cal. Code Regs., Tit. 17, Section 95371, et seq.). The prohibited HFCs with different effective dates are listed in the regulation. In addition, on September 30, 2022, the Governor approved Senate Bill 1206 (Skinner, Chapter 884, Statutes of 2022), which would prohibit a person from offering for sale or distribution, or otherwise entering into commerce in the state, bulk HFCs or bulk blends containing HFCs that exceed a specified GWP limit beginning January 1, 2025, and lower GWP limits beginning January 1, 2030, and January 1, 2033. The bill does not restrict the authority of CARB to establish regulations lowering the maximum allowable GWP limits below the limits established by the bill.

Executive Order B-55-18. On September 10, 2018, the same day he signed SB 100 into law, former Governor Brown issued Executive Order B-55-18 to achieve carbon neutrality, stating the governor’s intention “to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing greenhouse gas emissions.” From the 2020 GHG limit of 431 MMTCO₂e, California will need to reduce statewide emissions another 170 million tons to meet its 2030 statutory target of 260 million tons per year (40 percent below 1990 levels). The state would need to cut annual emissions by a further 175 million tons to meet its 2050 goal (set by executive order) of 85 million tons per year (80 percent below 1990 levels).

Reducing SF₆ Emissions from Gas Insulated Switchgear. In early 2011, CARB adopted a regulation (Cal. Code Regs., Tit. 17, Sections 95350 to 95359) to reduce SF₆ emissions in gas insulated switchgear (GIS) used in the electricity sector’s transmission and distribution system as an early action measure pursuant to AB 32. SF₆ is an extremely powerful and long-lived GHG. The 100-year GWP of SF₆ is 22,800 (from the IPCC Fourth Assessment Report). Because of its extremely high GWP, small reductions in SF₆ emissions can have a large impact on reducing GHG emissions, which are the main drivers of climate change. The regulation requires GIS owners to report SF₆ emissions annually and requires reductions of SF₆ emissions from GIS over time, setting an annual emission rate limit for each GIS owner. The maximum allowable emission

rate started at 10 percent in 2011 and has decreased one percent per year since then. The limit reached one percent in 2020 and remained at that level going forward. However, data show that statewide SF₆ capacity is growing by one to five percent per year, which would increase the expected SF₆ emissions. In response to emerging technologies using lower or zero GWP insulators, CARB amended the regulation (Cal. Code Regs., Tit. 17, Sections 95350-95359.1) in 2021 to further reduce GHG emissions from gas-insulated equipment (GIE [changed from GIS to include more devices beyond switchgear]). Key provisions of the amended regulation include a phase-out schedule in stages between 2025 and 2033 for new SF₆ GIE, coverage of other GHG beyond SF₆ used in GIE, and other changes that enhance accuracy of emissions accounting and reporting.

The California Climate Crisis Act (Assembly Bill 1279). Assembly Bill 1279 (Muratsuchi, Chapter 337, Statutes of 2022) establishes the policy of the state to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO₂ removal solutions and carbon capture, utilization, and storage (CCUS) technologies. The CARB 2022 Scoping Plan for Achieving Carbon Neutrality (CARB 2022) plans for the 2045 target set forth by AB 1279 and Executive Order B-55-18.

Regional

2017 Bay Area Clean Air Plan. Bay Area Air Quality Management District (BAAQMD) adopted the 2017 Bay Area Clean Air Plan on April 19, 2017 (BAAQMD 2017). It provides a regional strategy to protect public health and protect the climate. To protect public health, the plan describes how BAAQMD will continue its progress toward attaining all state and federal ambient air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious GHG emissions reduction targets for 2030 and 2050 and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieving those GHG emissions reduction targets.

BAAQMD CEQA Guidelines. The purpose of the BAAQMD CEQA Guidelines is to assist lead agencies in evaluating a project's air quality and climate impacts (BAAQMD 2023). This document describes the criteria that BAAQMD uses when reviewing and commenting on the adequacy of environmental documents. It recommends thresholds of significance for determining whether a project would have significant adverse environmental impacts, identifies methodologies for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts. The BAAQMD CEQA Guidelines include methodologies for estimating GHG emissions.

The BAAQMD CEQA Guidelines include the project-level and plan level thresholds for climate impacts that were adopted in April 2022 (BAAQMD 2022). The guidelines also include a bright-line threshold of significance of 10,000 MTCO₂e/yr for stationary sources (BAAQMD 2023, Section 6.4). The stationary source GHG threshold was first adopted by the BAAQMD Board of Directors on June 2, 2010. The 2022 CEQA Guidelines states that the threshold of 10,000 MTCO₂e/yr would be considered an interim threshold and BAAQMD staff will reevaluate the threshold as AB 32 Scoping Plan measures such as cap and trade are more fully developed and implemented at the state level (BAAQMD 2023, Section 2.2.5 of Appendix A).

Diesel Free by '33. In 2018, BAAQMD established a program intended to reduce GHG and criteria pollutant emissions by eliminating petroleum use by the end of 2033. Local Bay Area agencies are encouraged to voluntarily adopt the Statement of Purpose of this initiative. In 2018, the Contra Costa County Board of Supervisors became signatories to the BAAQMD's Diesel Free by '33 initiative. Entities signing the Statement of Purpose pledge to develop their own individual strategies to achieve the goal of reaching zero diesel emissions in their communities. Signatories to this agreement express their intent to:

1. Collaborate and coordinate on ordinances, policies, and procurement practices that will reduce diesel emissions to zero within their jurisdictions, communities, or companies;
2. Share and promote effective financing mechanisms domestically and internationally to the extent feasible that allow for the purchase of zero emissions equipment;
3. Share information and assessments regarding zero emissions technology;
4. Build capacity for action and technology adaptation through technology transfer and sharing expertise;
5. Use policies and incentives that assist the private sector as it moves to diesel-free fleets and buildings; and
6. Periodic reporting to all signers of progress towards the zero- diesel emissions goal.

Plan Bay Area 2050. Under the requirements of The Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375, Steinberg, Chapter 728, Statutes of 2008), all metropolitan regions in California must complete a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan. In the Bay Area, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) are jointly responsible for developing and adopting an SCS that integrates transportation, land use, and housing to meet GHG emissions reduction targets set by CARB. In July 2017, the MTC and ABAG approved Plan Bay Area 2040, which is a strategic update to the previous plan approved in July 2013. The Plan was updated and in 2021 Plan Bay Area 2050 was adopted. Plan Bay Area 2050 includes a target to reduce GHG emissions per capita from passenger vehicles 20 percent by 2035 compared to 2005 emissions (MTC & ABAG 2021).

Local

Contra Costa County Climate Action and Adaptation Plan (CAAP). Contra Costa County has a Climate Action and Adaptation Plan that was updated and adopted by the County Board of Supervisors on Tuesday, November 5, 2024. The 2024 CAAP is designed to meet the statewide GHG reduction targets of 40% reduction in emissions for 2030 set by SB 32, and to reduce emissions to 85 percent below 1990 levels and achieve net carbon neutrality by 2045 as set by AB 1279. The GHG emissions reduction goals for Contra Costa County are to reduce GHG emissions to 658,700 MTCO₂e by 2030, and 164,680 MTCO₂e by 2045 (Contra Costa County 2024).

The 2024 CAAP identifies measures to reduce GHG emissions through the areas of energy use, transportation and land use, green infrastructure, waste reduction, and government operations. Projects that comply with the policies and strategies outlined in the 2024 CAAP and that are consistent with the General Plan land use designation on the project site would have a less than significant GHG impact.

City of Pittsburg General Plan 2040. The City of Pittsburg General Plan 2040 includes a Sustainability Plan that includes GHG emissions reduction strategies and goals. Strategies related to the project include decarbonizing electricity, increasing zero-emission vehicle and equipment use (City of Pittsburg 2024). These policies include the following:

Policy 7-P-3.5: Encourage secure bicycle facilities and other alternative transportation facilities to be provided as part of new developments, especially future employment sites, public facilities, and multi-family residential complexes.

Policy 7-A-1.a: Evaluate project traffic and Vehicle Miles Traveled (VMT) impacts of development projects based on the City's Transportation Impact Analysis Guidelines to determine transportation impacts to all users, including pedestrians, bicyclists, transit riders, and motorists, and to require projects to address impacts consistent with the requirements of CEQA.

Policy 7-A-2.k: Encourage developers to provide enhanced Transportation Demand Management (TDM) programs and alternative transportation infrastructure that exceeds minimum requirements, as per 7-A-2.j, in exchange for reduced parking requirements, with a focus on priority development areas and locations in proximity to high capacity transit.

Policy 10-P-6.13: Implement development standards, mitigation measures, and best practices that require energy conservation and the reduction in greenhouse gases, including:

- a) Require new development to incorporate energy-efficient features through passive design concepts (e.g., techniques for heating and cooling, building siting orientation, street and lot layout, landscape placement, and protection of solar access);
- b) Require construction standards which promote energy conservation including window placement, building eaves, and roof overhangs;

- c) Require all projects to meet or, when feasible, exceed the most current "green" development standards in the California Green Building Standards Code;
- d) Require projects to implement applicable Sustainability Plan strategies and actions;
- e) Require developments to include vehicle charging stations that meet or exceed the requirements of State law and to include outdoor electrical outlets. Discourage portable generators or other portable power sources;
- f) Require best practices in selecting construction methods, building materials, project appliances and equipment, and project design;
- g) Encourage projects to incorporate enhanced energy conservation measures, electric-only appliances, and other methods of reducing energy usage and greenhouse gas emissions; and
- h) Require large energy users to implement an energy conservation plan, which may include solar or other non-fossil fuel sources to meet the operation's full power demand and 100% fleet electrification, as part of the project review and approval process, and develop a program to monitor compliance with and effectiveness of that plan.

Significance Criteria

CEQA Guidelines for GHG Emissions. With the enactment of Senate Bill 97 (Dutton, Chapter 185, Statutes of 2007), the Governor's Office of Planning and Research was required by July 1, 2009, to prepare, develop, and transmit to the Natural Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. Those amendments to the CEQA guidelines became effective March 18, 2010, and were subsequently updated in December 2018 to further address the analysis of GHG emissions, including the following:

- Lead agencies must analyze the GHG emissions of proposed projects. (See CEQA Guidelines, § 15064.4, subd. (a))
- The focus of the lead agency's analysis should be on the project's effect on climate change, rather than simply focusing on the quantity of emissions and how that quantity of emissions compares to statewide or global emissions. (See CEQA Guidelines, § 15064.4, subd. (b))
- The impacts analysis of GHG emissions is global in nature and thus should be considered in a broader context. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national, or global emissions. (See CEQA Guidelines, § 15064.4, subd. (b))
- Lead agencies should consider a timeframe for the analysis that is appropriate for the project. (See CEQA Guidelines, § 15064.4, subd. (b))
- A lead agency's analysis must reasonably reflect evolving scientific knowledge and state regulatory schemes. (See CEQA Guidelines, § 15064.4, subd. (b).)

- Lead agencies may rely on an adopted statewide, regional, or local plan in evaluating a project's GHG emissions. (See CEQA Guidelines, § 15064.4, subd. (b)(3))
- Lead agencies may analyze and mitigate the significant impact of GHG emissions as part of a larger plan for the reduction of greenhouse gases. (See CEQA Guidelines, §15183.5, sub. (a))
- A project's incremental contribution to a cumulative GHG emissions effect may be determined not to be significant and the effects of the project to not be cumulatively considerable if the project complies with the requirements of the GHG emissions reduction strategy. (See CEQA Guidelines, §§ 15064, sub. (h)(3); 15130, sub. (d); 15183, sub. (b))
- In determining the significance of a project's impacts, the lead agency may consider a project's consistency with the state's long-term climate goals or strategies, provided that substantial evidence supports the agency's analysis of how those goals or strategies address the project's incremental contribution to climate change and its conclusion that the project's incremental contribution is consistent with those plans, goals, or strategies. (See CEQA Guidelines, § 15064.4, subd. (b)(3))
- The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently account for the project's incremental contribution to climate change. (See CEQA Guidelines, § 15064.4, subd. (c).)

The Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines include recommended thresholds of significance for determining whether projects would have significant adverse GHG impacts.

Construction/Demolition Emissions. For construction-related GHG emissions, the BAAQMD CEQA Guidelines do not identify a numerical GHG emissions threshold of significance, but instead recommend that those emissions should be quantified and disclosed using available data and tools, to determine the amount, types, and sources of GHG emissions resulting from the project. In addition, the BAAQMD CEQA Guidelines state that projects should incorporate best management practices (BMPs) to reduce GHG emissions during construction (BAAQMD 2023).

Direct Stationary Sources Emissions. For stationary sources, BAAQMD adopted a numeric threshold of significance of 10,000 metric tons of carbon dioxide equivalent per year (MTCO₂e/yr) for projects that require permits from BAAQMD (BAAQMD 2023, Section 6.4).

Indirect and Non-Stationary Source Emissions. Other project-related emissions from mobile sources, area sources, energy use, and water use would not be included for comparison to the threshold of significance for stationary sources of GHG, based on guidance in the BAAQMD CEQA Guidelines (BAAQMD 2023, Section 6.4).

Instead, in April 2022, the BAAQMD adopted updated thresholds of significance with the publication of *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans* (BAAQMD 2022) to assist lead agencies when evaluating the indirect and “non-stationary” source emissions of land use development projects. Under the BAAQMD’s 2022 CEQA thresholds of significance for land use projects, a CEQA lead agency can conclude that a project will not make a cumulatively considerable contribution to global climate change if the project is designed and built to be consistent with the requirements of either Option A or Option B of the BAAQMD thresholds (BAAQMD 2023). In Option A, projects must include, at a minimum, the project design elements of buildings and transportation. In Option B, projects must be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b) (BAAQMD 2022, p.2).

5.8.2 Environmental Impacts

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction

Less Than Significant Impact. Construction of the project would result in GHG emissions generated by the on-site operation of construction equipment, vendor and hauling truck trips, and worker trips. The applicant estimated that these sources would generate a total of approximately 1,171 MTCO₂e during the estimated 18 months of construction, including site preparation, grading, and on-and-off-site construction (DayZen 2024a, p. 4.8-7).

Because construction emissions would cease once construction is complete, these emissions are considered short term. The BAAQMD CEQA Guidelines do not identify a GHG emissions threshold for construction-related emissions. Instead, BAAQMD recommends that GHG emissions from construction be quantified and disclosed using available data and tools, to determine the amount, types, and sources of GHG emissions resulting from the project. In addition, the BAAQMD CEQA Guidelines states that projects should incorporate BMPs to reduce GHG emissions during construction. BMPs may include zero-emission and hybrid-powered construction equipment to the greatest extent possible, minimizing idling time, use of local or recycled building materials with the goal of a 20 percent share based on costs, and recycling or salvaging construction and demolition debris at least 15 percent more by weight than the diversion requirement in Title 24 (BAAQMD 2023, Table 6-1).

The project would implement mitigation measure **AQ-1**, which would require, among other things, that the construction equipment be tuned and maintained in accordance with manufacturer’s specifications, construction equipment idling time be limited to five minutes, diesel-powered construction vehicle idling time would be limited to two minutes, and all contractors would use equipment that meets CARB’s most recent

certification standard for off-road heavy-duty diesel engines. With this measure, the project would reduce GHG emissions from fuel consumed from unnecessary idling or the operation of poorly maintained equipment. The quantity of construction-related GHG emissions would be limited to the construction phase, and the potential impact on the environment caused by construction GHG emissions would be less than significant.

Operation and Maintenance

Less Than Significant with Mitigation Incorporated. GHG emissions from project operation and maintenance would consist of direct “stationary source” emissions from routine readiness testing and maintenance of the emergency backup generators and indirect and “non-stationary source” emissions from offsite vehicle trips for worker commutes and material deliveries, and facility upkeep, including architectural coatings, consumer product use, landscaping, water use, waste generation, and electricity use.

i. Direct Project Stationary Combustion Sources

The applicant proposed to use renewable diesel instead of conventional diesel fuel for 100 percent of total energy use by the backup generators, and only use ultra-low sulfur diesel (<15 parts per million sulfur by weight) as secondary backup fuel in the event of supply challenges or disruption in obtaining renewable diesel (DayZenLLC 2024a, pg. 4.8-14). As discussed in more detail in **Section 5.6, Energy and Energy Resources**, the current supply for both renewable diesel and ultra-low sulfur diesel is more than sufficient to meet the project’s necessary demand. The currently available supply of renewable diesel is increasing as more refineries are coming online and more import supply bolsters availability of the fuel (DayZenLLC 2024a, pg. 4.6-6).

With the use of 100 percent renewable diesel, the fuel-cycle GHG emissions would be reduced. CARB’s 2021 testing report shows that renewable diesel used in place of ultra-low sulfur petroleum-based diesel can only reduce CO₂ tailpipe emissions by approximately 3 to 4 percent (CARB 2021). However, when compared with California’s average supplies of ultra-low sulfur petroleum-based diesel, renewable diesel is produced with a much lower fuel-cycle carbon intensity (CI). The CARB Low Carbon Fuel Standard Program’s current list of certified fuel pathways shows that the CI is reduced by 15 to 83 percent when using renewable diesel from various feedstocks in place of ultra-low sulfur petroleum-based diesel (CARB 2025b). Since the impacts of GHG emissions are global in nature, staff compared the fuel-cycle CI for renewable diesel and ultra-low sulfur petroleum-based diesel, as reported to CARB’s Low-Carbon Fuel Standard program (CARB 2025a). Staff found that the average supply of renewable diesel would have a pathway CI (in terms of MTCO₂e/gallon) that is less than 50 percent of the CI of ultra-low sulfur petroleum-based diesel.⁵ Using renewable diesel fuel would provide a 3 percent tailpipe CO₂ emissions reduction, and the total GHG

⁵ Staff reviewed CARB Low Carbon Fuel Standard Program data (CARB 2025a; CARB 2025b) and calculated the volumetric CI of 13,508 MTCO₂e per million gallons for California’s average supply of petroleum-based ultra-low sulfur diesel, and 5,330 MTCO₂e per million gallons for the average supply of renewable diesel.

emissions attributable to the long-term fuel production would be reduced by more than 50 percent using renewable diesel compared to ultra-low sulfur petroleum-based diesel.

Table 5.8-1 shows the annual GHG emissions for the gensets routine readiness testing and maintenance with ultra-low sulfur diesel and renewable diesel. The emissions are conservatively estimated based on 34 hours of annual testing and maintenance at 100 percent load per engine.

TABLE 5.8-1 GREENHOUSE GAS EMISSIONS FROM GENSETS TESTING AND MAINTENANCE	
Source	Maximum Annual Emissions (MTCO₂e/yr)
Gensets – Testing and Maintenance (with ultra-low sulfur diesel)	2,862
Gensets – Testing and Maintenance (with renewable diesel)	2,776
BAAQMD Threshold for Stationary Sources of GHG	10,000
Exceeds Threshold?	No

Source: (DayZen 2024b, Table 10).

Table 5.8-1 shows that GHG emissions from the project’s stationary sources (i.e. the emergency backup generators on ultra-low sulfur petroleum-based diesel or renewable diesel) for routine readiness testing and maintenance would be well below the BAAQMD CEQA Guidelines GHG emissions significance bright-line threshold of 10,000 MTCO₂e/yr for stationary sources and would not exceed the threshold level for inclusion in CARB’s cap-and-trade program, which is 25,000 MTCO₂e/yr (CARB 2012).

The project’s likelihood of operating the emergency backup generators for unplanned circumstances or emergency purposes is low and, if such operation did occur, it would be infrequent and of short duration. Data from BAAQMD as provided for a previous similar project (e.g. the CA3 Data Center project) reviewed the durations of runtimes for data centers that initiated operation of diesel engines for “non-testing/non-maintenance” purposes (BAAQMD 2021). Analysis of BAAQMD’s review of diesel engine use shows that the overall number of hours of operation for the facilities in the review that did run (which was less than half of them) was 0.07 percent of the available time over the 13-month period, which included the rare heat storm events in 2020 and is the only period for which data are available to staff. The average runtime for each event in BAAQMD’s review was approximately 5.0 hours. Staff concludes the GHG emissions of the emergency backup generators during unplanned circumstances or emergency purposes would not add significantly to the GHG emissions estimated for readiness testing and maintenance. Thus, 34 hours of emergency backup generator operation per year is an appropriate estimate of operational time to accommodate both readiness testing and maintenance and emergency operation for any given year, even if ultra-low sulfur diesel is used during short emergency operation durations in the event of supply challenges or disruption in obtaining renewable diesel.

The applicant proposed to use renewable diesel for 100 percent of the total energy use by the emergency backup generators, and only use ultra-low sulfur diesel as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. Staff agrees that this would be beneficial because the use of renewable diesel would reduce carbon dioxide emissions when compared with the emissions attributable to an equivalent supply of petroleum diesel. The applicant shall perform any source test of the emergency backup generators using renewable diesel if required by the BAAQMD. Staff proposes to incorporate this applicant proposed mitigation measure as **GHG-1**.

With the implementation of mitigation measure **GHG-1**, the impact of GHG emissions from the project's stationary sources would be less than significant. In addition, as discussed below, with the implementation of **GHG-1**, the project's stationary sources would not conflict with plans, policies, or regulations adopted to achieve long-term GHG emissions reduction goals.

ii. Indirect and Non-Stationary Sources Emissions

Maximum GHG emissions from indirect and non-stationary sources (i.e., energy use, mobile sources and building operation) are provided in **Table 5.8-2**.

Project Electricity Usage. **Table 5.8-2** shows the indirect GHG emissions attributed to electricity use. It also shows the worst-case GHG emissions due to electricity use, which would be during full build-out operation. The primary function of the project is to house computer servers, which require electricity and cooling 24 hours a day to operate. Annual GHG emissions associated with electricity usage are the product of the maximum estimated annual electricity usage and the utility-specific carbon intensity factor, which depends on the utility's portfolio of power generation sources. The projected maximum demand for the project is 92 MW. After full build-out, estimated worst-case energy use from the project's activities would be up to 858,480 MWh/year (DayZen 2024b, pg. 7). Actual electricity usage in any year would be lower than this level.

Electrical service would be provided by the Pittsburg Power Company (PPC) over the PG&E transmission system. For electricity supplied to PG&E's customers from the grid, PG&E bears the GHG emissions compliance obligation under the cap-and-trade program. For this project, the electricity supply would be procured by the PPC and delivered by PG&E, which is subject to CARB's cap-and-trade program requirements and the RPS requirements. The applicant forecasted GHG emissions based on PG&E's carbon intensity (DayZen 2024b, Table 15) and did not provide a forecast of the carbon intensity of electricity supplied by the PPC. Based on the PG&E supply, the project would indirectly emit a significant amount of GHGs as a result of its electricity use. As with all load serving entities in California, the carbon intensity factor would continue to change as the power mix gradually increases the use of renewable resources to achieve California's GHG and renewable energy goals.

Actual GHG emissions associated with electricity use at the project would depend on the mix of resources in the electricity supply and the level of actual electricity use. The PG&E annual average emission factor would be required to track downward towards “zero net” with the implementation of state and local measures to reduce GHG emissions associated with electricity production and California’s fuels. The applicant proposed to participate in PG&E’s Renewable Energy Program or other renewable energy program that accomplishes the same objective as the PG&E Renewable Energy Program for 100 percent carbon-free electricity, which would allow the project to avoid all greenhouse gas emissions related to electricity usage. Staff proposes to incorporate this applicant proposed mitigation measure as **GHG-2** and to modify it to allow the applicant to use carbon-free power procured by the PPC. With the implementation of mitigation measure **GHG-2**, the project’s electricity use would not impede the attainment of the state’s GHG emissions reduction goals.

Project Mobile Emissions Sources. Table 5.8-2 shows the applicant’s estimated annual GHG emissions from mobile emissions sources. Trip rates for land use types are default values obtained from CalEEMod, and the project land uses would generate up to 463 trips per day during operations (DayZen 2024b, p. 7). The emissions estimate did not account for the net change in trips at the site associated with the existing land use. However, the applicant conservatively estimated the GHG emissions based on 463 trips per day for the project.

Project Water Consumption and Waste Generation. Table 5.8-2 shows the estimated annual GHG emissions from water consumption and waste generation. Water consumption results in indirect emissions from electricity usage for water conveyance and wastewater treatment. Daily operations at the project would also generate solid waste, which results in fugitive GHG emissions during waste decomposition at the landfill.

Refrigerant Use. The project would use refrigerants in 72 air-cooled chillers (DayZen 2024a). The refrigerant used in the air-cooled chillers proposed would be R-513a. The applicant estimates a 1 percent annual refrigerant loss a year. Each chiller unit is charged with 692 lbs of R-513a. The applicant estimated a total of 498 lbs of refrigerant would be lost in a year for all (72) of the chiller units for the whole project (DayZen 2024a, p. 4.8-10, Table 4.8-3). Staff used a GWP of 629.76 for R-513a to estimate the CO₂-equivalent of about 142 MTCO₂e annually due to refrigerant loss.

Sulfur Hexafluoride Leakage. SF₆ would be used in the proposed breakers and switchgear. Each breaker and switchgear would contain approximately 68 lbs of SF₆, for a total of 544 lbs. The applicant estimated that the emissions of SF₆ due to leakage would be 2.72 lbs/yr at most assuming a leakage rate of 0.5 percent for the six switchyard circuit breakers and two substation switchgears (DayZen 2024c, Response to Data Request GHG-2). Staff used a GWP of 22,800 to estimate the CO₂-equivalent of 2.72 lbs/yr of SF₆ to be about 28 MTCO₂e/yr (**Table 5.8-2**).

TABLE 5.8-2 MAXIMUM GHG EMISSIONS FROM ENERGY USE, MOBILE SOURCES, AND BUILDING OPERATION DURING PROJECT OPERATION

Source	Annual Emissions (MTCO ₂ e/yr)
Energy Use ^a	80,216
Mobile Sources ^b	433
Area Sources ^c	7.0
Water Use ^d	33
Waste Generation ^e	183
Cooling System R-513a Leakage ^f	142
Sulfur Hexafluoride (SF ₆) Leakage	28
Total	81,042

Sources: DayZen 2024a, DayZen 2024b, DayZen2024c, CEC staff analysis.

Notes:

^a Based on PG&E carbon intensity factor of 206 lbsCO₂e/MWh for the online year of 2027 from CalEEMod v. 2022.1 and a 98 MW rating for 8,760 operating hours/year. However, with the implementation of mitigation measure **GHG-2**, the project would avoid all greenhouse gas emissions related to electricity usage.

^b Trip rates for land use types are default values obtained from CalEEMod.

^c Operational emissions estimated using CalEEMod.

^d Annual GHG emissions associated with water usage were based on an estimated annual water usage of 21,390,154 gallons per year.

^e Annual GHG emissions associated with solid waste generation estimated using CalEEMod.

^f Staff estimated GHG emissions from refrigerant leakage based on the leakage rate of 1 percent per year and a GWP of 629.76 for R-513a.

Summary of Indirect and Non-stationary GHG Emissions. As shown in **Table 5.8-2**, operation of the project is estimated to generate 81,042 MTCO₂e/yr from maximum possible electricity use and other non-stationary sources. However, this does not include efficiency measures that would be pursued as part of the project, nor does it reflect implementation of state and local measures to reduce GHG emissions associated with electricity production and California's fuels. For example, programs to implement SB 350 and SB 100 would continue to promote renewable resources in the power mix and ensure the ongoing substantial reductions in GHG emissions from electricity generation. In addition, with the implementation of mitigation measure **GHG-2**, the applicant would participate in PG&E's Renewable Energy Program or other renewable energy program that accomplishes the same objective as the PG&E Renewable Energy Program for 100 percent carbon-free electricity. Therefore, with the implementation of mitigation measure **GHG-2**, the GHG impacts from the project's electricity use would be less than significant.

Conclusion

Less Than Significant with Mitigation Incorporated. The quantity of GHG emissions caused by the proposed stationary sources would not exceed the quantitative threshold of 10,000 MTCO₂e/yr and would not make a cumulatively considerable contribution to global climate change. The quantity of GHG emissions caused by indirect and non-stationary sources would not be "cumulatively considerable" because mitigation elements contained in **GHG-1** and **GHG-2** would ensure the total emissions profile of the project would be less than significant.

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction

Less Than Significant Impact. The project's short-term construction GHG emissions would not interfere with the State's ability to achieve long-term GHG emissions reduction goals. As mentioned above, the project would implement BMPs, such as properly tune and maintain construction equipment and limit idling, as specified in mitigation measure **AQ-1**, which would reduce construction-related GHG emissions. The vehicles and fuel supplies used during construction of the project are required to comply with the applicable GHG reduction programs for mobile sources and suppliers of transportation fuels. The project would conform to relevant programs and recommended actions detailed in CARB's scoping plan. Similarly, the project components would not conflict with regulations adopted to achieve the goals of CARB's scoping plan. The project would be consistent with the City of Pittsburg General Plan 2040 GHG Reduction Policies 7-P-3.6 (encourage bicycle facilities and alternative transportation facilities to be provided in new developments), 7-A-1.b (consider project design modifications to reduce VMTs), and 7-A-2.k (encourage developers to provide alternative transportation infrastructure) (DayZen 2024a, Table 4.8-4). The project would not conflict with the measures, policies, and strategies outlined in the Contra Costa County 2024 CAAP, including TR-1: Improve the viability of walking, biking, zero emission commuting, and using public transit for travel within, to, and from the county. The project would also comply with Plan Bay Area 2040 and would be required to implement transportation demand management measures to reduce vehicle trips and VMT would not contribute to a substantial increase in passenger vehicle travel in the region (DayZen 2024a, pg. 4-8-12).

Operation and Maintenance

Less Than Significant with Mitigation Incorporated. The project's GHG emissions related to operation and maintenance would be caused by the combustion of diesel fuel in the emergency backup generator engines and other routine operational activities (including energy use, mobile sources, and building operation).

i. Direct Project Stationary Combustion Sources

The direct project stationary combustion sources are the emergency backup generator engines.

As discussed under Regulatory Background above, California has set ambitious 2030, 2045, and 2050 GHG emissions reduction goals. Because of these goals, staff concludes that the identified methods of carbon reduction contained in **GHG-1** and **GHG-2** would be necessary to ensure the project's GHG emissions are less than significant.

SB 100 established a landmark policy requiring renewable energy and zero-carbon resources supply 100 percent of electric retail sales to end-use customers by 2045. While the project is not directly required to comply with the SB 100 provisions, it is technically a generator of electricity and, therefore, it is reasonable to apply the GHG emissions reduction goal to the project. Mitigation measure **GHG-1** would ensure the applicant uses renewable diesel for 100 percent of total energy use by the gensets, and only use ultra-low sulfur diesel as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. The mitigation would also require annually reporting the status of procuring and using renewable diesel. With implementation of mitigation measure **GHG-1**, the project's stationary sources would use renewable diesel to ensure that the operation of the gensets would not hinder California's efforts to achieve the statewide 2045 GHG emissions reduction goal.

With mitigation measure **GHG-1**, the direct project stationary combustion sources (i.e. emergency backup generator engines) would also be consistent with BAAQMD's Bay Area 2017 Clean Air Plan measure to decarbonize Electricity Generation (EN1).

In 2018, the Contra Costa County Board of Supervisors became signatories to the BAAQMD's Diesel Free by '33 initiative. However, the CEC has concluded that Diesel Free by '33 is not an applicable GHG emissions reduction strategy, program, or law that facilities must comply with. Nevertheless, it is a regional goal to reduce petroleum-based diesel fuel emissions in communities.

ii. Indirect and Non-Stationary Sources Emissions

The project's indirect and non-stationary sources emissions include those from energy use, mobile sources and building operation.

The project's GHG emissions are predominantly from electricity usage. Multiple measures contained in CARB's scoping plan address GHG emissions from energy use. For example, CARB's cap-and-trade program, through the regulation of upstream electricity producers, would account for GHG emissions in the project's power mix and requires these emissions to be reduced by the amount needed to achieve the statewide 2030 GHG emissions reduction goal. Electricity sources and suppliers used by the project must comply with the RPS and cap-and-trade program requirements. This, however, is not to say that new large consumers of electricity should not also be responsible for the GHG emissions resulting from their electricity use.

While PG&E itself is obligated to achieve SB 100 targets, it is not sufficient to point to PG&E's obligation to conclude the project's indirect emissions from electricity use are less than significant because the project would present such a large, single potential increase in load of up to 92 MW. The more electricity demand added to the grid, the harder it becomes to meet long-term GHG emissions reduction goals. The higher the electricity demand, the more challenging it becomes to achieve long-term GHG emissions reduction goals. Transmission resources are limited, and renewable imports are decreasing as other states set their own GHG emissions reduction goals. While

adding renewable generation is preferable to fossil-fueled generation, it is not without potential environmental impacts. Asking all load-serving entity customers to share the costs of greening additional demand from large commercial customers raises equity concerns. Numerous data centers are being proposed in PG&E territory, with several already under construction or about to start. Without a requirement that these data center facilities bear responsibility for ensuring that their electricity use would not impede the attainment of the state's GHG emissions reduction goals, including SB 100, it is unclear how the state is going to make the increasingly steep reductions needed to avert the most catastrophic climate change scenarios. The applicant proposed to participate in the PG&E Renewable Energy Program (i.e., 100 percent carbon-free electricity) or participate in a program to purchase 100 percent renewable electricity or purchase renewable energy credits or similar instruments that accomplish the same goals of 100 percent carbon-free electricity. Therefore, to conclude the project would not impede the attainment of the state's GHG emissions reduction goals, staff recommends the implementation of mitigation measure **GHG-2**, which requires the project applicant to participate in PG&E Renewable Energy Program or other renewable energy program that accomplishes the same objective as PG&E Renewable Energy Program for 100 percent carbon-free electricity or purchase renewable energy credits or similar instruments that accomplish the same goals of 100 percent carbon-free electricity.

Other project activities, such as mobile sources and building operation, would be similar to those of other commercial or industrial projects subject to development review by the City. The project would comply with all applicable city and state green building standards measures, including Cal. Code Regs., Tit. 24, Part 6, baseline standard requirements for energy efficiency, based on the 2019 Energy Efficiency Standards requirements, and the 2022 California Green Building Standards Code, commonly referred to as CALGreen (Cal. Code Regs., Tit. 24, Part 11).

The applicant would use a low GWP refrigerant, R-513a, in the air-cooled chillers (DayZen 2024a, p.48-10). The use of the proposed low GWP refrigerant would be allowed under the HFC prohibition regulation and the HFC sale and distribution prohibition (SB 1206). The applicant would procure SF₆ in 2025 and anticipate its arrival onsite prior to the January 1, 2027 CARB SF₆ phase-out date for the proposed 245kV, 40kA rated GIE. In the unlikely event procurement is delayed, the applicant would comply with the phased-out regulatory framework (DayZen 2024c, Response to Data Request GHG-1).

With implementation of mitigation measures **GHG-1** and **GHG-2**, the operation of the project would not conflict with regulations adopted to achieve the goals of the scoping plan. Accordingly, the project's operational activities would not interfere with the state's ability to achieve long-term GHG emissions reduction goals.

BAAQMD's Bay Area 2017 Clean Air Plan (BAAQMD 2017) includes Energy and Climate Measure (ECM)-1 – Energy Efficiency. Due to the relatively high project electrical demand, energy efficiency measures are included in the design and operation of the

onsite electrical and mechanical systems, consistent with this measure. Mitigation measure **GHG-2** requires the project applicant to participate in PG&E Renewable Energy Program or other renewable energy program that accomplishes the same objective as PG&E Renewable Energy Program for 100 percent carbon-free electricity or purchase renewable energy credits or similar instruments that accomplish the same goals of 100 percent carbon-free electricity. These features would be consistent with BAAQMD’s Bay Area 2017 Clean Air Plan measure to Decarbonize Electricity Generation (EN1).

Under the BAAQMD’s 2022 CEQA thresholds of significance for land use projects, a CEQA lead agency can conclude that a project would not make a cumulatively considerable contribution to global climate change if the project is designed and built to be consistent with the requirements of either “Option A” or “Option B” of the BAAQMD thresholds (BAAQMD 2022, p.2). In “Option A”, projects must include, at a minimum, the project design elements of buildings and transportation. In “Option B”, projects must be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b) (BAAQMD 2022, pg. 2). The proposed project would meet the climate impact thresholds adopted by the BAAQMD by incorporating design elements in “Option A” as recommended by the BAAQMD in 2022 (BAAQMD 2022). The City has not yet adopted “a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b)”; and therefore, “Option B” of the BAAQMD climate impact thresholds is not available for this project (DayZen 2024a, pp. 4.8-5 and 4.8-8).

Discussions of the project’s consistency with BAAQMD design elements for land use projects are provided below in **Table 5.8-3**. Under the BAAQMD’s 2022 CEQA thresholds of significance for land use projects “Option A” (BAAQMD 2022, p.2), GHG impacts from indirect and non-stationary emissions sources of the project would be considered to have a less-than-significant impact because the project would be consistent with the building and transportation requirements under “Option A”.

TABLE 5.8-3 CONSISTENCY WITH BAAQMD DESIGN ELEMENTS FOR LAND USE PROJECTS

Buildings	
a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).	Consistent. The project would not include natural gas appliances or natural gas plumbing.
b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.	Consistent. As described in further detail in Section 5.6, Energy and Energy Resources , the project would not result in any wasteful, inefficient, or unnecessary energy usage. The project would be built to CalGreen standards with emergency diesel generators fueled by renewable diesel and only operated on a limited basis for maintenance, testing and emergency operation as required to ensure reliability and data security requirements. In addition the Applicant has proposed MM GHG-2 which decreases the net indirect GHG emissions from Project electricity use to zero.

TABLE 5.8-3 CONSISTENCY WITH BAAQMD DESIGN ELEMENTS FOR LAND USE PROJECTS

Transportation

a. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA: i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. Retail projects: no net increase in existing VMT	Consistent. As described in further detail in Section 5.17, Transportation, project generated VMT would be 15 percent below the countywide average with implementation of Transportation Demand Management (TDM) measures included in the project.
b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.	Consistent. The applicant commits to working with the City to include the necessary electric vehicle parking spaces to comply with the requirements of CALGreen Tier 2.

Source: DayZen 2024a, Table 4.8-1

Plan Bay Area 2050. Metropolitan Transportation Commission (MTC) and ABAG developed a Sustainable Communities Strategy (SCS) with the adopted Plan Bay Area 2050 to achieve the Bay Area's regional GHG emissions reduction target. Plan Bay Area 2050 sets a 20 percent GHG emissions reduction per capita target from passenger vehicles by 2035 when compared to the project 2005 emissions. The applicant proposes to implement a Transportation Demand Management (TDM) program to reduce vehicle trips and vehicle miles travelled (VMT) and thus would not contribute to a substantial increase in passenger vehicle travel within the region (see **Section 5.17, Transportation** for more information).

Conclusion

Less Than Significant with Mitigation Incorporated. Under the BAAQMD's 2022 CEQA thresholds of significance for land use projects, a CEQA lead agency can conclude that a project would not make a cumulatively considerable contribution to global climate change if the project is designed and built to be consistent with the requirements of either Option A or Option B of the BAAQMD thresholds (BAAQMD 2022, p.2). In Option A, projects must include, at a minimum, the project design elements of buildings and transportation. In Option B, projects must be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b) (BAAQMD 2022, pg. 2). Because the proposed project, including mitigation, would incorporate design elements identified by the BAAQMD as climate impact thresholds, the project is consistent with the requirements of Option A, and would not make a cumulatively considerable contribution to global climate change. With the implementation of the efficiency measures to be incorporated into the project and mitigation measures **GHG-1**

and **GHG-2**, GHG emissions related to the project would be consistent with the applicable plans and policies adopted to reduce GHG emissions and would comply with all regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The potential for the project to conflict with an applicable plan, policy, or regulation for GHG emissions reductions would be less than significant.

5.8.3 Mitigation Measures

GHG-1: Use renewable diesel fuel. The applicant shall use renewable diesel for 100 percent of total energy use by the emergency backup generators and only use ultra-low sulfur diesel (ULSD) as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. The applicant shall provide documentation of renewable diesel supply challenges or disruptions to the director, or director's designee, of the City of Pittsburg Community and Economic Development Department within 10 calendar days of occurrence and applicant demonstrate a good faith effort to comply with the requirement and that compliance is not practicable. The applicant shall provide an annual report of the status of procuring and using renewable diesel to the director, or director's designee, of the City of Pittsburg Community and Economic Development Department demonstrating compliance with the mitigation measure.

GHG-2: Procure carbon-free electricity supply. The applicant shall participate in PG&E's Renewable Energy Program or other renewable energy program that accomplishes the same objective as the PG&E Renewable Energy Program for 100 percent carbon-free electricity, or enter into agreement with the Pittsburg Power Company (PPC) to procure 100 percent carbon-free electricity on behalf of the project, or purchase renewable energy credits or similar instruments that accomplish the same goals of 100 percent carbon-free electricity. During operation, the applicant shall provide documentation to the director, or director's designee, of the City of Pittsburg Community and Economic Development Department of initial enrollment and shall submit annual reporting to the City documenting either continued participation in PG&E's Renewable Energy Program or documentation that alternative measures continue to provide 100 percent carbon-free electricity as verified by an independent third-party auditor specializing in greenhouse gas emissions.

5.8.4 References

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5.9 Hazards and Hazardous Materials

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to hazards and hazardous materials. The term "hazardous materials" includes both hazardous substances and hazardous waste.

HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project				
a. create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss,	☐	☐	☐	☒

HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project injury or death involving wildland fires?				

Environmental checklist established by CEQA Guidelines, Appendix G, hazards and hazardous materials.

5.9.1 Environmental Setting

Hazardous Waste and Hazardous Substances Sites

Existing and past land use activities are commonly used to identify sites or areas where hazardous materials may have been stored or used, or where potential environmental contamination may exist. For example, many historic and current industrial sites have soil or groundwater contaminated by hazardous substances. Other hazardous materials sources include leaking underground fuel tanks in commercial and rural areas, contaminated surface runoff from polluted sites, and contaminated groundwater plumes. Current and former agricultural properties commonly have herbicide, pesticide, and/or fumigant soil contamination.

The project site is located within the City of Pittsburg in Contra Costa County in an urban environment consisting of a mix of residential and open space uses. The project site is generally vacant with features in the northern portion associated with the golf course that formerly occupied the site (Delta View Golf Course, 1953 to 2018). Features include paved parking areas, foundation elements of former structures, depressed areas (former ponds), and a paved road that leads south to an aboveground water tank (and auxiliary building) located near the Contra Costa Canal at the southern boundary of the project site (the canal is outside of the project limits). The area north of the project site includes the Delta de Anza Regional Trail and existing residential development. The project site is bounded to the east by a PG&E transmission right-of-way. The Former Delta View Golf Course extended south and west of the project site. The Contra Costa Canal flows northeast to southwest through the center of the project site.

The project area was used for agricultural purposes beginning in at least 1937, when the northern portion of the project site showed signs of tilling. Starting around 1939, the Contra Costa Canal was constructed and bifurcated the northern third of the project site, while the southeastern corner was developed with rural residences. The project site was mapped as a shooting range of the former U.S. Army Camp Stoneman from 1942 to 1954. By 1953, the project site was developed as a golf course. By 1993, ponds and water features were constructed in the northwestern and central portions of the golf course. In 2018, the Former Delta View Golf Course ceased operation. The project site remained relatively unchanged through 2023 (DayZen LLC 2024a).

Previous Environmental Investigations

WSP USA Inc. (WSP) completed a Phase I Environmental Site Assessment (ESA) in 2023 and a Phase I ESA Update in 2024 to identify Recognized Environmental Conditions (RECs), as defined in the American Society for Testing and Materials (ASTM) Standard Practice E1527-21. The following agencies were contacted regarding files available for the project site: City of Pittsburg, Bay Area Air Quality Management District (BAAQMD), Contra Costa County Fire Protection District (CCCFFPD), Contra Costa Hazardous Materials Program (CCCCHMP), Contra Costa Health Services, California EPA Air Resources Board, California Department of Pesticide Regulation, California Office of Environmental Health Hazard Assessment (OEHHA), and United States Army Corps of Engineers (USACE). The following online databases were reviewed: State Water Resources Control Board's (SWRCB) GeoTracker and California Department of Toxic Substance Control's (DTSC) EnviroStor databases. Additionally, a regulatory database search was conducted by Environmental Data Resources, Inc. (EDR) (DayZen LLC 2024a).

The project site is associated with hazardous materials and a known petroleum release, summarized below, however no known current underground storage tanks (USTs) or aboveground storage tanks (ASTs) are identified on the project site (the existing aboveground water tank does not meet the definition of an AST). Regulatory databases associated with the project site are summarized below.

- One former UST was discovered and removed on the project site in 1994. The 1,100-gallon gasoline UST was reported as a leaking underground storage tank (LUST) case (DayZen LLC 2024a). This LUST is listed on the hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List). A closure letter from the San Francisco Bay Region Regional Water Quality Control Board (SFB RWQCB), dated July 7, 1977, and available on GeoTracker, includes a site summary that states, "Extensive excavation (approx. 40 feet X 40 feet, 23-40 feet deep) removed substantially all soil impacted. Isolated areas of impacted soil remain in the sidewalls up to 940 ppm of the Total Petroleum Hydrocarbons Gasoline Range (TPH-g). No groundwater encountered in excavation down to 40 feet below ground surface (bgs)." (SWRCB 2025). It should be noted that the remaining impact of 940 ppm TPH-g exceeds the current TPH-g environmental Screening Levels (ESL) for construction workers of 480 milligram/kilogram (mg/kg). For soil, units of mg/kg are interchangeable with ppm. However, the concentration is below the ESLs for commercial/industrial land use. Concentrations of volatile organic compounds (VOCs) were not provided. The Phase I ESA identified the former LUST as a historical REC for the project site.
- A California Environmental Reporting System (CERS) listing indicates that one 1,000-gallon underground storage tank (UST), containing regular unleaded motor vehicle fuel, was identified for the facility. The "active date" was provided as June 20, 1988. While no additional information was provided, it is possible that this UST is the same as the one removed in 1994.

- A Contra Costa County listing indicates that the golf course was associated with a hazardous material business plan and described as generating less than 5 tons of hazardous waste per year. However, details regarding hazardous material type, usage, storage location etc., were not provided.
- A California Hazardous Material Incident Reporting System (CHMIRS) listing indicates that a power pole was down and approximately 75 gallons of transformer oil was spilled and cleaned up within two days. The spill did not contain polychlorinated biphenyls (PCBs).
- A Formerly Used Defense Sites (FUDS) listing shows that the project site was a portion of the former U.S. Army Camp Stoneman; specifically, a former Small Arms Range was described as overlapping the project site. The Camp Stoneman 2023 Management Action Plan (MAP) indicates that a site inspection work plan for the "small arms range and impact area" was completed in 2006 and sampling occurred in 2009. Sample maps weren't provided in the MAP, but a summary of soil sample results states that, "...surface soil samples contained metals above ecological screening values, but no ambient samples were collected so the detected concentrations could be within the range of naturally occurring concentrations. The Site Investigation (SI) Report recommended further investigation for Munitions and Explosives of Concern (MEC) and/or Munitions Constituents (MC) of significant portions of the project area, and for additional areas outside the current Munitions Response Site (MRS) but within the FUDS. However, based on SI results, the USACE District does not believe that there is an unacceptable risk from past Department of Defense (DoD) military activities at the former Camp Stoneman and has prepared Department of Defense Action Indicated (NDAI) documentation" (DayZen LLC 2024a). The MAP indicates that Camp Stoneman was declared no NDAI in 2010 and DTSC concurred with NDAI for all of the former Camp Stoneman related areas used by the military.

Regulatory databases identified for adjacent sites are summarized below; it is unlikely that the below-stated facilities pose an environmental risk to the project site.

- T-Mobile West, LLC and AT&T Mobility USID50647 have the same address as the project site but are located immediately east of the project site boundary (within the overhead powerline alignment).
 - T-Mobile West, LLC is described as storing/using between 0 and 2599 cubic feet of hydrogen gas; the start date and most recent inspection are listed as December 5, 2016, and May 11, 2023, respectively.
 - AT&T Mobility USID50647 is described as storing/using between 120 and 599 gallons of diesel fuel; the start date and most recent inspection are listed as November 18, 2022, and August 8, 2025, respectively.
- American Civil Constructors West Coast, 2220 Golf Club Road (residential property located adjacent to the project site). This facility is registered as a Resource Conservation and Recovery Act (RCRA) waste handler with no violations or evaluation records found.

- Rancho Medanos Middle School/Rancho Medanos Junior High School/Range Road Middle School Site, 2301 Range Road (0.5 miles north of the project site). This site was under investigation as part of the former Camp Stoneman and it was part of the Small Arms Ranges area of interest (AOI). The site was investigated for possible elevated concentrations of metals and ordnance. No contaminants of potential concern (COPCs) are identified in the investigation of shallow soils. Metals concentrations detected in the site soil samples are within the ranges of local background concentrations. No further environmental investigations were recommended.
- Stanley Works/Acme Steel/Cold Metal Products, 855 North Parkside Drive (1 mile north of the project site). Three releases were reported at the site. Groundwater with uses other than drinking water and soil were the potential media of concern. Petroleum products, fuels, oils, and VOCs were identified as COPCs. Xylene contamination was discovered during UST closure in 1987. VOCs contamination was associated with a septic system removed in 1992. A petroleum release from an adjacent property was discovered in 2004. Remedial actions were completed for all three cases. Deed restriction, land use restriction, and environmental covenants were implemented at the site.
- Kevin Albertsen, 2181 Dover Way (0.25 miles northeast of the project site). This individual is registered as a RCRA waste handler with no violation or evaluation records found.
- Pittsburg Water Treatment Plant/Pittsburg Water Filtration Plant/City of Pittsburg Public Services, 300 Olympia Drive (0.25 miles southeast of the project site). This site is a water treatment plant owned and operated by the City of Pittsburg. Five diesel USTs with 1,500-gallon, 2,385-gallon, 290-gallon, and 280-gallon capacities are associated with the site. The facility is also registered as a hazardous waste generator and handler and a wastewater discharger. A stormwater construction permit was active from 2014 to 2016 at the facility. Several administrative violations existed regarding USTs and hazardous materials and the facility returned to compliance within a few months. There is also a violation related to stormwater/wastewater discharge pH in 2007.
- Veronica Alston, 37 Orinda Circle (0.5 miles east of the project site). This individual is registered as a RCRA waste handler with no violation or evaluation records found.
- Camp Stoneman IRMMRP, Railroad Avenue (0.5 miles east of the project site). Former Camp Stoneman is a U.S. Army staging area and training facility. Thirteen AOIs were identified at the site in 2005 for potential environmental concern as a result of previous Department of Defense (DoD) occupancy. Multiple investigations and assessments were carried out for the site. Four of the AOIs were near the project site to the north and were deferred to the Military Munitions Response Program (MMRP) with succeeding records. A finding of NDAI for Hazardous, Toxic, and Radiological Waste (HTRW) was issued from USACE to the SFB RWQCB in 2010.

- Service Station - SAP 135771, 3737 Railroad (0.75 miles east of the project site). A leak of a former UST was discovered during closure in 1989. Soil was the potential media of concern and gasoline was the potential contaminant of concern. The case was closed in 2004 as groundwater was found not to be impacted by the release in the Groundwater Assessment Program initiated by Shell Oil Products US. Several violations related to business administration and equipment maintenance existed for the facility, but it returned to compliance for all of them thereafter.

The WSP 2023 and 2024 Phase I ESA reports did not identify evidence of Recognized Environmental Conditions (RECs), Controlled RECs (CRECs), or de minimis conditions in connection with the project site (DayZen LLC 2024b, DayZen LLC 2024c). WSP identified the following Historical Recognized Environmental Condition (HREC) mentioned above and Business Recognized Environmental Risk (BREC) associated with the project site below. These items were not considered a REC.

- Prior environmental reports on the former U.S. Army Camp Stoneman, established in 1942 and deactivated in 1954, identified the former Small Arms Ranges to be overlapping with the project site. Spent bullets and mortar rounds have been found in close proximity to the project site. Historical use of the subject property as a shooting range may have incurred metal impacts on soil, soil vapor, and groundwater. Military bases and defense sites are generally associated with releases of hazardous substances and pollutants, discarded munitions, munitions constituents, and unexploded ordnance. However, a soil investigation conducted 0.5 miles north of the project site in 2006 identified no potential contaminants of concern. No unexploded ordnances have been found at the project site, including more recent land use activities related to the golf course development.

The 2023 Phase I ESA recommended further investigation to appropriate excavation depths prior to any onsite or offsite soil disturbance, and comparison of soil analytical results to the 2019 Soil Tier 1 ESLs from the SFB RWQCB as well as background concentrations of several contaminants. The 2024 Phase I ESA Update did not recommend any further environmental studies.

Soil Sampling

The 2023 Phase I ESA included limited soil sampling to evaluate the potential for impact from historical agricultural chemical use and past operations of the Former Delta View Golf Course and Camp Stoneman, respectively. Samples were obtained from four locations distributed across the project site. At each location, soil was collected from the surface and from a depth of approximately 5 feet below ground surface using a hand auger. A total of eight soil samples were collected and analyzed for PCBs, organochlorine pesticides (OCPs), herbicides, TPH, and metals. WSP compared laboratory test results to corresponding SFB RWQCB ESLs for Direct Exposure Human Risk (SFB RWQCB, 2019 Rev.2) for Construction Worker: Any Land Use/Any Depth Soil Exposure, applicable to Cancer Risk and Non-Cancer Hazard. WSP compared laboratory test results to the most conservative ESL for each analyte. Reported metal concentrations in each sample were below the corresponding screening levels, except

for arsenic. Though arsenic was detected in all eight of the soil samples, with reported concentrations ranging from 3.1 to 6.2 mg/kg), concentrations are above the ESL of 0.98 mg/kg, but below the background concentration of 11 mg/kg for arsenic in the San Francisco Bay Area according to Duverge in 2011. Other metals, including antimony, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, silver, thallium, vanadium, and zinc were detected in multiple samples, and detections were reported below the corresponding ESL. Low levels of petroleum hydrocarbons were detected in three samples, with maximum concentrations of TPH-gasoline, TPH-diesel, and TPH-motor oil reported as 1.6 mg/kg, 2.5 mg/kg, and 10 mg/kg, each below respective ESLs.

Two OCP analytes, heptachlor and methoxychlor, reported trace detections and concentrations were below the laboratory reporting limit. Heptachlor was detected at a concentration of 0.93 micrograms per kilogram ($\mu\text{g/kg}$). Methoxychlor was detected at concentrations of 0.14 $\mu\text{g/kg}$ and 0.19 $\mu\text{g/kg}$. These detections were below the corresponding ESLs. PCBs and herbicides were not detected in soil samples. Sampling results did not find evidence of significant releases of metals, TPHs, pesticides, or herbicides. WSP concluded that there were no significant impacts from historical operations of the Former Delta View Golf Course and Camp Stoneman. Analyte concentrations are below current SFB RWQCB ESLs for commercial/industrial land use and construction worker exposure (2025).

Airports

The Military Ocean Terminal, Concord Helipad is located approximately 7 miles west of the project site. This airport is operated by the U.S. Army Surface Deployment and Distribution Command.

Schools

There is one school located within 0.25 miles of the project site. The closest school to the project site is Rancho Medanos Junior High School, which is approximately 0.2 miles north of the project site.

Emergency Evacuation Routes

The Contra Costa County Emergency Operations Plan and City of Pittsburg Emergency Operations Plan identify hazards and provide a risk assessment for the potential natural hazards, such as a flood, wildfire, or earthquake, that could impact the county and city, respectively. These plans do not provide specific mapping or delineation of emergency evacuation or access routes (Contra Costa County 2015, City of Pittsburg 2018).

Wildfire Hazards

The project would be located within Contra Costa County in the City of Pittsburg and fire protection is provided by the Contra Costa County Fire Protection District (CCCFPD).

The California Department of Forestry and Fire Protection (Cal Fire) identifies, and maps areas of significant fire hazards based on fuels, terrain, and other relevant factors. The maps identify this information as a series of Fire Hazard Severity Zones, which are progressively ranked in severity as un-zoned, moderate, high, and very high. State responsibility areas (SRAs) are locations where the State of California is responsible for wildland fire protection. Local responsibility areas (LRAs) are locations where the responding agency is the local county or city. LRA Fire Hazard Severity Zones (FHSZ) are mapped as either Very High Fire Hazard Severity Zones (VHFHSZ) or as Non-VHFHSZs. The Cal Fire maps for Contra Costa County indicate that the project site is located in an LRA (Cal Fire 2023). Within the LRA, the project site falls within an un-zoned FHSZ that indicates that the project site has a less than moderate susceptibility to wildland fires (Cal Fire 2025). The project site is within a fully urbanized area and is unlikely to be exposed to wildland fires. For more information on wildfire hazards, see **Section 5.19, Wildfire.**

Regulatory Background

Hazardous substances, hazardous materials and hazardous waste are defined by law to protect public health and the environment. Hazardous materials have certain chemical, physical, or infectious properties. Under federal and state laws, any material, including wastes, may be considered hazardous if it is specifically listed by statute as such or if it is toxic (causes adverse human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases). Hazardous substances are defined in the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) section 101(14), and also in state law in California Health and Safety Code section 78075. Hazardous waste is defined in Title 22, California Code of Regulations, sections 66260.10. and 66261.3. California Health and Safety Code section 25501, defines a hazardous material.

For this analysis, contaminated soil that is excavated from a site may be considered a hazardous waste (if it meets the criteria in California Code of Regulations, Title 22, sections 66260.10 and 66261.3) hazardous substance (if it meets the criteria in CERCLA or HSAA), or hazardous material (Health & Saf. Code, s 25501.) Remediation (cleanup and safe removal/disposal) may also be required under oversight of relevant regulatory agencies such as DTSC, RWQCB, Certified Unified Program Agency (CUPA) or US EPA. Cleanup requirements are determined on a case-by-case basis by the lead agency pursuant to applicable requirements.

Federal

Resource Conservation and Recovery Act. The Resource Conservation and Recovery Act (RCRA) (42 U.S.C. § 6901 et seq.) authorizes the EPA to control hazardous waste from “cradle to grave” (generation, transportation, treatment, storage, and disposal). The EPA approved California’s RCRA program, referred to as the Hazardous Waste Control Law (Health and Safety Code § 25100 et seq.) in 1992

chlorinated biphenyls (PCBs), asbestos-containing materials, lead-based paint, and petroleum.

Toxic Substances Control Act. The Toxic Substances Control Act (TSCA) (15 U.S.C. § 2601 et seq.) authorizes the EPA to require reporting, record-keeping, testing requirements, and restrictions related to chemical substances and/or mixtures. It also addresses production, importation, use, and disposal of specific chemicals, such as polychlorinated biphenyls (PCBs), asbestos-containing materials, lead-based paint, and petroleum.

Comprehensive Environmental Response, Compensation, and Liability Act. The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. § 9601 et seq), including the Superfund program, provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA also enabled the revision of the National Contingency Plan. The National Contingency Plan provided the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The National Contingency Plan also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.

Department of Transportation. The United States Department of Transportation (DOT) is the primary federal agency responsible for regulating the proper handling and storage of hazardous materials during transportation (49 C.F.R. §§ 171-177 and 350-399).

Hazardous Materials Transportation Act. DOT, in conjunction with the EPA, is responsible for enforcement and implementation of federal laws and regulations pertaining to safe storage and transportation of hazardous materials under the Hazardous Materials Transportation Act (HMTA) 49 U.S.C. 5101-5128. DOT regulations implementing the Act (49 CFR parts 171-180), regulate the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials. This also includes regulations relevant to the storage of explosives, as well as the packaging, labeling, materials compatibility, driver qualifiers, and safety of transported explosives.

Clean Water Act. The Clean Water Act (CWA) is the principal federal statute protecting navigable waters and adjoining shorelines from pollution. The law was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. Since its enactment, the CWA has formed the foundation for regulations detailing specific requirements for pollution prevention and response measures. The EPA implements provisions of the CWA through a variety of regulations, including the National Contingency Plan, and the Oil Pollution and Prevention Regulations. Implementation of the CWA is the responsibility of each state.

As part of the CWA, the EPA oversees and enforces the Oil Pollution Prevention regulation (Title 40, CFR, Part 112), which is often referred to as the Spill Prevention, Control, and Countermeasure (SPCC) "SPCC rule" because the regulations describe the requirements for facilities to prepare, amend, and implement SPCC Plans. A facility is subject to SPCC regulations if the total above ground oil storage capacity exceeds 1,320 gallons, or the underground oil storage capacity exceeds 42,000 gallons, and if, due to its location, the facility could reasonably be expected to discharge oil into or upon the "navigable waters" of the United States. The rule specifies that proactive, and not passive, measures be used to respond to oil discharges.

National Pollutant Discharge Elimination System (NPDES). The NPDES permit program, created in 1972 by the CWA, helps address water pollution by regulating point sources that discharge pollutants to waters of the United States. The permit provides two levels of control: technology-based limits and water quality-based limits (if technology-based limits are not sufficient to provide protection of the water body). Under the CWA, the U.S. EPA may authorize state, tribal, and territorial governments to administer the NPDES permit program, enabling them to perform many of the permitting, administrative, and enforcement aspects of the NPDES program. In states authorized to implement CWA programs, the U.S. EPA retains oversight responsibilities. Within the state of California, the SWRCB issues both general permits and individual permits under the NPDES permit program.

State

California Environmental Protection Agency. The California Environmental Protection Agency (Cal EPA), created in 1991, unified California's environmental authority in a single cabinet-level agency and brought the California Air Resources Board (CARB), State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCBs), Integrated Waste Management Board (now Department of Resources Recycling and Recovery or CalRecycle), DTSC, Office of Environmental Health Hazard Assessment, and Department of Pesticide Regulation under one agency. These agencies under the Cal EPA "umbrella" provide protection of human health and the environment and ensure the coordinated deployment of state resources. Their mission is to restore, protect and enhance the environment, to ensure public health, environmental quality, and economic vitality.

The California Hazardous Waste Control Law. The California Hazardous Waste Control Law (HWCL) is the state law that implements and enforces federal hazardous waste law in California and directs DTSC to oversee and implement the state's hazardous waste program. The HWCL covers the entire management of hazardous waste, from hazardous waste generation to management, transportation, and ultimately disposal of waste into a state or federally authorized facility. DTSC administers the California Hazardous Waste Control Law. The HWCL, California Code of Regulations, title 22, Chapter 11, Appendix X, contains a list of 791 chemicals and 66 common names of waste. If the waste is listed or contains a listed chemical in Appendix X, it creates a presumption that the waste may be hazardous due to the presence of that

chemical. The HWCL also contains requirements for identifying, managing, storing, transporting and labeling hazardous wastes; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some hazardous wastes that cannot be disposed of in landfills.

The Carpenter-Presley-Tanner Hazardous Substances Account Act (HSAA).

The HSAA (Health and Safety Code, §78000 et seq.), authorizes DTSC to take response actions necessary (e.g., cleanup of a site) when there may be an imminent and substantial endangerment because of a release or threatened release of hazardous substances. The HSAA also authorizes DTSC to compel a responsible party to conduct response actions at the site and/or to pay for response actions conducted by DTSC. (Health & Saf. Code, § 78655.) The HSAA and its federal counterpart, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), authorize DTSC to recover all costs it incurs in response actions from responsible parties. (Health & Saf. Code, § 79650; 42 U.S.C. § 9607.)

Department of Toxic Substances Control. DTSC is a department within Cal EPA and is the primary agency in California that regulates the generation, transportation, treatment, storage and disposal of hazardous wastes. DTSC's responsibilities include delegated authority under the federal RCRA, California's HWCL, and state laws pertaining to hazardous waste, packaging and consumer products, as well as the management and disposal of universal wastes such as electronic waste. The HSAA also provides DTSC with general administrative responsibility for overseeing the state's responses to spills or releases of hazardous substances, and for hazardous waste disposal sites that pose a threat to public health or the environment. The HSAA provides DTSC with the authority, procedures, and standards to investigate, remove, and remediate contamination at sites; issue and enforce a removal or remedial action order to any responsible party; and impose administrative or civil penalties for noncompliance with an order. Federal and state laws also authorize DTSC to recover costs and expenses incurred by carrying out these activities.

California Occupational Safety and Health Administration. California Occupational Safety and Health Administration (Cal OSHA) is the primary agency responsible for worker safety related to the handling and use of chemicals in the workplace. Cal OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (Cal. Code Regs., Title 8, §§ 337340.). Regulations for worker safety and protection as related to exposure to asbestos and lead are included in California Code of Regulations, Title 8, Article 4, sections 1528-1537. Cal OSHA regulations also specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings (Cal. Code Regs., Title 13, §§ 1160-1167).

The Aboveground Petroleum Storage Act (APSA) Program. APSA requires tank facilities with an aggregate storage capacity of than 1,320 gallons or more of petroleum to develop and implement the federal Spill Prevention Control and Countermeasures

(SPCC) Plan requirements (CFR 2021). A tank facility is any tank or tanks that are aboveground, including connected piping, that contain petroleum and are used by an owner or operator at a single location or site, is in secondary containment, and it is used to hold petroleum (*See* Health & Safety Code, § 25270.2). CAL FIRE-Office of the State Fire Marshal (OSFM) is responsible for ensuring the implementation of the APSA element of the Unified Program. The CUPA (Santa Clara County Department of Environmental Health, Hazardous Materials Compliance Division) regulates businesses storing petroleum in aboveground containers or tanks (California Health & Safety Code, Chapter 6.67, §§ 25270-25270.13).

Porter-Cologne Water Quality Control Act. This state law provides a comprehensive water quality management system for the protection of California waters. The act designates the SWRCB as the ultimate authority over State water rights and water quality policy and also establishes nine RWQCBs to oversee water quality on a day-to-day basis at the local and regional level. The RWQCBs have the responsibility of granting NPDES permits and setting waste discharge requirements for stormwater runoff from construction sites.

Hazardous Materials Release Response Plans and Inventory Law. The California Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act, Health and Safety Code § 25500 et seq.) requires businesses that store or use hazardous materials to prepare a Hazardous Materials Business Plan (HMBP) and submit it to the CUPA. An HMBP includes details of a facility and business conducted at the site, an inventory of hazardous materials that are handled and stored on-site, an emergency response plan, and a safety and emergency response training program for new employees with an annual refresher course.

Department of California Highway Patrol. Department of California Highway Patrol is the primary agency responsible for enforcing the regulations related to the transport of hazardous materials on California roads and highways (Title 13, Cal. Code Regs., §§ 1160-1167).

California Department of Public Health (CDPH). Under Title 17, Public Health, Division 1, State Department of Health Services, Chapter 8 - Accreditation, Certification and Work Practices for Lead-Based Paint and Lead Hazards, the CDPH oversees the Lead Related Contractor (LRC) program certification requirements and work practice standards. LRC certification means that CDPH has evaluated and approved a person's qualifications, through the issuance of five different certificates, to perform lead-related construction work in residential and public buildings. CDPH evaluates applicants to make sure they have completed state-approved training and have relevant experience and education. The certifications are for Lead Inspector/Assessor, Lead Project Monitor, Lead Sampling Technician, Lead Supervisor, and Lead Worker. Certificates are granted to individuals, not to companies or businesses. The CDPH also provides guidelines and forms for required safe work practices related to lead hazards.

California Accidental Release Program. Under the California Accidental Release Program (CalARP) regulations, facilities that store extremely hazardous substances or regulated substances above the threshold quantities must register with the CalARP Program and submit a Risk Management Plan (RMP).

Local

Contra Costa County Health Services Hazardous Materials Department. Contra Costa County is the CUPA through contract with the state of California. Contra Costa County administers the CalARP Program and Industrial Safety Ordinances (ISO) by the County as well as the Hazardous Materials Business Plan, aboveground and underground storage tank programs.

Contra Costa County Ordinance Code 450-8. Contra Costa County adopted an ISO that establishes requirements for the safe handling, storage, and management of hazardous materials within the County. This ordinance sets standards to minimize the risk of releases, protect public health and safety, and ensure compliance with state and federal hazardous materials regulations. It also provides the framework for inspections, reporting, and enforcement related to hazardous materials management.

Contra Costa County Local Hazard Mitigation Plan. The plan includes a risk assessment that identifies natural hazards, human-caused, and technological hazards, and risks that can impact a community based on historical experience, estimates the potential frequency and magnitude of disasters, and assesses potential losses to life and property. The plan also includes developed mitigation goals and objectives as part of a strategy for mitigating hazard-related losses (Contra Costa County 2024).

Contra Costa County Emergency Operations Plan. The 2015 plan establishes the foundational policies and procedures that define how Contra Costa County would prepare for, respond to, recover from, and mitigate against natural or human-caused disasters. It provides a description of hazards in the county and of the emergency management organization and how it is activated. The plan does not include a list of evacuation routes.

Contra Costa County Hazardous Materials Area Plan. The 2009 plan is a dynamic document designed to protect human health and the environment through hazardous materials emergency planning and community right-to-know programs. The plan describes the overall hazardous materials emergency response organization within Contra Costa County, establishes the lines of authority and coordination for hazardous materials incidents affecting the County, and identifies the roles and responsibilities of local, state, and federal agencies necessary to minimize the impacts of such incidents.

City of Pittsburg Municipal Code. The City of Pittsburg Municipal Code contains the laws passed and enforced by the city (City of Pittsburg 2025).

City of Pittsburg Emergency Operations Plan. The 2018 plan establishes the foundational policies and procedures that define how the city of Pittsburg would prepare

for, respond to, recover from, and mitigate against natural or human-caused disasters. It provides a description of hazards in the city and of the emergency management organization and how it is activated. The plan does include a list of evacuation routes.

City of Pittsburg General Plan. Pittsburg 2040 General Plan (General Plan) includes policies applicable to all development projects in the city of Pittsburg. The following hazards and hazardous materials policies and actions are applicable to the proposed project:

Policy 11-P-1.1: Ensure Pittsburg is prepared to effectively respond to any emergency or disaster, including flooding, fire, hazardous material releases, and seismic activity, in cooperation with other public agencies and appropriate organizations.

Policy 11-P-1.2: Ensure emergency response equipment and personnel training are adequate to follow the procedures contained within the Emergency Operations Plan and Emergency Response and Emergency Operations Plan for a major earthquake, wildland fire, flood, or hazardous materials release event.

Policy 11-P-1.3: Locate new essential public facilities outside of high hazard areas, including high fire risk areas, special flood hazard areas, and areas at high risk for geologic or soil instability, to the extent feasible. Where it is not feasible to locate essential public facilities outside of high hazard areas, require site design, construction, and other methods to minimize damage.

Policy 11-P-1.5: Prepare and disseminate information to local residents, businesses, and schools about emergency preparedness, including for flooding, fire, hazardous material releases, and seismic activity, and evacuation routes.

Policy 11-P-1.8: Ensure that all areas of the city are accessible to emergency response providers. Keep emergency access routes free of traffic impediment.

Policy 11-P-5.1: Strictly regulate the production, use, storage, transport, and disposal of hazardous materials.

Policy 11-P-5.2: Require hazardous waste generated within the city to be disposed of in a safe manner, consistent with all applicable local, State, and Federal laws.

Policy 11-P-5.3: Continue to support and require compliance with Contra Costa County's Countywide Integrated Waste Management Plan as well as all of the Consolidated Unified Protection Agency (CUPA) program elements.

Policy 11-P-5.4: Support Contra Costa County in implementing the Hazardous Materials Area Plan (HMAP) to coordinate emergency response and hazardous materials incidents affecting the City.

Policy 11-P-5.5: Require compliance with the City's Hazardous Waste Management Plan (HWMP) in addressing the generation, transport, and disposal of hazardous waste in the city, from large and small generators.

Policy 11-P-5.6: Encourage and support as feasible the cleanup of contaminated sites during development and redevelopment projects

Action 11-A-5.a: Require that applications for discretionary development projects provide detailed information regarding the potential for the historical use of hazardous materials on the site, including information regarding the potential for past soil and/or groundwater contaminations. If warranted, identify and require mitigation measures to ensure the exposure to hazardous materials from historical uses has been mitigated to acceptable levels acceptable by the City and consistent with EPA and/or DTSC standards.

Action 11-A-5.b: Continue to review all new development projects expansions and projects requiring use permits for compliance with Municipal Code Chapter 18.84, Article VI, "Hazardous Materials," to addresses the use, handling, storage, and transport of hazardous materials and substances.

5.9.2 Environmental Impacts

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Construction

Less Than Significant Impact with Mitigation Incorporated. During the construction phase of the project, the only hazardous materials used would be paints, cleaners, solvents, gasoline, motor oil, welding gases, and lubricants. When not in use, any hazardous material would be stored in designated construction staging areas in compliance with local, state, and federal requirements. Any impacts resulting from spills or other accidental releases of these materials would be limited to the site due to the small quantities involved and their infrequent use. Temporary containment berms would also be used to help contain any spills during the construction of the project (DayZen LLC 2024c).

The former buildings on the project site have been demolished, and only remnant foundations and concrete slabs remain on the project site. There is a potential that lead or Lead-Based Paint (LBP) could be present and released by demolition activities, since the pre-existing structures were built prior to 1970. Existing regulations from Cal EPA, Cal OSHA, and CDPH regulate the handling and disposal of lead and LBP. However, there are no existing regulations that require testing for LBP in commercial buildings or residential structures. Since the former buildings have the potential for LBP, but testing is not required, staff recommends mitigation measure **HAZ-1** for testing and removal of LBP contaminated materials prior to any further ground disturbance. LBP contaminated materials shall be handled, transported, and disposed of per applicable local, state, and federal regulations. Therefore, the routine transport, use or disposal of hazardous materials during project demolition and construction would have a less than significant impact to the public or the environment through compliance with regulations and implementation of mitigation measure **HAZ-1**.

No fuel would be stored on-site for vehicle refueling. All refueling of construction vehicles would be off-site. Minor repairs of vehicles or equipment may occur on-site. For major repairs the equipment would be transported off-site to a repair facility (DayZenLLC 2024c).

During construction, the 37 diesel generator fuel tanks would have to be filled. The transportation of diesel fuel to the site would take several tanker truck trips. Deliveries of diesel fuel during the project's operation would be scheduled on an as-needed basis. Diesel fuel has a long history of being routinely transported and used as a common motor fuel. It is appropriate to rely upon the extensive regulatory program that applies to the shipment of hazardous materials on California highways and roads to ensure safe handling in general transportation (see Federal Hazardous Materials Transportation Law, 49 USC § 5101 et seq., DOT regulations 49 C.F.R. subpart H, §§ 172–700, and California Department of Motor Vehicles (DMV) regulations on hazardous cargo). Thus, the transportation of diesel fuel would pose a less than significant risk to the surrounding public.

Operation

Less Than Significant Impact. Project operation would include the use and storage of diesel fuel for the emergency operation, testing and maintenance of the backup generators. Minor amounts of hazardous materials could also be stored and used on-site for operation and maintenance of the data center and associated facilities. Additionally, hazardous materials located on site would be identified on the project's Hazardous Materials Business Plan. Renewable diesel fuel, with ultra-low sulfur diesel (USLD or conventional) as a backup fuel, would be used for routine maintenance and testing and during emergency operation of the generators.

Diesel fuel would be used during routine testing and maintenance, and emergency operation of the generators. BAAQMD's Authority to Construct and the California Air Resources Board's Airborne Toxic Control Measures (ATCM) limits each engine to no more than 50 hours annually for reliability purposes (i.e., testing and maintenance). Maintenance and testing of each of the generators are anticipated to be once a month and would occur at loads ranging from 25 to 100 percent (DayZenLLC 2024c). Each generator would be tested individually during monthly and annual testing. Generators would only be run simultaneously during an emergency utility outage. For each generator testing and maintenance would not exceed 34 run hours per year (DayZenLLC 2024a).

The Pittsburg Backup Generating Facilities (PBGF) would be an emergency backup generating facility with a generation capacity of up to 92 MW to support the need for the AVAIO Pittsburg Data Hub (PDH) to provide uninterruptible power supply for its tenant's servers. The PBGF would consist of 37, 3 MW diesel-fired backup generators arranged in a generation yard located on the west side of the PDH building. Thirty-six (36) of the generators would be dedicated to replacing the electricity needs of the data center and one (1) of the generators (house generator) would be used to support

general office loads along with building and life safety services in the case of a loss of utility power. The backup generators would use renewable diesel as its primary fuel when feasible and ultra-low sulfur diesel as fuel (<15 parts per million sulfur by weight) when renewable diesel is not readily available (DayZen LLC 2024a).

Each pair of generators (one top/one bottom) would have two tanks. The current configuration has a 9,800-gallon tank as the base for the bottom generator which would provide 48 hours' worth of fuel to both units. The top unit would have a 570-gallon free standing day tank that would be filled by the lower 48-hour tank. So, for every two generators there is 10,370 gallons of fuel. With 36 units, this would be 186,660 gallons of fuel for the stacked generators. In addition, the house generator would have a storage tank of approximately 5,200 gallons. Therefore, the estimate of total fuel storage capacity of all the generators combined would be 191,860 gallons (DayZen LLC 2024c).

Although diesel fuel would be stored on-site, the generators would only be filled to 95 percent capacity of its tank. The diesel fuel would be used during emergencies, testing, and maintenance. Each generator would run once a month for up to 15 minutes. Each generator would also be required to run for a total of four hours per year, under maximum load, for yearly testing purposes (DayZen LLC 2024a).

Projects with diesel-fired back up generators would use standard practice for fuel quality and maintenance of stored renewable and CARB diesel fuel. Standard practice includes that each engine would have a dual fuel filter system and that the fuel would be replenished after testing. The fuel water separators (a three-bank system) would be the primary fuel filter. The secondary fuel filter, installed just before the fuel would be injected into the engine, would filter the fuel down to particles less than five microns in size. Routine replacement of the engine dual fuel filters would reduce any effects of fuel degradation on engine components and operation. Waste fuel filters would be managed in compliance with HWCL. Commercial diesel fuels also contain biocides that prevent microbial growth and additives that help to stabilize the fuel for several months. Additionally, the diesel fuel would be replenished with fresh fuel when needed to maintain 24 hours of emergency electrical capacity for the PDH (DayZen LLC 2024a).

To comply with Tier 4 emissions standards, the diesel gensets would use selective catalytic reduction (SCR) that injects a liquid-reductant through a special catalyst into the exhaust stream of the diesel engine. The reductant source would be diesel exhaust fluid (DEF) which is a non-hazardous urea solution of 67.5 percent water and 32.5 percent automotive grade urea. Each genset enclosure is equipped with 250-gallons of DEF. The DEF consumption would vary depending upon the environment, operation, and duty cycle of equipment. On average, DEF consumption would be 3 percent to 5 percent of diesel fuel consumption. DEF will be stored in tanks located within each generator enclosure and fluid levels will be monitored and refilled as necessary (DayZen LLC 2024a).

Each generator unit and its integrated fuel tanks have been designed with double walls to meet APSA requirements and do not require secondary containment structures to be constructed. The interstitial space between the walls of each tank is continuously monitored electronically for the existence of liquids. This monitoring system is electronically linked to an audible and visual system that alerts personnel if a leak is detected (DayZen LLC 2024a). The above design features would ensure that the diesel fuel generators meet the secondary containment requirements in the APSA for the above ground petroleum storage tank program.

Diesel fuel delivery would be scheduled and provided on an as-needed basis in a compartmentalized tanker truck with a maximum capacity of approximately 17,500 gallons. Diesel fuel transport would comply with all appropriate regulations regarding transport of hazardous materials on California roads and highways. The tanker truck would park on the access road to the south of the generator yard and extend the fuel fill hose through one of the multiple hinged openings in the precast screen wall surrounding the generator equipment yard or via a centralized fueling station located on the exterior of the precast screen wall (DayZen LLC 2024a).

There are no loading/unloading racks or containment for re-fueling events; however, a spill catch basin would be located at each fill port for the generators. Storm drain inlets would be blocked off by the truck driver and/or facility staff during fueling events to prevent fuel from being released into the storm drain system in the event of spills. Additional measures, such as rubber pads, would be used to block storm sewer drains and prevent discharges from entering the storm drains during fueling events (DayZen LLC 2024a).

The generators are equipped with a tightly sealed main tank fill box and day tank fill box, both utilizing an overfill prevention valves integral to the generator assembly. Filling of the tanks would not be left unattended. The internal tanks within the generator assemblies are equipped with overflow prevention valves and catch basins sized for expected fuel capacity. Generators are on a continuous concrete platform in which minor spills related to filling can be contained and cleaned (DayZen LLC 2024c).

Any spills or overflow from filling the tanks would be addressed by the vendor company that supplies the fuel and fills the tanks. In addition to the vendor's actions and responsibilities, the facility would have spill kits readily available and worker training would be conducted as described pursuant to the SPCC Plan (DayZen LLC 2024c).

The SPCC Plan would have an outline of the procedure that would be followed in the event of a hazardous materials spill (i.e., fuel, coolant, oil). Per the plan, employees working at the site are responsible for conducting monthly SPCC inspections to visually inspect oil-filled equipment for any evidence of leaks or spills. Initial response to a spill would be to prevent discharge offsite and would include covering any storm drains nearby or creating berms/barriers and reporting internally and/or externally as required. The SPCC plan includes a map of the facility that identifies all oil-filled equipment, storm drains, stormwater flow, and spill kits needed to respond to an accidental spill or

release of oil. It includes the required training for employees, discharge prevention measures, and oil contingency plan. SPCC plans are updated within 30 days of a change in hazardous materials inventory or emergency contact information to ensure it is updated accordingly to avoid any errors to response procedures (DayZen LLC 2024c).

To further minimize the potential of diesel fuel encountering stormwater, to the extent feasible, fueling operations would be scheduled at times when storm events are improbable. Warning signs and/or wheel chocks would be used in the loading and/or unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed transfer lines. An emergency pump shut off would be utilized if a pump hose breaks while fueling the tanks. Tanker truck loading and unloading procedures would be posted at the loading and unloading areas (DayZen LLC 2024a).

Each generator would have DEF tanks for emissions aftertreatment. DEF is used as part of the diesel engine combustion process to meet the emissions requirements. Each enclosure would have a 550-gallon DEF gallon tank. Dosing is addressed at each generator within the enclosure. The generator package would integrate a SCR and DEF tank (DayZen LLC 2024a). The term dosing refers to delivering the urea from the tank to the SCR housing. The total estimated DEF to be stored on-site is 550 gallons times 37 generators or approximately 20,350 gallons. It should be noted that DEF is not a hazardous material. DEF tanks would need to be refilled approximately annually (DayZen LLC 2024c).

DEF spills/ leaks during commissioning and operations are contained in a box at the point of connection. For leaks or spills that are large and may cause an overflow, there would be spill kits available on site to help absorb the liquid. AVAIO will employ the same procedure for immediate response and clean up as there is for fuel leaks (DayZen LLC 2024c).

Hazardous materials storage at the project site would be regulated under local, state and federal regulations. For example, the project would be subject to the APSA due to the volume of fuel that would be stored in aboveground tanks. Tank facilities under the APSA must comply with all requirements and prepare and implement a SPCC plan, which the applicant has committed to preparing. The spill prevention measures described above would be incorporated into the plan. Additionally, a HMBP would be required and completed for the safe storage and use of chemicals and would incorporate all relevant regulations. Transport of diesel fuel would comply with regulations that apply to the shipment of hazardous materials on California highways and roads to ensure safe handling in general transportation. Conformance with relevant laws and regulations would minimize the likelihood of hazardous material releases from the project. Project operation would not create a hazard to the public and thus impacts would be less than significant.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Construction

Less Than Significant Impact. As described under the discussion for impact criterion “a”, project construction would require the limited use of hazardous materials, such as fuels, lubricants, and solvents. The storage and use of hazardous materials during construction could result in the accidental release of small quantities of hazardous materials typically associated with minor spills or leaks. However, as discussed in impact criterion “a”, hazardous materials would be stored, managed, and used in accordance with applicable regulations. Personnel would be required to follow Health and Safety Plans, including instructions on health and safety precautions and procedures to follow in the event of a release of hazardous materials. Equipment and hazardous materials storage areas would be routinely inspected for leaks. Inspection records would be maintained onsite to document compliance with the management of hazardous materials requirements. For the previously described reasons, the project construction impacts would be less than significant.

Operation

Less Than Significant Impact. The project would not create a significant hazard to the public or environment due to an accidental release of a hazardous material. As described above in criterion “a” the project would include the use and storage of diesel fuel for the emergency operation, testing and maintenance of the backup generators. Additionally, minor amounts of hazardous materials would be stored and used for maintenance of on-site equipment. Hazardous materials would be used and stored in accordance with federal, state, and local requirements. Project specific HMBP and SPCC plans would be completed for the safe storage and use of chemicals during operation of the Project. The SPCC would include the listed spill prevention measures outlined in criterion “a”. Conformance with relevant laws and regulations would minimize the likelihood of hazardous material releases from the project. With the above listed safety features and precautions, the risk to the off-site public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would have a less than significant impact.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Construction

Less Than Significant Impact with Mitigation Incorporated. Rancho Medanos Junior High School is located approximately 0.2 miles north of the project site. As described under the discussion for impact criterion “a”, project construction would require the limited

use of hazardous materials which would be stored, handled, and used in accordance with applicable local, state, and federal regulations. Any impacts resulting from spills or other accidental releases of these materials would be limited to the site due to the small quantities involved and their infrequent use.

The former buildings on the project site have been demolished, and only remnant foundations and concrete slabs remain on the project site. There is a potential that lead or LBP could be present and released by demolition activities. Implementation of mitigation measure **HAZ-1** requires testing and removal of LBP contaminated materials prior to any further ground disturbance, with handling, transportation, and disposal per applicable local, state, and federal regulations would reduce impacts to less than significant.

The project site may contain contaminated soil, soil vapor, and/or groundwater due to historical uses, including agricultural activities, a shooting range, golf course operations, and LUST. Therefore, demolition and ground disturbing activities would have the potential to encounter impacted soil and/or groundwater. Implementation of mitigation measures **HAZ-2** and **HAZ-3**, described in impact criterion "d", which would require the preparation of a Site Management Plan (SMP) and Health and Safety Plan (HSP), and testing of soils, soil gas, and/or groundwater would reduce impacts to less than significant.

With implementation of mitigation measures **HAZ-1**, **HAZ-2**, and **HAZ-3**, the project would not result in hazardous emissions or expose schools within one-quarter mile to hazardous materials, and impacts would be less than significant.

Operation

Less Than Significant Impact. Rancho Medanos Junior High School is located approximately 0.2 miles north of the project site. As described in the impact criteria "b", the project would store large amounts of diesel fuel on site. However as discussed in impact criteria "b", with the listed safety features and precautions, the risk to the off-site public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials would have a less than significant impact.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Construction

Less Than Significant Impact with Mitigation Incorporated. According to the WSP 2023 Phase I ESA, WSP 2024 Phase I ESA Update, and a review of the Envirostor and GeoTracker databases (DayZen LLC 2024a; DayZen LLC 2024c; SWRCB 2025, and DTSC 2025), the project site had a case listed on the hazardous materials sites

compiled pursuant to Government Code section 65962.5. According to the 2023 WSP Phase I ESA, in 1994, a LUST was discovered during the removal of a 1,100-gallon gasoline UST (DayZen LLC 2024b). Soil was the potential medium of concern and gasoline was the potential contaminant of concern. Substantially impacted soil was removed with extensive excavation (approximately 40 feet X 40 feet, 23-40 feet deep) and no groundwater was encountered during excavation. Pockets of impacted soils, specifically 940 ppm of TPH-gasoline, remained in the sidewalls. The case was granted closure by the SFB RWQCB in 1997. It should be noted that the remaining impact of 940 ppm TPH-g exceeds the current TPH-g ESL for construction workers of 480 mg/kg (for soil, units of mg/kg are interchangeable with ppm). However, the concentration is below the ESLs for commercial/industrial land use. Concentrations of VOCs were not provided.

WSP conducted a limited soil sampling at the project site in 2023 as part of the Phase I ESA (DayZen LLC 2024a). While arsenic was the only analyte detected in soil at concentrations exceeding risk-based screening levels, the detected concentration (ranging from 3.1 to 6.2 mg/kg) falls within regional background ranges and is not considered indicative of site-related impacts. Analyte concentrations are below current SFB RWQCB ESLs for commercial/industrial land use and construction worker exposure (SWRCB 2025). Therefore, there exists a potential for contaminated soil or groundwater to migrate from adjacent sites to other locations within the project site.

Demolition activities for the project would include ground disturbing activities for removal of below ground structures such as utilities, as well as remnant building foundations and concrete slabs from the previously demolished golf course buildings. Ground disturbing activities associated with construction would include site grading, excavation, and the installation of a cast in place aggregate pier foundation system to support the data center building. Construction would also include the installation of shallow foundations for ancillary support features, fencing, paving of roadways and parking areas. Additionally, installation would include underground utilities, such as conduit and electrical cabling to interconnect to the PDH Building switchgear, and the placement and securing of the generators.

Staff reviewed the applicant's proposed design measure, **PDM HAZ-1**, in the context of the potential impacts and concludes that **PDM HAZ-1** is sufficient for reducing potentially significant soil, soil gas, and/or groundwater impacts to construction workers to a less than significant level. To ensure that **PDM HAZ-1** is enforced, staff recommends mitigation measure **MM HAZ-2** which would ensure preparation of a Site Management Plan (SMP) and Health and Safety Plan (HSP) and would identify the minimum information to be included in each plan. The information to be included in the SMP would include protocols for testing any remnant or unknown soil and/or groundwater contamination via sampling and testing prior to issuance of demolition or grading permits and would identify procedures to follow if unknown or remnant contamination is encountered during project activities. Additionally, the SMP includes protocols for sampling at the site to verify or rule out a vapor encroachment conditions

at the site and at the former LUST area and/or proposed future buildings. If contamination is identified through the sampling and testing, the appropriate local, state, and federal regulations would be followed, and local and state agencies would be coordinated with regarding handling and disposal of the contaminated soil or groundwater. The SMP would also include measures to remediate any verified vapor encroachment conditions within existing buildings prior to demolition and prevent vapor encroachment in the proposed structures.

The limited subsurface soil sampling conducted by WSP, as documented in the 2023 Phase I ESA, did not identify significant releases of metals, TPHs, pesticides, or herbicides. Analyte concentrations were below the current SFB RWQCB ESLs for commercial/industrial land use and construction worker exposure (SWRCB 2025). Previous site investigations and site history indicate the potential presence of contaminated soil, soil gas, and/or groundwater at the project site. Construction workers could be exposed to contaminated soil and/or groundwater during excavation, grading, and construction activities. Staff recommends mitigation measure **MM HAZ-3** which specifies testing of soil, soil gas, and/or groundwater per the plan and protocols developed in the SMP to fully identify potential soil, soil gas, and/or groundwater contamination at the project site. Any contaminated soils identified by testing would be removed and disposed of according to the appropriate local, state, and federal regulations under the oversight of the agency taking lead jurisdiction. Alternatively, the contaminated portions of the site shall be capped beneath the planned development under the regulatory oversight of the agency taking lead jurisdiction.

With implementation of mitigation measures **MM HAZ-2** and **MM HAZ-3** and compliance with applicable local, state, and federal regulations, there would be a less than significant impact to people or the environment from hazardous materials at an environmentally contaminated site.

Operation

Less Than Significant Impact. Operation and maintenance activities would not involve excavation activities. Therefore, there would be a less than significant impact to people or the environment from hazardous materials at an environmentally contaminated site.

- e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

Construction

No Impact. The closest airport is over 7 miles to the west of the project site. The project site is not within the vicinity of a private airstrip or an airport land use plan. Therefore, the project would have no impact related to aviation safety hazards or excessive aviation noise for people residing or working in the project area. Additionally, project construction would not result in excessive noise impacts for people residing or

working in the project area, as described in a more detailed analysis in **Section 5.13, Noise**.

Operation

No Impact. Operation and maintenance activities for the project site would be similar to those for a similarly sized industrial building and would not have an impact on people working or residing in the area. Therefore, there would be no impact for people residing or working in the project area due to safety hazards or excessive noise.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction

No Impact. A review of the Contra Costa County and City of Pittsburg Emergency Operations Plans for the project revealed no specific mapping or delineation of emergency evacuation or access routes. The plans identified that the area police, fire department, and other emergency services would implement their emergency response or evacuation plans according to their communications protocols and hazard mitigation programs. The proposed project site is not identified on any emergency evacuation or access routes. In addition, the construction would not require any road closures since the work would all be done onsite. During project construction, there would be no impact to an adopted response plan or emergency evacuation plan.

Operation

No Impact. After construction, no lane closures would be needed, and no impact to a response plan or emergency evacuation plan would occur.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Construction

No Impact. The project site is located in an urban part of Contra Costa County within an LRA. It is located within an un-zoned Fire Hazard Severity Zone, within a LRA, indicating that the project site has a less than moderate susceptibility to wildland fires. It is not located within a FRA or SRA, nor is it mapped within a LRA VHFSZ. The project site is not adjacent to wildlands. The project site is currently vacant and vegetated, improved with paved parking areas and roads, and an above ground water storage tank and adjacent building. The project area consists primarily of a mix of residential and open space uses. Although equipment and vehicles used during construction, as well as welding activities, have the potential to ignite dry vegetation, the project is located within an urban area surrounded by residential and open space uses that have very limited dry vegetation. In addition, the project is within an un-zoned fire hazard area. In

the event of construction triggered fire at the project site, it would be served by the Contra Costa County Fire Protection District (CCCYPD). The closest fire station is CYPD Station 87 located at 800 West Leland Road (approximately 0.5 miles northwest of the project site). Therefore, there would be no impact from wildland fires resulting from construction activities related to the project.

Operation

No Impact. The project site is located within a LRA that is not located within or near any wildlands. The project site would be served by the CCCYPD in the event of project related or other local fires. The closest fire station is CYPD Station 87 located at 800 West Leland Road (approximately 0.5 miles northwest of the project site). As discussed for construction, there would be no impact from wildland fires.

5.9.3 Mitigation Measures

HAZ-1: Prior to issuance of grading permits, a lead-based paint (LBP) visual inspection and pre-demolition survey, including sampling and testing of suspect materials, shall be conducted near former structures to assess for possible lead-in-soil due to possible use of former LBP. The survey shall be conducted by a contractor with California Department of Public Health (CDPH) Lead Related Construction (LRC) certified personnel as required by CDPH regulations. The findings of the LBP survey shall be submitted to the appropriate agencies per the requirements of the SMP.

HAZ-2: Prior to issuance of demolition or grading permits, the project applicant shall prepare a Site Management Plan (SMP) to guide activities during demolition, excavation and grading, and initial construction to ensure that potentially contaminated soils and unexploded ordinance (UXO) are identified, characterized, removed, and disposed of properly. The purpose of the SMP is to establish appropriate management practices for handling impacted soil, UXO, or other materials that may be encountered during construction activities. The SMP shall be reviewed and approved by the City of Pittsburg prior to any work on the site, including prior to soil and groundwater sampling.

The SMP shall be implemented during project demolition and construction and shall include, but shall not be limited to, the following components:

- A detailed discussion of the site background.
- Prior to any onsite work, Health and Safety Plans (HSPs) for the Project shall be prepared by all contractors and subcontractors that will be working at the project site and incorporated in the SMP. The HSPs shall be prepared by a Certified Qualified Professional (CSP), such as an industrial hygienist, Professional Engineer or Professional Geologist. The HSPs shall be specific to each of the contractors' or subcontractors' scopes of work and based upon the known environmental conditions for the site prior to project construction. The HSPs shall be updated as needed if site conditions change significantly, such as the discovery of contaminated soil or groundwater or UXO. The HSPs shall be approved by the City of Pittsburg and

implemented under the direction of a Site Safety and Health Officer. Copies of the approved HSPs shall be kept at the project site.

- Description of soil and groundwater testing, which shall include (but not be limited to) the collection of soil samples and groundwater samples and analyses for metals, TPH, VOCs and any other contaminants identified in previous environmental studies in the soil and groundwater and lead and organochlorine pesticides in the soil to verify presence or absence of remnant or unknown soil or groundwater contamination. This soil and groundwater characterization shall be performed prior to initiation of project construction
- Protocols for sampling at the site to verify or rule out vapor encroachment conditions at the former LUST area and/or proposed future buildings and, if verified, procedures for mitigation or remediation of vapor encroachment conditions. Note that the location of the former LUST is currently unknown but the RWQCB is anticipated to have documentation with exhibits of the former LUST location (requires additional record request to RWQCB).
- Protocols for sampling of soil and groundwater to facilitate the profiling of the soil and groundwater for appropriate off-site disposal or reuse, and for construction worker safety, dust mitigation during demolition and construction and potential exposure of contaminated soil or groundwater to future users of the site prior to project construction.
- Procedures to be undertaken in the event that contamination is identified above action levels or previously unknown contamination is discovered prior to or during project demolition or construction;
- Notification procedures if previously undiscovered significantly impacted soil or groundwater, or free fuel product, or UXO is encountered during demolition or construction;
- Procedures to be undertaken in the event that UXO is identified.
- Sampling and laboratory analyses of excess soil requiring disposal at an appropriate off-site waste disposal facility;
- Procedures and protocols for the safe storage, stockpiling, and disposal of contaminated soils or UXO; and
- Protocols to manage groundwater, including segregation or treatment of contaminated groundwater, if necessary, that may be encountered during trenching or subsurface excavation activities.
- If there are no contaminants identified on the project site that exceed applicable screening levels for construction workers published by the Regional Water Quality Control Board (RWQCB), California Department of Toxic Substances Control (DTSC), or California Environmental Protection Agency, the SMP does not need to be submitted to an oversight agency and instead only needs to be submitted to the City of Pittsburg for approval prior to issuance of a grading permit and prior to conducting any demolition activities.

- If contaminants are identified at concentrations exceeding applicable screening levels, the project applicant shall obtain regulatory oversight from Contra Costa County Department of Environmental Health or the DTSC under a Site Cleanup Program as applicable. The SMP and planned remedial measures shall be reviewed and approved by the Contra Costa County Department of Environmental Health Hazardous Materials Compliance Division or DTSC. A copy of the SMP shall be submitted to the city of Pittsburg. Copies of the approved SMP shall be kept at the project site.
- Any contaminated soils identified by testing conducted in compliance with the SMP and found in concentrations above established thresholds shall either be removed and disposed of according to California Hazardous Waste Regulations or the contaminated portions of the site shall be capped beneath the planned development under the regulatory oversight of the Contra Costa County Hazardous Materials Compliance Division or the DTSC. Contaminated soil excavated from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site.

MM HAZ-3: Prior to the issuance of grading permits, soil, soil gas, and/or groundwater samples shall be taken in areas where disturbance is anticipated to determine if contaminated soils or groundwater with concentrations above ESLs for construction workers and commercial users may be present due to historical uses including agricultural, shooting range, golf course, and LUST. Sampling shall be conducted per the protocols outlined in the approved project SMP. Once the soil sampling analysis is complete, a report of the findings shall be submitted to the appropriate agencies per the requirements of the SMP.

Any contaminated soils identified by testing conducted in compliance with the SMP and found in concentrations above ESLs shall either be removed and disposed of according to California Hazardous Waste Regulations or the contaminated portions of the site shall be capped beneath the planned development under the regulatory oversight of the agency taking lead jurisdiction. Contaminated soil excavated from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site.

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- SWRCB 2025 – State Water Resources Control Board (SWRCB). GeoTracker Database. Accessed August 2025. Accessed online at: <http://geotracker.waterboards.ca.gov>

5.10 Hydrology and Water Quality

This section describes the environmental setting and regulatory background, as well as discusses impacts, associated with the construction and operation of the project with respect to hydrology and water quality.

HYDROLOGY AND WATER QUALITY	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner which would:				
i. result in substantial erosion or siltation, on- or offsite;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐		☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Environmental checklist established by CEQA Guidelines, Appendix G

5.10.1 Environmental Setting

The proposed AVAIO Pittsburg Backup Generating Facility (PBGF) would consist of 37 diesel-fired generators and would serve as the backup power component of the proposed Pittsburg Data Hub (PDH). The PBGF would provide up to 92 megawatts (MWs) of emergency backup power generation to support the PDH. Electrical service would be provided by the Pittsburg Power Company (PPC). The overall PDH project would be constructed on a previously disturbed site. The project site was part of the

U.S. Army Camp Stoneman shooting range from 1942 to 1954 and a golf course from 1953 to 2018 (DayZenLLC 2024c).

Storm Drainage and Water Quality

The project would be constructed in Pittsburg, California, within the Kirker Creek-Frontal Suisun Bay Estuaries watershed (DWR 2024). The topography of the project site gently slopes from the southwest at an elevation of approximately 115 feet to approximately 80 feet to the northeast (USGS 2024). Stormwater from the project site drains into the Willow Creek drainage immediately east of the project site, which drains directly into Suisun Bay (Google 2025). Prior to 2018, the project site was part of the Delta View Golf Course that opened in 1947. The water quality of the Willow Creek drainage is influenced by pollutants contained in stormwater runoff from the site and other nearby residential and industrial properties. Stormwater runoff from urban areas typically contains conventional pollutants such as sediment, metals, pesticides, herbicides, oil, grease, asbestos, lead, and animal wastes (USEPA 2024).

Stormwater runoff would be managed by incorporating 31,000 square feet (SF) of bioretention areas and at-grade flow-through planter boxes. Flow-through planters and bioretention planters would include perforated underdrains and overflow structures that connect to the on-site storm drains systems. Downspouts for the roof drainage would connect to storm drains that would route flows either into drainage swales leading to bioretention or flow-through planters. Surface drainage of hardscape such as asphalt drive aisles and parking would be routed to curb cuts and drainage swales. Under current conditions, stormwater discharges the site at two locations; 1) a storm drain lateral located at the north end of the site, and 2) by overland flow from the low point of the site to the parcel to the east. The existing lateral located at the north end of the site would be reused. Since Golf Club Road would extend onto the project site, overland discharge from the site would be improved with a culvert undercrossing to transmit flows to the east and match existing hydrology (DayZenLLC 2024a).

Groundwater

The project site is located within the Pittsburg Plain groundwater basin (No. 2-004), which consists of aquifers within Pleistocene to Recent alluvial deposits that border the south shore of Suisun Bay. Groundwater contains relatively high total dissolved solids (TDS) that range from 450 to 5,737 milligrams per liter (mg/l), and averages 1,821 mg/l (DWR 2004), which exceeds the short-term secondary maximum contaminant levels (MCLs) for TDS.

The Pittsburg Plain groundwater basin is a very low priority basin, and thus a Groundwater Sustainability Plans (GSP) is not required (LSCE 2021). However, the City of Pittsburg prepared a groundwater management plan (GMP) for the basin (DWR 2024, LSCE 2012).

Fluctuations in rainfall, changing drainage patterns, and other hydrologic factors can

influence groundwater levels. Groundwater was not encountered in any of the soil borings included in the preliminary geotechnical investigation (DayZenLLC 2024c). However, according to the Sustainable Groundwater Management Act (SGMA) Data Viewer, depth to groundwater was measured at 63.25 feet below ground surface (bgs) from a monitoring well at the extreme north of the project site in March 2023 (DWR 2025c). This would explain why groundwater was not encountered in the geotechnical investigation soil borings since none exceeded 45 feet bgs. According to a City of Pittsburg report, the project site lies within an area of high recharge potential (LSCE 2012).

The City of Pittsburg operates two groundwater wells that produce water from the Pittsburg Plain groundwater basin that account for 10 percent of the city's water supply (Pittsburg 2025a).

Flooding

The elevation of the existing project site is between 80 and 115 feet above the 1988 North American Vertical Datum (NAVD88) (USGS 2024). According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM), the proposed project site is located within Zone X; areas of minimal flood risk (FEMA 2015). According to the *Dam Breach Inundation Map Web Publisher* sponsored by the California Department of Water Resources (DWR), there are no dams in the area that could inundate the project site (DWR 2025b). Although the project site is near Suisun Bay, the site's lowest elevation is 80 feet and is outside an area to be affected by a projected 3-meter rise in sea level according to the National Oceanic and Atmospheric Administration's Digital Coast, Sea Level Rise Viewer (NOAA 2024). In addition, due to the project site's elevation, it lies outside of a tsunami hazard zone (CGS 2021).

Regulatory Background

Federal

Clean Water Act and California's Porter-Cologne Water Quality Control Act.

The State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs) are responsible for the regulation and enforcement of the water quality protection requirements of the federal Clean Water Act (CWA) and the state's Porter-Cologne Water Quality Control Act (Porter-Cologne). The National Pollutant Discharge Elimination System (NPDES) is the permitting program that allows point source dischargers to comply with the CWA and Porter-Cologne laws. This regulatory framework protects the beneficial uses of the state's surface and groundwater resources for public benefit and environmental protection. Protection of water quality would be achieved by ensuring the proposed project complies with applicable NPDES permits from the SWRCB or the San Francisco Bay RWQCB.

Under Section 303(d) of the CWA, states are required to identify impaired surface water bodies and develop total maximum daily loads (TMDLs) for contaminants of concern.

The TMDL is the quantity of a pollutant that can be assimilated by a water body without violating water quality standards.

Stormwater from the project site would drain into Willow Creek, which is not listed as a Section 303(d) impaired waterway. However, Willow Creek empties into the Sacramento-San Joaquin Delta which is listed by the United States Environmental Protection Agency (USEPA) as a waterbody included on the Section 303(d) List of Impaired Waters for California and is affected by dioxins, mercury, polychlorinated biphenyls (PCBs) and pesticides (USEPA 2024). Listing of a water body as impaired does not necessarily suggest that the water body cannot support beneficial uses; rather, the intent is to identify the water body as requiring future development of a TMDL to maintain water quality and reduce the potential for future water quality degradation.

The San Francisco Bay RWQCB issued a Municipal Regional Storm Water NPDES Permit (Permit Number CAS612008) that requires the City of Pittsburg to implement a stormwater quality protection program under order R2-2019-0004. This regional permit applies to 77 Bay Area municipalities, including the City of Pittsburg. Under the provisions of the Municipal NPDES Permit, redevelopment projects that disturb more than 10,000 SF are required to design and construct stormwater treatment controls to treat post-construction stormwater runoff. The permit requires the post-construction runoff from qualifying projects to be treated by using low-impact development treatment controls, such as biotreatment facilities.

The Contra Costa Clean Water Program (CCCWP) assists co-permittees, such as the City of Pittsburg, in the implementation of the provisions of the Municipal NPDES Permit.

In addition to water quality controls, the Municipal NPDES Permit requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff, where such hydromodification is likely to cause increased impacts to beneficial uses of local streams.

Projects may be deemed exempt from the hydromodification requirements under either of the following conditions (CCCWP 2025):

- 1) The project is not located in an area of hydromodification applicability per the *2023 Hydromodification Management Applicability Map for Contra Costa Jurisdictions* (CCCWP 2023).
- 2) The post-project impervious area is less than, or the same as, the pre-project impervious area.

According to the Hydromodification Management Applicability Map, the project is not located within an exempted area. In addition, based on an estimate using Google Earth, the current impervious area of the project site is 141,168 SF, and would increase to 292,647 SF (Google 2025, DayZenLLC 2025c). Therefore, the project would be subject to CCCWP hydromodification requirements (CCCWP 2025).

Federal Emergency Management Agency Flood Insurance Program. The national standard of flood magnitude used for floodplain management is a flood having a one percent probability of occurrence for any given year, otherwise known as the 100-year flood, or base flood. Flood Insurance Rate Maps (FIRMs), the official maps created and distributed by FEMA for the National Flood Insurance Program that shows areas subject to inundation by the base flood for participating communities. FIRMs contain flood risk information based on historic, meteorologic, hydrologic, and hydraulic data, as well as open-space conditions, flood control works, and existing state of development. As stated above, the proposed project site is located in Zone X, which is defined as areas of minimal flood risk.

State

California Water Code, Sections 10910-10915. California Water Code (Sections 10910-10915) requires water service providers to evaluate stresses to the water supply service system caused by proposed project developments. The code sections require public water systems to prepare water supply assessments (WSA) for certain defined development projects subject to the California Environmental Quality Act (CEQA).

A WSA was prepared for the Pittsburg Technology Park Specific Plan, which includes the project as Phase I (WSP 2024).

Sustainable Groundwater Management Act. The 2014 Sustainable Groundwater Management Act (SGMA) requires local public agencies and Groundwater Sustainability Agencies (GSAs) in high- and medium-priority basins to develop and implement Groundwater Sustainability Plans (GSPs) or Alternatives to GSPs. GSPs are detailed road maps for how groundwater basins would be managed to achieve long term sustainability. The Pittsburg Plain groundwater basin is identified as a very low priority and thus no GSP is required by SGMA.

Local

Contra Costa County 2045 General Plan

Goal COS-5 protects and restores natural streams and wetlands. The following Goal COS-5 policies are related to the impact of development on natural water ways and control of stormwater quality:

- **Policy COS-P5.2.** Require public infrastructure and private development projects to preserve, and whenever possible restore and enhance, natural watercourses, floodplains, and riparian habitat.
- **Policy COS-P5.4.** Require new buildings and structures on private property be set back at least 75 feet from the edge of any wetland area, unless a peer-reviewed, site-specific evaluation indicates that a different setback is appropriate.
- **Policy COS-P.5-11.** Prohibit direct runoff of pollutants and siltation into marsh, creek, and wetland areas from outfalls serving urban development.

Goal COS-7 manages surface water and groundwater sustainably. The following Goal COS-7 policy in is related to stormwater runoff control:

- **Policy COS-P7.7.** Require landscaping for new development to filter and retain runoff, and support flood management and groundwater recharge.

Goal COS-8 protects surface water and groundwater quality. The following Goal COS-8 policies in are related to water supply, surface water quality and soil erosion:

- **Policy COS-P8.1.** Protect public water supplies by denying applications for projects that would introduce significant new pollution sources in groundwater basins and watersheds feeding major reservoirs.
- **Policy COS-P8.2.** Coordinate with other agencies to control point and non-point sources of water pollution and maintain water quality standards.
- **Policy COS-P8.4.** Require new development to retain natural vegetation and topography whenever feasible and require projects involving erosion-inducing activities to use best management practices to minimize erosion.

Goal COS-12 protects natural features with high scenic value. The following Goal COS-12 policies may affect grading practices:

- **Policy COS-P12.4.** Preserve the scenic qualities of hillsides by encouraging designs that are sensitive to a site's topography and prohibiting unnecessary grading and vegetation removal.
- **Policy COS-P12.5.** Require restoration of natural contours and vegetation after grading and other land disturbances.
- **Policy COS-P12.6.** Prohibit extreme topographic modification, such as filling canyons or removing prominent hilltops.

City of Pittsburg Municipal Code.

15.104.020 – Since the project is located within the Kirker Creek watershed, stormwater management would be subject to the Kirker Creek watershed drainage improvement plan and schedule adopted by the city council by Resolution 99-8789 on January 19, 1999.

15.88.030:

- A.** No person may grade, fill, excavate or store or dispose of soil and earth materials or perform any other land-disturbing or land-filling activity without first obtaining a permit as set forth in this chapter.
- B.** All land-disturbing or land-filling activities or soil storage shall be undertaken in a manner designed to minimize surface runoff, erosion and sedimentation.

5.10.2 Environmental Impacts

Environmental impacts evaluated in this section include the construction and operation elements of the proposed project.

a. Would the project violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact with Mitigation Incorporated. The proposed project would disturb approximately 22.3 acres and be subject to requirements of California's NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) administered by the SWRCB. Prior to any ground-disturbing construction activity, the applicant must comply with the Construction General Permit, which includes preparing a Storm Water Pollution Prevention Plan (SWPPP). By implementing the SWPPP, redevelopment of the site would not cause substantial degradation in the quality, or an increase in the rate or volume, of stormwater runoff from the site during construction. The applicant proposed specific best management practices (BMPs) to address water quality degradation due to construction-related stormwater runoff through mitigation measure **HYD-1**.

In addition, the Municipal NPDES permit, as well as the CCCWP Stormwater C.3 Guidebook (CCCWP 2025), requires that redevelopment does not result in a substantial net increase in stormwater flow exiting the project site during operation. Thus, runoff from the project site would not be expected to exceed the capacity of the local drainage system or to significantly degrade the quality of receiving water bodies.

During construction, soil could potentially be excavated to a maximum depth of 15 feet below grade. As stated in Section 5.10.1, groundwater was measured in a nearby well at about 63 feet bgs. It is therefore unlikely that groundwater would be encountered during excavation activities and dewatering would not be necessary. However, if dewatering is later found to be necessary, and the discharge is found to be uncontaminated, the applicant would be allowed to discharge dewatering water to waters of the US, within the San Francisco RWQCB's jurisdiction, under the Construction General Permit. If discharged groundwater is found to be contaminated, a special permit would be necessary depending on the nature of the contamination. This would require the applicant to treat the groundwater before discharge or haul away the untreated water by a permitted service provider.

As stated in Section 5.10.1, prior to 2018, the project site was part of the Delta View Golf Course. Impervious area of the project site would increase from 141,168 SF (Google 2025) to 292,647 SF (DayZenLLC 2025c). Therefore, the project would be designed to comply with CCCWP hydromodification requirements (CCCWP 2025). The increase in impervious surface area would result in additional stormwater runoff that could impact water quality, unless appropriate mitigation measures are taken. The project would include approximately 31,000 SF of Low Impact Development (LID)

stormwater treatment controls such as bioretention and self-treating areas. The plans and permits work together to establish specific requirements to reduce stormwater pollution from new and redevelopment projects (DayZenLLC 2024a, DayZenLLC 2025c).

Thus, the project would not be expected to violate water quality standards or waste discharge requirements during construction or operation, and impacts would be less than significant.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The City of Pittsburg Water Department would provide water for the project. Two groundwater production wells account for 10 percent of the City's water supply. Remaining City water supply is Central Valley Project (CVP) water from the Sacramento-San Joaquin Delta purchased through the Contra Costa Water District (CCWD). Construction water demand is anticipated at 1.75 acre-feet (AF) over an 18 month period, or 1.17 acre-feet per year (AFY), noting that the consumption rate is higher than average during the early stages of construction. Operational demand for potable water is anticipated at 0.22 AFY.

Unfortunately, an estimate for Pittsburg Plain groundwater basin storage capacity could not be found in the available literature. However, a gross estimate can be made using the following parameters:

- Groundwater basin area: 11,613.25 acres (DWR 2021).
- Aquifer thickness (8 nearby wells): 99 feet (DWR 2025a, LSCE 2012).
- Porosity, Central California sand: 0.42 (Wolff 1982).

The resulting gross estimate for storage capacity of the Pittsburg Plain groundwater basin is 686,621 AF. The annual operational project water demand of 0.22 AFY would equal 0.00003 percent of the estimated Pittsburg Plain groundwater basin storage capacity. Accounting for groundwater as 10 percent of City of Pittsburg water supply, the annual project water demand would be 0.000003 percent of the storage capacity.

During times of drought, the City of Pittsburg may increase use of groundwater. Between 1993 and 2020, a maximum of 2,092 AF was pumped from groundwater in 2008 (Akel 2021). This would constitute approximately 21 percent of City of Pittsburg water supply based on current deliveries (Pittsburg 2025b). However, even with increasing the amount of groundwater used in the City of Pittsburg water supply, the annual project water demand would be 0.00004 percent of the storage capacity.

As stated in Section 5.10.1, the project site lies within an area of high recharge potential (LSCE 2012). However, the post-construction project site would be nearly 50

percent pervious and include 29,000 SF of bioretention area that would promote stormwater infiltration. Thus, the proposed project would aid in recharge to the underlying aquifer system.

Therefore, the project's impact on groundwater supplies or recharge during construction and operation would be less than significant.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner which would:

i. Result in substantial erosion or siltation on- or off-site;

Less Than Significant Impact. During construction, a SWPPP prepared in compliance with NPDES requirements would ensure impacts from erosion and siltation are minimized.

The proposed project would cause an increase in impervious areas, but would also include a new stormwater collection system that would incorporate bioretention areas and at-grade flow-through planter boxes.

The bioretention areas and at-grade flow-through planter boxes would reduce the overall runoff into the City's storm drain system and also reduce erosion and sedimentation impacts. This post-construction design would therefore not be expected to substantially increase runoff (rate or volume) from the site. Furthermore, the stormwater system design is expected to comply with the CCCWP Stormwater C.3 Guidebook. Therefore, impacts would be less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Less Than Significant Impact. Surface runoff from the proposed project would be controlled as described in criteria "a" and "c(i)" above. Therefore, impacts would be less than significant.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less Than Significant Impact. The proposed project would result in a new stormwater collection system that includes a structure to address any increases in runoff to the City's collection system. The discharge of polluted runoff from the site is not expected to be greater than what is expected under existing conditions. Therefore, impacts would be less than significant.

iv. Impede or redirect flood flows?

Less Than Significant Impact. According to the FEMA FIRM 06013C0118G, the project site is located within Zone X (FEMA 2015). Zone X is defined as areas of minimal flood hazard. The project site is also not within an area mapped as vulnerable to sea level rise in the National Oceanic and Atmospheric Administration's Digital Coast, Sea Level Rise Viewer (NOAA 2020). The proposed project is not expected to impede or redirect flood flows. Therefore, significant obstruction to flood flows is not expected from the proposed project and the impacts would be less than significant.

d. Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact. The project site is located within FEMA Flood Zone X where flood risk is low. Moreover, the project site is not within an area mapped as vulnerable to sea level rise in the National Oceanic and Atmospheric Administration's Digital Coast, Sea Level Rise Viewer (NOAA 2020). According to the online DWR Dam Breach Inundation Map, there are no dams in the area that could inundate the project site (DWR 2025b). The proposed project site would not be subject to inundation by seiche, tsunami, or mudflow. (CGS 2021). Therefore, the project would not risk the release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the local water quality control plan. The project would comply with the Basin Plan by implementing the requirements of the Construction General Permit, by preparing a construction SWPPP and by implementing post-construction BMPs, as described in criteria "a" above. In addition, due to project location and the increase of impervious area, the project design would adhere to CCCWP hydromodification requirements in compliance with the Municipal NPDES permit (CCCWP 2025). The Municipal NPDES permit was developed with respect to the water quality requirements of the Basin Plan.

The Pittsburg Plain groundwater basin has been designated as very low priority for groundwater management under the SGMA; therefore, a Groundwater Sustainability Plans (GSP) is not required (LSCE 2021). However, the City of Pittsburg prepared a groundwater management plan (GMP) for the basin out of extra precaution to ensure the basin is managed sustainably (DWR 2024, LSCE 2012).

Therefore, the proposed project would not be expected to obstruct implementation of the San Francisco Bay Basin Plan, and its impact would be less than significant.

5.10.3 Mitigation Measures

HYD-1: Construction Best Management Practices. The project would be required to implement the following construction BMPs as part of the SWPPP prepared for the project to ensure construction-related water quality impacts are less than significant.

- Install filter materials (such as sandbags, filter fabric, etc.) at the storm drain inlet nearest the downstream side of the project site prior to: 1) start of the rainy season; 2) site dewatering activities; or 3) street washing activities; and 4) saw cutting asphalt or concrete, or to retain any debris or dirt flowing into the City storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding. Dispose of filter particles in the trash.
- Create a contained and covered area on the site for the storage of bags of cement, paints, flammables, oils, fertilizers, pesticides or any other materials used on the project site that have the potential for being discharged to the storm drain system through being windblown or in the event of a material spill.
- Never clean machinery, tools, brushes, etc., or rinse containers into a street, gutter, storm drain or stream. See "Building Maintenance/Remodeling" flyer for more information.
- Ensure that concrete/gunite supply trucks or concrete/plaster finishing operations do not discharge wash water into street gutters or drains.
- The SWPPP shall also comply with C.6 provisions under Municipal Regional Stormwater permit (Order R2-2022-0018). The applicant/developer shall allow site inspections from City agencies.
- The applicant/developer shall immediately report any soil or water contamination noticed during construction to the City Fire Department Hazardous Materials Division, the City of Pittsburg Environmental Services Department, the Contra Costa County Department of Health and the Regional Water Quality Control Board.
- No site grading shall occur during the rainy season, between October 15 and April 15, unless approved erosion control measures are in place.
- Non-storm water discharges to the City storm sewer system are prohibited. Prohibited discharges include but are not limited to the following: polluted cooling water, chlorinated or chlorinated swimming pool water, hazardous or toxic chemicals, grease, animal wastes, detergents, solvents, pesticides, herbicides, fertilizers, and dirt. All discharges of material other than storm water must comply with a NPDES Permit issued for the discharge other than NPDES Permit No. CAS612008.

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5.11 Land Use and Planning

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project specific to land use and planning.

LAND USE AND PLANNING				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Environmental checklist established by CEQA Guidelines, Appendix G, Land Use and Planning.

5.11.1 Environmental Setting

The proposed AVAIO Pittsburg Data Hub (PDH) (i.e., project) would be located within the City of Pittsburg (City), in Contra Costa County, CA. The PDH would occupy a 22.31-acre site within the Pittsburg Technology Park Specific Plan (Specific Plan) Area (DayZenLLC 2024). The Specific Plan Area has a General Plan land use designation of Employment Center Industrial (ECI) and a zoning of Planned Development (PD) district (City of Pittsburg 2024a, 2024b).

The 22.31-acre PDH site currently includes two parcels: APNs 095-160-001 and 095-160-002 (DayZenLLC 2025b). However, the applicant has submitted a Vesting Tentative Subdivision Map for the PDH (DayZenLLC 2025a, 2025c). Once the map is approved and recorded by the City of Pittsburg, the proposed data center and backup generating facility would be located on a single parcel that is 764,308 square feet (DayZenLLC 2025a, 2025c).

The PDH would be constructed within a portion of the former municipal Delta View Golf Course, a 175-acre property that permanently closed in 2018. The former Delta View Golf Course is located within a larger 420-acre property that is known as the Stoneman Property (City of Pittsburg 2025). Table 5.11-1 identifies the land uses that surround the project site.

TABLE 5.11-1 LAND USES SURROUNDING PROJECT SITE

Direction	Land Use	Location
Northwest	Residences	Located along Golf Club Road, with the nearest residence west of and adjacent to the project site's northernmost end
	Church of Jesus Christ of Latter-Day Saints	Located at 2201 Golf Club Road, west of and adjacent to the project site's northernmost end
	Rancho Medanos Junior High School	Located at 2301 Range Road, approximately 0.1 miles northwest of the project site
North	Delta de Anza Regional Trail	Approximately 100 feet north of the project site
East	PG&E transmission right-of-way	Adjacent to the project site along the east side of the project
	Residences	East of the PG&E right-of-way, approximately 0.15 miles east of the project site
Southeast	Pittsburg Water Treatment Plant	Located at 300 Olympia Drive, approximately 0.2 miles southeast of the project site
South	Contra Costa Canal	Adjacent to the project site's southernmost end
	Former Delta View Golf Course	South of the Contra Costa Canal
Southwest	Diablo Valley Radio Controllers Airfield	Located within the Stoneman Property and accessible via John Henry Johnson Parkway. Approximately 0.85 miles southwest of the project site
	Hiking and mountain biking trails	Located within the Stoneman Property and accessible via John Henry Johnson Parkway. Approximately 0.25 miles southwest of the project site at their nearest point
	Picnic shelter	Located within the Stoneman Property and accessible via John Henry Johnson Parkway. Approximately 0.4 miles southwest of the project site
West	Former Delta View Golf Course	Adjacent to the project site along the west side of the project

Sources: DVRC 2025; Google Earth 2025

Regulatory Background

Federal

No federal regulations relating to land use and planning apply to the project.

State

No state regulations relating to land use and planning apply to the project.

Local

Pittsburg 2040 General Plan. On May 6, 2024, the City Council adopted a comprehensive update to the City of Pittsburg General Plan (General Plan). The General Plan delineates the City into 16 planning subareas, with the project site located in the West Leland Subarea. The updated General Plan revised the land use designations for the West Leland Subarea to change 112.5 acres of Open Space to ECI, and the 22.31-acre project site is located within this ECI designation (City of Pittsburg 2024c). The General Plan Land Use Element identifies a data center as an allowable use within an ECI designation (City of Pittsburg 2024c). The Economic Development Element further identifies the ECI designation as an employment and revenue-generating opportunity site (City of Pittsburg 2024c).

The following General Plan policies are applicable to the project:

- 2-P-4.2 – Encourage the development and intensification of employment centers, including high quality, professional office campuses, business parks, and industrial parks, along with innovation districts, related mixed-use development and open spaces. The centers shall be located in areas fully served by public facilities and services, located along major arterials with easy freeway access and with access from public transit, and accessible to bicyclists and pedestrians.
- 2-P-4.10 – Ensure that employment-generating development, such as industrial, warehouse, distribution, logistics, and fulfillment projects, does not result in adverse impacts (including health risks and nuisances), particularly to residential uses and other sensitive receptors, including impacts related to the location and scale of buildings, lighting, noise, smell, and other environmental and environmental justice considerations. When development is incompatible, require adequate buffers and/or architectural consideration to protect residential areas, developed or undeveloped, from intrusion of nonresidential activities that may degrade the quality of life in such residential areas.
- 6-P-2.7 – Facilitate and encourage more efficient use of the City’s industrial and employment-generating land supply, creating higher employment densities and high-quality jobs, while discouraging the use of large sites and buildings with low intensity uses and other uses that may compromise the sustainability of these areas.
- 6-P-2.14 – Encourage new businesses and project development under the Employment Center Industrial land use classification.

Pittsburg Technology Park Specific Plan. On November 4, 2024, the City Council adopted the Pittsburg Technology Park Specific Plan, which establishes development standards for a 76.38-acre area located within a portion of the former Delta View Golf Course (City of Pittsburg 2024d). The 22.31-acre project site is located within the Specific Plan area. The intent of the Specific Plan is to support the development of industrial, office, and technology park uses. A data center is identified as a permitted land use within the Specific Plan.

Concurrent with the adoption of the Specific Plan, the City Council changed the zoning of the Specific Plan area to a PD district (City of Pittsburgh 2024b). The following development standards apply to projects within this PD district:

- Minimum lot area: 5,000 square feet
- Minimum lot width: 70 feet
- Maximum height of structure(s): 99 feet (Height shall be calculated from the proposed finished grade to top of roof membrane. This excludes screening and architectural facades, i.e., parapet)
- Maximum lot coverage: 60%
- Maximum floor area ratio (FAR): 0.5
- Minimum site landscaping: 7%

5.11.2 Environmental Impacts

a. Would the project physically divide an established community?

Construction and Operation

No Impact. The project would be constructed and operated on a 22.31-acre site that was formerly used as a golf course. The buildings that were previously part of the golf course have been demolished. Additional demolition activities will occur during project construction and will include the removal of existing concrete slabs, foundations, and underground utility pipelines. (DayZenLLC 2024). All construction laydown and staging activities would be located on the project site and would not interfere with roadways, sidewalks, or bikeways in the surrounding area (DayZenLLC 2024). The project would not introduce a new barrier or otherwise restrict public access within the community. Neither project construction nor operation activities would physically divide an established community, and no impact would occur.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Construction and Operation

No Impact. As discussed in the subsections that follow, the construction and operation of the project would not conflict with applicable land use plans or policies such that an environmental impact would occur. There would be no impact associated with a land use plan or policy conflict.

Pittsburg 2040 General Plan. The project site has a general plan land use designation of ECI, which includes data centers as an allowable use (City of Pittsburgh 2024c). The PDH would be supported by 37 emergency backup generators. As a data center project, the proposed project is an allowable use in an ECI designation. The

project is also consistent with the following General Plan land use policies that are applicable to the project.

- Policy 2-P-4.2 – This policy encourages the development of business and industrial parks in areas served by public facilities and services. The proposed project would construct the PDH, which would be located at a site targeted by the city for new employment development opportunities such as data centers. The proposed site is currently served by utilities, transit services, and an existing road network (City of Pittsburgh 2024d). As the project would develop a new business that is an allowable use within the site’s ECI land use designation, the project would be consistent with this policy.
- Policy 2-P-4.10 – This policy requires new employment opportunities to maintain consistency with development standards and to ensure compatibility with surrounding land uses. The proposed project would be constructed within the planning area of the Pittsburgh Technology Park Specific Plan, which establishes development standards for all new projects. The proposed project has been designed to adhere to the Specific Plan’s development standards, including the location and scale of buildings, setbacks, and landscaping. The discussion under the Pittsburgh Technology Park Specific Plan (see Table 5.11-2) provides further detail on the project’s consistency with these development standards. The project would be consistent with this policy.
- Policy 6-P-2.7 – This policy encourages the development of new businesses that provide higher employment densities and high-quality jobs, while discouraging the use of buildings with low intensity uses. The PDH would employ approximately 20 to 30 operation workers, which is not a large workforce (DayZenLLC 2024). However, data centers are considered to be a source of a small number of high-quality jobs (Tarczynska 2025; Data Center Coalition 2024). While the project would not create a large employment workforce, it would be consistent with this policy as it is an allowable use within an ECI land use designation and is identified as a permitted use within the Pittsburgh Technology Park Specific Plan.
- Policy 6-P-2.14 – This policy promotes the development of new businesses within an ECI land use designation. As the project would construct and operate a new data center project within an ECI land use designation, the project would be consistent with this policy.

Pittsburgh Technology Park Specific Plan. The project site is zoned as a PD district and is subject to the development standards adopted in the Pittsburgh Technology Park Specific Plan. As discussed in Table 5.11-2, the project would be consistent with the Specific Plan’s development standards.

TABLE 5.11-2 CONSISTENCY WITH PITTSBURGH TECHNOLOGY PARK DEVELOPMENT STANDARDS

Development Standard	Requirement	Project Consistency
Minimum lot area	5,000 square feet	The project’s lot area is 960,456 square feet (DayZenLLC 2025a). As the project would exceed

TABLE 5.11-2 CONSISTENCY WITH PITTSBURG TECHNOLOGY PARK DEVELOPMENT STANDARDS

Development Standard	Requirement	Project Consistency
		the minimum lot area requirement, the project would be consistent with this standard.
Minimum lot width	70 feet	The project's lot width varies in size but is approximately 160 feet wide at its most narrow end (i.e., northern portion) (DayZenLLC 2025c; Google Earth Pro 2025). The central portion of the lot has the largest width of over 850 feet (DayZenLLC 2025c; Google Earth Pro 2025). As the project would exceed the minimum lot width of 70 feet, the project would be consistent with this standard.
Minimum front setback	10 feet	The proposed data center and backup generating facility would be set back at a minimum of 26 feet from the front, back, and sides of the parcel boundary to accommodate an emergency vehicle access easement (DayZenLLC 2025a, 2025c). As these project components would exceed the minimum setback requirements of 10 feet, the project be consistent with this standard.
Minimum side setback	10 feet	
Minimum corner side setback	10 feet	
Minimum rear setback	10 feet	
Maximum height of structure(s)	99 feet ¹	The roof of the data center building would have a height of 81 feet (DayZenLLC 2024). A rooftop dunnage platform, sound attenuating screen, and freight elevator would be placed on the data center roof. The dunnage platform and screen would extend up to 85 feet and 94 feet from ground level, respectively (DayZenLLC 2024). Although the top of the elevator parapet would reach 105 feet from ground level, the Specific Plan's maximum height development standards exclude screening and parapet structures (DayZenLLC 2024; City of Pittsburg 2024d). As the project's roof height would not exceed 99 feet, the project would be consistent with this standard.
Maximum lot coverage	60%	The project's total building area would be 116,200 square feet, which is 12% of the project's lot area (DayZenLLC 2024). As the project would not exceed the maximum lot coverage of 60%, the project would be consistent with this standard.
Maximum floor area ratio (FAR)	0.5	The total square footage of the data center building would be 347,740 square feet and would be located on a 764,308-square foot parcel (DayZenLLC 2025a, 2025c). The data center's FAR would be 0.45 (347,740/764,308). As the data center's FAR would not exceed 0.5, the project would be consistent with this standard.
Minimum site landscaping	7%	The preliminary landscape plan includes 438,363 square feet of groundcover or landscaping, which covers approximately 45% of the lot (DayZenLLC 2025b). As the project would exceed the

TABLE 5.11-2 CONSISTENCY WITH PITTSBURG TECHNOLOGY PARK DEVELOPMENT STANDARDS

Development Standard	Requirement	Project Consistency
		minimum site landscaping of 7%, the project would be consistent with this standard.

1 – Maximum height shall be calculated from the proposed finished grade to top of roof membrane. This excludes screening and architectural facades, i.e., parapet.

5.11.3 Mitigation Measures

None required.

5.11.4 References

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5.12 Mineral Resources

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to mineral resources.

MINERAL RESOURCES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Environmental checklist established by CEQA Guidelines, Appendix G.

5.12.1 Environmental Setting

In the context of the California Environmental Quality Act (CEQA), mineral resources are land areas or deposits deemed significant by the California Department of Conservation (CDOC). A mineral resource is a concentration of natural inorganic materials or fossilized organic material occurring in such form, quantity, or quality that there are reasonable prospects for economic extraction. Inorganic mineral resources include non-fuel materials such as aggregate (sand and gravel), metals (gold, silver, and iron), and industrial minerals (clays, limestone, and gypsum). Petroleum resources include coal, crude oil, and natural gas.

Information on mineral resources was compiled from published literature, geologic and resource maps, and review of aerial and satellite imagery. Impacts to mineral resources from project construction and operational activities were evaluated qualitatively based on the area occupied by the project, site conditions, expected construction practices, anticipated materials used, and the locations and duration of project construction and operational activities, as described in the project application (DayZenLLC 2024a) and preliminary site-specific geotechnical investigation (DayZenLLC 2024c).

The proposed project site is in northern Contra Costa County, in the City of Pittsburg. The project site is in an area that the California Geological Survey (CGS) designated as Mineral Resource Zone 1 (MRZ-1) for aggregate materials. A MRZ-1 area is an area where available geologic information indicates that no significant mineral deposits are present, or where little likelihood for their presence exists (CDOC 1996).

According to the CDOC Division of Mine Reclamation's (CDOC-DMR) list of mines, referred to as the AB 3098 List and regulated under the Surface Mining and

Reclamation Act (SMARA), there are four active or potentially active mines in Contra Costa County (CDOC 2025b). Significant mineral resources are not present in the City of Pittsburg (Pittsburg 2025).

According to the CDOC-DMR's Mines Online mapping application, there are fourteen active or potentially active mines within 25 miles of the project. The closest active mine to the project is a dredge operation in Suisun Bay, about 3 miles northeast of the project (CDOC 2016). According to the United States Geological Survey (USGS) Mineral Resources online mapping application, the closest former mine site to the project was a gravel or borrow pit, about 1.5 miles east of the project (USGS 2011).

According to the CDOC Geologic Energy Management Division (CalGEM) Well Finder online mapping application, there are no energy production related wells at the project site. There are 2,607 wells within 25 miles of the project. The closest well is a plugged dry hole well about 1.8 miles southwest of the project (CDOC 2025a).

At the project site, known geologic units at the surface and interpreted geologic units in the subsurface are Historic artificial fill, late Holocene to modern (<150 years) stream channel deposits, and early to late Pleistocene alluvial fan deposits (CDOC 2009; DayZenLLC 2024c). The project site and surrounding area are not known to support significant mineral resources of any type.

Regulatory Background

Federal

No federal laws, ordinances, regulations, and standards related to mineral resources apply to the proposed project.

State

The following state laws, ordinances, regulations, and standards related to mineral resources apply, or may apply, to the proposed project.

Surface Mining and Reclamation Act. As described in the Public Resources Code (PRC), Division 2, Chapter 9, Article 1, the 1975 Surface Mining and Reclamation Act (SMARA) provides a comprehensive surface mining and reclamation policy for the regulation of surface mining operations to assure that adverse environmental impacts are minimized and mined lands are reclaimed to a usable condition. SMARA also encourages the production, conservation, and protection of the State's mineral resources. County governments enact ordinances to implement SMARA at the local level and hold reclamation financial assurances (CPRC 2022).

The PRC, Division 2, Chapter 9, Article 4 requires that the State Geologist classify land into areas of statewide or regional significance (CPRC 2022). To implement Article 4, the State Geologist classifies mineral lands into Mineral Resource Zones (MRZs) or Scientific

Zones according to the known or inferred mineral potential of the land (Pub. Resources Code §§ 2710-2796). MRZs are defined as the following (CDOC 2000):

- MRZ-1: Areas where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood for their presence exists (CDOC 2000).
- MRZ-2a: Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. Areas classified MRZ-2a contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information. Land included in the MRZ- 2a category is of prime importance because it contains known economic mineral deposits (CDOC 2000).
- MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered deposits that are either inferred reserves or deposits that are presently sub-economic as determined by limited sample analysis, exposure, and past mining history. Further exploration work and/or changes in technology or economics could result in upgrading areas classified MRZ-2b to MRZ-2a (CDOC 2000).
- MRZ-3a: Areas containing known mineral deposits that may qualify as mineral resources. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2a or MRZ-2b categories. MRZ-3a areas are considered to have a moderate potential for the discovery of economic mineral deposits (CDOC 2000).
- MRZ-3b: Areas containing inferred mineral deposits that may qualify as mineral resources. Land classified MRZ- 3b represents areas in geologic settings which appear to be favorable environments for the occurrence of specific mineral deposits. Further exploration work could result in the reclassification of all or part of these areas into the MRZ-3a category or specific localities into the MRZ-2a or MRZ-2b categories. MRZ-3b is applied to land where geologic evidence leads to the conclusion that it is plausible that economic mineral deposits are present (CDOC 2000).
- MRZ-4: Areas where geologic information does not rule out either the presence or absence of mineral resources. The distinction between the MRZ-1 and MRZ-4 categories is important for land-use considerations. It must be emphasized that MRZ-4 classification does not imply that there is little likelihood for the presence of mineral resources, but rather there is a lack of knowledge regarding mineral occurrence. Further exploration work could well result in the reclassification of land in MRZ-4 areas to MRZ-3 or MRZ-2 categories (CDOC 2000).

Scientific Zones are defined as areas containing uique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance.

Local

County of Contra Costa General Plan. The Contra Costa County 2045 General Plan includes goals, policies, and actions that are relevant to the project. Chapter 7: Conservation, Open Space, and Working Lands Element states policy guidance for mineral resources (Contra Costa County 2024).

The purpose of Goal COS-13 is to continue economically viable mineral extraction while minimizing land use conflicts and environmental impacts. The following policies in Goal COS-13 are related to mineral resources (Contra Costa County 2024).

- Policy COS-P13.1. Protect valuable mineral resources by prohibiting incompatible projects and land uses (i.e., those that would directly or indirectly interfere with extraction, processing, or transportation of mineral resources) within Mineral Resource Areas.
- Policy COS-P13.2. Encourage compact design and layout for mineral resource processing areas, preserving as much land as possible for buffering between these areas and adjacent land uses.

County of Contra Costa Municipal Code. The 2025 Contra Costa County Municipal Code, Title 8, Chapter 88-11 Surface Mining and Reclamation effectuates SMARA. The goals of Chapter 88-11 are to regulate surface mining and mine reclamation consistent with the county's general plan, use economically valuable mineral deposits, minimize impacts to land use, the environment, and public health and safety, and protect economic and natural resources related to surface mining for future benefit (Contra Costa County 2025).

City of Pittsburg General Plan. The City of Pittsburg's 2040 General Plan, Chapter 10: Resource Conservation and Open Space Element states that significant mineral resources are not present in Pittsburg (Pittsburg 2024).

5.12.2 Environmental Impacts

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?

Construction and Operation

No Impact. The project site is in an area that does not contain any known or designated mineral resources. The project would not result in the loss of availability of a known mineral resource that would be valuable to the region or to the residents of the State.

b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Construction and Operation

No Impact. The project site is in an area that does not contain any known or designated mineral resources. The project would not result in the loss of availability of a locally important mineral resource recovery site.

5.12.3 Mitigation Measures

None required.

5.12.4 References

- CDOC 1996 – California Department of Conservation (CDOC), Division of Mines and Geology. Update of Mineral Land Classification: Aggregate Materials in the South San Francisco Bay Production-Consumption Region. Open-File Report 96-03. Accessed on August 22, 2025. Accessed online at: <https://www.conservation.ca.gov/cgs/minerals/mineral-land-classification-smara#maps-and-reports>
- CDOC 2000 – California Department of Conservation (CDOC), State Mining and Geology Board and Division of Mines and Geology. Guidelines for Classification and Designation of Mineral Lands. Special Publication 52. January 2000. Accessed on August 22, 2025. Accessed online at: <https://www.conservation.ca.gov/smgb/Guidelines/>
- CDOC 2016 – California Department of Conservation (CDOC). Mines Online Interactive Web Map. 2016. Accessed on June 10, 2025. Accessed online at: <https://maps.conservation.ca.gov/mol/index.html>
- CDOC 2025a – California Department of Conservation (CDOC), California Geologic Energy Management Division (CalGEM). Well Finder. Online mapping application last updated on February 20, 2025. Well Statewide Tracking and Reporting System (WellSTAR) database last updated on August 21, 2025. Accessed on August 22, 2025. Accessed online at: <https://maps.conservation.ca.gov/doggr/wellfinder/>
- CDOC 2025b – California Department of Conservation (CDOC), Division of Mine Reclamation (DMR). AB 3098 List. As effective: August 22, 2025. Accessed on August 22, 2025. Accessed online at: <https://www.conservation.ca.gov/smgb/Pages/AB-3098-List.aspx>
- Contra Costa County 2024 – County of Contra Costa (Contra Costa County), Department of Conservation and Development. 2045 General Plan. Prepared by PlaceWorks in association with Barry Miller Consulting, Fehr & Peers, BAE Urban Economics, and ICF Jones & Stokes, Inc. Adopted November 5, 2024. Accessed on August 14, 2025. Accessed online at: <https://www.contracosta.ca.gov/4732/General-Plan>
- Contra Costa County 2025 – County of Contra Costa (Contra Costa County). A Codification of the General Ordinances of Contra Costa County, California. Kept

regular by Municipal Code Corporation, Tallahassee, Florida. Version: August 5, 2025. Accessed on August 15, 2025. Accessed online at: https://library.municode.com/ca/contra_costa_county/codes/ordinance_code?noDeId=COCOCOCO

CPRC 2022 – California Public Resources Code (CPRC), Division 2. Geology, Mines, and Mining, Chapter 9. Surface Mining and Reclamation Act of 1975. As effective: January 1, 2022. Accessed on: August 15, 2025. Accessed online at: https://leginfo.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=PRC&division=2.&title=&part=&chapter=9.&article=

DayZenLLC 2024a – DayZenLLC (TN 254728). AVAIO SPPE Application Main Application and Appendix A - PBGF - Part I, dated February 29, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>

DayZenLLC 2024c – DayZenLLC (TN 254730). AVAIO SPPE Application Appendices D through F - PBGF - Part III, dated February 29, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>

Pittsburg 2024 – City of Pittsburg (Pittsburg). 2040 General Plan. Adopted May 6, 2024. Accessed on August 14, 2025. Accessed online at: <https://pittsburg.generalplan.org/>

USGS 2011 – United States Geological Survey (USGS). Mineral Resources Online Spatial Data: Interactive Maps and Downloadable Data for Regional and Global Geology, Geochemistry, Geophysics, and Mineral Resources. 2011. Accessed on August 22, 2025. Available online at: <https://mrdata.usgs.gov/general/map-us.html>

5.13 Noise

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to noise and vibration.

NOISE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental checklist established by CEQA Guidelines, Appendix G.

5.13.1 Environmental Setting

The project area consists primarily of employment center industrial (ECI), residential, and park land uses. The project site zoning is bordered to the north with residential and open space zoned land, bordered to the south and east with ECI zoned land, and bordered to the west with park zoned land. The nearest noise sensitive receptor is a residence located approximately 800 feet north of the project center. There is also a church approximately 1,070 feet north-northwest of the project center. The project site is located approximately 3,250 feet south of State Route 4 in the City of Pittsburg, Contra Costa County.

Long-term ambient noise monitoring assessments L-1 and L-2 were conducted at the south of the residences on Golf Club Road and west of the residences along Orinda Circle between Wednesday, November 11, 2023, and Friday, November 13, 2023 (48-hour period), respectively. The measured daytime and nighttime ambient noise level at

the monitoring locations were 56 and 54 decibels on the A-weighted scale (dBA) L_{dn} ¹ at L-1 and L-2, respectively. L-1 is also the closest long-term ambient noise monitoring assessment to the residences north of the project center.

Ambient noise levels were attributed to vehicular traffic along local roads, distant trains, and general neighborhood activity in adjacent residential areas.

Regulatory Background

Thresholds of Significance

The California Environmental Quality Act (CEQA) Guidelines state that a project would normally be considered to have a significant impact if noise levels conflict with adopted environmental standards or plans, or if noise levels generated by the project would substantially increase existing noise levels at noise-sensitive receivers on a permanent or temporary basis (environmental checklist established by CEQA Guidelines, Appendix G). CEQA does not define what noise level increase would be substantial. Generally, an increase of 3 dBA is noticeable and an increase of 5 dBA is distinct. A noise level increase of more than 5 dBA would be considered potentially significant. Other factors, such as the frequency of occurrence of the noise and time of day/night it occurs, are also commonly considered in determining if such an increase is clearly significant or not.

There are no adopted thresholds for an increase in dBA level to be considered a significant impact for construction activities. Noise impact due to construction activities are considered to be less than significant if the construction activity is temporary and the use of heavy equipment and noisy activities is limited to daytime hours. Based on staff's experience with community reaction to increases of noise due to construction, an increase of 10 dBA or more during the day can trigger a community reaction (e.g., a receptor hearing a 10 dBA increase due to construction noise could consider this noise negatively) and can warrant additional measures to address impacts. An increase of 10 dBA corresponds to a doubling of loudness or dBA level and is generally considered to be the starting point at which significant impacts may occur. The exact level of noise resulting from construction is very difficult to identify because it fluctuates based on many factors over the course of a week, day, or even hour. It also depends on other factors, such as intervening structures, land topography, and land cover. For example, intervening structures would block or impede sound waves, and undulating topography and land roughness would play a role in attenuating the propagation of sound waves. Therefore, performance standards (i.e., a complaint and redress process) are ultimately used as a backstop measure to address any impacts that are perceived by the community.

¹ L_{dn} is day-night average sound level, which is the 24-hour average sound pressure level calculated with a 10 dBA penalty added to nighttime hours (10 P.M. to 7 A.M.).

The California Department of Transportation (Caltrans) released the Transportation and Construction Vibration Guidance Manual. This manual includes the Federal Transit Administration's (FTA) methods and findings. The Caltrans manual states that for construction activities that generate vibration, the threshold of human response begins at a peak particle velocity (PPV) of 0.16 inch per second (in/sec). This is characterized by Caltrans as a "distinctly perceptible" event with an incident range of transient to continuous (Caltrans 2020). A level of 0.20 in/sec has been found to be annoying to people in buildings and can pose a risk of architectural damage to buildings.

Local

City of Pittsburg General Plan Update 2040 Draft. *City of Pittsburg 2040 General Plan* (General Plan) describes the levels of exterior noise considered compatible for various land uses to guide land use planning decisions. The General Plan includes policies applicable to all development projects in Pittsburg (Pittsburg 2024c). The city's noise and land use compatibility guidelines are shown in **Table 5.13-1**.

TABLE 5.13-1 PERFORMANCE STANDARDS FOR STATIONARY NOISE SOURCES, INCLUDING AFFECTED PROJECTS

Noise Level Descriptor	Daytime (7 AM to 10 PM)	Nighttime (10 PM to 7 AM)
Hourly L_{eq} dBA	55	45

Source: Table 13-2, Pittsburg 2024.

In addition, the General Plan lists the following policies to control noise and vibration pollution impacts:

- 13-P-1.2: Require development projects, including new uses, to meet the noise standards established in Table 5.13-1.
- 13-P-1.3: Require that applicants for noise-sensitive development, such as schools, residences, and hospitals, in areas subject to noise generators producing noise levels greater than 65 dB CNEL, obtain the services of a professional acoustical engineer to provide a technical analysis of noise impacts and measures to reduce noise exposure to acceptable levels.
- 13-P-1.4: Ensure that new noise-sensitive uses in areas near roadways identified as producing noise levels greater than 65 dB CNEL incorporate noise reduction measures to ensure that interior noise levels do not exceed 45 dB CNEL.
- 13-P-1.5: Continue efforts to incorporate noise considerations into land use planning decisions, including measures to control noise at the source through site design, building design, landscaping, hours of operation, and other techniques, for new development deemed to be noise generators, and guide the location and design of transportation facilities to minimize the effects of noise on adjacent land uses.
- 13-P-1.6: Encourage criteria such as building design and orientation, wider setbacks, and intense landscaping in lieu of sound walls to mitigate traffic noise along all major corridors, except along State Route 4.

- 13-P-1.7: Limit generation of loud noises on construction sites adjacent to existing development to normal business hours between 8:00 AM and 5:00 PM.
- 13-A-1.e: In making a determination of impact significance under the California Environmental Quality Act (CEQA), a substantial increase will occur if ambient noise levels experience a substantial permanent increase. Generally, a 3 dB increase in noise levels is barely perceptible, and a 5 dB increase in noise levels is clearly perceptible. Therefore, increases in noise levels shall be considered to be substantial when the following occurs:
 - When existing noise levels are less than 60 dB, a 5 dB increase in noise will be considered substantial;
 - When existing noise levels are between 60 dB and 65 dB, a 3 dB increase in noise will be considered substantial.

When existing noise levels exceed 65 dB, a 1.5 dB increase in noise will be considered substantial. Additional or alternative criteria can be used for determining a substantial increase in noise levels. For instance, if the overall increase in noise levels occurs where no noise-sensitive uses are located, then the City may use its discretion in determining if there is any impact at all. In such a case, the following alternative factors may be used for determining a substantial increase in noise levels:

- the resulting noise levels;
- the duration and frequency of the noise;
- the number of people affected;
- conforming or non-conforming land uses;
- the land use designation of the affected receptor sites;
- public reactions or controversy as demonstrated at workshops or hearings, or by correspondence; and
- prior CEQA determinations by other agencies specific to the project.

City of Pittsburg Municipal Code. Title 18, Chapter 18.82, Section r specifies allowable uses and activities near residential zoned areas. Noise limits at the property line of a project are not allowed to exceed 65 dBA except between the hours of 8:00 AM and 5:00 PM.

The city's Municipal Code does not establish quantitative noise limits for demolition or construction activities occurring in the city (Pittsburg 2025).

5.13.2 Environmental Impacts

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction

Less Than Significant Impact. Construction activities would last for about 18 months (DayZenLLC 2024d) and would utilize equipment that could generate noise levels that exceed ambient noise, such as bulldozers and jackhammers. For example, typical equipment used for trenching and foundation work usually produce an average of 82 dBA sound pressure level at 50 feet. Sound pressure level is the pressure generated by sound waves as perceived by the human ear and is affected by the distance from the sound source or sound power level from the source. Sound power level is the amount of energy generated from a sound source similar to the wattage of a light bulb. Equipment manufacturers often provide sound levels in either sound pressure level or sound power level; however, if the latter is provided, sound pressure level can be converted from sound power level to determine the sound perceived by the human ear.

If impact pile driving is used, it would be for short durations to install deep foundation piles. Impact pile installation can generate an equivalent hourly noise level, L_{eq} , of 95 dBA at 50 feet away.

The city of Pittsburg's Municipal Code does not establish a noise threshold for construction activities, but limits construction events and activities in excess of 65 dBA to occur during the daytime hours of 8:00 a.m. to 5:00 p.m.

Sound levels from stationary noise sources attenuate in an inverse exponential pattern at a rate of 6 dBA for every doubling of distance. The maximum noise level from construction activities would be 62 dBA at the nearest residences, located approximately 800 feet north of the project site center. This would increase the existing ambient noise level of 56 dBA L_{eq} at these receptors by 6 dBA. Located approximately 1,070 feet north from the center of the project is a church. Noise level from construction activities would be 62 dBA at this location, 6 dBA above the existing ambient level. Since project construction would occur during daytime hours, these increases are less than significant. Also, these activities would be intermittent and temporary (DayZenLLC 2024d, Table 5-2).

Additionally, the SPPE application states that the project would follow the City of Pittsburg Municipal Code conditions related to construction noise, which includes the following:

- Limit construction noise exceeding 65 dBA to between 8:00 AM and 5:00 PM.

- Prohibit the discharge of exhaust of stationary internal combustion engines (e.g., generators) except through a muffler or other noise control device.
- Prohibit the operation of pile drivers, steam shovels, pneumatic hammers, derricks, and steam or electric hoists between the hours of 10:00 p.m. and 7:00 a.m. except in the case of emergency.
- Prohibit the operation of any noise-producing blower, power fan, or engine unless noise from the source is sufficiently controlled.

The construction team is also expected to inform the nearest residences prior to the start of the paving activity (DayZenLLC 2024a).

Noise impacts from project construction would not be in excess of adopted environmental standards or plans.

Operation and Maintenance

Less Than Significant Impact. The backup generators (gensets) would provide backup power to the data center buildings during emergency outages when electric service is interrupted. Sources of operational noise for the project would include thirty-seven (37) gensets.

The applicant performed an operational noise impact assessment for the project. The assessment modeled standard operation, in which no gensets are running in day-to-day operation, as well as highest resulting continuous sound level, which would occur if all thirty-seven (37) gensets ran at the same time during an emergency (DayZenLLC 2024d).

Noise levels during the standard operation mode would increase ambient noise levels at the closest residential receptors from 56 dBA L_{dn} to 59 dBA L_{dn} . This difference of 3 dBA L_{dn} would be considered less than significant (DayZenLLC 2024d).

Noise levels during the worst-case emergency mode would increase the ambient noise level at adjacent sensitive receptors. At the nearest residences, the emergency operation mode would increase the ambient noise level by 7 dBA L_{dn} to 63 dBA L_{dn} ; however, power outages are typically infrequent and temporary (DayZenLLC 2024d). Based on historical data, emergency operation has occurred infrequently, and this project is not expected to be different.

Humming noise, or white noise, from the operation of an industrial facility, such as a data center, is usually associated with either, equipment imbalance that can occur in older or poorly designed equipment, or due to the lack of noise-control features. The project, on the other hand, would be a new, state of the art facility, incorporating low-noise equipment and noise-control features. The project is not expected to generate a humming noise or any other tonal noise discernable at the nearby residences.

The noise impact from project operation would be less than significant.

Noise impacts from project operation would not be in excess of adopted environmental standards or plans.

b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction

Less Than Significant Impact. This analysis relies on the vibration thresholds identified by Caltrans to determine the significance of vibration impacts related to adverse human reaction. These thresholds are consistent with local regulations. The threshold of human response begins at a PPV of 0.16 in/sec. Caltrans characterizes this as a “distinctly perceptible” event (Caltrans 2020). A level of 0.20 in/sec has been found to be annoying to people in buildings and can pose a risk of architectural damage to buildings.

Construction activities such as drilling, use of jackhammers, rock drills, and other high-power or vibratory tools, as well as rolling stock equipment such as tracked vehicles and compactors, may generate substantial vibration in the immediate site vicinity. Jackhammers can cause a groundborne vibration rate of 0.035 in/sec at 25 feet (less than the threshold of human response) and vibratory rollers can cause a groundborne vibration of 0.21 in/sec at 25 feet, while typical vibration rate caused by impact pile driving at 25 feet is 0.64 in/sec (Caltrans 2020). However, vibration rates dissipate rapidly with distance, and the vibration rate generated by an impact pile driver drops to 0.14 in/sec at a distance of 100 feet from the source. The closest sensitive receptor to the project boundary would experience up to 0.07 in/sec PPV from paving activities, which does not exceed the threshold of human response. Paving is also only expected to last for 3 days at most and would not be a significant impact due to the temporary nature of the vibration. The construction team is also expected to inform the nearest residences prior to the start of the paving activity (DayZenLLC 2024a). Therefore, temporary vibration impacts from construction equipment are expected to be less than significant.

Operation

Less Than Significant Impact. Sources of groundborne vibration associated with project operation would include the gensets and rooftop equipment. These pieces of equipment would be well-balanced, as they are designed to produce very low vibration levels throughout the life of a project. In most cases, even when there is an imbalance, they could contribute to ground vibration levels only in the vicinity of the equipment and would be dampened within a short distance. The proposed gensets are equipped with specifications that ensure sufficient exhaust silencing to reduce vibration. Therefore, vibration impacts due to project operation would be less than significant.

- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

Construction and Operation

No Impact. The nearest airport to the project site is the Buchanan Field Airport, located approximately 8.15 miles west of the project site. The airport is too far from the project site to result in exposure of people residing or working in the project area to excessive noise levels, when combined with the project.

5.13.3 Mitigation Measures

None required.

5.13.4 References

- DayZenLLC 2024a – DayZenLLC (TN 254728). AVAIO SPPE Application Main Application and Appendix A - PBGF - Part I, dated February 29, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>
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- Pittsburg 2025 – City of Pittsburg (Pittsburg). City of Pittsburg Municipal Code, Title 18: Zoning. Current Version: June 2, 2025. Accessed on: August 5, 2025. Accessed online at: <https://www.codepublishing.com/CA/Pittsburg/#!/Pittsburg18/Pittsburg1882.html#18.82.040>

5.14 Population and Housing

This section describes the environmental and regulatory background, and discusses impacts associated with the construction and operation of the project with respect to population and housing.

POPLUATION AND HOUSING	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Environmental checklist established by CEQA Guidelines, Appendix G, population and housing.

5.14.1 Environmental Setting

Population Growth

The proposed project would be located in the City of Pittsburg, Contra Costa County. Contra Costa County is the study area for the population and housing-related impacts of this project. The Oakland-Hayward-Berkely Metropolitan Division (MD), which includes Alameda and Contra Costa counties, is the study area for the labor supply for the project. Local workers are defined as residing within a 90-minute commute for project construction and a 60-minute commute for project operation. According to the US Census Bureau, super commuters are becoming more common and are willing to drive longer distances, with greater travel time to reach places of employment (Rapino and Fields 2012). Data showed that approximately 8.1 percent of US workers commute longer than 60 minutes and nearly 600,000 full-time workers at the time of the study were considered mega commuters (90 minutes or more and 50 miles or more commutes). Considering this, and the available workforce in Contra Costa County, it is reasonable that most, if not all, of the construction workers would commute to the site in lieu of moving themselves and families closer for the temporary construction period and permanent operation of the data center.

Contra Costa County has an estimated land area of 458,240 acres (716 square miles), is the 51st largest county in California in terms of land area, and the ninth most populous (Contra Costa County 2025). The county has nineteen incorporated cities and five

districts that comprise of 38 unincorporated communities in total. Pittsburg is the fifth largest city by population within the county.

As shown in **Tables 5.14-1** and **5.14-2**, Pittsburg, like much of the rest of Contra Costa County and California, saw a large population growth between 2010 and 2020, increasing from 63,264 in 2010 to 76,401 in 2020, representing a 1.90 percent compound average growth rate (CAGR [CA DOF 2021]). However, projections indicate that this rate will be reduced in the following decade, showing a slight population decrease from 76,401 in 2020, to 75,600 in 2030, representing a -0.11 percent CAGR. Projections show a decrease from 76,374 from current levels (2025) to 75,600 in 2030, indicating a -0.17 percent CAGR (CA DOF 2025a). Pittsburg's population is expected to continue its swing back into the positive between 2030 and 2040, with annual growth rates returning to pre-COVID-19 Pandemic levels for the city and county. Pittsburg's population is expected to increase to 91,615 in 2040, representing a 1.94 percent CAGR between 2030 and 2040 (ABAG 2018).

For the next five years (2025 to 2030), the population of the county is expected to increase with a CAGR of 0.23 percent. From 2030 to 2040, the population is projected to increase about half as fast as Pittsburg's with a 0.84 percent CAGR, increasing to a population of nearly 1.28 million by 2040. In contrast, California's population is projected to remain at a stagnant level in the coming decades through 2050, with a slight increase in population from 40,968,090 in 2040 to 41,726,601 in 2050, representing a 0.18 percent CAGR (CA DOF 2025a, 2025b).

TABLE 5.14-1 HISTORICAL AND PROJECTED POPULATIONS

Area	2010	2020	2025	2030 projected	2040 projected	2050 projected
City of Pittsburg	63,264	76,401	76,374	75,600	91,615	N/A
Contra Costa County	1,052,613	1,160,099	1,158,225	1,174,589	1,277,132	1,384,222
California	37,253,956	39,520,071	39,529,101	39,771,423	40,968,090	41,726,601

Source: CA DOF 2025a, 2025b; ABAG 2018¹

TABLE 5.14-2 AVERAGE ANNUAL COMPOUND GROWTH RATE

Area	2010-2020	2020-2030 Projected	2025-2030 projected	2030-2040 Projected	2040-2050 Projected
City of Pittsburg	1.90%	-0.11%	-0.17%	1.94%	N/A
Contra Costa County	0.98%	0.12%	0.23%	0.84%	0.81%
California	0.59%	0.06%	0.10%	0.30%	0.18%

¹ The ABAG 2018 projections were the only available future projections for the City of Pittsburg at the time of this analysis.

Housing

Table 5.14-3 presents housing supply data for the project area. Year 2025 housing estimates indicate there are 725 vacant housing units within the City of Pittsburg and 16,996 available units in Contra Costa County (CA DOF 2025a).

TABLE 5.14-3 HOUSING ESTIMATES AS OF JANUARY 1, 2025

Housing Supply	Total Units	Single-Family (Detached)	Multi-Family (Attached)	Mobile Homes	Vacant Units	Percent Vacant
City of Pittsburg	25,017	17,574	5,227	729	725	2.9%
Contra Costa County	435,790	289,101	105,308	7,085	16,996	3.9%
California	14,949,001	8,525,241	4,797,844	539,557	956,736	6.4%

Source: CA DOF 2025a

The Association of Bay Area Governments (ABAG) developed the Final Regional Housing Needs Allocation Plan (RHNA), which allocates the estimated number of housing units needed in Contra Costa County from 2023 to 2031. It is estimated that 49,043 housing units are needed in the county during that eight-year period to meet projected population growth. Of that amount, 2,052 additional housing units would be needed in the City of Pittsburg (ABAG 2022, p. 25). According to the City of Pittsburg 2023-2031 Housing Element Background Report, the city has a total realistic capacity (based on its inventory of vacant sites, approved projects, and pending projects) for at least 6,138 units to fulfill the required 2,052-unit ABAG RHNA (City of Pittsburg 2024a).

Labor Supply

According to the California Employment Development Department (CEDD) 2022-2032 Occupational Employment Projections for the Oakland-Hayward-Berkely MD (Alameda and Contra Costa counties), from 2022 to 2032, the Construction Trades Workers occupation is expected to have a 10.2 percent increase in employment from 1,243,050 to 1,369,490. The 2032 projected occupational employment for the Computer and Information Systems Managers is 7,660, which has a 12.8 percent change from 2022 levels, as shown in **Table 5.14-4** (CA EDD 2025). Both of these project-related construction and operations occupations are projected to have an average annual compounded growth rate of 1.3 percent through 2030.

TABLE 5.14-4 PROJECTED OCCUPATIONAL EMPLOYMENT GROWTH FOR THE OAKLAND-HAYWARD-BERKELY MD

Occupation	Base Year Employment Estimate 2022	Projected Year Employment Estimate 2032	Percentage Change 2022-2032	Average Annual Compounded Growth Rate
Construction Trades Workers	1,243,050	1,369,490	10.2	1.0%
Computer and Information Systems Managers	6,790	7,660	12.8	1.2%
Project-Related Workers	1,249,840	1,377,150	23.0	2.2%

TABLE 5.14-4 PROJECTED OCCUPATIONAL EMPLOYMENT GROWTH FOR THE OAKLAND-HAYWARD-BERKELY MD

Occupation	Base Year Employ-ment Estimate 2022	Projected Year Employ-ment Estimate 2032	Percentage Change 2022-2032	Average Annual Compounded Growth Rate
All Occupations in MD	53,620	60,090	12.1	1.1%

Source: CA EDD 2025

Regulatory Background

No regulations related to population and housing apply to the project.

5.14.2 Environmental Impacts

- a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Construction

Less Than Significant Impact. The project would not directly or indirectly induce substantial unplanned growth in the City of Pittsburg. The project does not propose new housing or land use designation changes and would not facilitate growth by extending growth inducing infrastructure such as roads, water supply pipelines, electrical service, or other growth inducing infrastructure. Construction of the proposed AVAIO Pittsburg Data Hub (PDH), including the AVAIO Pittsburg Backup Generating Facility (PBGF) would provide short-term jobs for an average workforce of about 100 construction workers, with a peak workforce of up to 150 workers. Project construction would not likely result in workers relocating to the area because there is a sufficient workforce pool in the Oakland-Hayward-Berkely MD, as shown in **Table 5.14-4** above, and because of the short construction duration of 13 to 18 months. However, should all 150 workers relocate to Contra Costa County, there is ample vacancy of housing units in Pittsburg (725 units), as well as the county. Adding 150 construction workers would only reduce the total vacant housing units by less than one percent of the available 16,996 units in the county. Thus, their relocation would not create unplanned population growth as a result of the construction of the data center and its backup generation facility. While the project includes 37 emergency backup generators, the electricity produced would directly serve the data center only in the event utility power interruptions occurred. Because the generation facility would not be an extension of Pittsburg Power Company's infrastructure, it would not result in indirect population growth.

Construction activities would last approximately 13 to 18 months and would occur in five phases, many of which would have even a shorter duration. Phase 1 includes site preparation and clearing; Phase 2 would begin following completion of Phase 1 and

include grading work; Phase 3 would include building construction; Phase 4 would include paving activities; and Phase 5 would include architectural coating and finishes. The PBGF would involve construction of the generation yard, which includes the construction of concrete slabs, stacking structures, fencing, installation of underground and aboveground conduit and electrical cabling to interconnect to the PDH switchgear, and placement and securing of the generators. Construction of the generation yard is expected to require 10 to 15 construction workers and to take six months, which is included in the 18-month construction period of the PDH (DayZenLLC 2024, TN 254728 pg. 2-9).

The construction workforce is anticipated to be sourced locally. As indicated in **Table 5.14-4**, there is a sufficient local construction workforce in the Oakland-Hayward-Berkely MD to accommodate the project; thus, because of the adequate workforce and the short construction duration, the construction workforce would not likely seek temporary lodging closer to the project site. Therefore, the project's construction workforce would not directly or indirectly induce substantial population growth in the project area. The impact would be less than significant.

Operation

Less Than Significant Impact. Operation of the project would not directly induce substantial unplanned growth in the City of Pittsburg because the project does not propose new housing or land use changes. The data center is expected to staff between 20 and 30 full-time employees. The 37 generators would be used for backup power in the event of a disturbance or interruption of the utility's power supply. Otherwise, it would only run for short periods for testing and maintenance purposes. Maintenance and testing of each of the generators is anticipated to be once a month and would not require a substantial expansion of onsite personnel. It is anticipated that each generator would run for no more than 34 work hours per year during maintenance activities (DayZenLLC 2024, TN 254728 p. 2-9).

As indicated in **Table 5.14-4**, because there would be sufficient supply of operational staff, they would likely be based in the region and would not relocate closer to the project site. If some operations workers were to relocate, **Table 5.14-3** indicates a vacancy rate of 2.9 percent in the City of Pittsburg, and a vacancy rate range of 3.9 percent in the county. Although a 5-percent vacancy rate is a typical industry-accepted minimum benchmark for sufficient availability of housing for people searching for houses (Virginia Tech 2006), the increase of 30 employees relocating their families would not cause an unforeseen burden to the available housing stock of 16,996 vacant units. There is a sufficient supply of available housing units if operations workers seek housing closer to the PDH. In addition, the City of Pittsburg 2040 General Plan and ABAG's Final RHNA have accounted for population growth in Pittsburg and as mentioned above, the city has a surplus of realistic capacity to fulfill its portion of the RHNA. Therefore, the project's operations workforce would not directly or indirectly induce substantial unplanned population growth in the project area. The impact would be less than significant.

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Construction and Operation

No Impact. The site is currently part of the abandoned Delta View Golf Course. As part of the adopted City of Pittsburg 2040 General Plan Update on May 6, 2024, the general plan designation of the site changed from "Park" to "Employment Center Industrial (ECI)" and through City Council Ordinance No. 24-1523, the zoning of the site was changed from "Open Space (OS)" to "Limited Industrial with Limited Overlay District (IL-O)." On November 4, 2024, the zoning of the project site further changed to through the certification of the Technology Park Specific Plan EIR and approval of the Specific Plan, rezoning the project site to "Planned Development (PD)" (City of Pittsburg 2024b). The PD zoning designation allows for the proposed data hub and backup generation facility land use. There are no residents or housing units on the project site, nor any included in the proposed project. Therefore, the project would not displace any people or housing. Construction of replacement housing elsewhere would not be necessary and thus, no impact would occur.

5.14.3 Mitigation Measures

None required.

5.14.4 References

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5.15 Public Services

This section describes the environmental setting, regulatory background and impacts associated with the construction and operation of the project with respect to public services.

PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☐	☒
ii. Police Protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☒	☐
iv. Parks?	☐	☐	☒	☐
v. Other public facilities?	☐	☐	☒	☐

Environmental checklist established by CEQA Guidelines, Appendix G, public services.

5.15.1 Environmental Setting

For the area where the proposed project would be located, public services, including fire and police services, as well as public and private schools, parks and recreational areas, and other public services, are provided by the City of Pittsburgh, Contra Costa County, and private entities. The study area for public service-related impacts is the City of Pittsburg and Contra Costa County.

Fire Protection

Fire protection in the City of Pittsburg and the project area is provided by the Contra Costa County Fire Protection District (CCCYPD). The CCCYPD provides fire suppression and prevention services for more than 750,000 residents of the county, along with dispatch, fire inspection, rescue, and Advanced Life Support for medical emergencies. The Contra Costa County Local Area Formation Commission (LAFCO) approved the annexation of the CCCYPD and the East Contra Costa Fire Protection District on July 30, 2022 (CCCYPD 2022). The CCCYPD now encompasses 35 fire stations, covering 553 square miles and employing over 600 personnel. The CCCYPD includes 17 battalion chiefs, 3 deputy fire chiefs, 8 assistant fire chiefs, 127 fire captains, 119 fire engineers, 191 firefighters, and other fire service personnel (CCCYPD 2024a). Based on the

county's population and CCCFPD's estimated fire personnel roster, the district's staffing ratio is approximately 0.8 fire personnel for every 1,000 residents of the county. In 2023, the district responded to 126,387 incidents that included 70,922 Emergency Medical Services, 5,125 fires (structure, vehicle, vegetation, and others), 3,484 vehicle accidents, and 5,857 fire alarms (CCCFPD 2024b).

According to CCCFPD, the district's current response time goal for emergency and non-emergency calls is under five minutes for most incidents. CCCFPD Station 87, located at 800 West Leland Road in Pittsburg, is the closest station to the proposed PDH and is approximately 0.5 mile from the site. The station is part of Battalion 8, which comprises stations 83 through 87, with three engines shared between all five stations. Station 87 typically staffs three personnel in each shift, including one fire captain, and has one engine on hand. During incidents consisting of hazardous materials, the station is cross-staffed with the district to provide sufficient personnel (N. Vanderburg, personal communication, November 19, 2024).

Police Protection

The City of Pittsburg Police Department is responsible for providing law enforcement services to the city and project site. The police station is located at the City of Pittsburg City Hall complex at 65 Civic Avenue, approximately 1.3 miles northeast of the project site. The department is a full-service police department (P. Galer, personal communication, December 6, 2024). According to the most recent Pittsburg Police Department Annual Report (FY 2018-2019), the department offers police protection services through several of its divisions including its patrol, traffic, and investigations divisions; as well as through its Special Weapons and Tactics (SWAT), crisis negotiations, and canine teams; and through its marine unit (City of Pittsburg 2019).

The Pittsburg Police Department employs 113 individuals, including 88 sworn officers and 25 non-sworn staff. The department's structure comprises 2 captains, 6 lieutenants, 10 sergeants, patrol officers, special teams members, and administrative personnel. The department's current response time goal is under 2 minutes for priority calls and under 15 minutes for non-priority calls. The department continues to meet this response time goal on a regular basis. This would be consistent with any priority or non-priority calls that would be associated with the project during construction and operation. The current service ratio for the department is more than 1.16 officers for every 1,000 residents of Pittsburg (P. Galer, personal communication, December 6, 2024).

Schools

The Pittsburg Unified School District (PUSD) serves the project site and is comprised of 13 public kindergarten through 12th grade (K-12) schools, the Los Medanos Community College, various preschools, adult education, and special training opportunities. The PUSD is comprised of eight elementary schools, three junior high schools, one comprehensive high school, and one alternative education high school. The district serves over 10,700 students in K-12 grades (PUSD 2025).

The nearest public schools to the project site include:

- Heights Elementary, located approximately 0.7 miles southeast of the site at 40 Seeno Avenue;
- Rancho Medanos Junior High School, located approximately 0.2 miles north of the proposed data center at 2301 Range Road; and
- Pittsburg High School, located 1.3 miles northeast of the site at 1750 Harbor Street.

The district had a total of 11,015 K-12 students in the 2020-2021 school year; 10,793 students in 2021-2022; 10,665 students in 2022-2023; 10,709 students in 2023-2024; and 10,666 in the most recent year ending in 2025. Enrollment in PUSD has declined 3.2 percent in the last five school years (DOE 2025).

Parks

The City of Pittsburg is home to a network of 28 city parks that provide a variety of recreational opportunities for the residents of Pittsburg. The city's local and regional trail system provides connections to and from neighborhoods, commercial districts, and parks. The city aims to maintain a neighborhood and community park standard of 5 acres of public parkland per 1,000 residents. The majority of the recreational parks and open space acreage within the city's Planning Area consists of four large county passive recreational areas: Black Diamond Mines Regional Preserve, Browns Island Regional Shoreline, Baypoint Regional Shoreline, and Stoneman Trailhead Park. The city is working to expand access to the Suisun Bay shoreline (City of Pittsburg 2024). The Woodland Hills Park, located 0.9 mile southeast of the site at the corner of Crestview Drive and Alta Vista Circle, would be the closest parkland to the proposed PDH.

Other Public Facilities

Contra Costa County Library has 27 branches to serve the county (Contra Costa County Library 2025). The closest library to the project site is the Pittsburg Branch Library, which is located approximately 1.1 miles northeast of the site at 80 Power Avenue. There are several hospitals that are part of the Contra Costa Health network of medical services within Pittsburg and the neighboring cities of the project area, providing emergency services, intensive care units, preventative care, pediatrics, and more. The Pittsburg Health Center is the closest hospital to the project site and is located approximately 2.2 miles east of the proposed PDH (Contra Costa Health 2025). However, the closest trauma hospital is the John Muir Health, Concord Medical Center, approximately 9.2 miles southwest of the PDH site.

Regulatory Background

Local

Pursuant to the provisions of Section 17620 of the Education Code, as well as Sections 65995 and 66001 of the Government Code, Assembly Bill ("AB") 181, and subdivision (e) of Section 17621 of the Education Code, the Pittsburg Unified School District

establishes the Residential and Commercial/Industrial Development School Fee. This fee is enacted through the District Board Policy (BP 7211 Facilities: Developer Fees) as a means of mitigating impacts related to residential and commercial/industrial development. It achieves this by (i) determining the need to construct or reconstruct school facilities to accommodate new development, (ii) the cost of those school facilities, and (iii) the amount of statutory school fees per residential and commercial/industrial development building square foot that may be levied for schools (PUSD 2022).

5.15.2 Environmental Impacts

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire protection?

Construction

No Impact. The project site is currently served by the CCCFPD Station 87, located approximately 0.5 miles west of the site and roughly a two-minute drivetime. The CCCFPD strives to achieve a response time of less than five minutes for incidents. Because the project is only 0.5-mile from the closest station, a typical response time for incidents occurring during the construction period of the data center and backup generator facility would be well under the station's five minute-or-less incident response goal. Construction activities that could result in the need for fire protection services would include the use of cranes, excavation equipment, vehicles, bulldozers or the use of torches and welding equipment that may cause heated exhaust, sparks, or be a source of open flames.

Construction activities would comply with all state and local regulations including building and fire codes during the temporary construction period. As addressed in **Section 5.9, Hazards and Hazardous Materials**, the project would not impair the implementation of, or physically interfere with, an adopted emergency response or evacuation plan. The project would not increase traffic to a level where traffic performance would be degraded and at least one lane of travel would remain open at all times.

Emergency response time to the project would be consistent with the department's goal of under five minutes, because the site would be located within an existing service area and within close proximity to Station 87. While there may be a slight increased need for fire protection response during the short project construction period, these effects

would not be sufficient to induce the construction of new or physically altered governmental facilities that could result in significant environmental impacts; therefore, there would be no impact.

Operation

No Impact. The project would employ between 20 and 30 operations workers and have 12 to 15 daily tenants or visitors (including deliveries). As addressed in **Section 5.14, Population and Housing**, staff anticipates that workers would be sourced from the Oakland-Hayward-Berkeley Metropolitan Division (MD). Based on the near proximity of the supply of operational workers, data center employees are not likely to relocate closer to the project. The few operational employees that may move into the city and within the service area would have a negligible effect on the ability of the fire stations that serve the project site to meet their emergency service and response standards.

Each of the 37 generator units backing up the data center activities would have a diesel fuel storage tank, equipped with double-walled fuel tanks. The interstitial space between the inner and outer walls of each tank would be continuously monitored electronically for the presence of leaks through the inner wall. The monitoring system would be electronically linked to an alarm system in the security office that would alert personnel if a leak were detected in any of the inner tanks (DayZenLLC 2024; TN 254728, pp. 2-8, 4.9-8). The project would complete a Spill Prevention, Control and Countermeasure Plan (SPCC) to address the storage, use, and delivery of diesel fuel for the generators (see **Section 5.9, Hazards and Hazardous Materials**). Diesel fuel would be delivered by truck on an as-needed basis. Added protective measures include an emergency pump shut-off being activated in the event a pump hose breaks during refueling (DayZenLLC 2024, pp. 2-8 and 4.9-8). Furthermore, CCCFPD would review the project plans to ensure appropriate safety features are incorporated to reduce fire hazards (DayZenLLC 2024; TN 254728, p. 4.15-3).

According to CCCFPD, the district aims to respond to incidents in their jurisdiction within five minutes. As previously mentioned, the typical emergency response time for the proposed PDH would be considerably shorter given that Station 87 is located approximately 0.5 miles west of the site. If an incident were to occur at the backup generator facility, or the data center, Station 87 would proceed with caution, but with the intent to exterminate any fire onsite (N. Vanderburg, personal communication, November 19, 2024). Additional fire personnel would be dispatched from other stations in Battalion 8 to assist if needed, as well as other hazardous material personnel from the district in the event that a hazardous material incident were to occur at the PDH facility.

The operation of the PDH would not result in the provision or need of new or physically altered fire protection facilities within the City of Pittsburg or Contra Costa County. The project would comply with all applicable federal, state, and local laws and regulations, including the California Fire Code, which regulates emergency and standby power

systems. With the above safety elements incorporated into the project, there would be no impact to fire protection services.

ii. Police protection?

Construction and Operation

No Impact. As addressed in **Section 5.14, Population and Housing**, the construction and operational workers are not expected to relocate closer to the project site and would not increase the demand for emergency response services, including police protection. The project proposes a perimeter fence/wall along the property boundary of the facility, with the eastern, southern, and a portion of the northern boundary line consisting of a maximum six-foot concrete wall and the rest of the project site boundary consisting of a security fence (DayZenLLC 2024; TN 254728, Appendix A, Figure C2.0). A security gate is proposed at the northwestern corner of the site where the new access road from West Leland Road enters the site. Pole-mounted light fixtures would be installed along the site's perimeter, along the perimeter of the PBGF utility yard, as well as along the PDH building and driveway entrances (DayZenLLC 2024; TN 254728, p. 4.1-4). As noted previously, the Pittsburg Police Department meets their response goals for incidents within the city. This would be consistent with priority and non-priority calls regarding activity onsite during construction and operation of the data hub and generation facility. The department has adequate staffing levels to serve the project site (P. Galer, personal communication, December 6, 2024). Additionally, the police department would review the project's final site design, including landscaping, ingress and egress, and facility lighting to ensure the project provides adequate safety and security measures. The department's response goals would not be significantly affected by the project, nor would the project induce the construction of new or physically altered governmental facilities, such as police stations, that could result in significant environmental impacts. Therefore, there would be no impact.

iii. Schools?

Construction and Operation

Less Than Significant Impact. The proposed project would be in the PUSD. District Board Policy (BP 7211 Facilities: Developer Fees) allows the Board of Trustees to establish, levy, and collect developer fees on residential, commercial, and industrial construction within the district. Government Code section 65995 expressly provides that "[t]he payment or satisfaction of a fee, charge, or other requirement levied or imposed pursuant to Section 17620 of the Education Code in the amount specified in Section 65995... are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving but not limited to, the planning, use, or development of real property, or any change in governmental organization... on the provision of adequate school facilities." The current school impact fee for the district is \$0.84 per square foot of office space. The City of Pittsburg Planning & Building Services Department would determine the assessable square footage for developer fees of the

proposed project and the fees would be collected when the applicant applies for building permits (PUSD 2022).

Construction activities would be temporary, and as previously mentioned, are not anticipated to require the relocation of workers and their families. The proposed PDH and PBGF would be constructed in phases. This would result in the various construction tradesmen being onsite for a limited duration and would leave upon completion of their specific trade work. Thus, most of the construction workers would not be onsite for the 18-month construction period required for the combined PDH and PBGF build.

During project operation, the regional Oakland-Hayward-Berkeley MD would provide the 20 to 30 employees required for the PDH and it is unlikely that any workers would relocate to the area near the project site. However, if a portion or all of the 30-person workforce were to relocate closer to the project site, the PUSD would not be significantly impacted as indicated in subsection 5.15.1 above, nor would this influx induce construction of new or physically altered schools in the PUSD that would result in significant environmental impacts. Impacts on schools, as a result of the construction and operation of the PDH and PBGF, would be less than significant.

iv. Parks?

Construction

Less Than Significant Impact. The construction workforce will be sourced primarily from the local Oakland-Hayward-Berkeley MD, minimizing the introduction of new workers to the project area. While it is possible that workers traveling to the area may use existing public services or amenities such as parks before, during, or after a workday, the potential increase in use and demand would be minimal and would cease upon completion of the construction period. This minimal use would not contribute substantially to the physical deterioration of existing facilities. No new or physically altered park facilities would be required to accommodate additional usage during the project's construction. Therefore, construction-related impacts would be less than significant.

Operation

Less Than Significant Impact. The PDH is anticipated to create between 20 to 30 employment opportunities. Most, if not all, of the operational workforce, are anticipated to be recruited from the Oakland-Hayward-Berkeley MD. Thus, the project would not generate substantial population growth in the surrounding area that could result in the need for additional park facilities for new residents. As shown in **Table 5.14-4** in **Section 5.14, Population and Housing**, the Computer and Information Systems Managers occupation is expected to grow in the Oakland-Hayward-Berkeley MD at a rate of 1.3 percent annually. Because of the availability of an existing workforce throughout the area, the project's small number of permanent employees required would likely reside within commuting distance of the PDH and would not need to relocate closer to the project area. These permanent employees would continue to

be served by existing park facilities in their local communities. If some operations workers were to relocate, the few new residents would have a negligible increase in the usage of or demand for parks, trails, or other recreational facilities within the city. The project would not result in substantial adverse physical environmental impacts associated with the provision of new or physically altered park facilities to maintain acceptable service ratios or other performance objectives. Therefore, operation-related impacts with respect to parks and recreation would be less than significant.

v. Other public facilities?

Construction

Less Than Significant Impact. Based on the short construction period, the available workforce in the Oakland-Hayward-Berkeley MD, and the willingness of workers to commute up to, and even longer than 90 minutes for work (see **Section 5.14, Population and Housing** regarding super commuters), construction workers from the Oakland-Hayward-Berkeley MD are not likely to relocate closer to the PDH facility. However, in the event that some construction workers were to temporarily relocate for the duration of their required trade-related tasks, they are not likely to visit public facilities such as libraries while working on the project. These workers would be expected to return to their primary residence for the weekends, where they would be more likely to use public facilities. No new or physically altered public facilities or services would be required for project construction. Therefore, construction-related impacts on other public facilities would be less than significant.

Operation

Less Than Significant Impact. The proposed project would not generate substantial population growth in the project area that would result in the need for additional public facilities or services for new residents. As mentioned previously, the project's operational employment base is projected to be drawn from the Oakland-Hayward-Berkeley MD and are not expected to relocate closer to the project site. However, in the case that some workers were to relocate for permanent employment at the data center, the few new residents would have a negligible increase in the usage of, or demand for the surrounding libraries or public facilities. Therefore, the project's operation-related impacts with respect to other public facilities would be less than significant.

5.15.3 Mitigation Measures

None required.

5.15.4 References

CCCFPD 2022 – Contra Costa County Fire Protection District (CCCFPD). "Con Fire Annexes East Contra Costa Fire in Historic Brentwood Ceremony." Released July 1, 2022. Accessed online at: <https://www.cccfpd.org/wp-content/uploads/2022/07/7-1-22-Con-Fire-Annexes-East-Con-Fire-in-Brentwood-Transfer-of-Command-Ceremony-FINAL.pdf>

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5.16 Recreation

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to recreation.

RECREATION	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Environmental checklist established by CEQA Guidelines, Appendix G, Recreation.

5.16.1 Environmental Setting

The proposed Pittsburg Data Hub (project), including the Pittsburg Backup Generating Facility would be located within the Pittsburg Technology Park Specific Plan area in the City of Pittsburg (City). This Specific Plan area was previously part of the Delta View Golf Course, which is now closed and vacant. The project site is designated as Employment Center Industrial (ECI) in the Pittsburg 2040 General Plan and zoned as Planned Development (PD) (City of Pittsburg 2024a and 2024b). The site is bordered to the north by low-density residential neighborhoods and public/institutional uses, to the east by utility and right-of-way designations, and to the west by recreational and park areas. South of the site lies undeveloped land that would be within the Specific Plan area, with unincorporated Contra Costa County lands located south of the Specific Plan boundary (City of Pittsburg 2023).

The project would require a temporary construction workforce and a small, permanent operation workforce. Construction of the project is anticipated to occur over an approximately 18-month period, requiring an average of approximately 100 workers per month with a peak of 150 workers per month. During operation, the project would employ approximately 20 to 30 individuals in total. The local workforce is anticipated to have sufficient capacity to support project construction and operation (DayZenLLC 2024).

Regional and Local Recreation Resources

The City is committed to providing recreational opportunities and park access for its residents, as outlined in the Pittsburg 2040 General Plan. There are approximately

2,866 acres of parks and recreational facilities within the City (City of Pittsburg 2023), which generally fall into the following categories:

- **Neighborhood Parks.** These parks primarily serve a small portion of the City, typically within a half-mile radius. Geared toward the recreational needs of children and youth, they often feature playgrounds, sports fields, and picnic areas. Neighborhood parks are strategically located near collector streets within residential neighborhoods.
- **Community Parks.** Community parks are designed to meet the recreational needs of larger populations within the City and typically vary in size. They often include facilities such as community centers and pools.
- **Regional Parks and Trails.** Beyond neighborhood and community parks, the City also benefits from regional parks, trails, and preserves that are maintained by Contra Costa County.

Within a two-mile radius of the project site, the following recreational facilities are notable:

- **Delta De Anza Regional Trail:** This regional trail is a paved multiuse trail spanning over 15 miles, with plans for expansion to 25 miles (City of Pittsburg 2023). The regional trail is located approximately 100 feet north of the project site and is managed by the East Bay Regional Park District. The trail provides a vital recreational and commuting resource, connecting Pittsburg with other Contra Costa County communities (City of Pittsburg 2023).
- **John Henry Johnson Community Park:** Approximately 0.3 miles northwest of the project site, John Henry Johnson Community Park spans approximately 8.4 acres and features multi-use turf fields, picnic areas, a play structure, and a cement walking trail that follows the perimeter of the park (City of Pittsburg 2023 and 2025).
- **Stoneman Park:** Stoneman Park is located approximately 0.4 miles southwest of the project site and is accessed via John Henry Johnson Parkway. The park encompasses approximately 190 acres and includes athletic fields, picnic facilities, a children's play structure, and trails for hikers and horseback riders. Stoneman Park also contains a designated remote-control airfield utilized weekly by the Diablo Valley Radio Controllers (City of Pittsburg 2025, DVRC 2025).
- **Ambrose Park:** Approximately 1.6 miles northwest of the project site, Ambrose Park spans approximately 6.5 acres and features athletic fields, picnic areas, and a play structure (City of Pittsburg 2023).
- **City Park:** Approximately 1.1 miles west of the project site, City Park covers approximately 27.6 acres and includes a community center, playgrounds, and open lawn areas (City of Pittsburg 2023).

Regulatory Background

Federal

No federal regulations related to recreation apply to the project.

State

No state regulations related to recreation apply to the project.

Local

City of Pittsburg 2040 General Plan. The City's General Plan describes goals and policies for addressing recreational needs with future population growth. These include maintaining a standard ratio of 5 acres of parkland per 1,000 residents, ensuring adequate recreational facilities for current and future populations (City of Pittsburg 2024a).

- **Policy 9-P-1.2** Maintain a neighborhood and community park standard of 5 acres of public parkland per 1,000 residents.
- **Policy 9-P-1.5** Maintain park and recreation facility standards for new development to serve both residents and employees, attainable through, in order of priority: 1) provision of fully developed parks, 2) dedication of parkland, or 3) payment of in-lieu fees dedicated to the provision of new park sites or enhancing existing facilities.

City of Pittsburg Municipal Code. The City of Pittsburg Municipal Code (PMC) is the primary tool that regulates development in the City. PMC Section 17.32.020 sets forth the requirements for park dedication as a condition of approval of a tentative or final parcel map, including land dedication and/or in-lieu fees (City of Pittsburg 2024c). PMC Section 17.32.020(M) identifies the types of subdivisions that are exempt from park dedication requirements, which includes commercial or industrial subdivisions.

- **Chapter 17.32.020(M) Park dedication. Exemptions.** This section on park dedications does not apply to:
 - (1) Subdivisions containing less than five parcels and not used for residential purposes. However, the city shall place the following condition on the parcel map: If, within four years, a building permit is required for construction of a residential structure on one or more of the parcels, the owner of each such parcel is required to pay a park dedication fee under this chapter before the permit is issued.
 - (2) Commercial or industrial subdivisions or condominium projects or stock cooperatives that consist of the subdivision of airspace in an existing apartment building which is more than five years old when no new dwelling units are added.

5.16.2 Environmental Impacts

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Construction

Less Than Significant Impact. As discussed in **Section 5.16.1, Environmental Setting**, construction of the proposed project would be short-term (approximately 18 months), and workers would likely be drawn from the local area. As construction workers are not expected to relocate to the city, this workforce would not substantially increase the use of nearby recreational facilities. The workers would likely use recreational facilities closer to their existing homes. Impacts to existing recreational facilities during project construction would be less than significant.

Operation

Less Than Significant Impact. Once operational, the project would employ 20 to 30 people. These employees would be drawn primarily from the local or regional labor pool, minimizing any increase in demand on recreational facilities. Similar to the construction workforce, the operational workers would likely use recreational facilities near their homes. Therefore, the project's operation workforce would not substantially increase the use of existing neighborhood or regional parks or other recreational facilities such that significant physical deterioration would occur. The impact to existing recreational facilities during project operation would be less than significant.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Construction and Operation

No Impact. The project does not include recreational facilities as part of the project and does not require the construction or expansion of existing recreational facilities. Because the project would construct an industrial use, it is exempt from Policy 9-P-1.2 and Policy 9-P-1.5 per Pittsburg Municipal Code Chapter 17.32.020(M), which states that commercial or industrial subdivisions are exempt from park dedication requirements unless residential structures are added within four years. As the proposed data center project would not include housing, the project would not conflict with local regulations pertaining to maintenance of park standards.

Furthermore, the project's small construction and operation workforce would likely use recreational facilities near their existing homes. The project has no recreational components. There would be no adverse environmental effects related to existing or future recreational facilities. Therefore, the project would have no impact associated with the construction or expansion of recreational facilities.

5.16.3 Mitigation Measures

None required.

5.16.4 References

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https://experience.arcgis.com/experience/75cc017246dc47d6abcd3a4ee2b596b8/#data_s=id%3AdataSource_1-18ba5ceb362-layer-4%3A26
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5.17 Transportation

This section describes the environmental setting and regulatory background and discusses transportation impacts associated with the construction and operation of the project.

The following Project Design Measures (PDMs) related to transportation are proposed by AVAIO and are incorporated into the design of the project:

PDM TRANS-1: A Construction Traffic Management Plan shall be developed and implemented to minimize impacts to the transportation system. The Construction Traffic Management Plan shall detail the project's construction schedule, vehicle type time-of-day plans, route planning, advanced public notices of partial or full street closures or traffic diversion, and other strategies to reduce potential conflicts during construction.

PDM TRANS-2: The project shall implement a Transportation Demand Management (TDM) program sufficient to demonstrate that vehicle miles travelled (VMT) associated with the project would be reduced to 12.8 or less per employee.

TRANSPORTATION	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b. Conflict or be inconsistent with CEQA Guidelines, section 15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☐	☒

Environmental checklist established by CEQA Guidelines, Appendix G

5.17.1 Environmental Setting

The proposed Pittsburg Backup Generating Facility and the Pittsburg Data Hub (project) would be located within an urbanized area of the City of Pittsburg, within the Pittsburg Technology Park Specific Plan area. The site is currently part of the abandoned Delta View Golf Course.

Regional

Major Highways

The project site is near one major highway that would provide primary regional access during both the construction and operational phases. According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System, there are no Designated State Scenic Highways near the project site. (CALT 2024a).

State Route 4. State Route (SR) 4 is the main east/west freeway through this area, running from Interstate 80 (I-80) to the west to I-5 in Stockton and beyond to the Sierra Nevada mountains to the east. SR 4 is a main route for goods transportation and would be used extensively by heavy trucks during the construction phase for this project. SR 4 is an eight-lane divided freeway with grade-separated interchanges in the area at Bailey Road and Railroad Avenue. It is located approximately 0.37 miles north of the project site.

Pedestrian / Bicycle / Transit Transportation

A Class I Bikeway (Bike Path) exists adjacent to the site. The Via Delta de Anza Trail runs east/west through the City of Pittsburg from Somerville Road to Bailey Road. Additional Class I Bike Paths are envisioned in the area. East/west Class II Bikeways (Bike Lanes) are located along both sides of West Leland Road and along Range Road. These Bike Lanes intersect the Via Delta de Anza Trail at the intersection of West Leland Road with Range Road /Golf Club Road. Sidewalks, crosswalks and pedestrian signals exist throughout the area. (City of Pittsburg 2024c, 2020a).

Tri Delta Transit bus routes 388 and 390 operate on weekdays only along West Leland Road and stop at Golf Club Road. The routes connect to other Tri Delta bus routes at the Pittsburg/Bay Point and Antioch BART rail stations. Tri Delta Transit also provided a dial-a-ride service.

SR 4, Railroad Avenue, West Leland Road and Bailey Road are designated as Routes of Regional Significance (CCTA 2023a).

Railways

Pittsburg is connected to the San Francisco Bay Area via the Pittsburg Center BART Station at SR 4/Railroad Avenue and the Pittsburg/Bay Point BART Station at SR 4/Bailey Road. Trains operate between San Francisco Airport and the Pittsburg/Bay Point station on 15-minute headways on standard electrified trains. The BART Antioch Extension extended service 10 miles further to the east using the SR 4 median, using diesel trains. The Pittsburg/Bay Point station has 2,000 parking spaces while the Pittsburg Center station offers 262 spaces. Pittsburg/Bay Point station serves approximately 8,000 average weekday riders, while the Pittsburg Center station serves an average 2,400 weekday riders (City of Pittsburg 2024c).

Union Pacific (UP) and Burlington Northern Santa Fe (BNSF) railroads provide freight rail service through Pittsburg.

Truck Routes

Designated City of Pittsburg truck routes in the area include West Leland Road, Bailey Road and Railroad Avenue. Construction and operational trucks associated with the proposed generating facility will use these roads for access to/from SR 4. Bailey Road and Kirker Pass Road are used by trucks to access points to/from the south (City of Pittsburg 2024c).

Airports

Public and private airports located within a 20-mile radius of the project site are described below. The nearest major commercial-service airport is Oakland International Airport, over 26 miles away.

Buchanan Field Airport is located approximately 8 miles west of the project site in Concord, California. It is a medium-sized general and business aviation airport and is publicly owned by Contra Costa County. It operates daily from 7:00 am to 10:00 pm and has a control tower.

Rio Vista Municipal Airport is approximately 16 miles northeast of the project site in Rio Vista, California. It is a general aviation airport. It is publicly owned by the City of Rio Vista.

Byron Airport is located approximately 19 miles southeast of the project site in Byron, California. It is a general aviation airport. It is publicly owned by Contra Costa County.

Local

Site Access

The project's main and secondary entrance to the site would be located off the extension of Golf Club Road at the northeastern corner of the property. An additional emergency entrance would be located in the northwest corner of the property via an easement which would connect with West Leland Road. The project would provide a total of 70 parking spaces on site. Design and construction of any access points must comply with applicable City of Pittsburg and Caltrans standards and requirements, and local permits would be obtained, if any are required. Due to truck traffic during construction, 24 feet of pavement should be provided.

West Leland Road. This east/west arterial roadway is adjacent to the project site. It begins to the west in Bay Point and runs east before turning into Delta Fair Road in the east part of Pittsburg. In the study area, it consists of two lanes per direction, with paved Class II bike lanes on both sides. The posted speed limit is 40 mph, but there is a 25-mph school zone just east of Golf Club Road, when children are present. West Leland Road is a designated truck route. (City of Pittsburg 2024c).

Bailey Road. This north/south arterial road connects Willow Pass Road to the north to the Concord/Clayton area to the south. North of West Leland Road, the road consists of two lanes per direction. It narrows to one lane per direction to the south. The posted speed limit is 30 miles per hour. Bailey Road has an interchange with SR 4 and would be the primary route for traffic to/from the west. (City of Pittsburg 2024c).

Railroad Avenue. This north/south arterial roadway is located approximately 1 mile east of the project site. It starts to the north at E. 3rd Street and runs south to Buchanan Road where it becomes Kirker Pass Road. It functions as the main north/south road in Pittsburg, with an interchange with SR 4. In the study area, it consists mostly of two lanes per direction and serves BART's Pittsburg Center Station. The posted speed limit is 35 mph (City of Pittsburg 2024c).

Golf Club Road/Range Road. These short local roads serve residential areas. Range Road leads north from West Leland Road with two lanes per direction and a speed limit of 35 mph. Golf Club Road leads south with one lane per direction and a speed limit of 25 mph (City of Pittsburg 2024c).

Existing Traffic Volumes

The following table presents 2024 daily and peak hour traffic volume estimates. No volumes are available for Golf Club Road, but volumes are expected to be lower than that on Range Road. (City of Pittsburg 2024c).

Road	Daily Traffic Volume	Peak Hour Traffic Volume
West Leland Road	18,000	1,800
Bailey Road	21,000	2,100
Railroad Avenue	23,000	2,300
Range Road	4,000	400

Regulatory Background

Federal

Code of Federal Regulations. The Code of Federal Regulations, Title 49, contains the federal rules and regulations pertaining to the transportation of goods and materials.

State

California Vehicle Code (CVC) and Streets and Highways Code. The California Vehicle Code and the Streets and Highways Code contain requirements applicable to the licensing of drivers and vehicles, the transportation of hazardous materials, right-of-way and regulations on roadway encroachment during truck transportation and delivery.

California State Planning Law. Government Code, Section 65302 requires that the project must conform to the General Plan (Fresno 2024a).

California Senate Bill 743. Codified in Public Resources Code Section 21099, SB 743 required changes to the CEQA Guidelines (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 15000 et seq.) regarding the analysis of transportation impacts. Pursuant to Public Resources Code Section 21099(b)(1), the criteria for determining the significance of transportation impacts must “promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses.” (CEQA Guidelines Section 15064.3(b), Criteria for Analyzing Transportation Impacts). To that end, in developing the criteria, the Governor’s Office of Land Use and Climate Innovation (LCI) proposed, and the California Natural Resources Agency certified and adopted, changes to the CEQA Guidelines that identify VMT as the most appropriate metric to evaluate a project’s transportation impacts. With the California Natural Resources Agency’s certification and adoption of the changes to the CEQA Guidelines, automobile delay, as measured by “level of service”, no longer constitutes a significant environmental effect under CEQA (Pub. Resources Code, Section 21099(b)(3)).

Local

City of Pittsburg Municipal Code. The City of Pittsburg Municipal Code contains the laws passed and enforced by the city (City of Pittsburg 2024d).

City of Pittsburg 2040 General Plan and Zoning Ordinance. The City of Pittsburg 2040 General Plan shows that the project site is within an area designated as Employment Center Industrial (ECI) in the Pittsburg 2040 General Plan and zoned as Planned Development (PD) (City of Pittsburg 2024a, 2024b).

Contra Costa Transportation Authority (CCTA). In 2020, CCTA adopted criteria, standards and thresholds for the assessment of vehicle-miles of travel (VMT) for CEQA assessment (CCCb, 2020).

City of Pittsburg Transportation Impact Analysis (TIA) Guidelines. The city has set TIA guidelines for assessing project traffic impacts under CEQA. These guidelines provide VMT thresholds, screening criteria, VMT analysis and forecasting guidance for projects requiring a complete analysis, and a variety of potential VMT mitigation measures (City of Pittsburg 2024c).

5.17.2 Environmental Impacts

VMT Analysis

The proposed development is expected to have 20-30 employees and 12-15 visitors daily. Using the high-end values, this translates to 90 trips per day.

The City of Pittsburg published allowable VMT thresholds, screening criteria and mitigation measures for development projects that are subject to CEQA assessment (City of Pittsburg 2024e). This document provides screening criteria to identify types, sizes and locations of developments that are not expected to exceed VMT thresholds of

significance. If a project meets any of the screening criteria, VMT impacts would be considered less than significant and detailed VMT analysis is not required.

Screening Criteria 1: Project Type defines small projects as those that generate fewer than 110 trips per day. Since 90 trips per day are forecast for this development, this criterion is satisfied. No further VMT analysis is required under the applicable City of Pittsburg guidelines.

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Construction and Operation

No Impact. Project construction and operation would not significantly obstruct any transit, roadway, bicycle, or pedestrian facilities in the area. The City's Active Transportation Plan, "Pittsburg Moves", identifies the West Leland Road – East Leland Road as the tenth priority pedestrian/ bicycle corridor. The plan lists planned pedestrian and bicycle improvements in the vicinity of the site. The proposed project would not impede or interfere with any proposed roadway or multi-modal improvements planned (City of Pittsburg 2020a). The project is consistent with the 2040 General Plan (City of Pittsburg 2024a). Project construction and operation would not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and would therefore have no impact.

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Construction and Operation

Less Than Significant Impact. Any effect of project-generated traffic during construction would be temporary in nature and is not expected to result in any long-term impacts to the transportation system. Projected traffic for normal operations would be less than 110 vehicles per day, so VMT thresholds found within applicable City of Pittsburg guidelines would not be exceeded.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Construction and Operation

No Impact. The proposed access points and internal site circulation plan proposes no geometric design features that would substantially increase hazards. The development itself would not introduce any incompatible uses to the transportation system.

d. Would the project result in inadequate emergency access?

Construction and Operation

No Impact. No changes are proposed to existing road network, so adequate emergency access would continue to be provided.

5.17.3 Mitigation Measures

None required.

5.17.4 References

- CALT 2024a – Caltrans 2024 – Caltrans GIS Data Traffic Volumes AADT. Accessed online at: <https://gisdata-caltrans.opendata.arcgis.com/>
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- CCCa – Contra Costa County Public Works Website. 2025. Available online at: <https://www.contracosta.ca.gov/4694/Airports>
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5.18 Utilities and Service Systems

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to utilities and service systems.

UTILITIES AND SERVICE SYSTEMS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

Environmental checklist established by CEQA Guidelines, Appendix G.

5.18.1 Environmental Setting

The proposed project would include of 37 diesel-fired generators and the proposed Pittsburg Data Hub (PDH). The Pittsburg Backup Generating Facilities (PBGF) would provide up to 92 megawatts (MWs) of emergency backup power generation to support the PDH. Electrical service would be provided by the Pittsburg Power Company (PPC). The overall project would be constructed on a previously disturbed site. The project site was part of the U.S. Army Camp Stoneman shooting range from 1942 to 1954 and a golf course from 1953 to 2018 (DayZenLLC 2024c).

Potable Water Supply

The project would be supplied with potable water provided by the City of Pittsburg. Untreated water is supplied to the City by the Contra Costa Water District (CCWD) primarily from surface water sources in the Sacramento-San Joaquin Delta. Two

groundwater wells operated by the City account for 10 percent of the City's water supply (Pittsburg 2025a). Between July 2022 and June 2023, CCWD delivered 9.9 billion gallons (30,381 acre-feet [AF]) of treated water and 13.7 billion gallons (42,044 AF) of untreated water to customers in its service area (CCWD 2024). Water demand in the CCWD service area is projected to increase to 175,900 acre-feet per year (AFY) by 2045 (CCWD 2021). Operational demand for potable water is estimated at 0.22 AFY for indoor domestic use.

Existing former golf course infrastructure includes a 6-inch water main on Golf Club Road. However, this service line is not adequate for the project needs. An alternative 12-inch connection is proposed to avoid disrupting service to local residents. The proposed 12-inch water main extension from the water main would run along West Leland Road crossing APN 095-150-032 (DayZenLLC 2024a).

Wastewater Service

The Delta Diablo Sanitation District (Delta Diablo) has provided wastewater collection and treatment service for the cities of Pittsburg and Antioch and for the unincorporated community of Bay Point since 1955. The City of Pittsburg owns, operates and maintains 300 miles of sewer lines, which discharge into Delta Diablo's conveyance system and converge at the wastewater treatment plant (WWTP) located at 2500 Pittsburg-Antioch Highway in Antioch. The Delta Diablo WWTP has a capacity of 19.5 million gallons per day (MGD) and treats an average of 13 MGD. The WWTP also functions as a resource recovery facility, producing 6 MGD of tertiary treated water at the recycled water facility (RWF) (Delta Diablo 2025a, Delta Diablo 2025c).

Delta Diablo operates both the WWTP and RWF under Nation Pollutant Discharge Elimination System (NPDES) permit CA0038547, administered by the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) per Order R2-2019-0035, amended on August 13, 2025.

Wastewater discharge to the sanitary sewer is anticipated at 11.7 AFY resulting from administrative HVAC and data hall cooling reverse-osmosis filtration system and indoor sanitary use. The project would connect to the existing 8-inch sanitary sewer main in the former golf course parking lot (DayZenLLC 2024a).

Recycled Water Supply

Uses of Delta Diablo's non-potable recycled water (6 MGD) include habitat restoration, industrial uses such as carpet dying and paper production, cooling water for power plants, and landscape irrigation for parks and golf courses. The amount of recycled water produced reduces the need for potable water by 6,721 AFY. The Delta Diablo system consists of 16 miles of distribution pipelines to convey recycled water to their various users (Delta Diablo 2025a, Delta Diablo 2025b). Recycled water use is estimated at 65.47 AFY for administrative and data hall cooling, and landscape irrigation. A 30-inch recycled water main and a private 1 million gallon storage tank

currently exists at the project site that was used for the previous golf course. The project would connect to the storage tank facility for recycled water supply (DayZenLLC 2024a).

The State of California Water Code sections 13550 and 13551 include language prohibiting the use of potable water where recycled water can be used, if recycled water is available and economically feasible.

Storm Sewer Service

The project would be constructed in the City of Pittsburg, within the Kirker Creek-Frontal Suisun Bay Estuaries watershed (DWR 2024). Stormwater from the project site drains into the Willow Creek drainage immediately east of the project site, which drains directly into the Sacramento-San Joaquin Delta (Google 2025). Site stormwater is also captured by a catch basin located in the former golf course parking lot, at the northern portion of the site. The proposed project would access the storm drain system at this point. The City of Pittsburg owns and maintains the municipal storm drainage system in the vicinity of the project site, which also flows directly into Suisun Bay (DayZenLLC 2024a).

Solid Waste

Solid waste pick-up and disposal services for the City of Pittsburg are provided by Mt. Diablo Resource Recovery (MDRR). MDRR takes all solid waste to the materials recovery facility (MRF) located at 1300 Loveridge Road, Pittsburg, California, where recyclable material is separated and processed. Solid waste is sorted into recyclable material for reuse and green waste to create compost. The MRF has the capacity to process 300 tons per day. The MDRR MRF has a 90 percent diversion rate. In addition, 1,700 tons of unwanted reuseable items are collected annually from households and donated back to the community (MDRR 2025).

The remaining 10 percent of solid waste, or trash, would most likely be transported to the nearby Keller Canyon Landfill located in unincorporated Contra Costa County. Keller Canyon Landfill (SWIS No. 07-AA-0032) is permitted to accept a maximum of 3,500 tons of solid waste per day and has a remaining capacity of 63,408,410 cubic yards (CY) as of 2004 (CalRecycle 2025b).

Electric Power, Natural Gas, and Telecommunications

Pittsburg Power Company (PPC) is the City of Pittsburg's energy utility and would provide electricity service to the project site. PPC is a California municipal Joint Powers Agency (JPA) established in 1997 between the City of Pittsburg and the City's Redevelopment Agency. As a California JPA, PPC performs as an electric and natural gas municipal utility, with the authority to provide wholesale and retail electric and gas utility services under authorized franchise agreements within California. The project facility would require a new electrical interconnection to the adjacent PG&E regional system. The PPC is in the process of securing electricity through an agreement with

Pacific Gas and Electric (PG&E) and would be providing the electricity to the project. Natural gas would not be used for the project (DayZenLLC 2024a).

Telecommunication services would be provided by one of several fiber optics providers in the project area and would need to be extended to the project; however, the construction of substantial new telecommunication infrastructure is not anticipated to be required outside the project site (WSP 2024a).

Regulatory Background

Federal

Clean Water Act and California's Porter-Cologne Water Quality Control Act.

The State Water Resources Control Board (SWRCB) and its nine RWQCBs are responsible for the regulation and enforcement of the water quality protection requirements of the federal Clean Water Act (CWA) and the state's Porter-Cologne Water Quality Control Act (Porter-Cologne). The National Pollutant Discharge Elimination System (NPDES) is the permitting program that allows point source dischargers to comply with the CWA and Porter-Cologne laws. This regulatory framework protects the beneficial uses of the state's surface and groundwater resources for public benefit and environmental protection. Protection of water quality could be achieved by the proposed project by complying with applicable NPDES permits from the SWRCB or the San Francisco Bay RWQCB.

Under Section 303(d) of the CWA, states are required to identify impaired surface water bodies and develop total maximum daily loads (TMDLs) for contaminants of concern. The TMDL is the quantity of pollutant that can be assimilated by a water body without violating water quality standards. Listing of a water body as impaired does not necessarily suggest that the water body cannot support the beneficial uses; rather, the intent is to identify the water body as requiring future development of a TMDL to maintain water quality and reduce the potential for future water quality degradation. Stormwater from the project site would drain into Willow Creek, which is not listed as a Section 303(d) impaired waterway.

The San Francisco Bay RWQCB issued a Municipal Regional Storm Water NPDES Permit (Permit Number CAS612008) that requires the City of Pittsburg to implement a storm water quality protection program. This regional permit applies to 77 Bay Area municipalities, including the city of Pittsburg. Under the provisions of the Municipal NPDES Permit, redevelopment projects that disturb more than 10,000 square feet are required to design and construct storm water treatment controls to treat post-construction storm water runoff. The permit requires the post-construction runoff from qualifying projects to be treated by using low impact development treatment controls, such as biotreatment facilities.

The Contra Costa Clean Water Program (CCCWP) assists co-permittees, such as the City of Pittsburg, in the implementation of the provisions of the Municipal NPDES Permit. In

addition to water quality controls, the Municipal NPDES Permit requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other impacts to beneficial uses of local rivers, streams, and creeks. Projects may be deemed exempt from the permit requirements if they do not meet the size threshold, drain into tidally influenced areas or directly into the Bay. According to the Hydromodification Management Applicability Map for Contra Costa Jurisdictions (CCCWP 2023) the project is not located within an exempted area and the current impervious area of the project site is 141,168 SF would increase to 292,647 SF (Google 2025, DayZenLLC 2024a). Therefore, the project should be designed to meet CCCWP hydromodification requirements (CCCWP 2025)

State

California Water Code, Sections 10910-10915. California Water Code (Sections 10910-10915) requires water service providers to evaluate stresses to the water supply service system caused by proposed project developments. The code sections require public water systems to prepare water supply assessments (WSA) for certain defined development projects subject to the California Environmental Quality Act (CEQA).

A WSA was prepared for the Pittsburg Technology Park Specific Plan, which includes the project as Phase I (WSP 2024b).

California Energy Efficiency Standards for Residential and Nonresidential Buildings—Green Building Code (2011), Title 24 Update (2014). The California Green Buildings Standards Code applies to planning, design, operation, construction, use, and occupancy of newly constructed buildings and requires installation of energy- and water-efficient indoor infrastructure. The related waste management plan is required to allow for diversion of 50 percent of the generated waste away from the landfill.

Integrated Waste Management Act. The Integrated Waste Management Act of 1989, or Assembly Bill 939 (AB 939), requires cities and counties to reduce, by 50 percent (in reference to 1990 levels), the amount of solid waste disposed of in landfills by the year 2000 and beyond. To comply with the Integrated Waste Management Act, counties adopt regulations and policies to fulfill the requirements of the Act.

California Assembly Bill 341 (Mandatory Commercial Recycling Measure). Effective on May 7, 2012, AB 341 set a statewide goal of reducing solid waste by 75 percent by 2020. It also established mandatory recycling programs for solid waste generated by businesses, public entities, and multi-family dwellings generated solid waste. In addition, the Governor signed SB 1018 on July 27, 2012, which requires any business generating over 4 cy of solid waste per week to arrange for recycling services.

California Senate Bill 350 (Renewable Energy Targets). SB 350, the Clean Energy and Pollution Reduction Act of 2015 was signed into law by California Governor

Jerry Brown on October 7, 2015. This Bill calls for adoption of regulations to increase the procurement of electricity from renewable sources from 33 percent to 50 percent by 2030. SB 350 also requires establishment of annual targets for statewide energy efficiency savings and demand reduction by November 1, 2017. These energy efficiency savings and demand reductions would be designed to achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas use by January 1, 2030.

California Senate Bill 100 (The 100 Percent Clean Energy Act of 2018). SB 100, approved by California Governor on September 18, 2018, increases the target procurement of electricity from renewable sources to 60 percent by 2030 instead of the previous target of 50 percent identified in SB 350. Additionally, SB 100 targets 100 percent of electricity sold in California to come from eligible renewable energy resources and zero-carbon resources by 2045. Implementation of SB 100 would impact the implementation of electric power facilities through 2045. The SB 100 Joint Agency Report: Charting a path to a 100 percent Clean Energy Future, estimates an increased utility-scale capacity of 145 GW by 2045, which includes in state and out of state renewable sources and energy storage.

Local

City of Pittsburg 2040 General Plan

Goal 12-4: Increase recycling and waste diversion while maintaining adequate solid waste service for all users.

City of Pittsburg Municipal Code

8.10.010 (A): Recycle or reuse debris commonly referred to as construction and demolition (C&D) debris which consists of materials generated during construction, renovation, and demolition projects in order to meet CalRecycle requirements for recycling utilizing the California Green Building Standards Code.

8.14.030: No person shall dispose of garbage where disposal is not expressly allowed. Unlawful disposal of garbage is a public nuisance.

13.18.030 (A): No person shall waste any water provided by the city.

18.84.310 (B) (9): The proposed landscape design shall incorporate the most recent acceptable best management practices for water-efficient landscape design and shall comply with standards including:

Identify use of recycled water for nonedible landscaping, if recycled water is available to the project site, and subject to the required permits and regulations of any applicable agency.

5.18.2 Environmental Impacts

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Construction and Operation

Less Than Significant Impact. Existing former golf course infrastructure includes a 6-inch water main on Golf Club Road. This service line is not adequate for the project needs. Therefore, an alternative 12-inch water main connection is proposed to avoid disrupting service to local residents. The proposed 12-inch water main extension from the water main would run along West Leland Road crossing APN 095-150-032 (DayZenLLC 2024a). However, construction of the 12-inch extension would not result in an expansion of water facilities.

The project's wastewater flow during construction and operation would be treated by the RWF, which is monitored by the San Francisco Bay RWQCB to ensure compliance with the facility's NPDES wastewater discharge permit.

The RWF is permitted to treat the industrial and sanitary waste flows that would be generated by the project. Furthermore, as discussed under criterion "c" below, the WWTP has sufficient available capacity to accommodate the project's estimated wastewater flow. Therefore, the project would not cause the RWF to exceed its wastewater treatment requirements of the San Francisco Bay RWQCB for project construction and operation (DayZenLLC 2024a).

Electricity supply for construction and operation of the proposed project would be procured by the PPC and delivered by PG&E. The PPC has sufficient energy to serve the expected future demand of the project. Project electric demand during construction and operation would not be substantial and would not be expected to affect existing users (DayZenLLC 2024a).

Natural gas would not be used for the project (DayZenLLC 2024a).

Telecommunication services for the proposed project would be furnished by providers that have been serving the existing businesses in the project area. Those providers have adequate available capacity to accommodate the project needs during construction and operation. Impact of the project on telecommunication services would be less than significant (DayZenLLC 2024a).

Impacts on the local utility infrastructure for project operation would therefore be less than significant.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Construction and Operation

Less Than Significant Impact. The water system in the City is operated and maintained by the City's water utility. Untreated water is supplied to the City by the CCWD, primarily from surface water sources in the Sacramento-San Joaquin Delta. Two groundwater wells operated by the city account for 10 percent of the city's water supply (Pittsburg 2025a).

As noted in the regulatory background, a WSA was prepared for the Pittsburg Technology Park Specific Plan, which includes the project as Phase I. The WSA concluded that there would be sufficient water supplies to serve the Pittsburg Technology Park during normal, single dry, and multiple dry years over the 20-year projection period. This proposed development is within the growth projected in the City of Pittsburg 2020 Urban Water Management Plan (UWMP) (Akel 2021, WSP 2024b).

Project construction is expected to last for about 18 months, during which water demand would be approximately 1.75 AF primarily used for dust control. Project demand for potable and recycled water during operations is expected to be up to 0.22 AFY and 65.5 AFY respectively.

Based on the WSA, there are sufficient quantities of both potable and recycled water for use of the Pittsburg Technology Park, which includes the project. Thus, the impact on water supplies would be less than significant.

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Construction and Operation

Less Than Significant Impact. As stated in subsection 5.18.1, the Delta Diablo WWTP has a capacity of 19.5 MGD and treats an average of 13 MGD. Thus, the WWTP is operating at 67 percent of capacity. The project would generate an estimated 0.01 MGD, well below the 6.5 MGD of available operation and system capacity.

Therefore, the addition of the project's sanitary wastewater demand would be less than significant compared with the capacity of the Delta Diablo WWTP. Implementation of the proposed project would not result in a need to increase the wastewater treatment design capacity for the Delta Diablo WWTP and thus would be less than significant.

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction and Operation

Less Than Significant Impact. Demolition and construction activities for the project would result in minor amounts of solid waste and a temporary increase in solid waste. Using the rate of 1.42 pounds of solid waste per 100 square feet of building area per day for a manufacturing/warehouse facility (CalRecycle 2025a), times the building area of 745,771 SF (DayZenLLC 2024a), the resulting generation rate of solid waste would be about 10,590 pounds per day. Using a conversion rate for a similar waste scenario, a daily generation of solid waste by volume would be 38.5 CY (USEPA 2016), and 14,055 CY annually. The solid waste would be disposed of at the Keller Canyon Landfill in unincorporated Contra Costa County. Keller Canyon Landfill has a remaining capacity of 63,408,410 CY. The estimated volume of solid waste generated by the project would be 0.02 percent of the remaining capacity of the Keller Canyon Landfill.

Therefore, the project would be accommodated by the existing solid waste facility, and the impact resulting from the proposed project on nearby landfill capacity would be less than significant.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Construction and Operation

No Impact. The California Integrated Waste Management Act of 1989 (Assembly Bill 939) requires local jurisdictions in California to reduce, by 50 percent, the amount of solid waste disposed of in landfills by the year 2000 and beyond. During construction, the project would collect and haul construction debris off-site for recycling or disposal in local jurisdictions that comply with this state requirement and have programs in place to ensure that disposal of solid waste meets these requirements. The project would comply with these requirements pursuant to City requirements. The project would not result in an impact on solid waste collection and would comply with management and reduction regulations. Typically, data centers do not generate special or unique wastes. Likewise, the project would not generate any special or unique wastes that would make the project not comply with federal, state, and local statutes or solid waste management and reduction regulations. Management of hazardous waste and applicable federal regulations are discussed in **Section 4.9, Hazards and Hazardous Materials**.

During operation, the project would comply with federal, state, and local statutes and regulations related to solid waste. There would be no change in compliance with federal, state, or local statutes and regulations related to solid waste management and reduction. No impact would occur.

5.18.3 Mitigation Measures

None required.

5.18.4 References

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5.19 Wildfire

This section describes the environmental setting and regulatory background and discusses impacts associated with the construction and operation of the project with respect to wildfires.

WILDFIRE	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
i. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
ii. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
iii. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
iv. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Environmental criteria established by CEQA Guidelines, Appendix G.

5.19.1 Environmental Setting

Fire Hazard Mapping

CAL FIRE Fire Hazard Severity Zones. The California Department of Forestry and Fire Protection (CAL FIRE) identifies and maps areas of significant fire hazards based on fire history, existing and potential fuel (natural vegetation), predicted flame length, blowing embers, terrain, typical fire weather for the area, and other relevant factors. The maps identify this information as a series of Fire Hazard Severity Zones (FHSZ), which are progressively ranked in severity as un-zoned, moderate, high, and very high. Fire Hazard Severity Zone maps evaluate "hazard," not "risk"; wildfire "hazard" is based on the physical conditions that create a likelihood and expected fire behavior over a 30 to 50-year period without considering mitigation measures such as home hardening, recent wildfire, or fuel reduction efforts (CAL FIRE 2025a).

Wildland Fire Hazard Severity Zones in California are divided into State, local, or federal government responsibility areas. State Responsibility Areas (SRA) includes those areas where the financial responsibility of preventing and suppressing fires falls primarily on the State. Local Responsibility Areas (LRA) are locations where the responding agency is the county or city.

CPUC High Fire Threat District Map. Over the last two decades, the California Public Utilities Commission (CPUC) has adopted a series of fire safety rules which includes the preparation of Fire-Threat and High Fire-Threat District (HFTD) Maps and the identification, evaluation, and adoption of more fire-safety regulations for the high fire threat districts. Areas mapped as high fire threat are required (under CPUC General Orders 95, 165, and 166) to have increased patrols along overhead lines, increased vegetation clearances and frequency of vegetation clearance, increased inspections of aerial communications facilities, and increased maintenance and repairs to correct fire hazards. The HFTD maps identify three tiers of fire threat/risk: Tier 1 zones near communities, roads, and utility lines, and are a direct threat to public safety; Tier 2 fire-threat areas outline areas where there is a higher risk (including likelihood and potential impacts on people and property) from utility related wildfires; and Tier 3 fire-threat areas outline areas where there is an extreme risk (including likelihood and potential impacts on people and property) from utility related wildfires (CPUC 2025a).

Wildfire Hazards

Wildfires are and have been an important natural process throughout California's history. However, recent changes in wildfire locations and increases in frequency and intensity are posing increasing threats to the population and environment of California. More acres in California have burned in the past decade than in the previous nine decades and eight of California's ten largest wildfires (between 1932 and 2022) have occurred in the last decade. Wildfires in California have had tragic consequences with nearly 150 fatalities between 2010 and 2022, over 97,000 structures destroyed between 2005 and 2022 (California AG 2022).

Wildfires in California can have significant adverse ecological impacts that can result in habitat loss and fragmentation, shifts in vegetative compositions, reductions in small mammal populations, and accelerated loss of predatory species. Wildfire can also have adverse impacts on erosion and water quality. During active burning, ash and associated contaminants can enter water supplies. After large burns, rainstorms can flush vast amounts of sediment from exposed soils into those same water supplies (California AG 2022).

The project site is located within the City of Pittsburg (City) in Contra Costa County (County) on the former municipal Delta View Golf Course. The State Route 4 is approximately 0.37 miles north of the project site. The Contra Costa Canal parallels the south boundary of the project site. The project site is not located in an SRA, but is located within an un-zoned LRA (CAL FIRE 2025b). The project site is not located in a moderate, high, or very high FHSZ, or land classified as having a fire threat by the

CPUC (CPUC 2025b). The Contra Costa Canal separates the project site from a moderate FHSZ and land classified as a Tier 2 fire threat area, both located south of the Contra Costa Canal.

Regulatory Background

Federal

No federal regulations related to wildfires apply to the project.

State

Fire Hazard Severity Zones (Pub. Resources Code, §§ 4201-4204). The purpose is to provide for the classification of lands within SRAs in accordance with the severity of fire hazard present and identify measures to be taken to retard the rate of spreading and to reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property.

Fire Hazard Severity (Cal. Code Regs, tit. 14, § 1280). Fire Hazard Severity Zones reflect the degree of severity of fire hazard.

California Public Utilities Commission General Orders. The CPUC regulates private investor-owned utilities in the state of California. The following CPUC General Orders are applicable to the project.

General Order 95. General Order 95 applies to construction and reconstruction of overhead electric lines. General Order 95 includes Rules which apply to overhead electric lines located in Tier 2 or Tier 3 HFTDs, which include corrective actions, maintenance, increased inspection, vegetation management to establish clearances, and establishment of minimum vertical, horizontal, and radial clearances of wires from other wires.

General Order 165. General Order 165 establishes requirements for the inspection of electric distribution and transmission facilities that are not contained within a substation. A "Patrol" inspection, defined as a simple visual inspection of utility equipment and structures that is designed to identify obvious structural problems and hazards, must be performed at least once per year for each piece of equipment and structure. "Detailed" inspections, where individual pieces of equipment and structures are carefully examined, are required every 5 years for all overhead conductor and cables, transformers, switching/protective devices, and regulators/capacitors. A utility subject to this General Order must submit an annual report of its inspections by July 1 of each year for the previous year.

General Order 166. General Order 166 requires that Investor Owned Utilities (IOUs) develop a Fire Prevention Plan, which describes measures that the electric utility will implement to mitigate the threat of power line fires. Under General Order 166 the IOUs are required to outline a plan to mitigate power line fires when wind conditions exceed

the structural design standards of the line during a Red Flag Warning in a high fire threat area. IOUs are also required to prepare an emergency response plan. Further, utilities are required to report annually to the CPUC regarding compliance with General Order 166.

Local

Contra Costa County 2045 General Plan, Chapter 9: Health and Safety Element. The Health and Safety Element of the Contra Costa County 2045 General Plan focuses on improving health and safety and reducing the risk of hazards and addresses hazards, including wildfire hazards. The Wildfire Hazards section includes policy guidance to minimize wildfire risks to residents, infrastructure, and natural resources (Contra Costa County 2024).

Pittsburg 2040 General Plan, Community Facilities Element. The Community Facilities Element of the Pittsburg 2040 General Plan addresses the provision of community services, public services and facilities, including fire protection and public utility corridors in the City of Pittsburg. It also addresses fire hazards and contains related goals, policies, and action items (City of Pittsburg 2024).

City of Pittsburg Local Hazard Mitigation Plan. Last updated in April 2023, the City of Pittsburg Local Hazard Mitigation Plan 2022 identifies the hazards facing the City, including wildland fire (wildfire); analyzes the risks from these hazards; and develops mitigation strategies and an implementation strategy (City of Pittsburg 2023).

City of Pittsburg Emergency Operations Plan. The City of Pittsburg Emergency Operations Plan December 2018 guides the City on how to operate during an emergency. It identifies the functions and responsibilities for the City's emergency response organization and the City's Emergency Operations Center staff (City of Pittsburg 2018).

5.19.2 Environmental Impacts

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

i. Substantially impair an adopted emergency response plan or emergency evacuation plan?

Construction

No Impact. During project construction, traffic levels would experience a minimal increase that is not expected to degrade traffic performance significantly. Emergency response access during construction would not be significantly impeded. The project would not involve the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or

emergency evacuation plan. Project construction would involve an extension of the primary access road, Golf Club Road, and the construction of a second emergency access road connecting to West Leland Road at the project site's northwest corner (DayZenLLC 2024a, Section 4.17). Therefore, the project would not impair an adopted emergency response plan or emergency evacuation plan during construction.

Additionally, the project is not located in a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

Operation

No Impact. The project does not involve the addition of a large number of people to the local area as discussed in **Section 5.14, Population and Housing** and thereby would not increase emergency response demand during a potential evacuation. Thus, the project would not interfere with the coordination of the county's emergency operations plan at the emergency operations center or alternate emergency operations center, nor would the project interfere with any statewide emergency response, or evacuation routes or plans. Adequate emergency access to the project site and surrounding area would be maintained.

Additionally, the project is not located in a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

ii. Would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Construction and Operation

No Impact. The topography of the project site is relatively flat to slightly undulating. The surrounding existing infrastructure includes residences to the northwest, an electric transmission corridor to the east, and the Contra Costa Canal to the south and west (DayZenLLC 2024a, Section 4.11). Though some of the land surrounding the site could contain grass subject to ignition, most of the surrounding land is maintained with irrigated landscaping and very limited dry vegetation, and regulated by the CPUC General Orders for the transmission corridor. Therefore, project construction and operation would not exacerbate wildfire risk or expose occupants to pollutant concentrations from a wildfire.

Additionally, the project is not located in a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

iii. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Construction

No Impact. The project would improve or extend several offsite linear features that include a potable water line, a recycled water line, a sanitary sewer line, and a storm water drainage line (DayZenLLC 2024a, Section 4.18). The construction of these utilities would not block access to any road or result in traffic congestion. The potable, storm water, and sanitary lines would be underground utilities that would follow existing paved roadways. Therefore, the project infrastructure would not constitute a possible ignition source for local vegetation, nor would it block access to any road or result in traffic congestion.

Additionally, the project is not located in a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

Operation

No Impact. The site is currently vacant and development of the site for the project would not require the installation of associated infrastructure that could exacerbate fire risk or result in impacts to the environment. Maintenance of the project and proposed utilities would not physically block any access roads or result in traffic congestion that could significantly compromise timely access to this facility or any other location. The project would maintain a second emergency access road connecting to West Leland Road at the project site's northwest corner.

Additionally, the project is not located in a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

iv. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Construction

No Impact. The project would not substantially alter local drainage patterns. Storm water discharge during construction would be managed according to the project's Storm Water Pollution Prevention Plan. The project would therefore not be expected to contribute to a flooding hazard onsite or offsite. For further discussion of the potential flooding impacts that could result from the construction of the proposed project, please see the discussion in **Section 5.10, Hydrology and Water Quality**.

As discussed in this section, the topography of the project site and surrounding area is relatively flat to slightly undulating. Therefore, the project would not be exposed to post-fire slope instability or drainage changes.

Additionally, the project is not located in a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

Operation

No Impact. Operation of the project would not alter the course of a drainage (stream or river) and would not substantially alter local drainage patterns. The proposed onsite stormwater treatment areas would be designed to meet the municipal stormwater permit requirements (DayZenLLC 2024a, Section 4.10). The project would therefore not contribute to a flooding hazard onsite or offsite.

As discussed in this section, the topography of the project site and surrounding area is relatively flat to slightly undulating and minimally developed. Therefore, the project would not be exposed to post-fire slope instability or drainage changes.

Additionally, the project is not located in a SRA or a very high FHSZ, or land classified as having a fire threat by the CPUC.

5.19.3 Mitigation Measures

None required.

5.19.4 References

CAL FIRE 2025a – California Department of Forestry and Fire Protection (CAL FIRE). Fire Hazard Severity Zone viewer. Accessed August 2025. Accessed online at: <https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones>

CAL FIRE 2025b – California Department of Forestry and Fire Protection (CAL FIRE). *City of Pittsburg – Contra Costa County Local Responsibility Area Fire Hazard Severity Zones*. Dated February 24, 2025. Accessed August 2025. Accessed online at: <https://calfire.app.box.com/s/wahuw9ny7cgn89xpxh7092ur50r1pwvj/file/1785860464783>

California AG 2022 – California Attorney General (California AG). "Best Practices for Analyzing and Mitigating Wildfire Impacts of Development Projects Under the California Environmental Quality Act", by the State of California Office of the Attorney General (Attorney General Rob Bonta). Dated October 10, 2022. Accessed online at: <https://oag.ca.gov/news/press-releases/attorney-general-bonta-issues-guidance-local-governments-mitigate-wildfire-risk>

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- CPUC 2025b – California Public Utilities Commission (CPUC). *CPUC Fire-Threat Map*. Revised August 19, 2021. Accessed August 2025. Accessed online at: https://files.cpuc.ca.gov/safety/fire-threat_map/2021/CPUC%20Fire%20Threat%20Map_v.3_08.19.2021.Letter%20Size.pdf
- DayZenLLC 2024a – DayZenLLC (TN 254728). AVAIO SPPE Application Main Application and Appendix A - PBGF - Part I, dated February 29, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>

5.20 Mandatory Findings of Significance

This section describes impacts specific to mandatory findings of significance associated with the construction and operation of the project.

MANDATORY FINDINGS OF SIGNIFICANCE	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Environmental checklist established by CEQA Guidelines, Appendix G, mandatory findings of significance.

- a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Less Than Significant with Mitigation Incorporated.

Biological Resources

Less Than Significant with Mitigation Incorporated. With mitigation, the project would not substantially degrade the quality of the environment, reduce the existing habitat of any fish or wildlife species, cause any fish or wildlife population to drop below self-sustaining levels, threaten to eliminate any plant or animal community, or substantially reduce the number or restrict the range of a rare, threatened, or endangered species.

The project would occupy a 22.31-acre site within the Pittsburg Technology Park Specific Plan area. The Specific Plan has a General Plan land use designation of Employment Center Industrial (ECI) and a zoning of Planned Development (PD) district. The project site lies within the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (ECCC HCP/NCCP) Inventory Area. The surrounding area consists of commercial and industrial buildings, residences, a church, a water treatment facility, a junior high school, open space areas consisting of hiking, mountain biking, and equestrian trails, and areas of the former Delta View Golf Course. Historically, the Specific Plan area was owned by the city of Pittsburg and was used as the public Delta View Golf Course, which has been closed for seven years. The only structures left on the project site include a water storage tank and an associated one-story building located in the southeastern corner. The only remnants of the golf course are associated building foundations, concrete slabs, parking lot, driving range barrier netting, golf cart paths and fencing. Two remnant golf course ponds are located on the western portion of the site, outside of the project footprint; however, an emergency vehicle access road would be located between the two ponds connecting the project site to Leland Road. The Contra Costa Canal parallels the south boundary of the project site.

The majority of the study area includes upland habitat. Most of the project site supports annual grasslands that were managed from the late 1940s until 2018 when the golf course closed. Native soils were replaced or amended and a wide range of trees, shrubs, and grasses were imported and maintained via irrigation, mowing, and pruning. Invasive species have taken over the site since the closure of the golf course. The site is dominated by non-native grasslands including wild oat and brome grasslands, upland mustard, and star-thistle. The areas within the 250-foot survey buffer, that were not managed as part of the former golf course, along the east and southwest edges of the project site support more diverse vegetation that includes native wildflowers along with oat and brome grassland and upland mustard/star-thistle fields.

The project site provides suitable habitat for nesting and foraging birds and some common wildlife species. Numerous special-status bird species were observed onsite during field surveys. The site supports several sensitive natural communities, comprising potentially jurisdictional waters, including wetlands, as well as riparian habitat consisting of Himalayan blackberry thickets and Valley Foothill Riparian areas. There were no special-status plants found during protocol-level surveys conducted on the project site and buffer zone. With the exception of a few planted oaks and remnant

cottonwoods and willows, all of the dominant plant species throughout the area are exotic. Although not observed during surveying attempts, the project area has the potential to support a variety of special status amphibians. The project site is located within designated critical habitat for Delta smelt; however, the project site provides no habitat suitable for the species.

The nearest Natural Landscape Block, part of the California Essential Habitat Connectivity Project, is approximately 3 miles to the southeast. A designated Small Natural Area is located approximately 0.4 miles to the southwest. The project site is separated from these areas by the Contra Costa Canal. According to the CDFW BIOS Terrestrial Connectivity layer, the project site and surrounding vicinity provide Limited Connectivity Opportunity for wildlife movement. However, the PG&E transmission line corridor to the east is accessible from the project site and provides direct connectivity from the Diablo Range hills to the edge of Suisun Bay. As such, it represents a potentially important wildlife movement corridor.

Staff concluded that in addition to several special-status nesting and migratory birds found to have a low potential to be nesting or foraging onsite, there was a low potential for western burrowing owl to occur onsite. Staff concluded that there is potential for Swainson's hawk to occur in or near the project site. Furthermore, the study area provides suitable habitat for San Joaquin kit fox, California red-legged frog, California tiger salamander, suitable foraging habitat (does not provide nesting habitat) for golden eagle, and the former golf course ponds in the area provide only low-quality opportunities for western pond turtle.

The applicant included **Project Design Measures (PDMs) BIO-1** through **BIO-12**. Staff evaluated these measures and determined overall were adequate to reduce impacts to less than significant and included as proposed mitigation measures (MMs). Staff made modifications to **BIO-6**, **BIO-7**, and **BIO-9** to ensure impacts were reduced to less than significant. In addition, staff developed **MM BIO-3**. Staff has proposed mitigation measures **MM BIO-1** through **MM BIO-13** to ensure that no significant impacts to special-status plants or wildlife would occur during construction and operation of the project.

With implementation of the above mitigation measures, the project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal.

Additional measures that would ensure ongoing viability of wildlife movement corridors such as the PG&E transmission line corridor include control of stormwater or pollutant runoff (discussed further in **Section 5.10, Hydrology and Water Quality**) via a National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction

General Permit). Additionally, adherence to the HCP/NCCP conservation measures, specifically Measure 1.7 that establishes a stream setback to maintain a protective buffer between new development and existing stream corridors to protect water quality and instream habitat. This measure would also protect the riparian corridor at the east edge of the study area by decreasing the potential for damage incursions and trash accumulation.

Cultural and Tribal Cultural Resources

Less Than Significant with Mitigation Incorporated. Important examples of the major periods of California history or prehistory represented by historical, unique archaeological, or tribal cultural resources are known to be present in the project area. The two built-environment resources that meet CEQA's criteria for historical resources that are in the project area of analysis (PAA) are the Pittsburg-Tesla Transmission and Distribution Line and the Contra Costa Canal. Although the PAA has been partially disturbed by construction of a golf course, telephone line, and the Pittsburg-Tesla Transmission/Distribution Line, geologic research indicates that there is a low-moderate potential that the project site could contain buried archaeological resources. The northern portion of the project site has a moderate potential to contain these resources due to its proximity to seasonal streams and waterways. No archaeological or ethnographic resources meeting CEQA's criteria for a unique archaeological resource were identified. Nevertheless, the extent of proposed ground disturbance has the potential to damage unknown, buried archaeological resources in the project area. If these resources were to be exposed or destroyed, it would result in a significant impact. With the inclusion of **PDM CUL-1** through **PDM CUL-4**, and the implementation of mitigation measures **MM CUL-1** through **MM CUL-5**, included in **Section 5.5, Cultural and Tribal Cultural Resources**, impacts to buried cultural resources would be reduced to a less-than-significant level.

With implementation of above mitigation measures, the proposed project is unlikely to eliminate important examples of major periods of California history or prehistory and the impact would be less than significant.

Geology and Soils

Less Than Significant with Mitigation Incorporated. As described in **Section 5.7, Geology and Soils**, CEC staff and the applicant's preliminary site-specific geotechnical investigation (DayZenLLC 2024c), identify and propose mitigation for, geologic hazards that could have a significant impact on the safety of people and property during project grading, construction, and operation. Nearby active faults have ruptured in the recent past and will produce significant earthquakes again (USGS 2015, 2016). There is a 72 percent chance that the San Francisco Bay Region, including Contra Costa County and the project site, will experience a $M \geq 6.7$ earthquake between 2014 and 2043 (USGS 2016). The project site is in a California Geological Survey mapped Zone of Required Investigation for liquefaction (CDOC 2019ab). The preliminary site-specific geotechnical investigation concluded liquefaction potential at the project site is negligible

(DayZenLLC 2024c). In addition, CEC staff presume that artificial fill deposits at the project site are liquefiable and require mitigation. DayZenLLC (2024c) identified potential impacts from, and proposed mitigation for, unstable geologic units or soils, soil settlement, and expansive soils. During grading, construction, and design, compliance with the 2022 California Building Code (CBC) Section 1803, as detailed in **MM GEO-1**, and applicable Contra Costa County and City of Pittsburg LORS, would mitigate potential impacts from geologic hazards on the safety of people and property to less than significant.

The project is sited on two existing stream channels. During project grading, construction, and grading, there is an ongoing potential for impacts related to soil erosion. Compliance with the 2022 CBC, the applicant's proposed best management practices (**PD-HYD-1.1**), and applicable Contra Costa County and City of Pittsburg LORS would mitigate potential impacts related to soil erosion to less than significant. **PD-HYD-1.1** is described in **Section 5.10, Hydrology and Water Quality**.

There are no known paleontological resources within the project site. A search of the University of California Museum of Paleontology database failed to identify any paleontological resources onsite but did indicate there were resources within two miles of the site (UCMP 2025). As described in **Section 5.7, Geology and Soils**, Pleistocene alluvial fan deposits at the project site have a high paleontological sensitivity. Ground-disturbing activities have the potential to impact undiscovered paleontological resources. The project would require excavation trenching of depths of up to 15 feet below the existing grade. Foundations would be augured piles, likely to exceed depths of 30 feet below the existing grade. Paleontological resources could be encountered during construction of the project. Exposure, damage to, or destruction of, significant paleontological resources would be a significant impact.

Adherence to the County of Contra Costa 2045 General Plan (Contra Costa 2024) policies (COS-P10.6 and COS-P10.7) and the City of Pittsburg 2040 General Plan (General Plan)(Pittsburg 2024a) policies (10-P-7.3), and implementation of **MM PAL-1** through **MM PAL-8**, which protect significant paleontological resources during grading and construction, included in **Section 5.7, Geology and Soils**, would reduce the impacts to buried paleontological resources to a less-than-significant level. With mitigation incorporated, the proposed project will have a less than significant impacts on important paleontological resources that are part of the California's prehistory.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant with Mitigation Incorporated. California Environmental Quality Act (CEQA) Guidelines 15130(b) state that an adequate discussion of significant cumulative

impacts can employ one of two methods to establish the effects of other past, current, and probable future projects. A lead agency may select a list of projects, including those outside the control of the agency, or, alternatively, a summary of projections. These projections may be from an adopted the City of Pittsburg 2040 General Plan or related planning document, or from a prior environmental document that has been adopted or certified, and these documents may describe or evaluate the regional or area-wide conditions contributing to the cumulative impact.

Pittsburg Technology Park Specific Plan Projection

This analysis evaluates cumulative impacts using the first method, which considers the proposed project's effects in conjunction with past, current, and probable future projects in the vicinity of the proposed data center and generation facility. The list of cumulative projects (Table 5.20-1) was developed based on the City of Pittsburg Technology Park Specific Plan Draft Program Environmental Impact Report (Specific Plan Draft PEIR) (SCH # 2024030184). Because the project would be consistent with applicable land use plans and policies (Pittsburg 2024b), the Specific Plan Draft PEIR serves as the basis for this cumulative analysis. The Draft PEIR concluded that buildout of the Specific Plan area would result in a less than cumulatively considerable contribution to significant cumulative impacts, with mitigation incorporated.

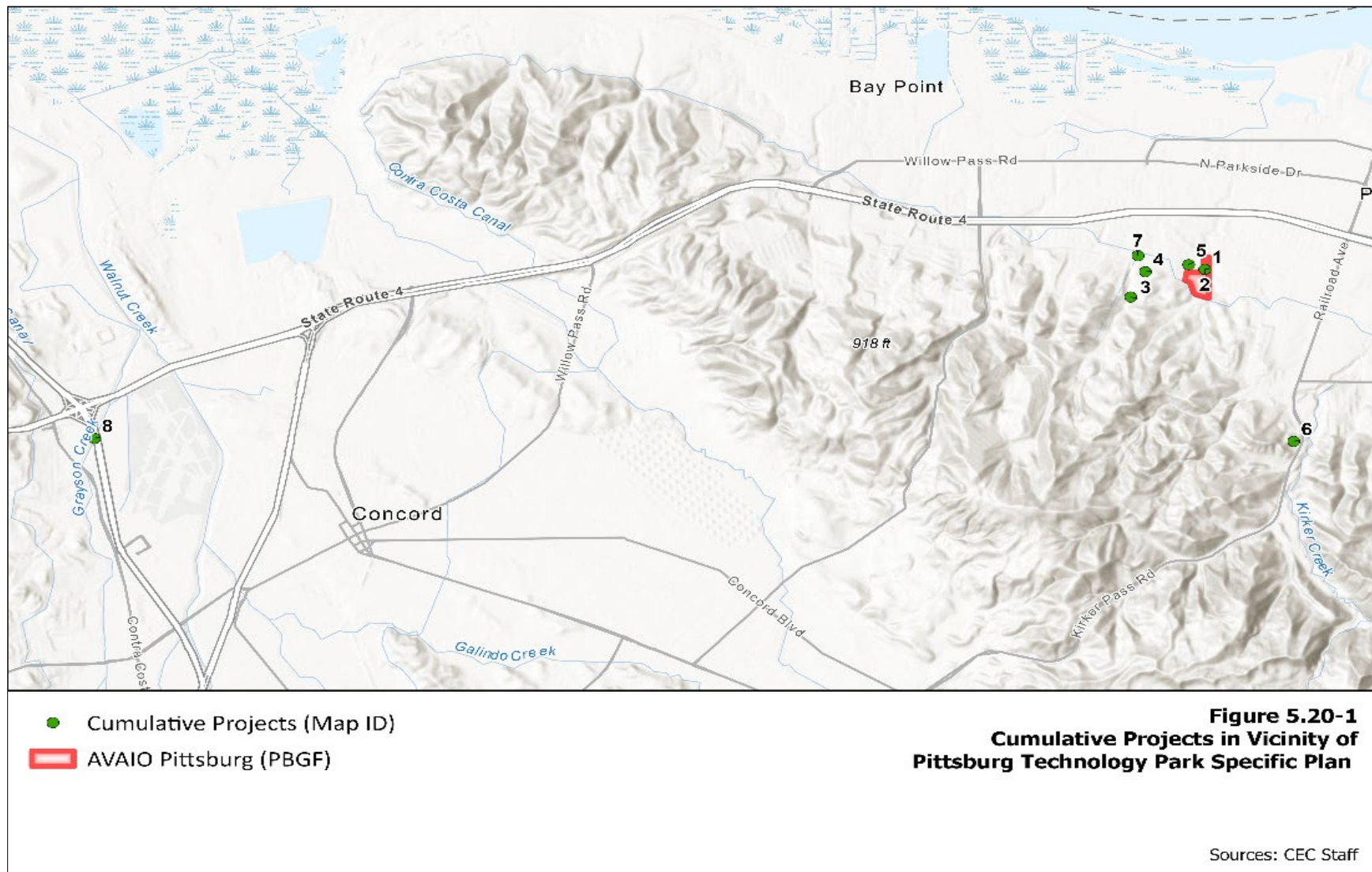
TABLE 5.20-1 CUMULATIVE PROJECTS IN VICINITY OF PITTSBURG TECHNOLOGY PARK SPECIFIC PLAN

Map ID Number	Project Name	Description	Location	Distance to Project	Latitude	Longitude	Status
1	T-Mobile Cell Tower Modification	Cell Tower/Antenna Modification	2222 Golf Club Rd, Pittsburg, CA	Approximately 340 feet east of the site's northeastern corner	38.01264	-121.90989	Completed
2	AT&T Backup Generator	Installation of a backup generator at an existing AT&T Cell Tower/Antenna	2222 Golf Club Rd, Pittsburg, CA	Directly adjacent to site's northeastern corner	38.012640	-121.909890	Completed
3	Stoneman Park Subdivision	342 Unit Residential Subdivision	Southwest corner of John Henry Johnson Pkwy and Ripple Rouge Rd	Approximately ½ mile southwest of the project site	38.009031	-121.920436	Pending
4	Pittsburg Premier Fields Project	Develop a portion of the former Delta View Golf	Southeast corner of John Henry Johnson	Approximately ¼ mile west of the project site	38.012335	-121.918318	Under Construction

**TABLE 5.20-1 CUMULATIVE PROJECTS IN VICINITY OF PITTSBURG TECHNOLOGY PARK
SPECIFIC PLAN**

Map ID Number	Project Name	Description	Location	Distance to Project	Latitude	Longitude	Status
		Course into three multi-purpose natural turf sports fields	Pkwy and W Leland Rd				
5	Los Médanos Industrial Park	Development of an industrial park	Approximately 300 feet south of intersection of W Leland Rd and Golf Club Rd	Adjacent to site's northwest boundary	38.013237	-121.912169	Approved
6	Montreux Residential Subdivision	356-unit residential subdivision	West side of Kirker Pass Rd, approximately 0.25 mile south of city limits	Approximately 1.6 miles southeast of the site	37.990261	-121.897217	Approved
7	Dreamcourts	39,779 square-foot gymnasium	North of, and adjacent to, the intersection of John Henry Johnson Pkwy and W Leland Rd.	Approximately 0.4 mile west of the project site	38.014421	-121.919406	Approved
8*	Interstate 680 (I-680) Northbound Express Lane Completion Project	Express lane to improve corridor-wide congestion, travel delays, and operational challenges	I-680 post mile (PM) limits between realignment (R) 10.7 at the southern limit to PM 23.1 at the northern limit	8.4 miles west of the project site	37.990676	-122.067935	Pending

**= not included in the Specific Plan Draft PEIR, but it is included here due to its proximity to the project site.*



Specific Plan Significant Unavoidable Impacts

The Specific Plan Draft PEIR concluded that implementation of the Specific Plan would result in less than significant environmental impacts with the incorporation of mitigation measures. Although the proposed project, in combination with future development within the City of Pittsburg Technology Park Specific Plan area, could conceivably contribute to significant cumulative impacts on certain environmental resources, the following analysis demonstrates that the project's individual contribution to these impacts would be less than cumulatively considerable and, therefore, less than significant, with incorporation of the mitigation measures identified in this Initial Study/Mitigated Negative Declaration.

Greenhouse Gas Emissions

Less Than Significant Impact with Mitigation Incorporated. The Bay Area Air Quality Management District (BAAQMD) CEQA Air Quality Guidelines do not identify a greenhouse gas (GHG) emissions threshold for construction-related emissions. Instead, BAAQMD recommends that GHG emissions from construction be quantified and disclosed. The BAAQMD further recommends incorporation of best management practices (BMPs) to reduce GHG emissions during construction, as feasible and applicable. The project's construction emissions would be in conformance with state and local GHG emissions reduction goals, so impacts would be less than significant.

For operation, including readiness testing and maintenance-related emissions, the BAAQMD CEQA Air Quality Guidelines states that for stationary-source projects, the threshold to determine the significance of an impact from GHG emissions is 10,000 metric tons per year of carbon dioxide equivalent (MTCO₂e/yr).

Other project-related emissions from mobile sources, area sources, energy use, and water use would not be included for comparison to the threshold of significance for stationary sources of GHG, based on guidance in the BAAQMD CEQA Guidelines (BAAQMD 2023, Section 6.4). Instead, in April 2022, the BAAQMD updated thresholds of significance to assist lead agencies when evaluating the indirect and "non-stationary" source emissions of land use development projects. Under the BAAQMD's 2022 CEQA thresholds of significance for land use projects, a CEQA lead agency can conclude that a project would not make a cumulatively considerable contribution to global climate change if the project is designed and built to be consistent with the requirements of either Option A or Option B of the BAAQMD thresholds. In Option A, projects must include, at a minimum, the project design elements of buildings and transportation. In Option B, projects must be consistent with a local GHG reduction strategy that meets the criteria under CEQA Guidelines Section 15183.5(b) (BAAQMD 2023, p. 2). The proposed project would meet the climate impact thresholds adopted by the BAAQMD by incorporating design elements in "Option A" as recommended by the BAAQMD and as shown in **Table 5.8-3** in **Section 5.8, Greenhouse Gas Emissions**.

Staff proposes implementation of mitigation measure **MM GHG-1** which would require the applicant to use renewable diesel for 100 percent of total energy use by the emergency backup generators, and only use ultra-low sulfur diesel (ULSD) as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. Staff also proposes implementation of **MM GHG-2** which would require the applicant to participate in PG&E's Renewable Energy Program or other renewable energy program that accomplishes the same objective as the PG&E Renewable Energy Program for 100 percent carbon-free electricity, such as an agreement with the Pittsburg Power Company (PPC), or purchase carbon offsets renewable energy credits or similar instruments that accomplish the same goals of 100 percent carbon-free electricity. With the implementation of the mitigation measures described in **Section 5.8, Greenhouse Gas Emissions** of this analysis (**MM GHG-1** and **MM GHG-2**), the project would ensure that the project-related emissions would not significantly add to the global problem of climate change, nor would the project hinder California's ability to reach its GHG reduction goals in any significant way, even when considered cumulatively. Additionally, the project would implement efficiency measures to meet California green building standards, and additional voluntary efficiency and use reduction measures. As such, with implementation of **MM GHG-1** and **MM GHG-2**, GHG emissions related to the project would not conflict with the City's Climate Action Plan or other plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs. Therefore, the project's GHG emissions would not be considered cumulatively significant.

Noise

Less Than Significant Impact. Construction activities would increase existing noise levels at the adjacent land uses, but they would be temporary and intermittent. In addition, construction activities would occur during daytime hours from 8:00 a.m. to 5:00 p.m., in compliance with Pittsburg City Code, Section 18.82.040. While construction of the proposed project would temporarily increase noise levels in the immediate neighboring areas of the project site, there are no noise-sensitive land uses in the immediate vicinity of the project (the closest sensitive receptor is about 800 feet north of the project site center). Noise levels experienced at the nearest receptor would be 62 dBA, a 6 dBA increase above existing ambient levels. Since project construction would occur during daytime hours and are temporary in nature, these increases are less than significant. Thus, construction activities would result in a less than significant noise impact.

Sources of operational noise for the project would include the 37 backup generators and noise from standard operations of a data center building. During standard operations, the nearest residential receptor would experience an increase of 3 dBA Ldn, which is barely perceptible and would be considered less than significant. The operational noise levels would comply with the City's noise limits and would not significantly elevate the existing ambient noise levels at the nearest residences. Furthermore, since the project is not adjacent to, or near a residential land use, no

noise reduction measures would be required, and operation of the project would have a less than significant impact and would not be cumulatively considerable.

Population and Housing

Less Than Significant Impact. The Specific Plan Draft PEIR did not identify any significant impacts associated with implementation of the proposed Specific Plan. The Draft PEIR explained that no specific development projects were proposed as part of the Plan; rather, the Plan serves as a framework to guide future development within the Plan Area. The Draft PEIR further noted that while uses permitted under the Specific Plan could attract new residents and increase economic activity – potentially inducing growth – such growth would be consistent with the the City of Pittsburg 2040 General Plan’s intent to foster economic opportunity. Moreover, the Specific Plan is specifically designed to accommodate the population and employment projections established in the General Plan, ensuring that the anticipated growth remains consistent with the city’s long-term planning objectives. As described in **Section 5.14, Population and Housing**, the project would not displace any people or housing, or necessitate construction of replacement housing elsewhere. Operation of the project is anticipated to require 20 to 30 full-time operation workers. The project’s construction and operation workforce would not directly or indirectly induce a substantial population growth in the project area. Therefore, the project’s contribution to the jobs-housing imbalance would not be cumulatively considerable.

Transportation

No Impact. The General Plan FEIR anticipates significant traffic impacts from the build-out of the General Plan. As discussed in **Section 5.17, Transportation**, implementation of **PDM TRANS-1** and **PDM TRANS-2** would be incorporated into the design of the project. **PDM TRANS-1** would include a Construction Traffic Management Plan to minimize impacts to the transportation system. **PDM TRANS-2** requires the project implement a Transportation Demand Management program sufficient to demonstrate that vehicle miles travelled (VMT) associated with the project would be reduced to 12.8 or less per employee. Further, the project would be consistent with the city’s Transportation Impact Analysis Guidelines that provide VMT screening criteria. The project would meet the requirements to be screened out of providing a deeper VMT analysis. With implementation of **PDM TRANS-1** and **PDM TRANS-2**, the project’s contribution to cumulative transportation impacts during project construction and operation would not be cumulatively considerable.

Solid Waste Impacts (Utilities and Service Systems)

Less Than Significant Impact. As determined in **Section 5.18, Utilities and Service Systems**, adequate water supply, as well as wastewater treatment capacity, are available to serve the project. Likewise, there are adequate electricity and telecommunication services in the vicinity to meet the project’s needs. Natural gas resources would not be used on the project as proposed.

The nearby Keller Canyon Landfill has available landfill capacity and is anticipated to cease operation in 2050 (CalRecycle 2025). The project would generate minimal operational waste because data centers typically require very little equipment turnover. Additionally, the project does not include a residential development component and would not substantially increase the supply and demand of utility services and infrastructure from the influx of 20 to 30 employees. Therefore, the project's contribution to this cumulative impact would not be considerable.

Other Technical Areas

Although the Specific Plan Draft PEIR did not identify significant effects in the areas of air quality, cultural and tribal resources, utilities and service systems and geology (paleontology), the CEC staff concluded that the project's impacts in these areas are *less than significant with mitigation*. Thus, staff has considered whether the project would contribute to cumulatively considerable impacts in these areas. Staff has also included an analysis of potential cumulative impacts for the other technical areas where project impacts would be *less than significant*.

Aesthetics

Less Than Significant Impact. The proposed project would be constructed on relatively flat land in a highly developed urban area in the southcentral portion of the city of Pittsburg, California, on land that has been historically used as a golf course. The segment of Interstate 680 (I-680) that is officially designated as a state scenic highway is located over 11.5 miles to the south. San Francisco International Airport is located approximately 50 miles southwest of the proposed data center.

As discussed in **Section 5.1, Aesthetics**, there is no recognized scenic resource on the site or in the vicinity that the project would block its public view.

The project and new or foreseeable projects in the Specific Plan area are within an "urbanized area" as defined per Public Resources Code section 21071. At this location they would be consistent with policies in the Specific Plan and conform with applicable zoning and other regulations governing scenic quality.

The project would include pole mounted site light fixtures along the site perimeter, as well as along the perimeter of the PBGF utility yard, outdoor security lighting along the PDH building and driveway entrances and would not incorporate large glass panels that would significantly increase glare. Security lighting would be indirect and diffused and parking lot lighting would be in compliance with Pittsburg Municipal Code 18.78.05(F).

The project site does not border residential uses. The nearest residential area by line of sight is approximately 400 feet north of the project site. For these reasons, project impacts with respect to aesthetics would be less than significant and not cumulatively considerable.

Air Quality

Less Than Significant with Mitigation Incorporated. The proposed project would be located in Contra Costa County in the San Francisco Bay Area Air Basin (SFBAAB), under the jurisdiction of the BAAQMD. The SFBAAB is designated as a nonattainment area for ozone and particulate matter with a diameter of 2.5 microns or less (called PM_{2.5}) under both California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The SFBAAB is also designated as nonattainment for particulate matter with a diameter of 10 microns or less (called PM₁₀) under CAAQS, but not NAAQS.

SFBAAB's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. In developing thresholds of significance for air pollutants, BAAQMD considers the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. CEQA would then require implementation of all feasible mitigation measures.

The demolition and construction emissions of the project would be lower than the thresholds of significance from the BAAQMD CEQA Air Quality Guidelines. There is no numerical threshold for fugitive dust generated during construction in BAAQMD. BAAQMD considers fugitive dust emissions to be potentially significant without incorporation of basic construction mitigation measures, also referred to as BMPs. The applicant would be required to incorporate the BAAQMD's recommended BMPs and staff identifies this as mitigation measure **MM AQ-1**. Therefore, the project's construction emissions would not be cumulatively considerable.

For project operation, including readiness testing and maintenance, with the NO_x emissions fully offset through the permitting process with BAAQMD, criteria air pollutant emissions of the emergency standby generators are not estimated to exceed the BAAQMD significance thresholds for average daily or maximum annual emissions. As discussed in **Section 5.3, Air Quality**, the daily average and annual emissions of criteria air pollutants and precursors during total project operation would not exceed any applicable threshold of significance, and the project would not result in a cumulatively significant emissions increase. Therefore, the project emissions during operation, including readiness testing and maintenance would not be cumulatively considerable.

The criteria pollutant air quality impact analysis found that the concentrations from construction and readiness testing and maintenance of the gensets would not cause any exceedance of ambient air quality standards. Therefore, the project's criteria air pollutant impacts from genset readiness testing and maintenance would be less than significant.

The health risk assessment shows that the project's health risk impacts would not exceed BAAQMD significance thresholds during construction. During backup generator readiness testing and maintenance, which includes operation at partial loads, the project could exceed the BAAQMD CEQA significance threshold for cancer risk and the more health protective cancer risk limit for permitting set by BAAQMD Regulation 2, Rule 5. Staff recommends mitigation measure **MM AQ-2** to ensure all scenarios of readiness and maintenance testing do not exceed the cancer risk limit of 6 in one million for the protection of Overburdened Communities. Mitigation would ensure that all readiness and maintenance testing at partial engine loads (75% or lower) do not exceed 17 hours per year per engine. With **MM AQ-2**, the project would not expose sensitive receptors to substantial toxic air contaminant (TAC) concentrations during construction or emergency backup generator readiness testing and maintenance.

Due to the infrequent nature of emergency conditions and the record of highly reliable electric service available to the project (see **Appendix B**), the project's emergency operations would be unlikely to expose sensitive receptors to substantial concentrations of criteria air pollutants or TACs.

Therefore, the project's air quality impacts would not be cumulatively significant.

Biological Resources

Less Than Significant Impact with Mitigation Incorporated. One operational impact that could potentially affect biological resources, and be cumulatively significant, is an indirect impact resulting from project-related nitrogen deposition on nitrogen-sensitive habitats resulting from emergency testing and sporadic (undefined) emergency operation of the diesel backup generators. Using California Natural Diversity Database Rarefind and BIOS, and the USFWS Environmental Conservation Online System, CEC staff identified several areas of protected habitat sensitive to nitrogen deposition within a six-mile radius of the project (the typical deposition zone for NO_x with reliable modeling results). These include USFWS-designated critical habitat for Delta smelt (*Hypomesus transpacificus*) and Alameda whipsnake (*Masticophis lateralis euryxanthus*), as well as the federally listed species at the Antioch Dunes National Wildlife Refuge. Coastal brackish marsh habitat was also identified as a CDFW-designated sensitive habitat with potential to be impacted from the project. CEC staff utilized Community Multiscale Air Quality modeling system data to provide a baseline nitrogen deposition estimate for the potential deposition zone around the project area. CEC staff then assessed potential project-related nitrogen deposition by using modeled data from comparable SPPE projects with similar distances to sensitive habitats. As described for the proposed project, staff concluded that project-related nitrogen deposition is expected to occur within approximately 0.5 miles of the project and would be considered to have a less than significant impact. Based on the modeling and distance from known sensitive habitats the projects emissions are not expected to be cumulatively considerable and would not result in a significant cumulative impact to sensitive biological resources or their habitat.

Cultural and Tribal Cultural Resources

Less Than Significant Impact with Mitigation Incorporated. The Specific Plan Draft PEIR addresses impacts on cultural and tribal resources. Historical resources and unique archaeological resources, as defined by CEQA, share several of the impact vulnerabilities that tribal cultural resources face, especially the effects of ground-disturbing activities. In addition, historical and unique archaeological resources can also qualify as tribal cultural resources. The suite of mitigation measures for cultural and tribal resources presented in the Specific Plan Draft PEIR would reduce the severity of some impacts on these resources. No known tribal cultural resources have been found on the project site, although ground disturbance associated with the proposed project could result in the exposure and destruction of buried cultural and tribal resources. Implementation of mitigation measures **MM CUL-1** through **MM CUL-5** would prevent, minimize, or compensate for impacts on buried, tribal cultural resources. Project impacts to tribal cultural resources, therefore, would not be cumulatively considerable.

Energy and Energy Resources

Less Than Significant Impact. The project would use 37 Tier 4 renewable diesel-fired gensets for emergency backup generation, administration, and life safety service needs. BAAQMD and CARB's Airborne Toxic Control Measures limit the total number of hours of operation from each genset for operational reliability purposes to no more than 50 hours annually. Actual testing and maintenance of each genset is anticipated not to exceed 34 hours per year (DayZenLLC 2024a, Section 2.2.12).

At a rate of 50 hours, the total quantities of renewable diesel or ULSD fuel used for all the gensets operating at full load would approximate 6,140 barrels per year (bbl/yr). California has a renewable diesel and ULSD fuel supply of approximately 27,200,000 bbl/yr and 229,000,000 bbl/yr, respectively. The project's use of fuel constitutes a small fraction of the renewable diesel and ULSD's available resources (less than 0.023 and 0.003 percent, respectively)—the supply from the combination of these two resources is more than sufficient to meet the project's necessary demand. For these reasons, the project's use of fuel would be less than significant.

The project's consumption of energy resources during operation would not be inefficient or wasteful, as discussed in **Section 5.6, Energy and Energy Resources**. Project operation would have a less than significant adverse effect on local or regional energy supplies and energy resources and likewise, would not be cumulatively considerable.

Geology and Soils

Less Than Significant with Mitigation Incorporated. The Contra Costa County General Plan identified two policies (COS-P10-6 and COS-P10.7) that specifically address impacts on paleontological resources (Contra Costa County 2024); the city of Pittsburg General Plan identified one policy (10-P-7.3 [Pittsburg 2024a]); and the Specific Plan for the project area identified a goal and two actions that aim to protect archaeological and paleontological resources (Goal 10-7 and actions 10-P-7.3 and 10-A-7.i [Pittsburg

2024b]). Paleontological resources can be impacted by the effects of ground-disturbing activities. A search of the University of California Museum of Paleontology database did not identify any paleontological resources at the project site. The database search did however indicate fossil discoveries have been documented in geologic formations that are within two miles of the project, such as the Neroly Formation (UCMP 2025). Additionally, layers of historic artificial fill, late Holocene to modern (<150 years) stream channel deposits, and early to late Pleistocene alluvial fan deposits were discovered during the geotechnical borings conducted for the site. There is no potential for paleontological resources being discovered in the historic artificial fill, while the likelihood of discovering paleontological resources increases with depth within Holocene stream channel deposits, and the early to late Pleistocene alluvial fan deposits that were found to be at the surface level and below are classified as high paleontological sensitivity. Ground-disturbing activities have the potential to impact undiscovered paleontological resources. The project would require excavation trenching of depths of up to 15 feet below the existing grade. Although unlikely, paleontological resources could be encountered during construction of the project.

Adherence to the city and county general plans, the Specific Plan, and implementation of **MM PAL-1** through **MM PAL-8**, included in **Section 5.7, Geology and Soils**, would reduce the impacts to buried paleontological resources to a less-than-significant level. The proposed project is unlikely to eliminate important examples of paleontological resources that are part of the prehistory of California and project impacts to paleontological resources therefore would not be cumulatively considerable.

Hazards and Hazardous Materials

Less Than Significant with Mitigation Incorporated. As discussed in **Section 5.9, Hazards and Hazardous Materials**, the project would use hazardous materials in small quantities associated with demolition and construction. When not in use, any hazardous material would be stored in designated construction staging areas in compliance with local, state, and federal requirements. Diesel fuel transport would comply with all appropriate regulations regarding transport of hazardous materials on California roads and highways. The project would use diesel fuel for routine testing and maintenance and during emergency operation of the generators. Although diesel fuel would be stored onsite, it would be stored in dedicated diesel fuel storage tanks for each generator, with each genset having a 9,800-gallon tank for the bottom generator in the stacked pair and a 570-gallon tank for the upper generator in the stacked configuration. The design features of the storage tanks would ensure that the diesel fuel generators meet the secondary containment requirements of the California Health and Safety Code for the aboveground petroleum storage tank program. The risk of a fire onsite would be reduced to less than significant through adherence to applicable codes and the use of effective safety management practices. In addition, the project would implement procedures, safety features, and precautions that would reduce the risk of accidental hazardous materials release. The incorporation of **MM HAZ-1** would ensure the testing and removal of lead-based paint contaminated materials prior to

building demolition. With incorporation of **MM HAZ-2** and **MM HAZ-3**, soil and groundwater samples would be taken, and any contaminated soil and groundwater encountered would be handled and disposed of properly. Therefore, the impact from the use, transport, disposal, or accidental release of hazardous materials would not be considered cumulatively significant.

Hydrology and Water Quality

Less Than Significant Impact. The project would be required to comply with the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) by implementing the requirements of the Construction General Permit, which includes preparing a Storm Water Pollution Prevention Plan, the Municipal National Pollutant Discharge Elimination System (NPDES) permits, and the Contra Costa Clean Water Program Stormwater C.3 Guidebook. The plans and permits work together to establish specific requirements to reduce storm water pollution from new and redevelopment projects, singularly and cumulatively. If implemented as described in **Section 5.10, Hydrology and Water Quality** of this analysis, these standards would protect the watershed receiving discharge from the project from a cumulatively considerable impact to the basin's hydrology. Similarly, these same plans and permits would be protective of water quality. These standards, along with BMPs contained in **PDM HYD-1**, would be protective of the quality of both surface water and groundwater bodies receiving discharge from the project and impacts would not be cumulatively significant.

Land Use and Planning

Less Than Significant Impact. A land use impact could occur if a project would physically divide an established community. Project construction and operation would occur mostly onsite and would not prevent pedestrian, bike, or vehicular movement between different areas of the community, and therefore, the project would not physically divide an established community.

A land use impact could also occur if a project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Staff assessed consistency of the proposed project with relevant policies and regulatory requirements contained in the city of Pittsburg 2040 General Plan (General Plan) and the Draft PEIR for the Pittsburg Technology Park Specific Plan. The Specific Plan Area has a General Plan land use designation of Employment Center Industrial (ECI), which includes data centers as an allowable use, and a zoning of Planned Development (PD) district (Pittsburg 2024b). The project would be consistent with the city's General Plan policies (2-P-4.2, 2-P-4.10, 6-P-2.7, and 6-P-2.14 specifically [Pittsburg 2024a]). The proposed project would also be consistent with the Pittsburg Zoning Code, with the city's approval of a conditional use permit for the data center use, and approval of a Vesting Tentative Subdivision Map for the three parcels to become one. With these City approvals, the project would be consistent with the uses and standards associated with the site's Planned Development zoning designation. The proposed project would also be consistent with the Specific

Plan, which is intended to support the development of industrial, office, and technology park uses. A data center is identified as a permitted land use within the Specific Plan. For these reasons, project impacts due to conflicts with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect would be less than significant, and there would be no cumulative impacts from conflicts with land use regulations. See **Section 5.11, Land Use and Planning** for details.

Public Services

Less Than Significant Impact. As discussed in **Section 5.15, Public Services**, the construction and operation of the project would not result in substantial adverse physical environmental impacts associated with the provision of new or physically altered fire and police service facilities to maintain acceptable service ratios, response times, or other performance objectives. The project would be consistent with the planned growth in the general plan and Specific Plan for the area. The project plans would be reviewed by the Contra Costa County Fire Protection District to ensure appropriate safety features are incorporated to reduce fire hazards.

In accordance with Section 17620 of the Education Code, as well as Sections 65995 and 66001 of the Government Code, Assembly Bill ("AB") 181, and subdivision (e) of Section 17621 of the Education Code, which is enacted through the District Board Policy (BP 7211 Facilities: Developer Fees) as a means of mitigating impacts related to residential and commercial/industrial development, the project would be required to pay the appropriate school impact fees to the Pittsburg Unified School District. Operation of the project is anticipated to require approximately 20 to 30 employees, which the applicant anticipates would be drawn from the greater Bay Area. Even if all of the operation workforce would relocate closer to the project site, the additional population would be consistent with growth projections and service ratios in the General Plan, and thus, the project would not cause significant environmental impacts associated with the provision of new or physically altered park and other public facilities in order to maintain acceptable service ratios or other performance objectives. The project's impacts to the public services would not be cumulatively considerable.

Recreation

Less Than Significant Impact. As discussed in **Section 5.16, Recreation**, the project does not require or propose the construction or expansion of recreation facilities. Operation of the project is anticipated to require 20 to 30 employees. The project's operation workforce would be consistent with growth projections and service ratios in the General Plan and, thus, the project would not increase the use of existing parks or recreational facilities to the extent that substantial physical deterioration of the park or facility would result. The project's impacts to recreation would not be cumulatively considerable.

Wildfire

Less Than Significant Impact. As determined in **Section 5.19, Wildfire**, the project would not be located in or near a State Responsibility Area (SRA) or very high Fire Hazard Severity Zone (FHSZ), or land classified as having a fire threat by the California Public Utilities Commission (CPUC). Additionally, the project would not impair an adopted emergency response plan or emergency evacuation plan. The project infrastructure would not constitute a possible ignition source for local vegetation, nor would it block access to any road or result in traffic congestion. Therefore, the project's impact to wildfire would not be considered cumulatively significant.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. The proposed project would not cause substantial adverse effects on human beings either directly or indirectly. The proposed project would result in less than significant impacts to human health during construction and operation, including changes to air and water quality, and exposure to geologic hazards, noise, and hazardous materials, as well as from GHG emissions. As discussed in **Section 5.3, Air Quality**, with implementation of **MM AQ-1**, which includes the BAAQMD's recommended BMPs for fugitive dust and construction equipment emissions, and **MM AQ-2** to limit certain scenarios of readiness and maintenance testing, the project would result in a less than significant impact related to human health. As discussed in **Section 5.7, Geology and Soils**, with the inclusion of **PDMs GEO-1** and **GEO-2**, impacts to people or property associated with geologic or seismic conditions onsite would be less than significant. As discussed in **Section 5.8, Greenhouse Gas Emissions**, direct GHG emissions from maintenance and testing of the project gensets would be less than significant with implementation of **MM GHG-1**, and indirect GHG emissions from the project's energy usage, mobile sources, and building operation (electricity use) would be less than significant with implementation of **MM GHG-2**. The project would result in temporary noise impacts to humans during construction and intermittently during operation. As discussed in **Section 5.13, Noise**, noise impacts would be less than significant. As discussed in **Section 5.9, Hazards and Hazardous Materials**, hazards impacts would be less than significant with the implementation of **PDM HAZ-1, MM HAZ-1, MM HAZ-2, and MM HAZ-3**. As discussed in **Section 5.10, Hydrology and Water Quality**, water quality impacts would be less than significant with the inclusion of the BMPs contained in **PDM HYD-1**. No additional impacts to human beings would occur during construction, operation and maintenance activities.

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Section 6

Environmental Justice

6.0 Environmental Justice

This section describes the environmental setting and regulatory background, and identifies any impacts associated with the construction and operation of the proposed project with respect to environmental justice.

6.1 Regulatory Background

California law defines environmental justice as “the fair treatment of people of all races, cultures and income with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies” (Gov. Code, § 65040.12). In keeping with its commitment to environmental sustainability and access to all, California was one of the first states to codify the concept of environmental justice in its statutes. Beyond the fair treatment principles described in statute, CEC considers environmental justice during its staff assessment process. CEC has included environmental justice analyses in its environmental review of power plant siting cases for over two decades. CEC’s goal is to ensure, through equal access to the decision-making process, everyone has equal protection from environmental and health hazards and can live, learn, play, and work in a healthy environment.

California Senate Bill 350, the Clean Energy and Pollution Reduction Act of 2015, called for the formation of a statewide Disadvantaged Communities Advisory Group (DACAG), consisting of members either from or representing disadvantaged communities, to advise the CEC and the California Public Utilities Commission (CPUC) regarding the development, implementation, and impacts of proposed programs related to SB 350 and other relevant clean energy programs and policies. Its purpose is to ensure that disadvantaged communities, including tribal and rural communities, benefit from proposed clean energy and pollution reduction programs.

Environmental Justice in the Energy Commission Siting Process

As described above, environmental justice (EJ) analysis is part of the CEC’s site certification process. CEC uses U.S. Census data to identify minority and/or low-income populations (i.e., an environmental justice population). Additionally, CEC uses the California Environmental Protection Agency’s (CalEPA) California Communities Environmental Health Screening Tool (CalEnviroScreen) to identify communities most affected by many sources of pollution, and where people are often especially vulnerable to pollution’s effects (referred to as a disadvantaged community by CalEnviroScreen). The “Environmental Justice Project Screening” subsection below presents the demographic data for those people living in a three-mile radius of the proposed project site and a determination of presence or absence of an EJ population. When an EJ population is identified, the analyses in project-specific technical areas¹ consider the

¹ The technical areas typically analyzed as part of the CEC Environmental Justice analysis are Air Quality; Cultural and Tribal Cultural Resources; Greenhouse Gas Emissions; Hazards and Hazardous Materials;

project's impacts on this population and if those impacts would disproportionately affect the EJ population. The "Project Outreach" subsection below discusses the CEC's outreach program specifically as it relates to the proposed project.

CEC staff typically conduct an EJ analysis by taking the following steps:

- Identification of a population of minority persons and/or persons with low income (i.e., environmental justice community), living in an area potentially affected by the proposed project;
- Identification of areas potentially affected by various project-related emissions (e.g., air quality, hazardous materials, etc.) or other project-related nuisance effects (e.g., noise, traffic, etc.); and
- A determination of the potential for a significant adverse disproportionate impact on an identified environmental justice population resulting from the proposed project alone, or in combination with other existing and/or planned projects in the area (i.e., from cumulative impacts).

Bay Area Air Quality Management District Community Health Programs

The project site is located within the Bay Area Air Quality Management District (BAAQMD). BAAQMD has community health programs intended to reduce air pollution disparities in the San Francisco Bay Area. The BAAQMD's Community Air Risk Evaluation Program (CARE Program) identifies areas where air pollution contributes most to health impacts and where populations are most vulnerable to air pollution. The BAAQMD adopted regulations in 2021 to define Overburdened Communities and to provide greater protection for the communities that face disproportionate environmental or health impacts when BAAQMD permits new or modified stationary sources of air pollution. The proposed project would be located within 1,000 feet of an Overburdened Community, as defined in BAAQMD Regulation 2-1-243.

CalEnviroScreen

In 2012, CalEPA developed CalEnviroScreen as a science-based mapping tool that provides an objective method for evaluating multiple pollutants and stressors in local communities, and ultimately for identifying disadvantaged communities pursuant to Health and Safety Code section 39711 as enacted by Senate Bill (SB) 535 (De León, Stats. 2012 Ch. 830). CalEPA released an updated designation for disadvantaged communities² in May 2022 for the purposes of SB 535. As required by State law,

Water Resources; Noise and Vibration; Transportation; Water Resources; and Visual Resources. Cultural and Tribal Cultural Resources considers impacts to Native American populations.

2 The CalEPA, for purposes of its Cap-and-Trade Program, has defines communities in terms of census tracts and identifies four types of geographic areas as disadvantaged: (1) census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0; (2) census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps, but receiving the highest 5 percent of CalEnviroScreen 4.0 cumulative pollution burden scores; (3) census tracts identified in the 2017 DAC designation as disadvantaged, regardless of their scores in CalEnviroScreen 4.0; (4) and areas under the control of federally recognized Tribes. (CalEPA 2022a).

disadvantaged communities are identified based on geographic, socioeconomic, public health, and environmental hazard criteria. CalEnviroScreen identifies impacted communities by taking into consideration pollution exposure and its effects, as well as health and socioeconomic status, at the Census-tract level (OEHHA 2021, pg. 8).

The CalEnviroScreen model incorporates 21 indicators that measure a community's exposure, environmental effects, sensitive population, and socioeconomic factors. Indicators for exposure and environmental effects comprise a Pollution Burden group, and indicators for sensitive populations and socioeconomic factors comprise a Population Characteristics group.

Table 6-1 lists the indicators that go into the Pollution Burden score and the Population Characteristics score to form the final CalEnviroScreen score. These indicators are used to measure factors that affect the potential for pollution impacts in communities.

TABLE 6-1 COMPONENTS THAT FORM THE CALENVIROSCREEN 4.0 SCORE	
Pollution Burden	
Exposure Indicators	Environmental Effects Indicators
Children's lead risk from housing	Cleanup sites
Diesel particulate matter (PM) emissions	Groundwater threats
Drinking water contaminants	Hazardous waste
Ozone concentrations	Impaired water bodies
PM 2.5 concentrations	Solid waste sites and facilities
Pesticide use	
Toxic releases from facilities	
Traffic impacts	
Population Characteristics	
Sensitive Populations Indicators	Socioeconomic Factors Indicators
Asthma emergency department	Educational attainment
Cardiovascular disease (emergency department visits for heart attacks)	Housing burdened low-income households
Low birth-weight infants	Linguistic isolation
	Poverty
	Unemployment

Notes: PM = particulate matter. PM 2.5 = fine particulate matter 2.5 microns or less. Source: OEHHA, 2021

The CalEnviroScreen model uses U.S. Census tract data as a geographic scale for identifying disadvantaged communities within California. For each Census tract, CalEnviroScreen calculates an overall score by combining the individual indicator scores within each of the two groups (i.e., Pollution Burden and Population Characteristics), then multiplying the Pollution Burden and Population Characteristics scores to produce a final score:

$$[\text{Pollution Burden}] \times [\text{Population Characteristics}] = \text{CalEnviroScreen Score}$$

- Pollution Burden Score. Pollution Burden scores for each U.S. Census tract are derived from the average percentiles of the eight exposures indicators (ozone and PM2.5 concentrations, diesel PM emissions, drinking water contaminants, children's lead risk from housing, pesticide use, toxic releases from facilities, and traffic

impacts) and the five environmental effects indicators (cleanup sites, impaired water bodies, groundwater threats, hazardous waste facilities and generators, and solid waste sites and facilities). Indicators from the environmental effects component are given half the weight of the indicators from the exposures component. The calculated average Pollution Burden score (average of the indicators) is divided by 10 and rounded to one decimal place for a Pollution Burden score ranging from 0.1 to 10.

- Population Characteristics Score. Population Characteristics scores for each U.S. Census tract are derived from the average percentiles for the three sensitive populations indicators (cardiovascular disease, low birth weight infants, and asthma) and the five socioeconomic factors indicators (educational attainment, linguistic isolation, housing burden, unemployment, and poverty). The calculated average percentile is divided by 10 for a Population Characteristic score ranging from 0.1 to 10.

Since each of the two groups (i.e., Pollution Burden and Populations Characteristics) has a maximum score of 10, the maximum CalEnviroScreen Score is 100. Based on these scores, Census tracts across California are ranked relative to one another. The indicator values for the Census tracts for the entire state are ordered from highest to lowest. A percentile is calculated from the ordered values for all areas that have a score. A higher percentile indicates a higher potential relative burden. A percentile does not describe the magnitude of the difference between two tracts, but rather it simply tells the percentage of tracts with lower values for that indicator (OEHHA 2021, pg. 20). Census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0 are considered disadvantaged for the purposes of SB 535 (CalEPA 2022a).

The tool uses US Census tracts as the geographic unit of analysis. The current version was released in 2021 (4.0) and uses 2010 Census boundaries.

Project Outreach

CEC's Office of the Public Advisor, Energy Equity, and Tribal Affairs' contact information and public participation assistance services are offered on all CEC event and other notices. The office also responds to public inquiries regarding this and other siting proceedings via phone or email. Environmental justice principles are described in California Government Code section 65040.12 and may be incorporated into local land use standards. Under this guidance, one principal of environmental justice is for government decisionmakers to engage in meaningful involvement with potentially impacted communities. Consistent with US EPA policy, meaningful involvement occurs when:

- those whose environment and/or health would be potentially affected by the decision on the proposed activity have an appropriate opportunity to participate in the decision;
- the population's contribution can influence the decision; and

- the concerns of all participants involved are considered in the decision-making process.

Furthermore, it is the policy of California Natural Resources Agency that the public, including minority and low-income populations, are informed of opportunities to participate in the development and implementation of all Resources Agency programs, caused to experience disproportionately high and adverse human health or environmental effects from environmental decisions (CNRA 2024).

The application for the AVAIO Pittsburg Backup Generating Facility SPPE was filed to the project docket on February 02, 2024. Following filing of this Draft Initial Study (IS)/Mitigated Negative Declaration (MND) in the docket for the project, a Notice of Intent (NOI) to Adopt a Mitigated Negative Declaration will also be filed to the docket and sent to responsible agencies, trustee agencies, the county clerk, organizations and individuals who have previously requested such notice and to owners and occupants of contiguous properties in accordance with CEQA Guidelines section 15072(b). The NOI, including attachments as specified in CEQA Guidelines section 15073, will be provided to responsible agencies and trustee agencies and will be submitted to the State Clearinghouse to initiate review by state agencies. Based on current U.S. Census English fluency data for the population residing in the cities and communities within a three mile radius of the project site, translation of the Notice of Intent was deemed appropriate. U.S. Census data also showed that of those who report they speak English less than “very well”, the predominant language spoken was Spanish.

In accordance with the Governor’s Executive Order B-10-11, the CEC’s Tribal Consultation Policy, the CEC’s Siting Regulations, and recent amendments to CEQA (that is, Assembly Bill 52), staff conducted outreach and consultation with regional tribal governments. Additional information regarding the outreach efforts and specific groups contacted can be found in **Section 5.5, Cultural and Tribal Cultural Resources**.

6.2 Environmental Setting

Environmental Justice Project Screening

For Environmental Justice concerns, CEC staff has selected a 3-mile radius surrounding the project site based on the area most likely to feel nuisance effects as a result of the effects of the project. The BAAQMD suggests a 1,000-foot radius for assessing cumulative Air Quality impacts (BAAQMD, 2022). The applicant used a 1,000-foot radius to assess community risks and hazards based on a BAAQMD recommendation in the environmental impact discussion in the application (TN254728), and they used a 1,000-meter radius to determine sensitive receptors in the health risk assessment (TN254729).

Table 6-2 presents race and income data of the regional and 3-mile radius surrounding the project site. The socioeconomic data source is U.S. Census Bureau’s American Community Survey (ACS) 2019-2023 5-Year Estimates (ACS 2024a,b). Because ACS

estimates come from a sample population, a certain level of variability is associated with the estimates. Supporting documentation on ACS data accuracy and statistical testing can be found on the ACS website in the Data and Documentation section available here: <https://www.census.gov/programs-surveys/acs.html>. For purposes of this analysis, U.S. Census ACS data was utilized to provide current data, consistency between the data used to identify minority and low-income populations, and consistency between the different geographies presented. For these reasons, U.S. Census ACS data is considered best available for representing the demographic makeup of affected communities in the project area. Use of published U.S. Census ACS data estimates is commonly used by CEQA Lead Agencies. The 2019-2023 ACS data uses the 2020 U.S. Census tract and block group boundaries used in Figures 6-1 and 6-2.

In this analysis, “minorities” are defined as individuals who are members of the following population groups: American Indian or Alaskan Native, Asian or Pacific Islander, Black not of Hispanic origin, or Hispanic. The minority population has been calculated (**Table 6-2**) by subtracting the “white alone, not Hispanic or Latino,” (as defined by the U.S. Census) population from the total population. Within this analysis, an environmental justice population of concern is identified when the minority population of the potentially affected area (i.e., Census tract) is greater than 50 percent. Guidance from EPA suggests using regional low-income definitions as appropriate (U.S. EPA 2015). Due to the higher cost of living in California as compared to the nation as a whole, a higher threshold is appropriate for the identification of low-income populations.

Consistent with CalEnviroScreen, for the purpose of this analysis, low-income people are defined as those with an income of less than 2.0 times the federal poverty threshold (EPA 2015; OEHHA 2021). Within this analysis, an environmental justice population of concern is identified when the percentage of low-income population of the potentially affected area (i.e., block group or Census tract) is equal to or greater than the low-income population of the greater geography (i.e., the County).

Figure 6-1 shows minority populations by census block groups within a three-mile radius of the project (ACS, 2024). The census block groups with greater than 50 percent minority represent an environmental justice population based on race and ethnicity as defined in the U.S. EPA’s *Guidance on Considering Environmental Justice During the Development of Regulatory Actions* (U.S. EPA 2015).

Figure 6-2 shows low-income populations by census block groups within a three-mile radius of the project. The census block groups with a greater percentage of low-income than the comparative geography (i.e., Contra Costa or Solano counties) are considered environmental justice populations based on the criteria presented above.

TABLE 6-2 RACE AND LOW INCOME STATISTICS FOR CALIFORNIA, CONTRA COSTA AND SOLANO COUNTIES, PITTSBURG CITY AND PROJECT 3-MILE RADIUS

Geography	Total Population¹	Percent People of Color^{1,2}	Percent People Low Income³
California	39,242,785	65.41%	27.52%
Contra Costa County	1,161,458	60.74%	18.57%
Pittsburg City	75,868	82.81%	25.29%
Census Tract 3090	3663	76.11%	19.96%
Census Tract 3100	6323	79.50%	33.38%
Census Tract 3110	5469	93.40%	34.34%
Census Tract 3120	2759	90.54%	38.66%
Census Tract 3131.02	4793	87.71%	28.84%
Census Tract 3131.04	2990	82.21%	39.20%
Census Tract 3131.05	5790	72.42%	24.87%
Census Tract 3131.06	7006	67.09%	11.75%
Census Tract 3131.07	2855	79.58%	23.05%
Census Tract 3132.03	3277	75.47%	15.04%
Census Tract 3132.04	5702	79.80%	25.07%
Census Tract 3132.05	2069	83.18%	13.97%
Census Tract 3132.06	6357	89.08%	46.55%
Census Tract 3141.02	6584	86.18%	27.93%
Census Tract 3141.03	5606	91.24%	39.35%
Census Tract 3141.05	3731	93.41%	23.66%
Census Tract 3141.06	4169	92.92%	66.38%
Census Tract 3551.07	5497	70.47%	24.00%
Census Tract 3552.01	8458	94.37%	11.96%
Census Tract 3552.02	3663	79.91%	6.63%
Census Tract 3553.07	4501	45.06%	7.68%
Block Group 1; Census Tract 3090	1398	71.03%	20.03%
Block Group 2; Census Tract 3090	773	87.06%	21.35%
Block Group 3; Census Tract 3090	1492	75.20%	19.17%
Block Group 1; Census Tract 3100	1418	75.95%	27.65%
Block Group 2; Census Tract 3100	1120	75.80%	57.86%
Block Group 3; Census Tract 3100	2393	83.70%	39.16%
Block Group 4; Census Tract 3100	1392	78.88%	9.48%
Block Group 1; Census Tract 3110	1304	94.94%	47.32%
Block Group 2; Census Tract 3110	2112	93.70%	45.44%
Block Group 3; Census Tract 3110	2053	92.11%	15.39%
Block Group 1; Census Tract 3120	2759	90.54%	38.66%

TABLE 6-2 RACE AND LOW INCOME STATISTICS FOR CALIFORNIA, CONTRA COSTA AND SOLANO COUNTIES, PITTSBURG CITY AND PROJECT 3-MILE RADIUS

Geography	Total Population¹	Percent People of Color^{1,2}	Percent People Low Income³
Block Group 1; Census Tract 3131.02	3489	90.48%	34.42%
Block Group 2; Census Tract 3131.02	1304	80.29%	14.42%
Block Group 1; Census Tract 3131.04	1655	72.99%	48.70%
Block Group 2; Census Tract 3131.04	1335	93.63%	27.42%
Block Group 1; Census Tract 3131.05	1814	57.28%	11.74%
Block Group 2; Census Tract 3131.05	2103	76.46%	37.52%
Block Group 3; Census Tract 3131.05	1873	82.54%	23.31%
Block Group 1; Census Tract 3131.06	3384	68.71%	1.42%
Block Group 2; Census Tract 3131.06	3622	65.57%	21.20%
Block Group 1; Census Tract 3131.07	1194	83.67%	13.99%
Block Group 2; Census Tract 3131.07	1661	76.64%	29.59%
Block Group 1; Census Tract 3132.03	487	48.25%	0.00%
Block Group 2; Census Tract 3132.03	2790	80.22%	17.78%
Block Group 1; Census Tract 3132.04	2440	86.80%	40.70%
Block Group 2; Census Tract 3132.04	1680	60.18%	4.29%
Block Group 3; Census Tract 3132.04	1582	89.82%	23.01%
Block Group 1; Census Tract 3132.05	2069	83.18%	13.97%
Block Group 1; Census Tract 3132.06	1435	92.68%	40.10%
Block Group 2; Census Tract 3132.06	1846	92.20%	43.50%
Block Group 3; Census Tract 3132.06	1846	88.24%	38.13%
Block Group 4; Census Tract 3132.06	1230	81.46%	69.76%
Block Group 1; Census Tract 3141.02	2860	87.76%	26.60%
Block Group 2; Census Tract 3141.02	1589	92.07%	39.96%
Block Group 3; Census Tract 3141.02	2135	79.67%	20.72%

TABLE 6-2 RACE AND LOW INCOME STATISTICS FOR CALIFORNIA, CONTRA COSTA AND SOLANO COUNTIES, PITTSBURG CITY AND PROJECT 3-MILE RADIUS

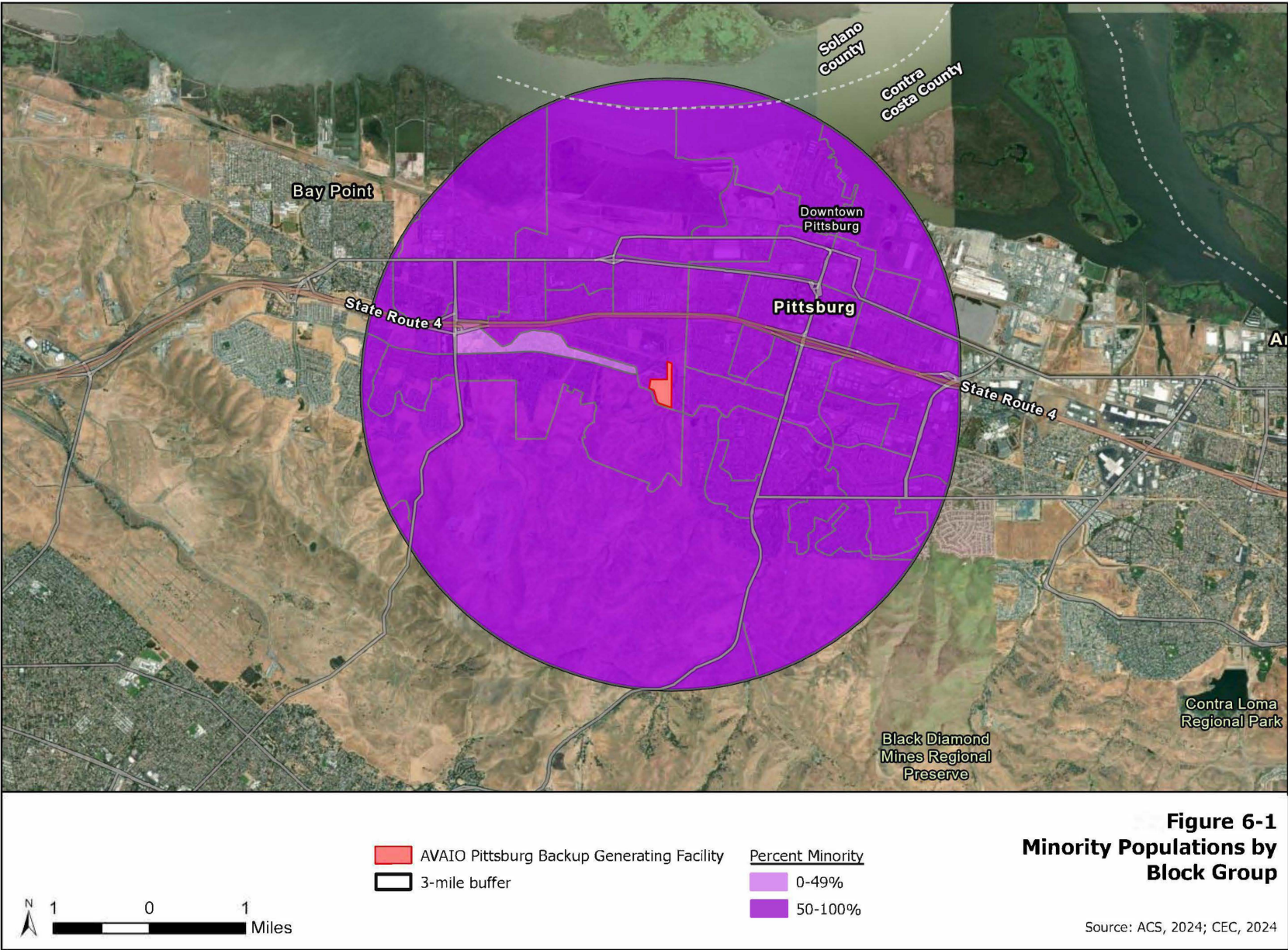
Geography	Total Population¹	Percent People of Color^{1,2}	Percent People Low Income³
Block Group 2; Census Tract 3141.03	1455	91.62%	47.63%
Block Group 3; Census Tract 3141.03	1815	94.33%	32.45%
Block Group 1; Census Tract 3141.05	1867	89.88%	32.40%
Block Group 2; Census Tract 3141.05	1864	96.94%	15.29%
Block Group 1; Census Tract 3141.06	1560	90.64%	48.49%
Block Group 2; Census Tract 3141.06	2609	94.29%	77.04%
Block Group 3; Census Tract 3551.07	2138	74.70%	26.35%
Block Group 1; Census Tract 3552.01	2247	96.31%	15.98%
Block Group 2; Census Tract 3552.01	2172	95.72%	2.26%
Block Group 3; Census Tract 3552.01	4039	92.57%	14.94%
Block Group 2; Census Tract 3552.02	2700	75.04%	4.15%
Solano County	450824	65.67%	21.98%
Census Tract 2527.02	7169	77.75%	41.15%
Block Group 6; Census Tract 2527.02	995	72.66%	17.49%

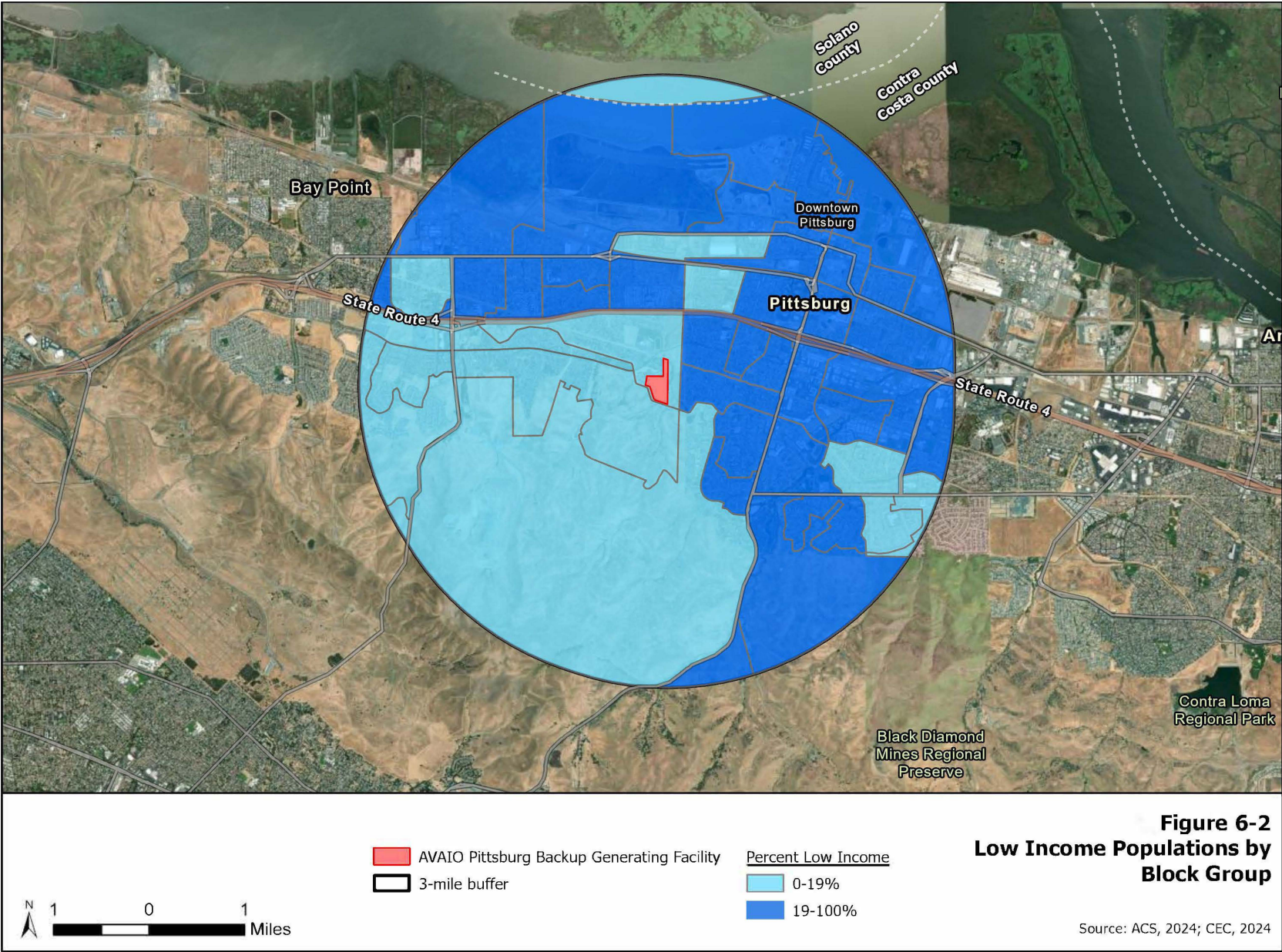
¹Total population from Table B03003, "Hispanic or Latino Origin by Race."

² To calculate percent people of color, the following equation was used: (Total Population: All races/ethnicities – Total Population: Non-Hispanic, White Alone) / (Total Population: All races/ethnicities) from Table B03002, "Hispanic or Latino Origin by Race." "...minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis." (CEQ, 1997).

³Low-income population is defined when the percent of a population (i.e., in a county or Census tract) in a household is less than or equal to twice the poverty level. The ACS low-income information is from Table C17002, "Ratio of Income to Poverty Level in the Past 12 Months." Highlighted rows show population where low-income population percentage is greater than the larger comparative geography (Contra Costa or Solano County).

Source: ACS, 2024a,b





CalEnviroScreen. CalEnviroScreen 4.0 was used to gather additional information about the population potentially impacted by the proposed project. The CalEnviroScreen indicators are used to measure factors that affect the potential³ for pollution impacts in disadvantaged communities, as defined by CalEnviroScreen.

Table 6-3 presents the CalEnviroScreen overall scores and disadvantaged communities (DAC) category for the disadvantaged communities within a three-mile radius of the project site, shown in **Figure 6-3**. Staff used CalEnviroScreen to identify disadvantaged communities,⁴ beyond the minority and low-income screening, in the vicinity of the proposed project and better understand the characteristics of the areas where impacts would occur.

TABLE 6-3 CALENVIROSCREEN SCORES FOR DISADVANTAGED COMMUNITIES

Census Tract No.	Total Population	CES 4.0 Percentile	Pollution Burden Percentile	Population Characteristics Percentile	DAC Category
6013311000	5329	85.45	71.40	86.86	CalEnviroScreen 4.0 Top 25%
6013314102	6561	79.00	61.85	82.70	CalEnviroScreen 4.0 Top 25%
6013310000	6257	86.28	74.52	85.87	CalEnviroScreen 4.0 Top 25%
6013309000	3546	83.30	79.84	76.65	CalEnviroScreen 4.0 Top 25%
6013314104	9278	86.79	70.14	89.69	CalEnviroScreen 4.0 Top 25%
6013314103	5629	75.26	53.32	83.41	CalEnviroScreen 4.0 Top 25%
6013313102	4595	70.37	38.76	87.58	CalEnviroScreen 3.0 Disadvantaged Communities Only
6013313101	7178	78.61	49.00	92.11	CalEnviroScreen 4.0 Top 25%
6013312000	2243	93.58	77.41	96.33	CalEnviroScreen 4.0 Top 25%

³ It is important to note that CalEnviroScreen is not an expression of health risk and does not provide quantitative information on increases of impacts for specific sites or project. CalEnviroScreen uses the criteria of “proximity” to a hazardous waste site, a leaking underground tank, contaminated soil, an emission stack (industry, power plant, etc.) to determine that a population is “impacted”. It does not address general principles of toxicology: dose/response and exposure pathways. For certain toxic chemicals to pose a risk to the public, offsite migration pathways must exist (through ingestion, inhalation, dermal contact, etc.) and contact to a certain amount – not just any amount – must exist.

⁴ The CalEPA, for purposes of its Cap-and-Trade Program, has defines communities in terms of census tracts and identifies four types of geographic areas as disadvantaged: (1) census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0; (2) census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps, but receiving the highest 5 percent of CalEnviroScreen 4.0 cumulative pollution burden scores; (3) census tracts identified in the 2017 DAC designation as disadvantaged, regardless of their scores in CalEnviroScreen 4.0; (4) and areas under the control of federally recognized Tribes. (CalEPA 2022a).

TABLE 6-3 CALENVIROSCREEN SCORES FOR DISADVANTAGED COMMUNITIES

Census Tract No.	Total Population	CES 4.0 Percentile	Pollution Burden Percentile	Population Characteristics Percentile	DAC Category
6013311000	5329	85.45	71.40	86.86	CalEnviroScreen 4.0 Top 25%
6013310000	6257	86.28	74.52	85.87	CalEnviroScreen 4.0 Top 25%
6013314102	6561	79.00	61.85	82.70	CalEnviroScreen 4.0 Top 25%
6013310000	6257	86.28	74.52	85.87	CalEnviroScreen 4.0 Top 25%
6013314102	6561	79.00	61.85	82.70	CalEnviroScreen 4.0 Top 25%
6013309000	3546	83.30	79.84	76.65	CalEnviroScreen 4.0 Top 25%
6013310000	6257	86.28	74.52	85.87	CalEnviroScreen 4.0 Top 25%
6013309000	3546	83.30	79.84	76.65	CalEnviroScreen 4.0 Top 25%
6013313102	4595	70.37	38.76	87.58	CalEnviroScreen 3.0 Disadvantaged Communities Only
6013313101	7178	78.61	49.00	92.11	CalEnviroScreen 4.0 Top 25%

Notes: Disadvantaged communities by census tract in the project's three-mile radius. The census tracts in CES are from 2010 geographies Current 2020 tract and block group geographies were used for the minority and low-income screening and what are shown in Figures 6-1 and 6-2.

Source: CalEPA 2022b

Table 6-4 presents the CalEnviroScreen percentiles for the indicators that make up the pollution burden percentile. **Table 6-5** presents the CalEnviroScreen percentiles for the indicators that make up the population characteristics.

TABLE 6-4 CALENVIROSCREEN INDICATOR PERCENTILES FOR POLLUTION BURDEN FOR DISADVANTAGED COMMUNITIES

Census Tract No.	Percentiles													
	Pollution Burden	Ozone	PM2.5	Diesel PM	Drinking Water	Lead	Pesticides	Toxic Release	Traffic	Cleanup Sites	Groundwater Threats	Hazardous Waste	Impaired Water Bodies	Solid Waste
6013311000	71.40	35.16	32.84	81.14	19.01	89.82	0.00	60.29	68.84	78.82	35.02	68.06	90.13	0.00
6013314102	61.85	32.15	33.49	69.22	45.41	47.76	0.00	75.36	76.58	34.62	68.99	22.37	77.30	24.83
6013310000	74.52	35.16	29.26	51.76	19.01	90.61	0.00	61.32	23.65	96.25	82.32	94.75	90.13	22.08
6013309000	79.84	37.57	30.69	55.51	19.01	34.53	0.00	70.51	15.71	98.90	91.63	99.55	98.72	88.93
6013314104	70.14	32.15	32.97	69.93	32.67	75.53	0.00	83.85	83.15	7.71	48.48	77.46	77.30	24.83
6013314103	53.32	29.89	30.90	44.09	32.50	54.05	0.00	95.95	29.75	40.84	65.32	75.83	77.30	0.00
6013313102	38.76	37.57	22.85	63.56	18.90	28.20	0.00	56.84	42.55	53.88	80.39	35.62	33.16	35.72
6013313101	49.00	35.16	31.80	71.04	19.01	50.98	0.00	57.56	48.84	34.90	83.21	65.92	33.16	22.08
6013312000	77.41	37.57	25.53	80.22	19.01	72.74	0.00	58.94	45.94	88.75	32.92	88.80	90.13	65.25
6013311000	71.40	35.16	32.84	81.14	19.01	89.82	0.00	60.29	68.84	78.82	35.02	68.06	90.13	0.00
6013310000	74.52	35.16	29.26	51.76	19.01	90.61	0.00	61.32	23.65	96.25	82.32	94.75	90.13	22.08
6013314102	61.85	32.15	33.49	69.22	45.41	47.76	0.00	75.36	76.58	34.62	68.99	22.37	77.30	24.83
6013310000	74.52	35.16	29.26	51.76	19.01	90.61	0.00	61.32	23.65	96.25	82.32	94.75	90.13	22.08
6013314102	61.85	32.15	33.49	69.22	45.41	47.76	0.00	75.36	76.58	34.62	68.99	22.37	77.30	24.83
6013309000	79.84	37.57	30.69	55.51	19.01	34.53	0.00	70.51	15.71	98.90	91.63	99.55	98.72	88.93
6013310000	74.52	35.16	29.26	51.76	19.01	90.61	0.00	61.32	23.65	96.25	82.32	94.75	90.13	22.08
6013309000	79.84	37.57	30.69	55.51	19.01	34.53	0.00	70.51	15.71	98.90	91.63	99.55	98.72	88.93
6013313102	38.76	37.57	22.85	63.56	18.90	28.20	0.00	56.84	42.55	53.88	80.39	35.62	33.16	35.72
6013313101	49.00	35.16	31.80	71.04	19.01	50.98	0.00	57.56	48.84	34.90	83.21	65.92	33.16	22.08

Notes: Disadvantaged communities by census tract in the project's three-mile radius. The census tracts in CES are from 2010 geographies. Current 2020 tract and block group geographies were used for the minority and low-income screening and what are shown in Figures 6-1 and 6-2.

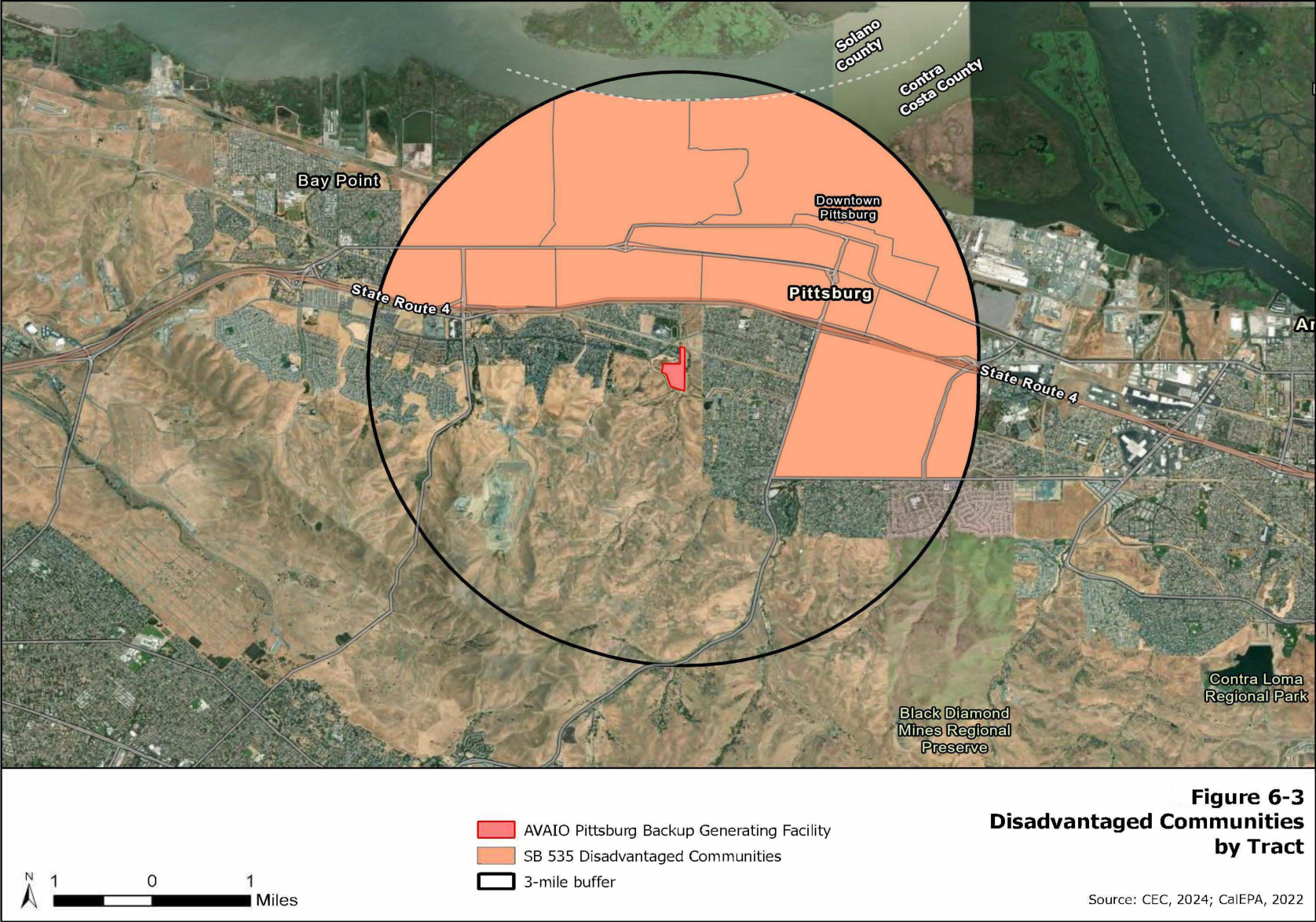
Source: CalEPA 2022b

TABLE 6-5 CALENVIROSCREEN INDICATOR PERCENTILES FOR POPULATION CHARACTERISTICS FOR DISADVANTAGED COMMUNITIES

Census Tract No.	Percentiles								
	Population Characteristics	Asthma	Low Birth Weight	Cardiovascular Disease	Education	Linguistic Isolation	Poverty	Unemployment	Housing Burden
6013311000	86.86	97.88	68.14	88.42	66.63	37.66	71.71	73.41	78.47
6013314102	82.70	97.88	45.06	88.42	79.87	75.53	58.51	53.89	66.07
6013310000	85.87	97.88	55.38	88.42	80.31	71.67	75.11	76.69	37.48
6013309000	76.65	93.22	93.51	72.18	40.07	10.45	54.79	94.31	44.46
6013314104	89.69	97.88	68.71	88.42	87.37	85.97	57.30	55.02	65.18
6013314103	83.41	97.88	6.89	88.42	74.65	85.74	75.72	88.40	79.06
6013313102	87.58	97.32	98.94	85.79	55.34	18.11	63.64	98.02	52.09
6013313101	92.11	97.88	66.28	88.42	76.49	56.85	71.22	88.40	81.04
6013312000	96.33	97.88	83.62	88.42	79.07	70.88	86.51	91.94	68.11
6013311000	86.86	97.88	68.14	88.42	66.63	37.66	71.71	73.41	78.47
6013310000	85.87	97.88	55.38	88.42	80.31	71.67	75.11	76.69	37.48
6013314102	82.70	97.88	45.06	88.42	79.87	75.53	58.51	53.89	66.07
6013310000	85.87	97.88	55.38	88.42	80.31	71.67	75.11	76.69	37.48
6013314102	82.70	97.88	45.06	88.42	79.87	75.53	58.51	53.89	66.07
6013309000	76.65	93.22	93.51	72.18	40.07	10.45	54.79	94.31	44.46
6013310000	85.87	97.88	55.38	88.42	80.31	71.67	75.11	76.69	37.48
6013309000	76.65	93.22	93.51	72.18	40.07	10.45	54.79	94.31	44.46
6013313102	87.58	97.32	98.94	85.79	55.34	18.11	63.64	98.02	52.09
6013313101	92.11	97.88	66.28	88.42	76.49	56.85	71.22	88.40	81.04

Notes: Disadvantaged communities by census tract in the project's three-mile radius. The census tracts in CES are from 2010 geographies. Current 2020 tract and block group geographies were used for the minority and low-income screening and what are shown in Figures 6-1 and 6-2.

Source: CalEPA 2022bSource: CalEPA 2022b



Summary of Environmental Justice Communities. In Contra Costa County, 31 block groups had a higher low-income population percentage than the greater county (identified as environmental justice communities by low-income criteria), and 15 block groups had a lower low-income population percentage than the greater county. Fifteen (15) census tracts had a higher low-income population percentage than the greater county, and 6 tracts had a lower low-income population percentage than the greater county. The only block group in Solano County had a lower low-income population percentage than the greater county. The single tract in Solano County had a higher low-income population percentage than the greater county.

In Contra Costa County, 43 block groups had a higher minority population percentage than the greater county (identified as environmental justice communities by minority criteria), and 3 block groups had a lower minority population percentage than the greater county. One census tract had a lower minority population percentage than the greater county, and 20 tracts had a higher minority population percentage than the greater county. The single block group and single census tract in Solano County both had a higher minority population percentage than the greater county.

6.3 Environmental Impacts and Mitigation Measures

The following technical areas discuss impacts to EJ populations: Aesthetics, Air Quality⁵, Cultural and Tribal Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, Wildfire and Utilities and Service Systems.

Aesthetics

As concluded in **Section 5.1, Aesthetics** the project will result in no aesthetic impacts. There are no aesthetic resources or vistas that may be impacted by the project. The project conforms to the applicable city zoning and other regulations governing scenic quality. The project would not create a new source of substantial light or glare, nor would it adversely affect day or nighttime views in the area.

No disproportionate impacts to an EJ population would occur.

Air Quality

Table 6-4 and **Table 6-5** include indicators that relate to both air quality and public health. The indicators that are associated with criteria pollutants such as ozone, fine particulate matter having a diameter of less than or equal to 2.5 microns (PM_{2.5}), and NO₂ are indicators related to air quality. Indicators that are associated with protecting public health are: Diesel PM or DPM, Pesticide Use, Toxic Release from Facilities, Traffic Density, Asthma Emergency Department Visits, Low Birth Weight Infants, and Cardiovascular Disease. Each of these air quality and public health indicators are summarized under this Air Quality subsection.

⁵ Public Health concern discussed under Air Quality.

Ambient air quality standards are established to protect the health of even the most sensitive individuals in our communities, which includes the EJ population, by defining the maximum amount of a pollutant that can be present in outdoor air without harm to the public's health. Both the California Air Resources Board and the U.S. EPA are authorized to set ambient air quality standards. Since toxic air contaminants (TACs) have no ambient standards that specify health-based levels considered safe for everyone, a health risk assessment (HRA) is used to determine if people might be exposed to those types of air pollutants at unhealthy levels.

Staff identified the potential air quality (i.e. ozone and PM_{2.5}) and public health impacts (i.e. cancer and non-cancer health effects) that could affect the EJ population. These potential air quality impacts and public health risks were evaluated quantitatively based on the most sensitive population, which includes the EJ population, by conducting an air quality impact analysis (AQIA) and an HRA. Please refer to **Section 5.3, Air Quality** for details. Staff also examined individual contributions of indicators in CalEnviroScreen that are relevant to air quality.

In **Section 5.3, Air Quality**, staff concluded that construction, operation (including readiness testing and maintenance), and any emergency operation are not likely to cause significant adverse impacts after including mitigation. Criteria pollutants would not cause or contribute to exceedances of health-based ambient standards, and mitigated levels of toxic air emissions would not exceed health risk limits. With impacts mitigated to levels that would not be significant, the project would not cause disproportionate air quality or public health impacts on sensitive populations, including the EJ population.

Ozone Concentrations. Ozone is known to cause numerous health effects, which can potentially affect EJ communities. Adverse health effects of ozone exposure include lung inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms, such as an increased risk of asthma emphysema, and chronic bronchitis. For CalEnviroScreen, the air monitoring data used in this indicator have been updated to reflect ozone measurements for the years 2017 to 2019. CalEnviroScreen 4.0 uses the average daily maximum eight-hour ozone concentration (ppm). According to CalEnviroScreen data, ozone concentrations in each census tract are ordered by ozone concentration values and then are assigned a percentile based on the statewide distribution of values (OEHHA 2021).

Table 6-4 shows that the census tracts identified as disadvantaged communities near the project are not exposed to high ozone concentrations as compared to the rest of the State. The project would include emission sources, such as the backup generators, of precursor pollutants that create ozone, such as nitrogen oxides (NO_x) and volatile organic compounds (VOCs). Based on criteria pollutant emissions quantified for this project, the project would not contribute significantly to the regional air quality impacts of ozone. The mitigated emissions of NO_x and VOCs would not occur at significant levels during construction or operation, and NO_x emissions resulting from backup generator readiness testing and maintenance would be fully offset through the

permitting process with BAAQMD (see **Section 5.3, Air Quality**). Therefore, the project would not contribute significantly to regional ozone concentrations. The project impact to ozone concentrations would not have a disproportionate impact on the EJ population.

PM2.5 Concentrations. Particulate matter is a complex mixture of aerosolized solid and liquid particles including such substances as organic chemicals, dust, allergens and metals. These particles can come from many sources, including motor vehicles, industrial processes, wood burning, or other activities involving combustion. PM2.5 refers to particles that have a diameter less than or equal to 2.5 micrometers. PM2.5 is known to cause numerous health effects, which can potentially affect EJ communities. Particles in this size range can have adverse effects on the heart and lungs, including lung irritation, exacerbation of existing respiratory disease, and cardiovascular effects. For CalEnviroScreen, the indicator PM2.5 is determined by the annual mean concentration of PM2.5, weighted average of monitored concentrations and satellite observations (in terms of $\mu\text{g}/\text{m}^3$), averaged over three years (2015-2017) (OEHHA 2021).

Table 6-4 shows that the census tracts identified as disadvantaged communities near the project are not exposed to high PM2.5 concentrations as compared to the rest of the State. The project would include mitigation to reduce particulate matter during construction and operation, and the project would not contribute significantly to the regional impacts of PM2.5 (see **Section 5.3, Air Quality**). The project impact to PM2.5 concentrations would not have a disproportionate impact on the EJ population.

Diesel PM. This indicator represents how much Diesel PM or DPM is emitted into the air within and near each census tract. Diesel engine exhaust has been classified as carcinogenic to humans by the International Agency for Research on Cancer in 2012, based on sufficient scientific evidence showing the association between exposure and elevated risk of lung cancer. For CalEnviroScreen, the Diesel PM indicator data are from 2016 California Air Resources Board's statewide spatial distribution of Diesel PM emissions from on-road and non-road sources, including trucks, buses, cars, trains, and heavy-duty equipment (OEHHA 2021).

Table 6-4 shows that three of the census tracts that are identified as disadvantaged communities near the project are higher than the 75th percentile for Diesel PM. The project would include emission sources of Diesel PM, including heavy-duty construction equipment and stationary backup generators using diesel fuel. Additionally, the project would be located within 1,000 feet of an Overburdened Community, as defined by BAAQMD, where the BAAQMD requires greater protection for the communities that face disproportionate environmental or health impacts. Based on the results of the HRA conducted for this project in **Section 5.3, Air Quality**, the project with mitigation would not expose sensitive receptors to substantial pollutant concentrations of Diesel PM, and the mitigated emissions of Diesel PM would not occur at significant levels during construction or operation. The project impact to Diesel PM concentrations would not have a disproportionate impact on the EJ population.

Pesticide Use. Agricultural pesticides selected for the Pesticide Use indicator in CalEnviroScreen were narrowed from the list of all registered pesticides in use in California to focus on a subset of 132 active pesticide ingredients that are filtered for hazard and volatility for the years 2017-2019 collected by the California Department of Pesticide Regulation (OEHHA 2021).

Table 6-4 shows that the census tracts identified as disadvantaged communities near the project are at the zero percentile in the Pesticide Use category. This indicates that pesticide use in these census tracts are below the statewide average in terms of pesticide use, and these communities are not exposed to high pesticide concentrations as compared to the rest of the State. Staff also expect the project would not have significant cumulative contribution to pesticide use to the local EJ community and the general population.

Toxic Releases from Facilities. This indicator represents modeled toxicity-weighted concentrations of chemical releases to air from facility emissions and off-site incineration in and near the census tract (averaged over 2017-2019). The U.S. EPA provides public information on the amount of chemicals released into the environment from many facilities. This indicator uses the modeled air concentration and toxicity of the chemical to determine the toxic release score (OEHHA 2021).

Table 6-4 shows that five of the census tracts identified as disadvantaged communities near the project are higher than the 75th percentile in the category for Toxic Releases. According to the results of the HRA conducted for the project in **Section 5.3, Air Quality**, impacts associated with toxic air contaminant emissions during construction and operation, including those from diesel-fueled equipment, would be less than significant with mitigation. The project contribution to toxic air contaminant concentrations would not have a disproportionate impact on the EJ population.

Traffic Impacts. Exhaust from vehicles causes human exposure to various air pollutants, including nitrogen oxides, carbon monoxide, diesel particulate matter, and benzene; additionally, major roadways have been associated with a variety of effects on communities, including noise, vibration, injuries, and local land use changes. The exposure indicator in CalEnviroScreen for traffic impacts represents the vehicles in a specified area, resulting in human exposures to chemicals that are released into the air by vehicle exhaust. It is calculated by dividing the average traffic volumes by the total road length within 150 meters around each census tract, using traffic volumes estimates from 2017 (OEHHA 2021).

Table 6-4 shows that four of the census tracts identified as disadvantaged communities near the project are higher than the 75th percentile in the category of Traffic Impacts. According to the emissions rates, ambient air quality impact analysis, and HRA results presented for the project in **Section 5.3, Air Quality**, impacts associated with air pollutants during construction and operation, including those from project-related traffic, would be less than significant with mitigation. The project's

contribution to traffic-related pollutants would not have a disproportionate impact on the EJ population.

Asthma. Asthma is a chronic lung disease characterized by episodic breathlessness, wheezing, coughing, and chest tightness. While the causes of asthma are poorly understood, it is well established that exposure to traffic and outdoor air pollutants, including particulate matter, ozone, and diesel exhaust, can trigger asthma attacks. This indicator is a representation of age-adjusted rates of emergency department visits for asthma. It measures the number of emergency department visits for asthma per 10,000 people over the years 2015 to 2017. The information was collected by the California Office of Statewide Health Planning and Development (OEHHA 2021).

Table 6-5 shows that all of the census tracts identified as disadvantaged communities near the project are higher than the 75th percentile in the Asthma category. These census tracts rank among the highest in California for rates of emergency department visits for asthma. According to the emissions rates, ambient air quality impact analysis, and HRA results presented for the project in **Section 5.3, Air Quality**, impacts associated with air pollutants during construction and operation would be less than significant with mitigation. The project's contribution to emergency department visits for asthma would not have a disproportionate impact on the EJ population.

Low Birth Weight Infants. The sensitive population indicator in CalEnviroScreen for low birth-weight infants represents an increased risk of health problems later in life as well as infant mortality. This indicator measures the percentage of babies born weighing less than 2,500 grams (about 5.5 pounds) out of the total number of live births over the years 2009 to 2015. The information was collected by the California Department of Public Health (OEHHA 2021).

Table 6-5 shows that six of the census tracts identified as disadvantaged communities near the project are higher than the 75th percentile in the indicator of Low Birth Weight Infants. These census tracts rank among the highest in California for rates of low birth weight infants. The evaluation of health risks for the project follows a highly conservative health-protective methodology that accounts for impacts on the most sensitive individuals in a given population. According to the results of the HRA, project health risks at the maximally exposed sensitive receptors (including residential and school/daycare receptors) would be below health-based thresholds with mitigation. According to the emissions rates, ambient air quality impact analysis, and HRA results presented for the project in **Section 5.3, Air Quality**, impacts associated with air pollutants during construction and operation would be less than significant with mitigation. The project's contribution to rates of low birth weight infants would not have a disproportionate impact on the EJ population.

Cardiovascular Disease. The sensitive population indicator in CalEnviroScreen for cardiovascular disease represents the rates of heart attacks defined by the number of emergency department visits for acute myocardial infarction per 10,000 people, over the years 2015 to 2017 (OEHHA 2021).

Table 6-5 shows that most of the census tracts identified as disadvantaged communities near the project are higher than the 75th percentile in the indicator for Cardiovascular Disease. These census tracts rank among the highest in California for rates of emergency department visits for acute myocardial infarction. According to the emissions rates, ambient air quality impact analysis, and HRA results presented for the project in **Section 5.3, Air Quality**, impacts associated with air pollutants during construction and operation would be less than significant with mitigation. The project's contribution to rates of cardiovascular disease would not have a disproportionate impact on the EJ population.

Cultural and Tribal Cultural Resources

No cultural or tribal cultural resources of concern to California Native American tribes have been identified on the project site. As discussed in the Section 5.5 of the Initial Study, Cultural and Tribal Cultural Resources, Section 5.5.3, mitigation measures **CUL-1** through **CUL-4** would reduce any inadvertent, construction-related impacts on buried cultural or tribal cultural resources to a less-than-significant level. Therefore, cultural and tribal cultural resource impacts would not result in disproportionate impacts on an EJ population.

Hazards and Hazardous Materials

EJ populations may experience disproportionate hazards and hazardous materials impacts if the storage and use of hazardous materials within or near EJ communities occur to a greater extent than within the community at large. However, a disproportionate impact upon the EJ population resulting from the planned storage and use of hazardous materials on the site is extremely low. Diesel fuel to run the emergency generators is the hazardous material that the project site would have in greatest quantity. The total quantity would be divided up and stored in many separate double-walled fuel tanks (one for each generator) with proper spill controls. Therefore, the likelihood of a spill of sufficient quantity to impact the surrounding community and EJ population would be very unlikely, thus the impact on the EJ community would not be disproportionate.

The former buildings on the project site have been demolished, and only remnant foundations and concrete slabs remain. There is a potential that lead or LBP could be present and released by remaining demolition activities and site development. In addition, the project site may contain contaminated soil, soil vapor, and/or groundwater due to historical uses, including agricultural activities, a shooting range, golf course operations, and former leaking underground storage tank (LUST). Therefore, demolition and ground disturbing activities would have the potential to encounter impacted soil and/or groundwater.

As discussed in **Section 5.9, Hazards and Hazardous Materials**, the mitigation measures **HAZ-1** through **HAZ-3** would reduce potential impacts associated with lead and LBP, contaminated soil, soil vapor, and/or contaminated groundwater to less than significant. Compliance with these measures would ensure that the routine transport,

use or disposal of hazardous materials during project demolition and construction would not pose a significant risk to the public or environment, including nearby EJ communities. With these measures in place, the project would not result in hazardous emissions or expose sensitive receptors, such as schools located within one-quarter mile of the project site, or EJ populations to hazardous materials.

Implementation of mitigation measures **HAZ-1** through **HAZ-3**, and compliance with applicable local, state, and federal regulations would ensure that potential impacts to people and the environment from hazardous materials at an environmentally contaminated site would be less than significant. Therefore, hazardous materials associated with project demolition and construction would not result in disproportionate impacts on EJ populations.

Hydrology and Water Quality

A disproportionate hydrologic or water quality impact on an EJ population could occur if the project would contribute to drinking water degradation, exacerbate groundwater contamination, or discharge additional pollutants to impaired surface water bodies. Since the overall CalEnviroScreen score reflects the collective impacts of multiple pollutants and factors, staff examined the individual contributions to indicators as they relate to hydrology and water quality. The pollutants of concern in this analysis are those from construction and operational activities. The CalEnviroScreen scores for the disadvantaged community census tracts in a three-mile buffer of the project (see **Figure 6-3**) are presented in **Table 6-4** for each of the following environmental stressors that relate to hydrology and water quality: Drinking Water Contaminants, Groundwater Threat, and Impaired Water Bodies. The percentile for each disadvantaged census tract reflects its relative ranking among all of California's census tracts.

CalEnviroScreen assigns a score to each type of stressor. To assess the impact of a stressor on population within a census tract, the score is assigned a weighting factor that decreases with distance from the census tract. For stationary stressors related to hydrology or water quality, the weighting factor diminishes to zero for distances larger than 1,000 meters (0.6 mile). As **Figure 6-3** shows, there are disadvantaged community census tracts within 1,000 meters of the project.

As discussed in **Section 5.10, Hydrology and Water Quality**, mitigation measure **HYD-1** would reduce potential impacts associated with wastewater discharge, surface water and groundwater water quality, groundwater supplies, and existing drainage systems. Implementation of **HYD-1** would be consistent with the Water Quality Control Plan of the San Francisco Bay Basin. Implementation of mitigation measure **HYD-1**, and compliance with applicable local, state, and federal regulations would ensure that potential impacts to people and the environment related to Hydrology and Water Quality would be less than significant. Therefore, potential impacts related to Hydrology and Water Quality would not result in disproportionate impacts on EJ populations.

Noise

EJ populations may experience disproportionate noise impacts if the siting of unmitigated industrial facilities occurs within or near EJ communities to a greater extent than within the community at large. The project site is within an area having an EJ population. The area surrounding the site is primarily employment center industrial (ECI), residential, and park land uses. The nearest noise sensitive receptor is a residence located approximately 800 feet north of the project center.

Construction activities would increase existing noise levels at the adjacent land uses, but they would be temporary and intermittent. The maximum noise level from construction activities would be 62 dBA at the nearest residences, located approximately 800 feet north of the project site center. This would increase the existing ambient noise level of 56 dBA L_{eq} at these receptors by 6 dBA. The city of Pittsburg's Municipal Code does not establish a noise threshold for construction activities, but limits construction events and activities in excess of 65 dBA to occur during the daytime hours of 8:00 a.m. to 5:00 p.m. While construction of the proposed project would temporarily increase noise levels in the immediate neighboring areas of the project site, since the increases would be temporary and intermittent, construction activities would not result in a disproportionate impact for the EJ community.

Sources of operational noise for the project would include the backup gensets, roof-top HVAC units, roof-top cooling fans, and other equipment necessary for project operation. The City's 2040 General Plan and Municipal Code establish noise standards to regulate noise impacts. The General Plan outlines exterior noise standards. Since the General Plan's limits are more conservative than the Municipal Code's, they are taken as the threshold for evaluating project noise levels. During both normal operation and genset testing, noise levels at the closest residence due to the operation would remain below the existing ambient noise level and within the City's noise limits. Since the project is not adjacent to, or in close proximity to a residential land use, operation of the project would have a less than significant impact for all the area's population, including the EJ population. No disproportionate impacts to an EJ population would occur.

Transportation

As concluded in **Section 5.17, Transportation**, the project will result in no transportation impacts, including impacts to alternative modes of transportation. No disproportionate impacts to an EJ population would occur.

Utilities and Service Systems

A disproportionate utilities and system services impact on an EJ population could occur if the project wastes impacted the disadvantaged community such as contributing to or exacerbating the effects of cleanup sites, hazardous waste generators and facilities, and solid waste facilities.

Since the overall CalEnviroScreen score reflects the collective impacts of multiple pollutants and factors, staff examined the individual contributions to indicators as they relate to wastes addressed under utilities and system services. The wastes of concern in this analysis are those from construction and operational activities. The handling and disposal of each type of waste depends on the hazardous ranking of its constituent materials. Existing laws, ordinances, regulations, and standards ensure the desired handling and disposal of waste materials without potential public or environmental health impacts.

The CalEnviroScreen scores for the disadvantaged community census tracts in a 3-mile buffer of the project (see **Figure 6-3**) are presented in **Table 6-4** for each of the following environmental stressors that relate to waste management: cleanup sites, hazardous waste generators and facilities, and solid waste facilities. The percentile for each disadvantaged census tract reflects its relative ranking among all of California's census tracts.

CalEnviroScreen assigns a score to each indicator of stressors. To assess the impact of a stressor on population within a census tract, the score is assigned a weighting factor that decreases with distance from the census tract. For stationery stressors, the weighting factor diminishes to zero for distances larger than 1,000 meters (0.6 mile). As **Figure 6-3** shows, there are disadvantaged community census tracts within 1,000 meters of the project.

As discussed in **Section 5.18, Utilities and Service Systems**, the project would have a less than significant impact on local utility infrastructure, the City of Pittsburg's water supply, the capacity of the Delta Diablo wastewater treatment plant, and the capacity of the Keller Canyon landfill. The project will comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, potential impacts related to Utilities and Service Systems would not result in disproportionate impacts on EJ populations.

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Section 7

Authors and Reviewers

7 Authors and Reviewers

Lead Agency—California Energy Commission

Technical Staff/Section Authors

Staff	Section(s)
Ardalan Sofi	Energy and Energy Resources, Appendix A: Jurisdictional and Generating Capacity
Brett Fooks	Wildfire
Brewster Birdsall	Air Quality (Public Health), Greenhouse Gas Emissions
Chris Huntley	Biological Resources
Chuck Huffine	Transportation
Collin Crawford	Population and Housing, Public Services, Mandatory Findings of Significance
Dave Tatsumi	Aesthetics
Irene Kaufman	Environmental Justice
Jacob Locsin	Noise
James Ackerman	Hydrology and Water Quality, Utilities and Service Systems
Jim Thurber	Hazards and Hazardous Materials
Joakim Osthus	Transportation
John Carrier	Population and Housing, Public Services
Julie Myrah	Biological Resources
Katherine Lewis	Wildfire
Ken Salyphone	Noise
Kevin Delano	Geology and Soils, Mineral Resources
Laiping Ng	Appendix B: Power Delivery System
Lauren Deoliveira	Cultural and Tribal Cultural Resources
Michael Aceves	Aesthetics
Michele Shi	Wildfire
Nader Khalil	Recreation
Negar Vahidi	Agriculture and Forestry Resources, Land Use and Planning, Recreation, Environmental Justice
Paul Miller	Hazards and Hazardous Materials

Supervision and Management

Staff	Role
Dian Vorters	Deputy Director, Siting, Transmission, and Environmental Protection Division
Eric Knight	Siting and Environmental Branch Manager

Staff	Role
Brett Fooks	Safety and Reliability Branch Manager
Joseph Hughes	Engineering Branch Manager
Wenjun Qian	Air Quality Unit Supervisor
Ann Crisp	Biological Resources Unit Supervisor
Kaycee Chang	CEQA Project Management Unit Supervisor
Steven Kerr	Land Use and Public Services Unit Supervisor
Gabriel Roark	Cultural Resources Unit Supervisor
Shahab Khoshmashrab	Engineering Unit Supervisor
Abdel-Karim Abulaban	Geosciences Unit Supervisor
Hurshbir Shahi	Compliance and Enforcement Unit Supervisor

Project Management/Legal

Staff	Role
Ali Jahani	Project Manager
Renee Longman	Project Manager
Alex Mayer	Staff Counsel
Barbara Borkowski	Staff Counsel

Project Assistant and Student Assistants

Staff	Role
Marichka Haws	Project Assistant
Lorenzo Cano	Student Assistant
Yiming Luo	Student Assistant

Appendix A

Project's Jurisdictional and Generating Capacity Analysis

Appendix A: Project's Jurisdictional and Generating Capacity Analysis

AVAIO Pittsburg Data Hub (PDH or project) is proposed by AVAIO Digital Partners I, LLC (AVAIO). The project includes the Pittsburg Backup Generating Facility (PBGF) and will include 37 diesel-fueled standby emergency backup generators (gensets) that would provide emergency backup power supply only during interruptions of electric service delivered by Pittsburg Power Company (PPC), via Pacific Gas and Electric (PG&E) transmission lines. The gensets would be electrically isolated from the PG&E electrical transmission system with no means to deliver electricity offsite of the project (the distribution line would only allow power to flow in one direction—from PG&E electrical transmission line to the PDH).

There are no other AVAIO-owned data centers in the City of Pittsburg or anywhere in California. There would be no common facilities between PDH and any other AVAIO-owned data center. Therefore, the project is considered an independent data center for the purpose of jurisdictional determination.

The 37 gensets would each have a nameplate output capacity of 3 megawatts (MW). However, the maximum total facility load requirements would not exceed 92 MW. This includes the critical information technology (IT) load of the servers and server bays, the cooling load of the IT servers and bays, and the facility's ancillary electrical and telecommunications equipment operating loads to support the data customers and campus. The California Energy Commission (CEC) is responsible for reviewing, and ultimately approving or denying, all applications for thermal electric power plants that are 50 MW and greater being proposed for construction in California. (Pub. Resources Code, § 25500.) The CEC has a regulatory process, referred to as the Small Power Plant Exemption (SPPE) process, that allows applicants with projects between 50 and 100 MW to obtain an exemption from the CEC's jurisdiction and from obtaining a CEC certificate (license) and instead proceed with local approval if the CEC finds that the proposed project would not create a substantial adverse impact on the environment or energy resources. (Pub. Resources Code, § 25541.)

CEC staff (staff) calculated a net deliverable or usable electricity capacity of more than 50 MW and less than 100 MW from the project's gensets, qualifying it for a SPPE under the capacity criterion. The factors below support this conclusion, followed by a more detailed discussion:

1. The diesel-fueled reciprocating engine gensets use a thermal energy source.
2. The gensets and the associated equipment that they would support would all be located on a common property under common ownership sharing common utilities, and the 37 gensets should be aggregated and considered as one thermal power generating facility with a generation capacity of greater than 50 MW.

3. While the project has an apparent installed generation capacity greater than 100 MW (37 gensets, each with 3 MW peak capacity), the “extra” MW installed are redundant. In no case would the maximum facility-wide load demand exceed 92 MW due to physical constraints built into the project.
4. Jurisdictional analyses are based on the net MWs that can be delivered for “use” (i.e., to a data center facility or the electricity grid), not the gross or nameplate rating. Unlike a traditional power plant supplying electricity to the grid, for a data center, the maximum load being served is determinative and not the combined net capacity of the installed gensets. Here, the maximum facility-wide project load requirement would be 92 MW.
5. The gensets would be exclusively connected to the data center building and would not be capable of delivering electricity to any off-site user or to the electrical transmission grid. The proposed redundancies built into the design of the facility are to ensure performance reliability, not to generate and supply the facility with more than 92 MW of electricity.
6. The restriction on the facility’s load demand is hardwired through various control systems. It would be physically impossible for the gensets to generate more electricity than the buildings require. Excess electricity would damage components or, at a minimum, isolate the facility loads from the gensets.

To make a jurisdictional recommendation, staff assessed the generating capacity of the project, using the following:

1. PBGF is a thermal power plant under the statutory definition.

The Warren-Alquist State Energy Resources Conservation and Development Act (Public Resources Code, § 25000 et. seq) defines a thermal power plant “as any stationary or floating electrical generating facility using any source of thermal energy, with a generating capacity of 50 megawatts or more, and any facilities appurtenant thereto.” (Pub. Resources Code, § 25120.) The project’s generation yard would be made up of gensets that use diesel-fueled engines to convert the thermal energy in the renewable diesel fuel¹ into electricity via a rotating generator, and, thus, each genset is an electrical generating device that uses a source of thermal energy. The facility proposes to use 37 such gensets to service PBGF.

The project’s 37 gensets, and the associated data center that they would support, would all be located on a common property under common ownership sharing common utilities. The gensets would operate to provide backup electricity to the data center when its connection to the grid is lost. The genset system configuration includes a 6-to-make-5 arrangement for the data center building meaning that for every five gensets that would support load in the event of a utility failure, there is one redundant genset.

¹ Renewable diesel fuel is composed of a mixture of hydrocarbons, containing chemical energy. When ignited, this chemical energy is converted to thermal energy.

The 37 gensets would never operate simultaneously at 100 percent capacity. However, any genset can function either as a primary back-up to the grid or a back-up to the grid back-up gensets, so there is not a functional difference in the type of engine or generator between each genset. All the gensets at the project would share a common trigger for operation during an emergency: the transfer switch isolating the PDH from the grid. Thus, because the project is stationary, under common ownership sharing common utilities, uses a fuel source to generate thermal energy, and has a generating capacity of 92 MW, the project meets the statutory definition of a thermal power plant.

2. California Code of Regulations, Title 20, section 2003 requires the generating capacity to be the net generating capacity.

For the proposed project, the data center would be installed during the initial construction of the project by the applicant, but there is no specific timeline proposed for when data center would need the full capacity of the gensets; the exact timing of individual leases that fill server bay space is subject to the market decisions of disparate customers. Therefore, it may be years before the data center is at full load. Nevertheless, for purposes of this analysis, staff assumes full load will eventually be reached.

California Code of Regulations, title 20, section 2003 specifies how the CEC calculates “generating capacity” for jurisdictional determinations, including the 50 MW threshold for the definition of a thermal power plant under Public Resources Code, section 25120. However, section 2003, which uses nameplate capacity in addition to consideration of other factors, only addresses steam and combustion turbines, not diesel-fueled gensets as used in the project, and is, therefore, not controlling here. There are also other reasons to conclude that simply focusing on nameplate capacity here is not appropriate.

For a typical power plant, outside the factors identified in California Code of Regulations, title 20, section 2003, there is almost no limit on what might be generated and provided to the grid, so the approach outlined in that provision identifies the potential maximum generating capacity and is reasonable for those facilities. This is not the case with data centers, where producing electricity more than what the data center requires would be economically wasteful and likely result in damage to the facility.

In traditional turbine-based power plants, parasitic loads (fans, pumps, and heaters) are external to the turbine. Thus, the generating capacity is the total net MWs at the switchyard bus; that is, gross MWs less parasitic loads. If the grid “demands” more, the power plant cannot deliver more electricity unless it burns fuel at a higher rate or reduces parasitic loads. Even then, equipment would have to have the physical capacity to burn more fuel and convert thermal energy into rotational energy, and then operate the generator at a higher output. The calculations assume normal conditions, where generation would be under average operating conditions, and assumes the onsite loads (often called parasitic loads) are also average (e.g., a filter backwash pumping load would not be included if that operation only occurs monthly or annually). Typically, at a

traditional power plant, no redundant generating equipment is installed.² Generating capacity at a traditional power plant is determined based on the net capacity of all generators proposed to be installed and connected to the grid because there is almost no limitation on the amount of MWs the grid can “take” from the facility.

Typically, emergency backup generating facilities serving data centers are designed such that they do not deliver power to the electricity grid, and all the electricity generated is consumed by the data center’s load demand, such as the case here. Data centers are designed with precise loads, assuming full build-out, and providing electricity more than these loads is not only economically wasteful (burning fuel for no benefit or reason) but can result in damage to the sensitive components located inside these data centers as well as to the heating, ventilation, air conditioning (HVAC) unit and other systems serving the buildings. Therefore, for purposes of evaluating the capacity of emergency backup generating facilities serving data centers, it is reasonable for staff to consider building loads to be the controlling factor in determining generating capacity. This type of approach has been taken with previous SPPE data center projects evaluated by the CEC in recent years for other facilities with a maximum installed nameplate capacity of over 100 MW with their redundant engines included.

3. Data centers are analyzed differently than conventional power plant facilities for several reasons.

To determine the net generating capacity of a collection of gensets³ for data centers, the approach is slightly different but consistent with that used on a traditional power plant. The differences are: 1) the end user is the building and data servers, not the grid, and 2) extra gensets or generating capacity are installed to provide electricity not only for building and data server loads but to provide redundancy that achieves a statistical reliability (five nines of reliability) that can be marketed to data customers.

Staff’s approach is consistent with widely practiced standards. For example, ASHRAE’s (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Energy Standards for Data Centers do not use the nameplate or gross capacity but the net generating capacity of data centers, or the actual cooling and IT server loads.⁴ These ASHRAE standards are performance-based as opposed to prescriptive standards,

2 At modern power plants, some equipment design includes 50 to 100 percent redundancy. The redundant equipment is generally limited to certain critical components like transformers, which are often custom items with long lead times for fabrication, or boiler water feed pumps, which are intended to protect the steam boiler components from damage from too much heat if circulating water flow is interrupted.

3 Backup generators, by definition, generally have the following characteristics: reliable starts, fast starting to full load, cheap to maintain as they sit idle most of the time, use cheap and stable fuel as the fuel sits unused most of the time, and use high-density fuels to limit storage volumes onsite so the project can operate if “islanded.”

4 American National Standards Institute (ANSI)/ASHRAE Standard 90.4-2016, www.ashrae.org.

advocating the determination of load requirements be based on project-specific operational characteristics.

Staff's approach to calculating generating capacity has also been devised based on the International Organization for Standardization (ISO), which sets standards for different industries including the energy industry. The ISO standards are widely accepted by, and used throughout, the energy industry. Consistent with staff's method, the ISO specifies that generating capacity should be the net capacity at average annual ambient conditions.⁵

In the case of the PBGF, the load demand acts as a limit to the generation levels from the gensets. The limit would be fixed by the specification and installation of electrical buses and panels, switchyard, and breakers effectively capping the capacity limit. This factor is not present in a capacity generation determination for a typical power plant feeding to the grid because the grid does not act in the same way the "data center grid" does. If the breakers between the data center building and the gensets were to trip due to excess generation, the data center would be isolated from the gensets, with the servers and building cooling forced to shut down. This subverts the intention of using the gensets to maintain reliable and high-quality electricity. Excess electricity would damage components or, at a minimum, isolate the load from the gensets. If the building cooling load were to increase (e.g., the day gets warmer), the gensets would open the engine fuel throttle to increase generation output and match demand but would still not exceed the combined 92 MW IT and building demand.

4. PBGF's capacity would not exceed 92 MW.

The cooling equipment's maximum demand would also be fixed by the specification and installation of equipment that have an upper physical limit of cooling capacity and would include some redundant cooling equipment. Such redundant equipment could only be operated if a primary component fails and could not be operated in addition to the primary components because that would damage the data center. The data center would be served from the grid or from the gensets with electricity that matches and does not exceed demand for the operations of the data server bays and buildings.

The heat rejected by the IT servers must be removed from each server bay or else the server equipment and data would be damaged. Any attempt to add more servers to a bay would result in direct, immediate, and dire consequences because the building and equipment would have been designed for an upper critical IT load. It is important to note that the maximum combined facility load of 92 MW is based on 100 percent critical IT load with maximum cooling on the hottest day. In actuality, the critical IT load and related cooling load would typically be less than this worst-case scenario.

5 ISO 3046-1 Reciprocating Internal Combustion Engines – Performance, www.iso.org/standards.html

The generation by PBGF would be regulated by each building and each bay in that building. PBGF would employ physical electronic devices and software technology that limit and monitor the facility's electrical load to ensure that it does not exceed 92 MW.

For the maximum generating capacity to increase, the project would have to be redesigned to physically fit more servers in a server bay or add more bays. The applicant would have to address the unplanned increase in electricity demand for normal operations because the existing electrical equipment would not be sized for the higher electricity throughput. Additionally, the applicant would have to install additional cooling equipment units to address the increased heat rejected by the server bays and buildings, and install additional redundant cooling equipment, additional uninterruptable power supply (UPS) battery units, and additional gensets to maintain the level of backup and reliability to match the new higher levels of load. This is an unlikely outcome because such changes are not trivial and would result in a cascade of design and physical changes to the facility.

Once the PDH loses connection to the local grid, the transfer switch isolates the PDH from the local electrical transmission grid, and all the gensets assigned to a server bay set initiate startup. As the gensets start, synchronize, and take up load associated with their server bays and building equipment, the UPS system would provide full-load power for up to five minutes⁶ to smoothly transition the data center customers' data servers from the grid to the gensets. If a genset or two fail to start or synchronize, the remaining genset in the 6-to-make-5 server bay ramps up to higher output levels. The output of the genset assigned to a server bay set match (meet but cannot exceed) the data center customers' IT demand in the respective server bay and the server bay's HVAC demand. The combined output of the server bay set is autonomously determined by the electrical equipment in the PDH server bays and building equipment.

Combined output would be limited by sizing the electricity handling equipment to throttle transfer capacity to no more than 92 MW, which would prevent damage to IT servers and building equipment. Therefore, it would be physically impossible for the gensets to generate more electricity than what the data center would use, or more than 92 MW. The PBGF qualifies for a SPPE.

References

DayZenLLC 2024a – DayZenLLC (TN 254728). AVAIO SPPE Application Main Application and Appendix A - PBGF - Part I, dated February 29, 2024. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>

⁶ The gensets are expected to be on and synchronized within a minute or so, but the UPS can supply up to 5 minutes of power at 100 percent full-load UPS to ensure a complete transition from the grid to the gensets.

Appendix B

Project Substation and Electrical Reliability Supporting Information

Appendix B: Project Substation and Electrical Reliability Supporting Information

This appendix includes a discussion of the Pacific Gas and Electric Company's (PG&E) electrical system reliability (including supporting information) and emergency operations.

Electrical System Reliability

Apart from readiness testing and maintenance, the backup generators are designed to operate only when the electric system is unable to provide power to the data center. To understand the potential for the backup generators to operate during emergencies, one needs to know the conditions under which the electric system is unable to provide power to the data center. There are essentially five conditions that might result in the operation of the backup generators:

1. A fault occurs (power supply interruption) or planned maintenance is required on the equipment interconnecting the data center to the PG&E grid and the data center's electricity needs cannot be met.
2. An outage or fault occurs on the utility transmission system and PG&E is unable to provide power to the data center.
3. A Public Safety Power Shutoff (PSPS) impacts the utility transmission system and the data center is not able to receive power from PG&E.
4. An energy shortage crisis similar to the one in late Summer 2020 and the most recent heat waves where the utility (e.g. PG&E) is unable to supply electricity to the data center or the data center operators voluntarily disconnect from the utility and rely on backup generators to provide the needed electricity.
5. Due to the design of the data center interconnection with PG&E, the design of the PG&E transmission network, and the historical and expected impacts of PSPS, staff expects the backup generators would only be used in testing, maintenance, and during emergency utility power outages at a load equal to the demand of the data center buildings.

Due to the design of the data center interconnection with PG&E, the design of the PG&E transmission network, and the historical and expected impacts of PSPS, staff expects the backup generators would only be used in rare events outside of testing and maintenance.

The proposed data center interconnection to PG&E includes redundant facilities that will allow the data center energy needs to be met without use of the backup generators even when maintenance is required on the transmission system. Thus, transformer or transmission line maintenance could be performed without interrupting the supply of electricity from PG&E.

The existing PG&E Pittsburg – Eastshore 230 kV line would be extended to loop into the proposed PG&E switching station through two 1113 aluminum conductor steel-reinforced (ACSR) overhead conductors. The switching station would be configured in a breaker-and-a-half arrangement consisting of six 230 kV breakers, steel structures, 230 kV switches, metering devices, and non-occupied control enclosure.

The two-bay project substation is designed to include two 100 MVA step-down (230/34.5 kV) transformers. One transformer would be effectively providing the full loads of the data center when the other would be taken out of service. The project Substation would be capable of delivering power to the Pittsburg Data Hub (PDH) from the PG&E Switching Station. No electric generation would be delivered to the transmission grid from the AVAIO Pittsburg Backup Generating Facility (PBGF) (DayZenLLC 2024a).

The California ISO and PG&E are responsible for the reliability of the transmission

network and are required to maintain compliance with national, regional, state and local standards. These standards are complicated but, generally speaking, they require that no loads be dropped, or customers shut off, when any single element of the bulk electric system is forced out of service. For the project, this means that PG&E should be able to supply power whenever any single part of the transmission system is out of service, sometimes called an N-1 or single contingency condition. This is the equivalent of, at a minimum, providing a looped system for the project.

For the past 5 years, the PG&E Pittsburg-Eastshore 230 kV line has recorded one unplanned outage which was caused by a lightning strike located 5.2 miles from Eastshore Substation. No outages were due to PSPS events (DayZenLLC 2025c).

Based on the information provided by PG&E, the project would not have experienced a power interruption over the last 5 years since the project would have power coming from both Pittsburg Substation and/or Eastshore Substation.

Wildfire policies could impact PG&E's ability to supply power to the project if curtailments on the transmission system interrupt supplies to both Pittsburg Substation and the Eastshore Substation. A PSPS essentially de-energizes power lines in order to prevent the lines from causing or being damaged by wildfires. The PSPSs to date have been generally limited to high fire risk zones and only implemented under special conditions. A line de-energization in one of PG&E's high-risk fire zones to reduce the risk of lines causing a wildfire could reduce the electricity transmission access and supply to the project substation.

As indicated in the Supplemental Response to CEC Staff Data Requests Set 2, dated April 2025, past PSPS events would not have resulted in the emergency operation at the proposed PDH. In addition, power serving the project would come from either the Pittsburg or Eastshore substations if either one of the 230 kV line is out of service. It is unlikely that a PSPS event would result in both 230 kV lines being taken out of service.

The future impacts of safety shutoffs on the PG&E system are not currently known – to date, the most recent broadly implemented PSPSs in PG&E service territory had no impact on the Pittsburg and Eastshore substations. As the utilities and regulators try to balance the costs and benefits of PSPS by fine tuning and targeting the implementation, the mostly likely outcome is that future PSPS events will have even fewer potential effects on PG&E's territory.

CEC staff expects the project's backup generators to be required to supply data center loads only rarely due to utility outages or certain onsite electrical equipment interruptions or failure. The PG&E system can supply power to the data center from both Pittsburg and Eastshore substations. These interconnections make the energy supply to the data center at least as reliable as a looped system but likely even more reliable. Finally, PSPS events have not impacted customers directly connected to these two substations and as we expect the effects of PSPS events to decrease over time we do not think this will be an issue for the project going forward.

Energy shortages, like those that occurred on two occasions in 2020 and the recent heat waves, could prevent a utility from supplying the data center electricity needs and the data center would then rely on backup generators. Recently, the California Public Utilities Commission (CPUC) has adopted a new pilot program (D.21-03-056), currently in effect through 2025, which ordered PG&E, Southern California Edison and San Diego Gas and Electric to administer the Emergency Load Reduction Program (ELRP). Data centers could voluntarily participate in the ELRP and in the event of an energy shortage emergency, they would disconnect from the grid and use their on-site generators to supply electricity. The ELRP provides a mechanism for utilities to measure the load reduction and provide financial compensation to the participants. The ELRP does not affect the likelihood of emergency shortage events. The last time an energy shortage event occurred, like those in 2020, was 2001. If the past is indicative of future shortages, they are rare events. The SPPE application indicated that the backup

generating facilities would not be interconnected to the transmission or distribution grid. The backup generating facilities would only be operated for maintenance, testing, and during emergency utility power outages and will not operate for any demand response program (DayZenLLC 2024a).

Electrical Reliability Supporting Information

The California Energy Commission staff provided a series of questions to PG&E designed to understand when, why, and for how long backup generators would need to operate for any purpose, including PSPS, other than readiness testing or maintenance at the proposed data center in the PG&E service area.

This supporting information includes the following (DayZenLLC 2025c):

AVAIO PBGE Supplemental Responses to CEC Staff Data Requests Set 2 – DR TSD-4 and TSD-6 in April 2025.

DR TSD-4

Please provide information that reviews the frequency and duration of historic outages of the Pittsburg-Eastshore 230 kV line and related facilities that would likely trigger the loss of electric service to the proposed onsite substation and could lead to the emergency operations of the backup generators. This response should identify the reliability of service historically provided by PG&E to similar customers in this part of its service territory.

RESPONSE TO DATA REQUEST DR TSD-4

Within the past 5 years, the one unplanned outage on the Pittsburg-Eastshore 230kV line was caused by a lightning strike 5.2 miles from Eastshore substation. However, with the presence of the planned PG&E switching station for PPC, this same outage would not have resulted in the loss of electric service to the proposed PPC onsite substation and would not have led to the emergency operations of the backup generators.

DR TSD-6

Please provide the following information regarding Public Safety Power Shutoff events:

- a. Would historical Public Safety Power Shutoff events have resulted in the emergency operations at the proposed PBGF?
- b. Have there been changes to the PG&E system around the PBGF that would affect the likelihood that future Public Safety Power Shutoff events would result in the operation of emergency generators at the proposed PBGF?

RESPONSE TO DATA REQUEST DR TSD-6

The answer to both questions a. and b. is No.

References

- BAAQMD 2021 – Bay Area Air Quality Management District Comments (BAAQMD). (TN 239805). Letter for CA3 Data Center NOP, dated September 21, 2021. Accessed online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=21-SPPE-01>
- CAISO 2021 – California Independent System Operator (CAISO). Final Root Cause Analysis Mid-August 2020 Extreme Heat Wave, dated January 13, 2021. Accessed July 2025. Accessed online at: <http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf>
- CEC 2021 – California Energy Commission (CEC). Record of Conversation with J. Zielkiewicz, BAAQMD Staff Regarding Emergency Operations: Great Oaks South Backup Generating Facility (TN 237631), May 2021. Available online at: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=20-SPPE-01>

- CPUC 2021a – California Public Utilities Commission (CPUC). Decision Directing Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company To Take Actions To Prepare For Potential Extreme Weather In The Summers Of 2021 and 2022. Decision 21-03-056 March 25, 2021. Available online at:
<https://docs.cpuc.ca.gov/publisheddocs/published/g000/m373/k745/373745051.pdf>
- CPUC 2021b – California Public Utilities Commission (CPUC). Phase 2 Decision Directing Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company To Take Actions To Prepare For Potential Extreme Weather In The Summers Of 2022 and 2023. Decision 21-12-015, December 2, 2021. Available online at:
<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M428/K821/428821475.PDF>
- CPUC 2023 – California Public Utilities Commission (CPUC). Decision Directing Certain Investor-Owned Utilities’ Demand Response Programs, Pilots, And Budgets For The Years 2024-2027. Decision 23-12-005 December 14, 2023. Accessed online at:
<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M521/K486/521486520.PDF>
- DayZenLLC 2024a – DayZenLLC (TN 254728). AVAIO SPPE Application Main Application and Appendix A - PBGF - Part I, dated February 29, 2024. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>
- DayZenLLC 2025c – DayZenLLC (TN 262829). AVAIO Supplemental Responses to CEC DR LU-2 TSD-4 and TSD-6 - PBGF, dated April 28, 2025. Accessed online at:
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=24-SPPE-01>

Appendix C

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

**AVAIO Pittsburgh Backup Generating Facility (PBGF)
24-SPPE-01**

October 2025

PREFACE

Section 21081.6 of the California Environmental Quality Act (CEQA) requires a Lead Agency to adopt a Mitigation Monitoring and Reporting Program (MMRP) whenever it approves a project for which measures have been required to mitigate or avoid significant effects on the environment. The purpose of the monitoring and reporting program is to ensure compliance with the mitigation measures during project implementation.

While the CEC is the lead agency in assessing the exemption application, the CEC is not the jurisdiction that will be approving the project for construction and operations. Such authority will be with the City of Pittsburg. Therefore, the MMRP will be implemented and enforced by the City upon its approval of the project.

The Initial Study/Mitigated Negative Declaration prepared for the AVAIO Pittsburg Backup Generating Facility concluded that the implementation of the project would not result in significant effects on the environment with the incorporation of mitigation measures. This MMRP addresses those measures in terms of how and when they will be implemented.

This document does *not* discuss those subjects for which the Initial Study/Mitigated Negative Declaration concluded that the impacts from implementation of the project would be less than significant.

I, _____, the applicant, on the behalf of _____, hereby agree to fully implement the mitigation measures described below which have been developed in conjunction with the preparation of an Initial Study/Mitigated Negative Declaration for my proposed project. I understand that these mitigation measures or substantially similar measures will be adopted as conditions of approval with my development permit request to avoid or significantly reduce potential environmental impacts to a less than significant level.

Project Applicant's Signature _____

Date_____

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Local Approval Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
AIR QUALITY					
Impact 5.3-b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?					
Impact 5.3-c. Would the project expose sensitive receptors to substantial pollutant concentrations?					
AQ-1. To ensure that fugitive dust impacts are minimized, the Project will implement the BAAQMD's recommended BMPs during the construction phase. A fugitive dust control plan shall be reviewed and approved by the director, or director's designee, of the City of Pittsburg Community and Economic Development Department prior to the issuance of any grading or building permits, whichever occurs earliest. These BMPs are incorporated into the design of the project and will include: - Water all exposed areas (e.g. parking areas, graded areas, unpaved access roads) twice a day. - Maintain a minimum soil moisture of 12% in exposed areas by maintaining proper watering frequency.	Implement the BAAQMD's recommended BMPs to control fugitive dust and additional measures to control exhaust emissions.	During construction phase.	City of Pittsburg Community and Economic Development Department Director or Director's designee.	Receive and approve the fugitive dust control measures and exhaust control measures during construction.	Prior to the issuance of any demolition, grading, and/or building permits (whichever occurs earliest).

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Local Approval Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
AIR QUALITY					
• Cover all haul trucks carrying sand, soil or other loose material. • Suspend excavation, grading and/or demolition activities when average wind speed exceeds 20 miles per hour. • Pave all roadways, driveways and sidewalks as soon as possible. Lay building pads as soon as grading is completed, unless seeding or soil binders are used. • Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction with a maximum 50 percent air porosity. • Use a power vacuum to sweep and remove any mud or dirt-track next to public streets, if visible soil material is carried onto the streets. • Limit vehicle speeds on unpaved roads to 15 miles per hour (mph). • Minimize idling time for all engines by shutting engines when					

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Local Approval Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
AIR QUALITY					
not in use or limiting idling time to a maximum of 5 minutes. Provide clear signage for construction workers at all access points. • Properly tune and maintain construction equipment in accordance with manufacturer's specifications. Check all equipment against a certified visible emissions calculator. • Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. • Install vegetative ground cover in disturbed areas as soon as possible and water appropriately until vegetation is established. • Limit simultaneous occurrence of excavation, grading, and ground-disturbing construction activities. • Install water washers to wash all trucks and equipment prior to leaving site.					

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Local Approval Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
AIR QUALITY					
• Treat site access to a distance of 100 feet from the paved road with a 6 to 12-inch compacted layer of wood chip, mulch or gravel. • Install sandbag or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent. • Minimize idling time of diesel-powered construction vehicles to two minutes • Develop a plan demonstrating that off-road equipment (more than 50 horsepower) used for construction would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent PM reduction compared to the most recent ARB fleet average. These include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters,					

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Local Approval Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
AIR QUALITY					
and/or other options as such become available. • Use low Volatile Organic Compounds • (VOC) (i.e., Reactive Organic Gases • (ROG)) coatings beyond the local requirements (i.e., Regulation 8, Rule 3: Architectural Coatings). • All construction equipment, diesel trucks, and generators be equipped with Best Available Control Technology for emission reductions of NOx and PM. • All contractors use equipment that meets California Air Resources Board's • (CARB) most recent certification standard for off-road heavy-duty diesel engines.					
AQ-2. To ensure that all readiness and maintenance testing at lower loads would not exceed the Bay Area Air Quality Management District (BAAQMD) cancer risk permitting limit	Provide documentation to the director of the City of Pittsburg	Prior to commencement of project operation.	City of Pittsburg Community and Economic Development Department	Review documentation and verify the project BAAQMD permit conditions comply	Prior to commencement of project operation.

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Local Approval Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
AIR QUALITY					
of 6 in one million that applies for impacts to Overburdened Communities, the Project will adopt the following limits on operation and will request that the BAAQMD adopt the following limits as permit conditions: • Generator and engine readiness and maintenance testing shall only be allowed during the 11-hour period between 7:00 a.m. and 6:00 p.m. daily. • Concurrent testing of engines shall be limited so that only a single engine operates for maintenance and testing at any given time. • Readiness and maintenance testing shall be limited to no more than 34 hours per year per engine. • Readiness and maintenance testing at generator loads less than or equal to 75 percent shall be limited to no more than 17 hours per year per engine.	Community and Economic Development Department or director's designee to verify that BAAQMD permit conditions include operating limitations.		Director or Director's designee.	with operating limitations.	

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Local Approval Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
BIOLOGICAL RESOURCES					
BIO-1: Project Coverage under ECCC HCP/NCCP The applicant shall obtain coverage for the project under the ECCC HCP/NCCP. This shall include the submittal of all required application materials per ECCC HCP/NCCP Section 6.2.1 and payment of a Development Fee consistent with current HCP/NCCP requirements. Alternatively, the applicant may, in accordance with the terms of the Pittsburg Municipal Code Chapter 15.108, offer to dedicate land in lieu of some or all of the ECCC HCP/NCCP Development Fee. All applicable fees shall be paid, and/or an "in-lieu-of-fee" agreement fully executed, prior to the issuance of a grading permit for the project. If a grading permit is not required, fee payment and/or an "in-lieu-of-fee" agreement shall be fully executed prior to issuance of the project's building permit. Proof of applicable fees and/or "in-lieu-of-fee" agreement shall be	The applicant shall obtain coverage for the project under the ECCC HCP/NCCP. This shall include the submittal of all required application materials per ECCC HCP/NCCP Section 6.2.1 and payment of a Development Fee consistent with current HCP/NCCP requirements. Provide proof of applicable fees and/or "in-lieu-of-fee" agreement shall be provided to City of Pittsburg Community and Economic	Prior to the issuance of a grading permit for the project.	City of Pittsburg Community and Economic Development Department Director or Designee.	Review proof of applicable fees and/or in-lieu-of-fee agreement to confirm Applicant/Proponent compliance.	Prior to construction.

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Local Approval Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
BIOLOGICAL RESOURCES					
provided to the City of Pittsburg Community and Economic Development Department Director or Director's designee.	Development Department Director or Director's Designee.				
BIO-2: Worker Environmental Awareness Program (WEAP) The applicant shall develop and implement a project-specific WEAP. The WEAP shall include a presentation on sensitive habitats on the project site, special-status species known or potentially present on the site, including their listing status and causes of decline, their habitat preferences and any distinguishing physical characteristics. In addition, the measures required to protect sensitive habitats and special-status species shall be explained, including next steps and notifications in the event of a special-status species sighting. The WEAP shall include a hard copy handout that summarizes information presented in the training and include photographs of habitat resources and	Develop and implement WEAP, provide copies of WEAP to regulatory agencies, train construction personnel, maintain record of training acknowledgment forms.	Prior to and throughout construction.	City of Pittsburg Community and Economic Development Department Director or Director's Designee.	Approve qualified biologist. Approve WEAP.	Prior to construction.

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BIOLOGICAL RESOURCES					
species to facilitate identification in the field by construction personnel. The applicant shall ensure that all construction personnel undergo WEAP training before they begin work. Training shall be delivered by a qualified biologist approved by the City of Pittsburg Community and Economic Development Department Director or Director's Designee and shall be provided bilingually in English and Spanish, if appropriate. Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines. The applicant shall secure approval for the WEAP from the City of Pittsburgh Community and Economic Development Department Director or Director's Designee. The applicant shall also provide the Conservancy a copy of all portions of the WEAP for review and comment.					

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BIOLOGICAL RESOURCES					
BIO-3: Regulatory Permits for Jurisdictional Waters Prior to project activities that would result in impacts to jurisdictional waters, the applicant shall seek a Section 404 permit from the U.S. Army Corps of Engineers (USACE), a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), and a Lake or Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW). The project shall be constructed and operated in compliance with all terms and conditions of these permits, if issued.	Prepare and submit permits to resource agencies. Comply with terms of permits.	Prior to ground disturbance and throughout construction.	City of Pittsburg Community and Economic Development Department Director or Director's Designee.	Confirm Applicant/Proponent compliance.	Prior to ground disturbance and throughout construction.
BIO-4: Adherence to ECCC HCP/NCCP Requirements The applicant shall ensure that the project adheres to all applicable ECCC HCP/NCCP requirements. Planning surveys per ECCC HCP/NCCP Section 6.3.1 were completed in 2018 to 2023 and copies shall be submitted to the Conservancy. Based on the outcomes of the planning surveys, preconstruction surveys by USFWS and	Ensure that the project adheres to all applicable ECCC HCP/NCCP requirements. Conduct surveys pursuant to ECCC HCP/NCCP requirements. Submit results of surveys to ECCC, USFWS, and	Surveys shall be conducted prior to construction. ECCC HCP/NCCP requirements based on survey results shall be implemented prior to and	City of Pittsburg Community and Economic Development Department Director or Director's Designee.	Confirm Applicant/Proponent compliance. Review CMP and approve if warranted.	Prior to site mobilization.

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BIOLOGICAL RESOURCES					
CDFW approved biologists shall be conducted for the following species per ECCC HCP/NCCP Sections 6.3.2 and 6.3.4: Golden eagle (<i>Aquila chrysaetos</i>); Western burrowing owl (<i>Athene cunicularia</i>); Swainson's hawk (<i>Buteo swainsonii</i>) and San Joaquin kit fox (<i>Vulpes macrotis mutica</i>). If pre-construction surveys determine that any of the above species is present on the site (or, for the bird species, within a distance where they could be disturbed by construction activity – see BIO-9), the Best Management Practices and Constructing Monitoring requirements in the ECCC HCP/NCCP Table 6-1 shall apply. The applicant shall ensure that construction monitoring is conducted per ECCC HCP/NCCP Section 6.3.3 (ECCC HCP/NCCP pages 6-12 to 6-13). This shall include the submittal of a Construction Monitoring Plan (CMP) to the City of Pittsburg Community and Economic Development Department Director or Director's Designee for	CDFW. Submit CMP to City of Pittsburg Community and Economic Development Department Director or Director's Designee. Prior to site mobilization implement protective measures pursuant to ECCC HCP/NCCP requirements if species are detected during surveys.	during construction.			

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BIOLOGICAL RESOURCES					
approval. The CMP must be submitted and approved prior to site mobilization. The applicant shall also comply with all applicable provisions of the ECCC HCP/NCCP Section 6.4, Specific Conditions on Covered Activities (beginning on HCP/NCCP page 6-14), as follows. Section 6.4.1: Landscape-Level Measures: • Conservation Measure 1.7 - Establish stream setbacks (HCP/NCCP pages 6-15 – 6-18) • Conservation Measure 1.10 - Maintain hydrologic conditions and minimize erosion (HCP/NCCP pages 6-21 – 6-22) • Conservation Measure 1.11 - Avoid direct impacts on extremely rare plants, fully protected wildlife species and covered migratory birds (HCP/NCCP pages 6-23 – 6-25)					

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BIOLOGICAL RESOURCES					
- Section 6.4.2: Natural Community-Level Measures - Conservation Measure 2.12 - Wetland, pond and stream avoidance and minimization (HCP/NCCP pages 6-33 – 6-35) Section 6.4.3: Species-Level Measures for the following species: - California tiger salamander (begins on ECCC HCP/NCCP page 6-45; see also Table 6-1) - California red-legged frog (begins on ECCC HCP/NCCP page 6-46; see also Table 6-1) - Burrowing Owl (begins on ECCC HCP/NCCP page 6-39; see also Table 6-1) - Golden Eagle (begins on HCP/NCCP page 6-38; see also Table 6-1) - Swainson's Hawk (begins on HCP/NCCP page 6-41; see also Table 6-1)					

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BIOLOGICAL RESOURCES					
San Joaquin kit fox (begins on HCP/NCCP page 6-37; see also Table 6-1)					
BIO-5: Rare Plant Survey and Protection An updated protocol-level rare plant survey shall be conducted by a qualified biologist/botanist who is familiar with the rare plants of the project region and has been approved by the City of Pittsburg Community and Economic Development Department Director or Director's Designee. Surveys shall be conducted prior to construction, with enough lead time to allow for the follow-up actions described below, if they are warranted. Surveys shall be conducted during the peak blooming periods of the target species and shall cover all potentially suitable habitats within the project site and surrounding 250-foot-wide buffer. If no special-status plants are documented within the area to be disturbed for project construction (including staging and access), no further action is required.	Protocol-level rare plant survey. Notification of ECCC if rare plants are found. Plant avoidance or implementation of the Plant Salvage and Mitigation Plan if required.	Prior to and for duration of ground disturbance.	City of Pittsburg Community and Economic Development Department Director or Director's Designee.	Approve plant biologist for surveys. Approve Plant Salvage and Mitigation Plan if required.	Prior to and for duration of ground disturbance.

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BIOLOGICAL RESOURCES					
If special-status plants covered by the ECCC HCP/NCCP, or plants designated as "no take" by the ECCC HCP/NCCP, are present on the site, the relevant survey report(s) shall be submitted to the Conservancy per ECCC HCP/NCCP Section 6.3.1 (see page 6-9). If any of the following species covered by the ECCC HCP/NCCP is found to be present, the applicant shall promptly notify the Conservancy of the species' presence and the planned construction schedule, to enable the Conservancy to salvage the occurrence(s) in accordance with ECCC HCP/NCCP Conservation Measure 3.10 (Plant Salvage when Impacts are Unavoidable). The applicant shall confirm with the Conservancy that the take limits established by the ECCC HCP/NCCP for the species in question have not been breached: • Big tarplant (<i>Blepharizonia plumosa</i>) • Mount Diablo fairy lantern (<i>Calochortus pulchellus</i>)					

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BIOLOGICAL RESOURCES					
- Diablo helianthella (<i>Helianthella castanea</i>) - Showy golden madia (<i>Madia radiata</i>) - Adobe navarretia (<i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i>) Under no circumstance shall any of the following ECCC HCP/NCCP "no-take" plants be harmed: - Large-flowered fiddleneck (<i>Amsinckia grandiflora</i>) - Alkali milkvetch (<i>Astragalus tener</i> ssp. <i>tener</i>) - Mt. Diablo buckwheat (<i>Eriogonum truncatum</i>) - Diamond-petaled poppy (<i>Eschscholzia rhombipetala</i>) - Contra Costa goldfields (<i>Lasthenia conjugens</i>) - Caper-fruited tropidocarpum (<i>Tropidocarpum capparideum</i>)					

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BIOLOGICAL RESOURCES					
Due to their extreme rarity, none of these species is expected to be present on the project site, but if any of them are found, the applicant shall notify the Conservancy immediately and shall work with the Conservancy to determine and execute the appropriate course of action. If any special-status plant not covered by the ECCC HCP/NCCP is found to be present, the occurrence(s) shall be avoided and protected in place to the extent feasible. If the occurrence(s) cannot be entirely avoided, then a Plant Salvage and Mitigation Plan shall be prepared and submitted to the City of Pittsburg Community and Economic Development Department Director or Director's Designee. The Plan shall be prepared by a qualified biologist/botanist who is familiar with the rare plants of the project region and has experience conducting rare plant salvage operations. Plant salvage techniques shall be consistent with those outlined in HCP/NCCP Conservation Measure 3.10. The plan					

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BIOLOGICAL RESOURCES					
shall, at a minimum, include the following: • Quantity and species of plants to be planted or transplanted • Location of the mitigation/transplant site(s) • Salvage methods, such as relocation/transplantation, seed collection, etc., including storage locations and methods to preserve the plants • Procedures for propagating collected seed, including storage methods • Planting procedures, including the use of soil preparation and irrigation • Schedule and action plan to maintain and monitor the mitigation/transplant site for a minimum 3-year period • Interim and final success criteria and corrective action thresholds					

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BIOLOGICAL RESOURCES					
(e.g., growth, plant cover, survivorship) - Potential corrective actions/contingency measures in the event interim success criteria are not being met (e.g., weed removal, supplemental irrigation, supplemental plantings, etc.) - Reporting requirements and procedures, including the contents of annual progress reports, report submittals, review/approval responsibilities, etc. The applicant shall implement the Plant Salvage and Mitigation Plan. The Plan shall be implemented under the oversight of the biologist/botanist who prepared it or another individual with equivalent qualifications. The biologist shall be approved by the City of Pittsburg Community and Economic Development Department Director or Director's Designee.					
BIO-6: Crotch's Bumble Bee and Obscure Bumble Bee Avoidance and Minimization Measures	Conduct surveys. Consult with CDFW if Crotch's	Prior to and for duration of	City of Pittsburg Community and Economic	Approve bumble bee biologist for	Prior to ground disturbance.

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BIOLOGICAL RESOURCES					
No more than 1 year prior to the initiation of vegetation removal and grading at the project site, the applicant shall retain an appropriately qualified biologist (see next paragraph) who has been approved by the City of Pittsburg Community and Economic Development Department Director or Director's designee to conduct surveys for Crotch's bumble bee and obscure bumble bee. CDFW has issued preliminary survey guidance for candidate bumble bee species in the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023). Consequently, there are no official requirements for bumble bee surveyor qualifications. If CDFW issues new guidance or protocol for bumble bee surveys, then biologist qualifications and survey methodology for bumble bee surveys shall conform to the CDFW guidance published at the time surveys are performed. Surveys shall be performed by a qualified biologist or entomologist	bumble bee is detected to implement full avoidance measures or seek take coverage. Inform City of Pittsburgh Community and Economic Development Department Director or Director's Designee of consultation outcome. Avoid nests if detected.	ground disturbance.	Development Department Director or Director's Designee.	surveys. Review survey report.	

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BIOLOGICAL RESOURCES					
familiar with the species' behavior and life history and shall include both habitat evaluations and foraging bee surveys consistent with the recommendations in Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species (CDFW 2023). Surveys shall be conducted during the Crotch's bumble bee colony active period of April 1 to September 31 and the obscure bumble bee colony active period of April 20 to August 20, and shall be conducted during the active period prior to the initiation of vegetation removal and grading at the project site. Surveys shall cover all areas of onsite habitat determined by the biologist to be suitable for any of the two target bumble bee species, based on habitat mapping conducted for the project to date. A minimum of 3 to 4 surveys shall be conducted, spaced 2 weeks apart; the total number, timing, and duration of surveys performed shall depend on the biologist's judgment, in consideration of weather, site conditions, and					

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BIOLOGICAL RESOURCES					
protocol requirements. Surveys shall be designed to identify all foraging bumble bees to species level. If Crotch's bumble bee individual or multiple bees are observed onsite during the surveys, the applicant shall consult with CDFW to determine additional measures necessary for full avoidance of Crotch's bumble bee or to seek an Incidental Take Permit under CESA for take authorization. Additional measures may include an additional survey or surveys to be conducted to determine whether a nest or colony is present. All workers shall be required to avoid injury and mortality to bumble bees they may encounter; this requirement shall be discussed during the WEAP training (Mitigation Measure BIO-2) and shall be reiterated to all workers if special-status bumble bees are confirmed onsite. If a Crotch's bumble bee nest or colony is present onsite, the applicant shall consult with CDFW to determine appropriate next steps, and shall					

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BIOLOGICAL RESOURCES					
ensure that the City of Pittsburg Community and Economic Development Department Director or Director's designee is informed of consultation outcomes. At a minimum, the biologist shall establish an avoidance buffer of 100 feet in diameter. No entry into the buffer shall be permitted. The buffer shall be delineated in the field using orange construction fencing or another appropriate medium, under the biologist's oversight, and shall remain in place until the end of the nesting species' gyne flying season, or until the qualified biologist determines that the nest has been abandoned. If the nest cannot be avoided the applicant shall coordinate with the City of Pittsburg Community and Economic Development Department Director or Director's designee and CDFW to obtain an Incidental Take Permit under CESA for take authorization. Survey results, including negative findings, shall be submitted to the City of Pittsburgh Community and					

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BIOLOGICAL RESOURCES					
Economic Development Department and CDFW at least 30 days prior to implementing project-related ground-disturbing activities. At a minimum, the survey report shall include the following information. (1) A description and map of the survey area (2) A habitat assessment focusing on areas that could provide suitable foraging, nesting, and overwintering habitat for Crotch bumble bee or obscure bumble bee (3) Field survey conditions, including name(s) of qualified entomologist(s) and brief qualifications; date(s) and time(s) of survey; survey duration; number of surveyors per acre; number of acres surveyed; amount of time of focused survey; general weather conditions; survey goals; species observed; and photo vouchers of bumble bees (4) Map(s) showing the location of nests/colonies, if any; a description					

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BIOLOGICAL RESOURCES					
of physical (e.g., soil, moisture, slope) and biological (e.g., plant composition) conditions where each nest/colony is found, including native plant composition (e.g., density, cover, and abundance) within impacted habitat (e.g., species list separated by vegetation class; density, cover, and abundance of each species) (5) The measures that will be implemented to avoid adverse effects on the bumble bee species present (6) An assessment of potential project effects on special-status bumble bees during project construction and project operation/maintenance.					
BIO-7: Monarch Butterfly Avoidance and Minimization Measures No more than 2 days prior to the initiation of vegetation trimming or removal for construction, the applicant shall ensure that a qualified biologist approved by the City of Pittsburg	Conduct survey. Protect host plants in place if Monarch eggs, larvae, or pupae are detected. Avoid removing milkweed until	Prior to and for duration of vegetation trimming or removal.	City of Pittsburg Community and Economic Development Department Director or Director's Designee.	Approve qualified biologist. Confirm Applicant/Proponent compliance.	Prior to and for duration of vegetation trimming or removal.

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BIOLOGICAL RESOURCES					
Community and Economic Development Department Director or Director's Designee surveys all areas of potentially suitable habitat for monarch butterfly larval host plants. If host plants are found, the biologist shall survey all host plants for monarch eggs, larvae, and pupae. If not eggs, larvae, or pupae are found, plants may be removed within 2 days. If eggs, larvae, or pupae are present, host plants shall be protected in place until the biologist has determined that the breeding season has concluded, or coordination with the City and USFWS occurs. It is recommended that milkweed removal should be avoided until after the plant has gone to seed.	plants release seeds. Protect host plants in place if Monarch eggs, larvae, or pupae are detected.				
BIO-8: Western Pond Turtle Avoidance and Minimization Measures Prior to the start of construction or operation and maintenance (O&M) activities, the applicant shall ensure that a qualified biologist approved by the City of Pittsburg Community and	Preconstruction survey; biologist to relocate turtles if found in disturbance area.	Prior to the start of construction.	City of Pittsburg Community and Economic Development Department Director or Director's Designee.	Approve qualified biologist. Confirm Applicant/Proponent compliance.	Prior to start of construction.

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BIOLOGICAL RESOURCES					
Economic Development Department Director or Director's Designee conducts a preconstruction survey of the project site and adjacent suitable habitat for western pond turtle. The survey shall be conducted no more than 24 hours prior to the start of work. If individuals are found, the biologist shall relocate them to suitable habitat outside the disturbance area and far enough away that they would not be expected to return. If the biologist determines that exclusion measures are warranted, exclusion measures identified by the biologist shall be implemented to prevent individuals from returning to the project site.					
BIO-9: Nesting Bird Protection If project-related disturbance (e.g., vegetation removal or trimming, clearing/grubbing, grading) commences any time during the nesting/breeding season of native bird species potentially nesting in or near the study area (February 1 through September 15 for most species; January 1 through August 31 for	Preconstruction survey and nest avoidance buffers. Implement nest avoidance buffers if nesting birds are detected. Notify City of Pittsburgh Community and	Prior to and during construction.	City of Pittsburgh Community and Economic Development Department Director or Director's Designee.	Approve qualified biologist. Confirm Applicant/Proponent compliance.	Prior to and during construction.

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BIOLOGICAL RESOURCES					
Golden Eagle; March 15 through September 15 for Swainson's Hawk), a qualified biologist approved by the City of Pittsburg Community and Economic Development Department Director or Director's Designee shall conduct a preconstruction survey using binoculars. The survey shall take place no more than 2 weeks prior to the initiation of work. If active nests are found in areas that could be directly affected or are within 500 feet of disturbance activities and would be subject to prolonged construction-related noise, a no disturbance buffer zone shall be created around active nests for the remainder of the breeding season or until the biologist determines that all young have fledged or that the nest has been abandoned. No entry into the no-activity buffer zone shall be permitted. The no-activity buffer zone shall be delineated in the field by or under the supervision of the biologist, using temporary construction fencing or another suitable low-impact medium. The size of the buffer zone(s) shall be	Economic Development Department Director or Director's Designee of any changes in avoidance buffer size.				

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BIOLOGICAL RESOURCES					
determined by the biologist based on the species involved, the amount of vegetative and other screening between the nest and areas where construction activity shall take place, and, if appropriate, other site-specific factors. The minimum buffer width shall be 50 feet for species other than raptors, and a minimum of 500 feet for raptor species. The biologist may enlarge the minimum buffer width by taking into account factors such as the following: - Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity - Sensitivity of nesting species and behaviors of the individual nesting birds If nesting Swainson's Hawk or Golden Eagle are observed, buffers and other avoidance measures shall conform to Species-Level Measures for these species as laid out in ECC HCP/NCCP					

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BIOLOGICAL RESOURCES					
Section 6.4.3. Buffers stipulated in the ECC HCP/NCCP for these species are as follows. - Swainson's Hawk: nest survey – 1,000 feet; no-project-activity nest protection buffer –1,000 feet. - Golden Eagle: nest survey – not specified; no-project-activity nest protection buffer – 0.5 mile. - If site-specific conditions (e.g., steep topography, dense vegetation) or the nature of the covered activity (e.g., limited activities or limited potential for disturbance due to low noise levels) indicate that a smaller nest protection buffer could be used, the applicant will coordinate with the Conservancy as the ECC HCP/NCCP Implementing Entity (for both species). The City of Pittsburg will be notified of any resulting adjustments to nest protection buffers.					

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BIOLOGICAL RESOURCES					
BIO-10: Nesting Bird Protection (Bald Eagle) The applicant shall retain a qualified biologist approved by the City of Pittsburg Community and Economic Development Department Director or Director's Designee to conduct a preconstruction survey for nesting Bald Eagles prior to the initiation of work at the site (including vegetation removal or trimming, clearing/grubbing, grading, etc.). The survey shall be conducted using binoculars and shall take place no more than 2 weeks prior to the initiation of work. If an occupied or active nest is present, construction-related activity shall be prohibited within 0.5 mile of the nest unless the biologist determines that site-specific conditions or the nature of the construction activity (e.g., dense vegetation, limited noise generation, limited activities) indicate that a smaller buffer could be appropriate or that a larger buffer should be implemented. The biologist shall coordinate with the CDFW and/or	Preconstruction survey and nest avoidance buffers. Implement nest avoidance buffers if nesting birds are detected.	Prior to and during construction.	City of Pittsburgh Community and Economic Development Department Director or Director's Designee.	Approve qualified biologist. Confirm Applicant/Proponent compliance.	Prior to and during construction.

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BIOLOGICAL RESOURCES					
USFWS to determine the appropriate buffer size. The buffer shall be delineated in the field using temporary construction fencing or another suitable low-impact medium. Construction shall be monitored by the qualified biologist to ensure the buffer remains in place and that no construction activities occur within the buffer zone until the biologist has determined that the young have fledged or that the nest has been abandoned.					
BIO-11: Special Status Bat Survey and Protection Prior to the initiation of any activity that could disturb roosting bats (including vegetation trimming/removal), a qualified biologist shall conduct a habitat evaluation for special-status bats, focusing on the needs of pallid bat (<i>Antrozous pallidus</i>), western red bat (<i>Lasiurus frantzii</i> [<i>L. blossevillii</i>], and hoary bat (<i>L. cinereus</i>), the species identified by planning surveys as having potential to be present on the site. Surveys shall	Habitat evaluation; occupancy survey and no-disturbance buffers if necessary.	Prior to and during construction.	City of Pittsburgh Community and Economic Development Department Director or Director's Designee.	Confirm Applicant/Proponent compliance.	Prior to and during construction.

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BIOLOGICAL RESOURCES					
include the entirety of the project site plus a 400-foot wide buffer. If no roosting habitat suitable for these species is present, no further action shall be required. If roosting habitat is present, the following additional requirements shall apply. Any potential roost trees/other potential roosting habitat shall also be considered potential bat maternity roosts. - Before any activities with the potential to disturb roosting bats begin, a City and CDFW approved biologist shall conduct focused surveys for roost occupancy. These shall be conducted at least 2 weeks prior to the start of work and shall include - Daytime visual surveys for bats and evidence of bat presence such as guano or urine staining - Evening emergence and acoustic surveys					

MITIGATION	MONITORING AND REPORTING PROGRAM				
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BIOLOGICAL RESOURCES					
If bat presence is confirmed, the species, number of individuals, and roost type (maternity/non-maternity) shall be documented and reported to the CNDDB. Bats shall not be disturbed or relocated during the surveys Confirmed non-maternity roosts shall be protected by buffers as laid out in the matrix that follows. Buffers shall be delineated in the field with temporary construction fencing or another suitable measure, installed under the qualified biologist oversight. Note that buffer distances vary depending on the species and the type of noise/disturbance involved. The biologist shall coordinate with construction staff to determine the appropriate buffer width; if there is uncertainty, the more conservative buffer width shall prevail.					

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BIOLOGICAL RESOURCES							
Disturbance Source	Pallid Bat	Other Bat Species					
Construction trucks and heavy equipment	120 feet	100 feet					
Smaller vehicles	90 feet	65 feet					
Drilling, trenching, and small equipment	150 feet	150 feet					
Unshielded light source	400 feet	300 feet					
Pedestrian traffic	65 feet	65 feet					
Stationary source of diesel/gasoline exhaust operating for more than 2 minutes	250 feet	250 feet					
Any equipment generating	Buffer shall be determined on a case-by case basis						

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BIOLOGICAL RESOURCES						
high-frequency (20 kHz – 50 kHz) sound (laser survey transits, drilling, etc.), as identified by the biologist by identifying the distance at which high-frequency sound generated by the equipment becomes indistinguishable from background levels, using one of the acoustic methods described on pp. 7-16 – 7-18 of the California Department of Transportation bat mitigation guidelines (H.T. Harvey & Associates 2019), or updated equivalent. If a confirmed roost must be removed or trimmed for construction, or if work must occur within the buffers laid out above, work shall be restricted to daylight hours when the qualified biologist						

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BIOLOGICAL RESOURCES					
has confirmed that the roost is not occupied and shall be overseen by the biologist to prevent injury or mortality. The biologist shall have authority to divert or stop work in the event of excessive risk to bats. Confirmed maternity roosts shall be protected by the same buffers identified above. Maternity roosts shall not be removed unless removal cannot be avoided, and in no case shall a confirmed maternity roost be removed during the breeding/non-volant season (April – August). If removal of a maternity roost is necessary, the applicant shall consult with the City and CDFW to determine appropriate compensatory mitigation such as the provision of bat boxes and shall submit a Bat Habitat Mitigation Plan (Plan) for City and CDFW approval. Consultation and submittal of the Plan shall occur prior to the removal, and the removal shall not take place until the City and CDFW					

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BIOLOGICAL RESOURCES					
has approved the Plan. The applicant shall then be responsible for implementing City and CDFW approved mitigation for removal of bat maternity roost habitat.					
BIO-12: San Joaquin Pocket Mouse Protection All vegetation removal, clearing/grubbing, and grading activities shall be conducted in a uniform direction to allow mobile animals such as San Joaquin pocket mouse the ability to escape the disturbed area into adjacent undisturbed habitat. Project construction activities shall avoid the creation of fragmented islands of habitat where individuals may become trapped, isolated from resources, and at risk from eventual clearing/grading activities.	Conduct vegetation removal and grading in a uniform direction; avoid creating fragmented islands of habitat.	During vegetation removal and grading.	City of Pittsburg Community and Economic Development Department Director or Director's Designee.	Confirm Applicant/Proponent compliance.	During vegetation removal and grading.
BIO-13: American Badger Survey and Protection No more than 4 weeks before the commencement of ground disturbance at the site, a qualified biologist approved by the City of Pittsburg	Survey for American badger den sites. If detected, remove and relocate badgers using CDFW-approved	No more than 4 weeks prior to the beginning of ground disturbance.	City of Pittsburgh Community and Economic Development Department Director or	Approve qualified biologist. Confirm Applicant/Proponent compliance.	Prior to ground disturbance.

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BIOLOGICAL RESOURCES					
Community and Economic Development Department Director or Director's Designee shall conduct a survey for American badger den sites. If an occupied den is found, and young are not present, any badgers present shall be removed from the den either by the use of appropriate exclusionary devices or by trapping and relocation. The removal method shall be approved by CDFW prior to implementation. If trapping and relocation are necessary, it shall be carried out by biologist(s) with all required permits for badger handling. Any trapped badgers shall be relocated to other suitable habitat at least 500 feet outside the project site boundary. Once any badgers are excluded or trapped and relocated, den(s) shall be excavated by hand and backfilled to prevent reoccupation. Exclusion shall continue until the badgers are successfully removed from the site, as determined by the biologist. Badgers shall not be excluded or relocated if it is determined by the	method or implement avoidance buffers.		Director's Designee.		

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BIOLOGICAL RESOURCES					
biologist that young are or may be present. Any occupied dens shall be protected with a 50-foot-wide non-disturbance buffer. The buffer shall be delineated in the field by a qualified biologist, using temporary construction fencing or another appropriate low-impact medium, and shall remain in place until the biologist has determined that the young are no longer dependent on their mother and den site. No entry into the buffer area shall be permitted.					

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
Impact 5.5.2-a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?					
Impact 5.5.2-b. Would the project cause a substantial adverse change in the significance of a unique archaeological resource pursuant to California Code of Regulations, title 14, §15064.5?					
Impact 5.5.2-c. Would the project disturb any human remains, including those interred outside of formal cemeteries?					
Impact 5.5.2-d. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.					
CUL-1: Worker Environmental Awareness Program. Prior to the commencement of construction, the applicant shall retain a qualified archaeological specialist to prepare a Worker Environmental Awareness Program (WEAP). The name and credentials of the Secretary of the Interior qualified archaeological specialist shall be submitted to the Director or Director's designee of the City of Pittsburg Planning Division for review and approval no less than 14 days prior to the commencement of the preparation of the WEAP.	The applicant shall retain a Secretary of the Interior qualified archaeologist specialist to prepare a WEAP and submit the name and credentials of the qualified archaeologist to the City of Pittsburg Planning Director or Director's designee for review and approval.	The applicant shall submit the credentials to the City of Pittsburg no less than 14 days prior to commencement of preparing the WEAP.	City of Pittsburg Planning Director or Director's designee.	Review and, if qualified, approve the credentials of the archaeological specialist.	Prior to preparing the WEAP.

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
The WEAP shall be designed to assure that construction workers are aware of the obligation to protect and preserve valuable archaeological and Native American resources. The WEAP training shall be submitted to the Director or Director's designee of the City of Pittsburg Planning Division at least 60 days prior to the start of construction for review and approval. This program will be provided to all construction workers via a recorded presentation and will include a discussion of applicable laws and penalties under the laws; samples or visual aids of resources that could be encountered in the project site and vicinity; instructions regarding the need to halt work in the vicinity of any potential archaeological and Native American resources encountered; and measures to notify their supervisor, the applicant, and the archaeological specialist.	The WEAP shall be designed to assure that construction workers are aware of the obligation to protect and preserve valuable archaeological and Native American resources. The applicant or their designee shall submit the WEAP to the City of Pittsburg Planning Director or Director's designee for review and approval.	The applicant shall submit WEAP to the City of Pittsburg at least 60 days prior to the start of construction for review and approval.	City of Pittsburg Planning Director or Director's designee.	Review and, if the WEAP is sufficiently designed to assure that construction workers are aware of the obligation to protect and preserve valuable archaeological and Native American resources, approve the WEAP.	

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
	The applicant or their designee shall provide WEAP training to all construction workers via a recorded presentation per CUL-1 .	Prior to construction.	City of Pittsburg Planning Director or Director's designee.	Document WEAP compliance training.	Prior to construction.
CUL-2: Cultural Resources Monitoring Plan. Prior to commencement of construction, the qualified archaeological specialist will develop a Cultural Resources Monitoring Plan (CRMP) to guide the procedures and protocols of a mitigation-monitoring program that shall be implemented within the project boundaries during all ground disturbing activities. The CRMP will outline the project schedule; address the methodology for grading activity observation by the monitors; and shall include a treatment plan, based on the project mitigation measures and conditions of approval, should any cultural resources be identified. The extent	The applicant shall retain a qualified archaeological consultant who shall prepare a CRMP and submit the CRMP to the Director or Director's designee of the City of Pittsburg Planning Division for review and approval.	The CRMP shall be submitted to the City of Pittsburg at least 60 days prior to the start of construction.	City of Pittsburg Planning Director or Director's designee.	Review and, if the CRMP treatment plan is written sufficiently in accordance with CUL-2 , approve the CRMP.	Prior to construction and/or any ground disturbing activities.

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
of the monitoring program will be dependent upon the project duration and complexity of ground disturbing activities. The CRMP shall be submitted to the Director or Director's designee of the City of Pittsburg Planning Division at least 60 days prior to the start of construction for review and approval.					
CUL-3: Archaeological Monitoring. Prior to commencement of construction, the applicant will secure the services of a qualified archaeological specialist to observe all new ground disturbing activity. Additionally, if requested by a consulting tribe, the applicant will secure the services of a Native American monitor to observe all new ground disturbing activity. Preference in selecting Native American monitors shall be given to members of a local consulting tribe.	The applicant shall secure the services of a qualified archaeological consultant to observe all new ground disturbing activity and, if requested by a consulting tribe, the services of a Native American monitor per CUL-3 .	Prior to construction.	City of Pittsburg Planning Director or Director's designee.	Ensure and document compliance with CUL-3 .	Prior to construction.
CUL-4: Unanticipated Discovery. If archaeological resources are encountered during excavation or grading of the site, all activity within	In the event of an unanticipated discovery, all activity within a	During construction, upon inadvertent discovery of any	City of Pittsburg Planning Director or Director's designee.	Review the recommendation(s) of the qualified archaeologist in	During the construction phase.

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
a 100-foot radius of the find shall be stopped, the Director or Director's designee of the City of Pittsburg Planning Division shall be notified, and a qualified archaeologist will examine the find. The qualified archaeologist will evaluate the find to determine if they meet the definition of a historical, unique archaeological, or tribal cultural resource and make appropriate recommendations regarding the disposition of such finds prior to issuance of building permits for any construction occurring within the above-referenced 100-foot radius. If the finds do not meet the definition of a historical, unique archaeological, or tribal cultural resource, no further study or protection is necessary prior to project implementation. If the find does meet the definition of a historical, unique archaeological, or tribal cultural resource, then it will be avoided by project activities. If avoidance is not feasible, adverse effects to such resources will be	100-foot radius of the find shall be stopped, the City of Pittsburg Planning Director or Director's designee shall be notified, and a qualified archaeologist will examine the finds.	archaeological resource.		accordance with CUL-4 and approve recommendations if appropriate.	
	If it is determined that the find does not meet the definition of a historical, unique archaeological, or tribal cultural resource, no further study or protection is necessary prior to project implementation. The qualified archaeologist shall notify the City of Pittsburg Planning Director or Director's designee.	During the construction phase.	City of Pittsburg Planning Director or Director's designee.	Authorize construction to resume in the vicinity of the find if the find does not meet the definition of a historical, unique archaeological, or tribal cultural resource.	During the construction phase.

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
mitigated in accordance with the recommendations of the qualified archaeologist. Recommendations may include collection, recordation, and analysis of any significant cultural materials. A report of findings documenting any data recovery shall be submitted to the Director or Director's designee of the City of Pittsburg Planning Division, Native American Heritage Commission (tribal cultural resources), and the Northwest Information Center.	If it is determined that the find does meet the definition of a historical, unique archaeological, or tribal cultural resource, then it will be avoided by project activities. If avoidance is not feasible, adverse effects to such resources will be mitigated in a report of findings documenting any data recovery. This report shall be submitted to the Director or Director's designee of the City of Pittsburg Planning Division, Native American Heritage Commission (tribal cultural resources),	During the construction phase.	City of Pittsburg Planning Director or Director's designee.	If avoidance is not feasible for a find meeting the definition of a historical, unique archaeological, or tribal cultural resource, ensure preparation of a report of findings documenting any data recovery, and Document submittal of the report to the Native American Heritage Commission (tribal cultural resources), and the Northwest Information Center.	During the construction phase.

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
	and the Northwest Information Center.				
CUL-5: Treatment of Human Remains. If human remains are discovered during excavation or grading of the site or other construction activities, all activity within a 100-foot radius of the find will be stopped. The Contra Costa County Coroner shall be notified immediately and will make a determination as to whether the remains are of Native American origin or whether an investigation into the cause of death is required. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendant(s) (MLD), the descendant(s) will make recommendations regarding the treatment and disposition with appropriate dignity of the Native American human remains (including the treatment of grave goods),	Immediately stop all construction within a 100-foot radius of the discovery of human remains. Notify the Contra Costa County Coroner and the City of Pittsburg Planning Director or Director's designee.	During the construction phase. If the remains are determined to be Native American, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours of the identification. Once the NAHC identifies the most likely descendant(s) (MLD), the descendant(s) will make recommendations regarding the	City of Pittsburg Planning Director or Director's designee.	Ensure preparation of and authorize implementation of the treatment plan by the Secretary of the Interior-qualified archaeologist, based on the recommendations of the MLD, if the remains are determined to be of Native American origin. Ensure that a report of findings documenting any data recovery shall be submitted to the CEC and the Northwest Information Center.	During the construction phase.

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CULTURAL AND TRIBAL CULTURAL RESOURCES					
which will be implemented in accordance with section 15064.5(e) of the California Code of Regulations, Title 14. The Secretary of the Interior-qualified archaeologist will recover scientifically valuable information, as appropriate and in accordance with the recommendations of the MLD. A report of findings documenting any data recovery shall be submitted to the CEC and the Northwest Information Center.		treatment and disposition of the Native American human remains.		Authorize construction to resume in the vicinity of the find as appropriate if the remains are determined to not be of Native American origin, and the Coroner has determined that an investigation to the cause of death is not required.	

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GEOLOGY AND SOILS (PALEONTOLOGY)					
Impact 5.7-a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii. Strong seismic ground shaking? iii. Seismic-related ground failure, including liquefaction? iv. Landslides?					
Impact 5.7-b. Result in substantial soil erosion or the loss of topsoil?					
Impact 5.7-c. Be located on geologic units or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?					
Impact 5.7-d. Be on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2022), creating substantial direct or indirect risks to life or property?*					
GEO-1. As required in the California Building Code (CBC) Sections 1803.2 to 1803.5, the project applicant shall conduct a geotechnical investigation for the project site. In accordance with the California Business and Professions Code and CBC Section 1803.1, the geotechnical investigations shall be conducted by a registered design professional. As described in the CBC Section 1803.6, the applicant shall write a geotechnical report that documents the results from the geotechnical investigations and	Submit geotechnical and geohazard report to the City of Pittsburg Planning Director or Director's designee. Ensure that final design, construction, and grading follows all recommendations in the geotechnical and geohazard report.	Prior to approval of final design and commencement of grading and construction.	City of Pittsburg Planning Director or Director's designee.	Complete required geotechnical and geohazard investigations and write geotechnical and geohazard report. Follow all report recommendations for project final design, grading, and construction.	Prior to approval of project final design. During grading and construction.

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GEOLOGY AND SOILS (PALEONTOLOGY)					
provides project design recommendations to mitigate geologic hazards. In accordance with the CBC Section 1803.1, the geotechnical report shall be prepared and signed by a California registered geotechnical engineer, certified engineering geologist, and a registered geophysicist, where applicable. In accordance with the CBC Section 1803.7, the geotechnical investigation report shall include a geohazards report that considers seismic hazards. The geohazard report shall identify site-specific geologic and seismic conditions that may require mitigation. The report shall recommend project design criteria to mitigate geologic and seismic hazards. The applicant shall incorporate recommendations for project design criteria into the final project design. An appropriately qualified California-certified licensed engineering geologist, in consultation with a California registered geotechnical engineer, shall prepare the geohazards portion of the geotechnical report.					

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GEOLOGY AND SOILS (PALEONTOLOGY)					
Impact 5.7-f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?					
PAL-1. The applicant shall provide the Director or Director's designee of the City of Pittsburg Planning Division) with the resume, qualifications, and contact information of its paleontological resource specialist (PRS) for review and approval. The PRS's resume shall demonstrate to the satisfaction of the Director or Director's designee of the City of Pittsburg Planning Division the appropriate education and experience to accomplish the required paleontological resource tasks. The PRS's resume shall also include the names and phone numbers of references that can be contacted to verify information. As determined by the Director or Director's designee of the City of Pittsburg Planning Division, the PRS shall meet the minimum qualifications for a Qualified Professional Paleontologist as defined in the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010). The qualifications of the PRS shall include the following: 1. A graduate degree in paleontology or geology, and/or a publication record in peer	Secure the services of a qualified PRS and PRMs.	Prior to the start of ground disturbance activities.	City of Pittsburg Planning Director or Director's designee.	Verify qualifications of the PRS and PRMs.	Prior to the start of ground disturbance activities.

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GEOLOGY AND SOILS (PALEONTOLOGY)					
reviewed journals; and demonstrated competence in field techniques, preparation, identification, curation, and reporting in the state or geologic province in which the project occurs. An advanced degree is less important than demonstrated competence and regional experience. 2. At least three years of paleontological resource mitigation and field experience in California and at least one year of experience leading paleontological resource mitigation and field activities. 3. Proficiency in recognizing fossils in the field and determining their significance. 4. Expertise in local geology, stratigraphy, and biostratigraphy. 5. Experience collecting vertebrate fossils in the field. The applicant shall ensure that the PRS obtains qualified paleontological resource monitors (PRMs) to monitor as they deem necessary on the project. PRMs shall have the equivalent of the following qualifications: 1. B.S. or B.A. degree in geology or paleontology and a minimum of one year of					

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GEOLOGY AND SOILS (PALEONTOLOGY)					
relevant paleontological resource monitoring experience in California; or 2. A.S. or A.A. in geology, paleontology, or biology and a minimum of four years of relevant paleontological resource monitoring experience in California; or 3. Enrollment in upper division classes pursuing a bachelor's degree or a more advanced degree in the field of geology or paleontology and a minimum of three years of relevant paleontological resource monitoring experience in California. 4. Demonstrated proficiency in recognizing various types of fossils, in collection methods, and in other paleontological field techniques. If the approved PRS is replaced prior to completion of project mitigation and submittal of the paleontological resources report (PRR), the applicant shall obtain approval for the replacement PRS. The applicant shall keep resumes on file for the qualified PRSs and PRMs. The PRM's resume shall include the names and contact information of references. If a PRM is replaced, the resume of the replacement PRM					

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GEOLOGY AND SOILS (PALEONTOLOGY)					
shall also be provided to the Director or Director's designee of the City of Pittsburg Planning Division for review and approval.					
PAL-2. The applicant shall provide the PRS and the CPM, for review and approval, maps and drawings showing the footprint of the power plant, construction laydown areas, and all related facilities. Maps shall identify all areas of the project where ground disturbance is anticipated. If the PRS requests enlargements or strip maps for linear facility routes, the applicant shall provide copies to the PRS and Director or Director's designee of the City of Pittsburg Planning Division. The site grading plan and the plan and profile drawings for the utility lines would be acceptable for this purpose. The plan drawings must show the location, depth, and extent of all ground disturbances and be at a scale between 1 inch = 40 feet (1:480) and 1 inch = 100 feet (1:1,200). If the footprint of the project or its linear facilities change, the applicant shall provide maps and drawings reflecting those changes to the PRS and Director or Director's designee of the City of Pittsburg Planning Division. If construction of the project proceeds in phases, maps and drawings may be submitted prior to the start of each phase. A letter	Provide the PRS and Director or Director's designee of the City of Pittsburg Planning Division maps and drawings showing the footprint of the power plant, construction laydown areas, and all related facilities. Ensure the PRS and PRMs consult with the project superintendent and construction field manager at least weekly to confirm the	Prior to the start of construction. Until ground disturbance activities are complete.	City of Pittsburg Planning Director or Director's designee.	Review and approve maps and drawings showing the project footprint.	Prior to the start of construction.

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GEOLOGY AND SOILS (PALEONTOLOGY)					
identifying the proposed schedule of each project phase shall be provided to the PRS and Director or Director's designee of the City of Pittsburg Planning Division. Before work commences on affected phases, the applicant shall notify the PRS and Director or Director's designee of the City of Pittsburg Planning Division of any construction phase scheduling changes. At a minimum, the applicant shall ensure that the PRS or PRM consults weekly with the project superintendent and construction field manager to confirm area(s) to be worked the following week, until ground disturbance is completed.	areas that will be worked in the following week.				
PAL-3. The applicant shall ensure that the PRS prepares a Paleontological Resources Monitoring and Mitigation Plan (PRMMP) and submits it to the Director or Director's designee of the City of Pittsburg Planning Division for review and approval. Approval of the PRMMP by the Director or Director's designee of the City of Pittsburg Planning Division shall occur prior to any ground disturbance. The PRMMP shall function as the formal guide for monitoring, collecting, sampling, and reporting activities, and may be modified with approval. The PRMMP shall be used as the basis of discussion when on-site decisions or changes are proposed. Copies of the PRMMP shall include all updates and reside with the PRS,	The PRS shall prepare PRMMP and submit it to Director or Director's designee of the City of Pittsburg Planning Division for review and approval.	Prior to the start of ground disturbance activities.	City of Pittsburg Planning Director or Director's designee.	Review and approve the PRMMP.	Prior to the start of ground disturbance activities.

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GEOLOGY AND SOILS (PALEONTOLOGY)					
each PRM, the project's on-site manager, and the Director or Director's designee of the City of Pittsburg Planning Division. The PRMMP shall be developed in accordance with the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (SVP 2010). The PRMMP shall include, but not be limited to, the following: 1. Procedures for, and assurance, that those procedures would be followed in the performance and sequence of project-related tasks, such as any literature searches, pre-construction surveys, worker environmental training, field work, flagging or staking, construction monitoring, mapping and data recovery, fossil preparation and collection, identification and inventory, preparation of final reports, and transmittal of materials for curation. 2. Identification of the person(s) expected to assist with each of the tasks required by the PRMMP and these MMs. 3. A thorough discussion of the geologic units expected to be encountered, the location and depth of the units relative to the project					

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when known, and the known sensitivity of those units based on the occurrence of fossils either in that unit or in correlative units. 4. An explanation of why sampling is needed, a description of the sampling methodology, and how much sampling is expected to take place and in which geologic units. This should include descriptions of the sampling procedures that shall be used for fine-grained and coarse-grained units. 5. A discussion of the locations where monitoring of project construction activities is deemed necessary, and a proposed plan for monitoring and sampling at these locations. 6. A discussion of procedures to be followed: (a) in the event of a significant fossil discovery, (b) stopping construction, (c) resuming construction, and how notifications shall be performed. 7. A discussion of equipment and supplies necessary for collection of fossil materials and any specialized equipment needed to prepare, remove, load, transport, and					

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GEOLOGY AND SOILS (PALEONTOLOGY)					
analyze large-sized fossils or extensive fossil deposits. 8. Procedures to inventory, prepare, and deliver fossil materials for curation in a retrievable storage collection at a public repository or museum that meet the Society of Vertebrate Paleontology's standards and requirements for the curation of paleontological resources. 9. Identification of the institution that has agreed to receive data and fossil materials collected, requirements or specifications for materials delivered for curation and how they shall be met, and the name and phone number of the contact person at the institution. 10. A copy of the paleontological resources MMs. 11. A copy of the daily monitoring log form.					
PAL-4. Prior to ground disturbance the applicant and the PRS shall prepare an approved Worker Environmental Awareness Program (WEAP). The WEAP shall address the possibility of encountering paleontological resources in the field, the sensitivity and importance of these resources, and legal obligations to preserve and protect those resources. The purpose of the	The PRS shall prepare a WEAP for Director or Director's designee of the City of Pittsburg Planning Division review and approval.	Prior to the start of ground disturbance activities.	City of Pittsburg Planning Director or Director's designee.	Review and approve the WEAP.	Prior to the start of ground disturbance activities.

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WEAP is to train project workers to recognize palaeontologic resources and identify procedures they must follow to ensure there are no impacts to sensitive palaeontologic resources. The WEAP shall include: 1. A discussion of applicable laws and penalties under the law. 2. Good quality photographs or physical examples of fossils expected to be found in units of high palaeontologic sensitivity at, or near, the project site. 3. Information that the PRS and PRM have the authority to stop or redirect construction in the event of a discovery or unanticipated impact on a paleontological resource. 4. Instruction that employees are to stop or redirect work in the vicinity of a find and to contact their supervisor and the PRS or PRM. 5. An informational brochure that identifies reporting procedures in the event of a discovery. 6. A WEAP certification of completion form signed by each worker indicating that they have received the training.					

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GEOLOGY AND SOILS (PALEONTOLOGY)					
7. A sticker that shall be placed on hard hats indicating that environmental training has been completed. The applicant shall submit the training script and, if the applicant is planning to use a video for training, a copy of the training video, with the set of reporting procedures for workers to follow that shall be used to present the WEAP and qualify workers to conduct ground disturbing activities that could impact paleontological resources.					
PAL-5. No worker shall excavate or perform any ground disturbance activity prior to receiving - approved WEAP training by the PRS, unless specifically approved by the Director or Director's designee of the City of Pittsburg Planning Division. Prior to project ground disturbance, the following workers shall be WEAP trained by the PRS in-person: project managers, construction supervisors, foremen, and all general workers involved with or who operate ground-disturbing equipment or tools. Following the start of ground disturbing activities and after the initial WEAP training conducted prior to ground disturbance, an approved video or in-person training may be used for new employees. If a	The PRS shall provide approved WEAP training to workers.	Prior to the start of ground disturbance activities.	City of Pittsburg Planning Director or Director's designee.	Review and approve the WEAP.	Prior to the start of ground disturbance activities.

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video is used a qualified trainer shall be present to monitor training and respond to questions. The training program may be combined with other training programs prepared for cultural and biological resources, hazardous materials, or other areas of interest or concern. A WEAP certification of completion form shall be used to document who has received the required training.					
PAL-6. The applicant shall ensure that the PRS and PRM(s) monitor, consistent with the PRMMP, all construction-related grading and excavation in areas where potential fossil-bearing materials were identified, both at the site and along any constructed linear facilities associated with the project. If the PRS determines full-time monitoring is not necessary in locations that were identified as potentially fossil bearing in the PRMMP, the applicant shall notify and seek the concurrence with the Director or Director's designee of the City of Pittsburg Planning Division. The applicant shall ensure that the PRS and PRM(s) have the authority to stop or redirect construction if paleontological resources are encountered. The applicant shall ensure that there is no interference with monitoring activities	The PRS and PRMs shall monitor ground disturbing activities, consistent with the PRMMP. The PRS shall keep daily monitoring logs. If suspected fossils are encountered, workers shall halt ground disturbing activities within 50 feet of any	During ground disturbance activities.	City of Pittsburg Planning Director or Director's designee.	Review of daily monitoring logs.	During ground disturbance activities.

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unless directed by the PRS. Monitoring activities shall be conducted as follows: Any change of monitoring from the accepted schedule in the PRMMP shall be proposed in a letter or email from the PRS and the applicant to the Director or Director's designee of the City of Pittsburg Planning Division prior to the change in monitoring. The letter or email shall include the justification for the change in monitoring and be submitted to the CPM for review and approval. The applicant shall ensure that the PRM(s) keep a daily monitoring log of paleontological resource activities. The name and contact information of PRM(s) and PRS who were making field observations shall be included in the daily log. The PRS may informally discuss paleontological resource monitoring and mitigation activities with the Director or Director's designee of the City of Pittsburg Planning Division at any time. The applicant shall ensure that the PRS notifies the Director or Director's designee of the City of Pittsburg Planning Division within 24 hours of the occurrence of any incidents of non-compliance with any paleontological resources MMs. The PRS shall recommend corrective	potential fossil find. The PRS or applicant shall notify the Director or Director's designee of the City of Pittsburg Planning Division within 24 hours.				

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action to resolve the issues or achieve compliance with the MMs. For any significant paleontological resources encountered, either the applicant or the PRS shall notify the Director or Director's designee of the City of Pittsburg Planning Division within 24 hours. If the resources are encountered on a weekend or holiday, notification shall occur on the morning of the next business day. In the event construction has been stopped because of a paleontological find, such notification shall be provided as soon as practical, but not later than 24 hours after a stop work order has been issued. For excavations planned in material that is classified as having a moderate to high paleontological sensitivity prior to construction additional precautions may be required. Should excavation methods be proposed that would preclude effective monitoring and examination of paleontological resources encountered during excavation, appropriate mitigation involving education of the public about the lost resources shall be proposed in the PRMMP.					
PAL-7. The applicant shall ensure preparation of a paleontological resources report (PRR) by the designated PRS. The PRR shall be prepared	The PRS shall prepare a PRR.	After completion of ground	City of Pittsburg Planning Director or	Review and approve the PRR.	After completion of ground

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following the completion of ground-disturbing activities. The PRR shall include an analysis of the collected fossil materials and related information and shall be submitted to the Director or Director's designee of the City of Pittsburg Planning Division for approval. The report shall include, but not be limited to, a description and inventory of recovered fossil materials, a map showing the location of paleontological resources encountered and the PRS's description of sensitivity and significance of those resources, and notes regarding if and how the fossil material was curated in accordance with PAL-3. Any portions of this report that involve any independent judgment or analysis of the earth's crust, and the rocks and other materials which compose it, must be done by or under the responsible charge of a California licensed Professional Geologist.		disturbance activities.	Director's designee.		disturbance activities.
PAL-8. The applicant, through the designated PRS, shall ensure that all components of the PRMMP are adequately performed, including collection of fossil material, preparation of fossil material for analysis, analysis of fossils, identification and inventory of fossils, preparation of fossils for curation, and delivery	The PRS shall ensure that the PRMMP is implemented and that recovered fossils are	After completion of ground disturbance activities.	City of Pittsburg Planning Director or Director's designee.	Verify the PRMMP is implemented. Verify recovered fossils are appropriately transferred to an appropriate	After completion of ground disturbance activities.

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GEOLOGY AND SOILS (PALEONTOLOGY)					
for curation of all significant paleontological resource materials encountered and collected during project construction. The applicant shall pay all curation fees charged by the museum for fossil material collected and curated because of paleontological mitigation. The applicant shall also provide the curator with documentation showing the applicant irrevocably and unconditionally donates, gives, and assigns permanent, absolute, and unconditional ownership of the fossil material.	appropriately transferred to an appropriate museum for curation.			museum for curation.	

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GREENHOUSE GAS EMISSIONS					
Impact 5.8-a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?					
Impact 5.8-b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?					
GHG-1: Use renewable diesel fuel. The applicant shall use renewable diesel for 100 percent of total energy use by the emergency backup generators and only use ultra-low sulfur diesel (ULSD) as a secondary fuel in the event of supply challenges or disruption in obtaining renewable diesel. The applicant shall provide documentation of renewable diesel supply challenges or disruptions to the director, or director's designee, of the City of Pittsburg Community and Economic Development Department within 10 calendar days of occurrence and demonstrate a good faith effort to comply with the requirement and that compliance is not practicable. The applicant shall provide an annual report of the status of procuring and using renewable diesel to the director, or director's designee, of the City of Pittsburg Community and Economic	Provide documentation to the director of the City of Pittsburg Community and Economic Development Department or director's designee to verify that renewable diesel is used for 100 percent of total energy use by the generators or demonstrate a good faith effort to comply with the requirement and that compliance is not practicable.	Following commencement of project operation then annually for the life of the project and within 10 days of renewable diesel supply disruption.	City of Pittsburg Community and Economic Development Department Director or Director's designee	Review documentation and verify the project is using renewable diesel.	Following commencement of project operation then annually for the life of the project and within 10 days of renewable diesel supply disruption

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GREENHOUSE GAS EMISSIONS					
Development Department demonstrating compliance with the mitigation measure.					
GHG-2: Procure carbon-free electricity supply. The applicant shall participate in PG&E's Renewable Energy Program or other renewable energy program that accomplishes the same objective as the PG&E Renewable Energy Program for 100 percent carbon-free electricity, or enter into agreement with the Pittsburg Power Company (PPC) to procure 100 percent carbon-free electricity on behalf of the project, or purchase renewable energy credits or similar instruments that accomplish the same goals of 100 percent carbon-free electricity. During operation, the applicant shall provide documentation to the director, or director's designee, of the City of Pittsburg Community and Economic Development Department of initial enrollment and shall submit annual reporting to the City documenting either continued participation in PG&E's Renewable Energy Program or documentation that	Provide documentation to the director of the City of Pittsburg Community and Economic Development Department or director's designee of enrollment and annual reporting of continued participation in PG&E's Renewable Energy Program or documentation that alternative measures continue to provide 100 percent carbon-free electricity as verified by an	Prior to local approval of project entitlements and during the operational phase.	City of Pittsburg Community and Economic Development Department Director or Director's designee.	Review documentation and verify that the project is enrolled in PG&E's Renewable Energy Program or other acceptable instrument continue to provide 100 percent carbon-free electricity.	Upon commencing project operation and annually for the life of the project.

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GREENHOUSE GAS EMISSIONS					
alternative measures continue to provide 100 percent carbon-free electricity as verified by an independent third-party auditor specializing in greenhouse gas emissions.	independent third-party auditor specializing in greenhouse gas emissions.				

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HAZARDS AND HAZARDOUS MATERIALS					
Impact 5.9-a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?					
HAZ-1. Prior to issuance of grading permits, a lead-based paint (LBP) visual inspection and pre-demolition survey, including sampling and testing of suspect materials, shall be conducted near former structures to assess for possible lead-in-soil due to possible use of former LBP. The survey shall be conducted by a contractor with California Department of Public Health (CDPH) Lead Related Construction (LRC) certified personnel as required by CDPH regulations. The findings of the LBP survey shall be submitted to the appropriate agencies per the requirements of the Site Management Plan (SMP).	Conduct an LBP visual inspection and a pre-demolition LBP survey near the former structures. Prepare a report of LBP survey findings and submit it to the City of Pittsburg. If lead in soil or LBP materials are identified, also submit report to the Contra Costa County Health Services Hazardous Materials Department.	Prior to issuance of grading permits, and prior to start of Project construction.	City of Pittsburg. If lead in soil or LBP is identified, Contra Costa County Health Services Hazardous Materials Department.	Review submitted documentation/report to verify presence of LBP materials or contaminated soil onsite after pre-demolition survey.	After LBP materials and lead in soil pre-demolition survey and prior to issuance of grading permits. Prior to start of Project construction.
Impact 5.9-c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?					

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HAZARDS AND HAZARDOUS MATERIALS					
HAZ-2. Prior to issuance of demolition or grading permits, the project applicant shall prepare a SMP to guide activities during demolition, excavation and grading, and initial construction to ensure that potentially contaminated soils and unexploded ordinance (UXO) are identified, characterized, removed, and disposed of properly. The purpose of the SMP is to establish appropriate management practices for handling impacted soil, UXO, or other materials that may be encountered during construction activities. The SMP shall be reviewed and approved by the City of Pittsburg prior to any work on the site, including prior to soil and groundwater sampling. The SMP shall be implemented during project demolition and construction and shall include, but shall not be limited to, the following components: A detailed discussion of the site background.	Prepare and implement a SMP. Submit the SMP for review and approval to the City of Pittsburg. If no soil or groundwater contaminants exceeding applicable Environmental Screening Levels (ESLs) are identified, submit the SMP for review and approval to the City of Pittsburg. If soil or groundwater contaminants exceeding applicable ESLs are identified,	Prior to issuance of demolition or grading permits, prior to soil and groundwater sampling, and prior to the start of and during construction.	If no soil or groundwater contaminants exceeding applicable ESLs are identified, City of Pittsburg. If soil or groundwater contaminants exceeding applicable ESLs are identified, California Department of Toxic Substances Control under a Site Cleanup Program, State Water Resources Control Board (SWRCB), or the Contra Costa County Health Services Hazardous	Review and approve submitted SMP. Review submitted documentation/report of results of soil and groundwater site characterization to verify presence or absence and levels of contamination. Provide regulatory oversight for site characterization and remediation in the event of identification of contaminated soil or groundwater. Provide verification of regulatory compliance to City of Pittsburg or the Contra Costa County Health Services Hazardous Materials Department.	Prior to issuance of any grading, demolition, or building permits, prior to and during handling and removal of any identified contaminated soil or groundwater, and prior to the start of and during construction.

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HAZARDS AND HAZARDOUS MATERIALS					
Prior to any onsite work, Health and Safety Plans (HSPs) for the Project shall be prepared by all contractors and subcontractors that will be working at the project site and incorporated in the SMP. The HSPs shall be prepared by a Certified Qualified Professional (CSP), such as an industrial hygienist, Professional Engineer or Professional Geologist. The HSPs shall be specific to each of the contractors' or subcontractors' scopes of work and based upon the known environmental conditions for the site prior to project construction. The HSPs shall be updated as needed if site conditions change significantly, such as the discovery of contaminated soil or groundwater or UXO. The HSPs shall be approved by the City of Pittsburg, and implemented under the direction of a Site Safety and Health Officer. Copies of the approved HSPs shall be kept at the project site.	obtain regulatory oversight from the agency with jurisdictional authority for characterization and remediation oversight. Submit the SMP and planned remedial measures for review and approval to the oversight agency. Submit a copy of the SMP to the Contra Costa County Health Services Hazardous Materials Department. The City of Pittsburg and Contra Costa County shall notify the local school of the SMP		Materials Department.		

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HAZARDS AND HAZARDOUS MATERIALS					
• Description of soil and groundwater testing, which shall include (but not be limited to) the collection of soil samples and groundwater samples and analyses for metals, Total Petroleum Hydrocarbons • (TPH), Volatile Organic Compounds • (VOCs) and any other contaminants identified in previous environmental studies in the soil and groundwater and lead and organochlorine pesticides in the soil to verify presence of absence of remnant or unknown soil or groundwater contamination. This soil and groundwater characterization shall be performed prior to initiation of project construction. • Protocols for sampling at the site to verify or rule out vapor encroachment conditions at the former leaking underground storage tank (LUST) area and/or	findings and potential effects.				

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HAZARDS AND HAZARDOUS MATERIALS					
proposed future buildings and, if verified, procedures for mitigation or remediation of vapor encroachment conditions. Note that the location of the former LUST is currently unknown but the RWQCB is anticipated to have documentation with exhibits of the former LUST location (requires additional record request to RWQCB). • Protocols for sampling of soil and groundwater to facilitate the profiling of the soil and groundwater for appropriate off-site disposal or reuse, and for construction worker safety, dust mitigation during demolition and construction and potential exposure of contaminated soil or groundwater to future users of the site prior to project construction. • Procedures to be undertaken in the event that contamination is identified above action levels or previously unknown					

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HAZARDS AND HAZARDOUS MATERIALS					
contamination is discovered prior to or during project demolition or construction; • Notification procedures if previously undiscovered significantly impacted soil or groundwater, or free fuel product, or UXO is encountered during demolition or construction; • Procedures to be undertaken in the event that UXO is identified. • Sampling and laboratory analyses of excess soil requiring disposal at an appropriate off-site waste disposal facility; • Procedures and protocols for the safe storage, stockpiling, and disposal of contaminated soils or UXO; and • Protocols to manage groundwater, including segregation or treatment of contaminated groundwater, if necessary, that may be					

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HAZARDS AND HAZARDOUS MATERIALS					
encountered during trenching or subsurface excavation activities. - If there are no contaminants identified on the project site that exceed applicable screening levels for construction workers published by the Regional Water Quality Control Board (RWQCB), California Department of Toxic Substances Control (DTSC), or California Environmental Protection Agency, the SMP does not need to be submitted to an oversight agency and instead only needs to be submitted to the City of Pittsburg for approval prior to issuance of a grading permit and prior to conducting any demolition activities. - If contaminants are identified at concentrations exceeding applicable screening levels, the project applicant shall obtain regulatory oversight from Contra Costa County Department of Environmental Health or the DTSC under a Site Cleanup Program as					

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HAZARDS AND HAZARDOUS MATERIALS					
applicable. The SMP and planned remedial measures shall be reviewed and approved by the Contra Costa County Department of Environmental Health Hazardous Materials Compliance Division or DTSC. A copy of the SMP shall be submitted to the city of Pittsburg. Copies of the approved SMP shall be kept at the project site. Any contaminated soils identified by testing conducted in compliance with the SMP and found in concentrations above established thresholds shall either be removed and disposed of according to California Hazardous Waste Regulations or the contaminated portions of the site shall be capped beneath the planned development under the regulatory oversight of the Contra Costa County Hazardous Materials Compliance Division or the DTSC. Contaminated soil excavated from the site shall be hauled off-site					

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HAZARDS AND HAZARDOUS MATERIALS					
and disposed of at a licensed hazardous materials disposal site.					
Impact 5.9-d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?					
HAZ-3. Prior to the issuance of grading permits, soil, soil gas, and/or groundwater samples shall be taken in areas where disturbance is anticipated to determine if contaminated soils or groundwater with concentrations above ESLs for construction workers and commercial users may be present due to historical uses including agricultural, shooting range, golf course, and LUST. Sampling shall be conducted per the protocols outlined in the approved project SMP. Once the soil sampling analysis is complete, a report of the findings shall be submitted to the appropriate agencies per the requirements of the SMP. Any contaminated soils identified by testing conducted in compliance with the SMP and found in concentrations above ESLs shall either be removed and disposed of according to	Conduct soil, soil gas, and/or groundwater sampling in areas of anticipated disturbance per the approved SMP. Analyze samples to assess contaminant concentrations relative to applicable ESLs. Prepare a report of the findings and submit it to the City of Pittsburg. If soil or groundwater	Prior to issuance of demolition or grading permits, and prior to start of Project construction.	If no soil or groundwater contaminants exceeding applicable ESLs are identified, City of Pittsburg. If soil or groundwater contaminants exceeding applicable ESLs are identified, California Department of Toxic Substances Control under a Site Cleanup Program, State Water Resources Control Board (SWRCB), or the Contra Costa	Review submitted documentation/report of results of soil and groundwater site characterization to verify presence or absence and levels of contamination.	Prior to issuance of demolition or grading permits. Prior to start of Project construction.

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HAZARDS AND HAZARDOUS MATERIALS					
California Hazardous Waste Regulations or the contaminated portions of the site shall be capped beneath the planned development under the regulatory oversight of the agency taking lead jurisdiction. Contaminated soil excavated from the site shall be hauled off-site and disposed of at a licensed hazardous materials disposal site.	contaminants exceeding applicable ESLs are identified, submit the report for review and approval to the Contra Costa County Health Services Hazardous Materials Department. Manage any soils exceeding applicable ESLs by either off-site disposal at a licensed hazardous waste facility or capping in place, following California Hazardous Waste Regulations and SMP guidance.		County Health Services Hazardous Materials Department.		

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HYDROLOGY AND WATER QUALITY					
Impact 5.10-a. Would the project violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? Impact 5.10-b, iii. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces in a manner which would: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?					
HYD-1: Construction Best Management Practices The project would be required to implement the following construction best management practices (BMPs) as part of the Storm Water Pollution Prevention Plan (SWPPP) prepared for the project to ensure construction-related water quality impacts are less than significant. Install filter materials (such as sandbags, filter fabric, etc.) at the storm drain inlet nearest the downstream side of the project site prior to: 1) start of the rainy season; 2) site dewatering activities; or 3) street washing activities; and 4) saw cutting asphalt or concrete, or to retain any debris or dirt flowing into the City storm drain system. Filter	Apply with the local RWQCB for coverage under the NPDES General Construction Permit. Prepare required SWPPP. Implement appropriate BMPs during project construction.	Apply for General Construction NPDES Permit prior to project construction.	San Francisco Bay RWQCB, City of Pittsburg Environmental Services Department.	Submit periodic stormwater monitoring reports to RWQCB.	Monitoring timing determined by General Construction NPDES Permit and submitted SWPPP.

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Local Approval Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
HYDROLOGY AND WATER QUALITY					
materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding. Dispose of filter particles in the trash. • Create a contained and covered area on the site for the storage of bags of cement, paints, flammables, oils, fertilizers, pesticides or any other materials used on the project site that have the potential for being discharged to the storm drain system through being windblown or in the event of a material spill. • Never clean machinery, tools, brushes, etc., or rinse containers into a street, gutter, storm drain or stream. See "Building Maintenance/Remodeling" flyer for more information. • Ensure that concrete/gunite supply trucks or concrete/plaster finishing operations do not discharge wash water into street gutters or drains.					

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Local Approval Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
HYDROLOGY AND WATER QUALITY					
- The SWPPP shall also comply with C.6 provisions under Municipal Regional Stormwater permit (Order R2-2022-0018). The applicant/developer shall allow site inspections from City agencies. - The applicant/developer shall immediately report any soil or water contamination noticed during construction to the City Fire Department Hazardous Materials Division, the City of Pittsburg Environmental Services Department, the Contra Costa County Department of Health and the Regional Water Quality Control Board. - No site grading shall occur during the rainy season, between October 15 and April 15, unless approved erosion control measures are in place. - Non-storm water discharges to the City storm sewer system are prohibited. Prohibited discharges include but are not limited to the					

MITIGATION	MONITORING AND REPORTING PROGRAM				
	Documentation of Compliance [Project Applicant/Proponent Responsibility]		Documentation of Compliance [Local Approval Agency Responsibility]		
	Method of Compliance Or Mitigation Action	Timing of Compliance	Oversight Responsibility	Actions/Reports	Monitoring Timing or Schedule
HYDROLOGY AND WATER QUALITY					
following: polluted cooling water, chlorinated or chlorinated swimming pool water, hazardous or toxic chemicals, grease, animal wastes, detergents, solvents, pesticides, herbicides, fertilizers, and dirt. All discharges of material other than storm water must comply with a National Pollutant Discharge Elimination System (NPDES) Permit issued for the discharge other than NPDES Permit No. CAS612008.					

Source: California Energy Commission. Initial Study for the AVAIO Pittsburgh Backup Generating Facility. October 2025.

Appendix D

Mailing List

Appendix D: Mailing List

The following is the mailing list for the AVAIO Pittsburg Backup Generating Facility project.

The following is a list of the State agencies that received State Clearinghouse notices and documents:

- California Air Resources Board (ARB)
- California Department of Fish and Wildlife, Bay Delta Region 3 (CDFW)
- California Department of Transportation, District 4 (DOT)
- California Department of Conservation
- California Emergency Management Agency
- California Energy Commission
- California Native American Heritage Commission (NAHC)
- California Natural Resources Agency
- California Public Utilities Commission (CPUC)
- California Regional Water Quality Control Board, Region 2 (RWQCB)
- Department of Toxic Substances Control
- Department of Parks & Recreation
- Office of Historic Preservation
- San Francisco Bay Conservation & Development Commission
- State Water Resources Control Board, Division of Water Quality

Table D-1 presents the list of occupants and property owners contiguous to the project site and a list of property owners within 1,000 feet of the project site and 500 feet of project linears.

Table D-2 presents the list of agencies, including responsible and trustee agencies.

Table D-3 presents the list of interested parties.

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
EAST BAY MUNICIPAL UTILITY DIS	PO BOX 24055	OAKLAND	CA	94623 1055
PACIFIC GAS & ELECTRIC CO	PO BOX 770000	SAN FRANCISCO	CA	94177 0001
PACIFIC GAS & ELECTRIC CO	PO BOX 770000	SAN FRANCISCO	CA	94177 0001
PACIFIC GAS & ELECTRIC CO	PO BOX 770000	SAN FRANCISCO	CA	94177 0001
PASTRANO JAMES	1360 9TH AVE	SAN FRANCISCO	CA	94122
VILLALUNA SIMEON R III & PEGGY	48 ORINDA CIR	PITTSBURG	CA	94565
HUGHES JOHN H & CARRIE L	13 FAIRWAY CT	PITTSBURG	CA	94565
LISTON MICHAEL W & JEANIE M	17 FAIRWAY CT	PITTSBURG	CA	94565
DILLON KENT	111 EL TOYONAL	ORINDA	CA	94563
WILLSON CATHERINE A TRE	21 FAIRWAY CT	PITTSBURG	CA	94565 4830
LCSTAR LLC	21692 COLUMBUS AVE	CUPERTINO	CA	95014 4711
RAMIREZ WENDY C	2804 S RIMPAU BLVD	LOS ANGELES	CA	90016 3530
BEDDOES KATHLEEN D TRE	PO BOX 21637	CONCORD	CA	94521 0637
LUO XING WEI	1678 33RD AVE	SAN FRANCISCO	CA	94122 3147
ZENG JASON TRE	937 NAPLES ST	SAN FRANCISCO	CA	94112 3829
MEDINA RAQUEL	14 FAIRWAY CT	PITTSBURG	CA	94565 4830
PADILLA APOLINAR HERNANDEZ	12 FAIRWAY CT	PITTSBURG	CA	94565 4830
HERNANDEZ HECTOR A & EDITH E	46 ORINDA CIR	PITTSBURG	CA	94565 4833
LOCKWOOD DANNY K	PO BOX 654	PITTSBURG	CA	94565 0065
TOMILLOSO MICHAEL & AURORA TRE	1279 KESTREL CT	CONCORD	CA	94521 5511
ANDRES RAMONA ALICIA	40 ORINDA CIR	PITTSBURG	CA	94565 4833
VALENCIA YOLANDA	38 ORINDA CIR	PITTSBURG	CA	94565 4833
SEMANICK JANICE J TRE	36 ORINDA CIR	PITTSBURG	CA	94565 4833
VELASQUEZ MARK A	34 ORINDA CIR	PITTSBURG	CA	94565 4833
LEE ANGELA	9378 S MASON MONTGOMERY RD 328	MASON	OH	45040 8827
BALTRONS ANTONIO JR & JENNIFER	30 ORINDA CIR	PITTSBURG	CA	94565 4833
GONZALEZ FERNANDO	28 ORINDA CIR	PITTSBURG	CA	94565 4833
PETERS GEORGIA	26 ORINDA CIR	PITTSBURG	CA	94565 4833
TRICON SFR 2023-2 BORROWER LLC	PO BOX 4900	SCOTTSDALE	AZ	85261 4900
ANDREWS DAMON A & BEATRICE V	22 ORINDA CIR	PITTSBURG	CA	94565 4833
DUENAS EMMANUEL L & FRANCES K	20 ORINDA CIR	PITTSBURG	CA	94565 4833
COOPER LEE O SR & GRACIE M	18 ORINDA CIR	PITTSBURG	CA	94565 4833
CONKLIN GILBERT R JR & ROSE M	16 ORINDA CIR	PITTSBURG	CA	94565 4833
CAMPOS JACKELINE	14 ORINDA CIR	PITTSBURG	CA	94565 4833

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
CAMPOS NATIVIDAD B	12 ORINDA CIR	PITTSBURG	CA	94565
CHEN CHANGSHENG; SONG MING	69 RHEEM BLVD	ORINDA	CA	94563
OWENS YVONNE JOYCE (TRE)	9 ORINDA CIR	PITTSBURG	CA	94565
XU NICHOLAS R	20036 CAMDEN AVE	HAYWARD	CA	94541 1450
HERNANDEZ MANUEL	21 ORINDA CIR	PITTSBURG	CA	94565 4832
THOMPSON ERICK	23 ORINDA CIR	PITTSBURG	CA	94565 4832
ZUERCHER HANNES	25 ORINDA CIR	PITTSBURG	CA	94565 4832
MARTIN ROBERT W & LYNNETTE TRE	27 ORINDA CIR	PITTSBURG	CA	94565 4832
BORROMEO NORMA A TRE	29 ORINDA CIR	PITTSBURG	CA	94565 4832
AREVALO JOSE LUIS	31 ORINDA CIR	PITTSBURG	CA	94565 4832
MONTANO VILMA	33 ORINDA CIR	PITTSBURG	CA	94565 4832
MARKOPOULOS KIRK & KAREN	35 ORINDA CIR	PITTSBURG	CA	94565 4832
ALSTON VERONICA	37 ORINDA CIR	PITTSBURG	CA	94565 4832
RAINES ALBERT LEE & DIANE	4705 MATTERHORN CT	ANTIOCH	CA	94531 8335
CORONADO LUZ MARIATE	41 ORINDA CIR	PITTSBURG	CA	94565 4832
GILLIAM PAULA	43 ORINDA CIR	PITTSBURG	CA	94565 4832
GUADAGNI JULIA M	19 PETAR LN	PITTSBURG	CA	94565
HERRERA ZENELIA; ABUD AMIN ALI	17 PETAR LN	PITTSBURG	CA	94565
ENG MICHAEL	15 PETAR LN	PITTSBURG	CA	94565
VEGA, MANUEL; VEGA, MARIA O	777 EASTON AVE	SAN BRUNO	CA	94066
LAMONICA, DAVID	1612 JEFFERSON ST	NAPA	CA	94559
BONO ANTHONY & BERNADETTE (TRE)	1873 QUEENS RD	CONCORD	CA	94519
VALENTINE CONI	7 PETAR LN	PITTSBURG	CA	94565
PITTSBURG CITY OF	65 CIVIC AVE	PITTSBURG	CA	94565 3814
THOMAS CHRISTINE V	2192 DOVER WAY	PITTSBURG	CA	94565 4758
KATOA LAVENITA	2198 DOVER WAY	PITTSBURG	CA	94565 4758
LIN DUKE LAM	2202 DOVER WAY	PITTSBURG	CA	94565 4758
THOMPSON CLAUDE A & LAURA	38 BROOKSHIRE CT	PITTSBURG	CA	94565
ASTUDILLO STEPHEN	46 BROOKSHIRE CT	PITTSBURG	CA	94565 4825
KUMAR DEVENDRA TRE	3490 PACHECO BLVD	MARTINEZ	CA	94553 2125
ESTRADA ARMANDO	65 BROOKSHIRE CT	PITTSBURG	CA	94565 4825
FREEL TERESITA T	57 BROOKSHIRE CT	PITTSBURG	CA	94565 4825
SCHROTH SHIRLEY A TRE	49 BROOKSHIRE CT	PITTSBURG	CA	94565 4825
ACUNA ANGELO T JR & CLARISSE C	41 BROOKSHIRE CT	PITTSBURG	CA	94565 4825

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
ATUEYICHUKWU ADAEZIE NGOZI	33 BROOKSHIRE CT	PITTSBURG	CA	94565
MIRAMONTES RAMIRO D & MARIA C	2244 DOVER WAY	PITTSBURG	CA	94565 4758
ELLIS CHARLES LEE & NEITA L	2240 DOVER WAY	PITTSBURG	CA	94565 4758
BERNARDINO ELLEN & GIL	2236 DOVER WAY	PITTSBURG	CA	94565 4758
ISAAK CARLOS	PO BOX 12356	SAN FRANCISCO	CA	94112 0356
SWH 2017-1 BORROWER LP	1131 W WARNER RD STE 102	TEMPE	AZ	85284 2891
CHACON RAFAEL & ASTRID	2224 DOVER WAY	PITTSBURG	CA	94565 4758
ESTRADA MARIA E	2220 DOVER WAY	PITTSBURG	CA	94565 4758
MORAVEC DARRIN T TRE	2214 DOVER WAY	PITTSBURG	CA	94565 4758
LI CHIH HUNG	801 FRANKLIN ST APT 1416	OAKLAND	CA	94607 4239
BARAJAS ELEAZAR JACOBO	2206 DOVER WAY	PITTSBURG	CA	94565 4758
GREELY CYNTHIA (TRE)	4484 SAINT JOHN LN	PITTSBURG	CA	94565
POTTS STEVEN D & ELISABETH N	2225 DOVER WAY	PITTSBURG	CA	94565
ARABSHAHI, WAHEED	2231 DOVER WAY	PITTSBURG	CA	94565
PITTSBURG CITY OF	65 CIVIC AVE	PITTSBURG	CA	94565 3814
PITTSBURG CITY OF	65 CIVIC AVE	PITTSBURG	CA	94565 3814
PITTSBURG LAND HOLDINGS LLC	88 RICHMOND HILL RD	GREENWICH	CT	6831 2526
PITTSBURG LAND HOLDINGS LLC	88 RICHMOND HILL RD	GREENWICH	CT	6831 2526
PITTSBURG LAND HOLDINGS LLC	88 RICHMOND HILL RD	GREENWICH	CT	6831 2526
PACIFIC GAS & ELECTRIC CO	PO BOX 770000	SAN FRANCISCO	CA	94177 0001
PITTSBURG CITY OF	65 CIVIC AVE	PITTSBURG	CA	94565 3814
PITTSBURG UNIFIED SCHOOL DIST	2000 RAILROAD AVE	PITTSBURG	CA	94565 3830
CHURCH OF JESUS CHRIST OF LDS	50 E NORTH TEMPLE 22ND FL	SALT LAKE CITY	UT	84150 0022
ALBERT D SEENO CONSTRUCTION CO	4021 PORT CHICAGO HWY	CONCORD	CA	94520 1122
PITTSBURG LAND HOLDINGS LLC	88 RICHMOND HILL RD	GREENWICH	CT	6831 2526
PACIFIC GAS & ELECTRIC CO	PO BOX 770000	SAN FRANCISCO	CA	94177 0001
PACIFIC GAS & ELECTRIC CO	PO BOX 770000	SAN FRANCISCO	CA	94177 0001
PACIFIC GAS & ELECTRIC CO	PO BOX 770000	SAN FRANCISCO	CA	94177 0001
PITTSBURG LAND HOLDINGS LLC	88 RICHMOND HILL RD	GREENWICH	CT	6831 2526
EAST BAY MUNICIPAL UTILITY DIS	PO BOX 24055	OAKLAND	CA	94623 1055
HOU JUNCHI	619 KING ST	SAN FRANCISCO	CA	94107 1530
IGBC LLC	2132 CARQUINEZ PL	PITTSBURG	CA	94565 4628
SANCHEZ HELLODORO G & MARIA E	2217 ACKERMAN DR	PITTSBURG	CA	94565 4665
VILLAGRAN MARIANA	2211 ACKERMAN DR	PITTSBURG	CA	94565 4661

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
ARRIAGA FERNANDO	2209 ACKERMAN DR	PITTSBURG	CA	94565 4661
CURIEL FERNANDO PACHECO	2207 ACKERMAN DR	PITTSBURG	CA	94565 4661
GALLO RUDY T	2127 IMPALA CT	PITTSBURG	CA	94565
HAREWOOD IVAN M SR & SHARI (TRE)	2125 IMPALA CT	PITTSBURG	CA	94565
YOUNG TED E & LAURA R (TRE)	2123 IMPALA CT	PITTSBURG	CA	94565
METCALF, RODNEY H; MCKEEVER, CASSIE M	2121 IMPALA CT	PITTSBURG	CA	94565
MCGRUE BRUCE D & CONNIE M (TRE)	2122 IMPALA CT	PITTSBURG	CA	94565
REYES DANIEL & CHELENE (TRE)	2124 IMPALA CT	PITTSBURG	CA	94565
COACH MICHAEL A & DANYELLE M	2126 IMPALA CT	PITTSBURG	CA	94565
HERNANDEZ RANDY J & JENNIFER L	2128 IMPALA CT	PITTSBURG	CA	94565
CARO MIGUEL I BECERRA; BECERRA ROSALINDA R	2132 CARQUINEZ PL	PITTSBURG	CA	94565
ZARCO, DIEGO	2127 CITRUS CT	PITTSBURG	CA	94565
HERNANDEZ JOSE JAVIER; MATAMOROS ANGELICA MARIA	PO BOX 5981, CONC	CONCORD	CA	94524
TAYLOR GREGORY F (TRE)	2123 CITRUS CT	PITTSBURG	CA	94565
TARROSA ALLAN DADIVAS	2122 CITRUS CT	PITTSBURG	CA	94565
IGBC LLC	2132 CARQUINEZ PL	PITTSBURG	CA	94565
BARRIENTEZ VICTOR JOSE	2126 DEBRA CT	PITTSBURG	CA	94565
LOPEZ VERA (TRE)	2128 DEBRA CT	PITTSBURG	CA	94565
TERRITO JOSEPH H JR	2132 DEBRA CT	PITTSBURG	CA	94565
TILLEY LAUREL K	2134 DEBRA CT	PITTSBURG	CA	94565
KEASLING, DONALD ANTONIO	2133 DEBRA CT	PITTSBURG	CA	94565
GRANGER MARK A & ROCHELLE (TRE)	2131 DEBRA CT	PITTSBURG	CA	94565
TRAN RICHARD (TRE); CHEN LILY	286 WILSHIRE AVE	DALY CITY	CA	94015
YUK PORTIA CHI FAN	188 LAWLOR CT	BAY POINT	CA	94565
SERRANO MIGUEL A SR & MARIA T	2198 ACKERMAN DR	PITTSBURG	CA	94565
VICTORIA ROBERTO M	2200 ACKERMAN DR	PITTSBURG	CA	94565
CARO MIGUEL IGNACIO BECERRA; BECERRA ROSALINDA RIVERA	2132 CARQUINEZ PL	PITTSBURG	CA	94565
TYNDALL KEVIN & LAURIE (TRE)	5053 GASPAR CT	OAKLEY	CA	94561
HARTMANN OSKAR & MARISELA; ALCALINE MARISELA	2131 MISTY CT,	PITTSBURG	CA	94565
WALLACE JOHN J & ANABEL E	2202 ACKERMAN DR,	PITTSBURG	CA	94565

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
SANTOS RAYMOND C & CATHLEEN	2204 ACKERMAN DR,	PITTSBURG	CA	94565
SANCHEZ BELLA A TRE	134 GREENMEADOW CIR	PITTSBURG	CA	94565 7331
CARATACHEA LUIS M	2208 ACKERMAN DR	PITTSBURG	CA	94565 4662
SINGH KAMALDEEP	2126 SHADOW CT	PITTSBURG	CA	94565 4648
BAKER LUCHAN G II	6 CARISBROOK LN	OAKLAND	CA	94611 1614
GRIFFIN KAREN A	2133 SHADOW CT	PITTSBURG	CA	94565 4648
AIELLO VINCENT M	2131 SHADOW CT	PITTSBURG	CA	94565 4648
POCHAEV ALEXANDER V & OXANA A	2129 SHADOW CT	PITTSBURG	CA	94565 4648
TOWIE JASON L & TIZIANA P TRE	213 CHEVAL LN	WALNUT CREEK	CA	94596 6037
REZENDES JEFFREY	2214 ACKERMAN DR	PITTSBURG	CA	94565 4663
THAXTON LEVON II	2000 ALLSTON WAY #597	BERKELEY	CA	94701 4030
ALLEN ROGER LEE TRE	2128 MONTOYA CT	PITTSBURG	CA	94565 4626
BARNOR MARION J	2130 MONTOYA CT	PITTSBURG	CA	94565 4626
GARIBAY JOSE LUIS & VERONICA L	2132 MONTOYA CT	PITTSBURG	CA	94565 4626
BEAUCHAMP MARIA	2131 MONTOYA CT	PITTSBURG	CA	94565 4626
MAGALLAN MIGUEL & MARIA	2129 MONTOYA CT PITTSBURG	PITTSBURG	CA	94565 4626
CONTRERAS IVAN	2127 MONTOYA CT	PITTSBURG	CA	94565 4626
SPEARS CELESTINE	2125 MONTOYA CT	PITTSBURG	CA	94565 4626
HSU MICHAEL HAN-CHAN TRE	316 MINDANAO DR	REDWOOD CITY	CA	94065 2808
SALERA BENJAMIN & ELSIE	3 GOLF CLUB CT	PITTSBURG	CA	94565 4877
ROMUALDO ALFREDO D & NORMA A	5 GOLF CLUB CT	PITTSBURG	CA	94565 4877
GONZALEZ JOSE ZARAGOZA	7 GOLF CLUB CT	PITTSBURG	CA	94565 4877
RUIZ MIGUEL A & LORENA M	9 GOLF CLUB CT	PITTSBURG	CA	94565 4877
MCKOY PIERRE A	4 GOLF CLUB CT	PITTSBURG	CA	94565 4877
MORGADO MICKAELA A	2 GOLF CLUB CT	PITTSBURG	CA	94565 4877
XIONG LI	5542 MONTEREY HWY STE 162,	SAN JOSE	CA	95138 1529
LOPEZ OMAR & JESENIA	2206 GOLF CLUB RD	PITTSBURG	CA	94565 4800
GAVINO JOSEPHINE J TRE	2208 GOLF CLUB RD	PITTSBURG	CA	94565 4800
RATTU RAMESH	2210 GOLF CLUB RD	PITTSBURG	CA	94565 4800
IGANO FREDDIE A & MARIA L	2212 GOLF CLUB RD	PITTSBURG	CA	94565 4800
SSANFELIPE FRANCIS ELIXSON	2214 GOLF CLUB RD	PITTSBURG	CA	94565 4800
TUCKER RICHARD D & LORI L	2216 GOLF CLUB RD	PITTSBURG	CA	94565 4800
ELNAR ALLAN & EVELYN	2218 GOLF CLUB RD	PITTSBURG	CA	94565 4800
BROADWELL JEANNINE A TRE	5430 WATERPERRY PL	DUBLIN	CA	94568 7421

TABLE D-1 OWNERS AND OCCUPANTS OF PROPERTY CONTIGUOUS TO PROJECT SITE OWNERS WITHIN 1,000 FEET OF PROJECT SITE AND 500 FEET OF PROJECT LINEARS

Name	Address	City	State	Zip
HENDRICKS LENETTE MARIE TRE	6 GOLF CLUB CT	PITTSBURG	CA	94565 4877
GARZA-LICUDINE EVANTE	2202 GOLF CLUB RD	PITTSBURG	CA	94565 4800
NAVARRO JORGE & LUZ	2135 SHADOW CT	PITTSBURG	CA	94565 4648
CARANTO RANDY & FLORDELIZA	2137 SHADOW CT	PITTSBURG	CA	94565 4648
GONZALEZ IZTACCUAUHTLI H	2139 SHADOW CT	PITTSBURG	CA	94565 4648
CRUZ FE M	2140 SHADOW CT	PITTSBURG	CA	94565 4648
KUMAR SABITA D	2138 SHADOW CT	PITTSBURG	CA	94565 4648
REYES ALLAN JOHN P & ERLINDA	2136 SHADOW CT	PITTSBURG	CA	94565 4648
DRIVER-HERNANDEZ SHANNON	2134 SHADOW CT	PITTSBURG	CA	94565 4648

TABLE D-2 AGENCIES

Name	Title	Agency	Address	City	State	Zip
ALISON SPELLS	SENIOR PLANNER	CITY OF PITTSBURG, PLANNING DIVISION	65 CIVIC AVENUE	PITTSBURG	CA	94565
KRISTIN B. CONNELLY	CLERK RECORDER	CONTRA COSTA COUNTY	555 ESCOBAR STREET	MARTINEZ	CA	94553
JOHN SAMUELSON	DIRECTOR OF PUBLIC WORKS/CITY ENGINEER	CITY OF PITTSBURG, PUBLIC WORKS DEPARTMENT	65 CIVIC AVENUE	PITTSBURG	CA	94565
STEVE ALBANESE	CHIEF OF PITTSBURG POLICE DEPARTMENT	CITY OF PITTSBURG, POLICE DEPARTMENT	65 CIVIC AVENUE	PITTSBURG	CA	94565
LEWIS BROSCHARD	FIRE CHIEF	CONTRA COSTA COUNTY FIRE PROTECTION DISTRICT	4005 PORT CHICAGO HIGHWAY, SUITE 250	CONCORD	CA	94520-1180
JANET SCHULZE	SUPERINTENDENT	PITTSBURG UNIFIED SCHOOL DISTRICT	2000 RAILROAD AVE	PITTSBURG	CA	94565
RACHEL MURPHY	GENERAL MANAGER	CONTRA COSTA WATER DISTRICT	CONTRA COSTA WATER DISTRICT 1331 CONCORD AVENUE	CONCORD	CA	94520

TABLE D-2 AGENCIES

Name	Title	Agency	Address	City	State	Zip
TIMOTHY HAILE	EXECUTIVE DIRECTOR	CONTRA COSTA TRANSPORTATION AUTHORITY (CCTA)	2999 OAK ROAD, SUITE 100	WALNUT CREEK	CA	94597
JOHN KOPCHIK	DIRECTOR	CONTRA COSTA DEPARTMENT OF CONSERVATION AND DEVELOPMENT	30 MUIR ROAD	MARTINEZ	CA	94553

TABLE D-3 INTERESTED PARTIES

Name	Title	Agency	Address	City	State	Zip
N/A	N/A	N/A	N/A	N/A	N/A	N/A