NOTICE OF AVAILABILITY
OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE
NAPA RENEWABLE RESOURCES PROJECT (NRRP) 2.0
(State Clearinghouse No. 2023110393)

The City of Napa, as the Lead Agency, has prepared a Draft Environmental Impact Report (DEIR) for the Napa Renewable Resources Project NRRP 2.0. The DEIR was prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Sections 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations [CCR] Sections 15000 et seq.).

PROJECT TITLE: Napa Renewable Resources Project (NRRP) 2.0

PROJECT LOCATION: The Project site includes the existing Napa Materials Diversion Facility (NMDF) located at 820 Levitin Way in the City of Napa and adjacent parcels within unincorporated Napa County. The adjacent parcels include the parcel directly south of the existing NMDF (APN 057-090-087) located on the westerly side of Devlin Road and a portion of the parcel directly north of the existing NMDF (APN 057-110-025) northwest of the Tower Road cul-de-sac.

PROJECT DESCRIPTION: The NMDF site is an 18.6-acre fully permitted Solid Waste Facility located at 820 Levitin Way and currently receives and processes all solid waste, compostable and recyclable materials generated within the City that are collected by the City's authorized operator Napa Recycling & Waste Services (NRWS). The NMDF site also receives, and processes materials delivered by haulers servicing surrounding jurisdictions (such as unincorporated Napa County) and by private (self-haul) customers. Current operations at the NMDF site include receiving, storing, processing, recycling, and composting waste materials from residential, commercial, and industrial sectors. The NMDF site operates under Solid Waste Facility Permit (SWFP) 28-AA-0030, which limits the facility to a maximum tonnage of 760 tons per day (tpd) and 386 waste hauling vehicles per day.

The proposed Napa Renewable Resources Project 2.0 (NRRP 2.0, the "Project") consists of an increase of the NMDF site's overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd, the construction and operation of a biomass conversion facility (BCF), and the construction and operation of an anaerobic digestion facility (ADF) as part of an initiative to enhance sustainable waste management at the NMDF site. The proposed daily permitted tonnage increase is reflective of recent equipment upgrades at the NMDF site (e.g., organics shredder, trommel screens, optical sorters, sorting robots, etc.) that have improved processing efficiency and would provide accommodations for peak days that have higher tonnage of certain waste streams (e.g., dirt, rock, grape pomace, leaf fall season, etc.).

The Project would include a portion of the adjacent parcel to the south (formerly APN 057-090-060) located on the westerly side of Devlin Road between NMDF site to the north and Devlin Road Transfer Station to the south. The parcel was purchased by the City in December 2023 and would be annexed into the City subject to approval by Local Agency Formation Commission (LAFCO) of Napa County. A sphere of influence (SOI) amendment would also be required by LAFCO to process the annexation. The existing parcel was subdivided to create a smaller 2.87-acre parcel (APN 057-090-087). The resulting 2.87-acre parcel, referred to as the Southern Annexation Parcel in the EIR, excludes the wetlands that have been identified in previous studies on the parcel that was formerly known as APN 057-090-060 (now APN 057-090-088). The Southern Annexation Parcel is currently undeveloped and includes an area that received soil material from 2019 to 2022. In addition to the development of the Southern Annexation Parcel, the EIR also analyzes the environmental impacts from the future annexation into the City, the pre-zoning of the parcel to Public, Quasi-Public: Airport Compatibility Overlay District (PQ-P:AC) to be consistent with the existing NMDF site zoning, and a General Plan Amendment (GPA) to designate the parcel in the General Plan as Public Serving to be consistent with the existing NMDF land use designation.

The Project would also use a portion of the parcel to the north that is owned by 600 Tower Road Holdings, LLC, an LLC with the same owners as NRWS (APN 057-110-025). The 600 Tower Road Parcel would be used for inert materials processing and storage (relocated from the existing NMDF site). The parcel is currently used for container, equipment, and vehicle storage. The parcel would remain under the same ownership and would allow for operational flexibility as it can be accessed directly from the NMDF site without using Tower Road.

PROJECT OBJECTIVES: The primary objectives of the Project include the following:

- To expand the NMDF site operations and support regional recycling and waste management efforts through new operational methodologies.
- To increase the City's ability to divert waste (including organics) from the landfill and continue to meet the state-mandated diversion goals provided in SB 1383, other state-mandates to reduce waste from landfill (AB 341) and reduce greenhouse gas (GHG) emissions (SB 32).
- To increase the NMDF site's efficiency, diversify operations, and operate more economically.
- Implement renewable energy solutions at the NMDF site to reduce reliance on non-renewable power sources and reduce GHG emissions.

SIGNIFICANT ENVIRONMENTAL EFFECTS: The Project would result in significant impacts to air quality; biological resources; cultural and tribal cultural resources; geology, soils, and seismicity; hazards and hazardous materials; and land use planning. The Project would result in significant and unavoidable impacts to hazards and hazardous materials and land use planning. All other impacts would be reduced to less than significant levels with mitigation incorporated.

AVAILABILITY: This DEIR is available for public and agency review for a 45-day period beginning **Thursday, January 29, 2026, and ending at 5:00 p.m. on Monday March 16, 2026**. The purpose of this comment period is to consider the content of the DEIR and the potential environmental impacts that may result from Project implementation, not the positive or negative attributes of the proposed Project itself. Comments pertaining to the impact analysis, criteria and thresholds, mitigation measures and alternatives presented in the DEIR will be considered by the City during preparation of the Final EIR. The Final EIR will include copies of comments received during the review period and the City's responses to the comments pertaining to environmental issues.

The DEIR is available at: https://www.cityofnapa.org/488/Solid-Waste-Recycling-Division. The DEIR may also be reviewed at City Hall at 955 School Street, Napa, CA 94559 and Napa County Library at 580 Coombs Street, Napa, CA 94559.

COMMENTS: Please submit your written comments on the Draft EIR by 5:00 PM on **Monday March 16, 2026**. Written comments on the Draft EIR should be sent to:

City of Napa Utilities Department
ATTN: Chris Jones, P.E.
RE: NRRP 2.0 EIR
P.O. Box 660
Napa, CA 94559-0660

Or, via email with the subject line "NRRP 2.0 EIR" to: chrisjones@cityofnapa.org

For Further Information Contact: Chris Jones at (707) 257-9460

At this time, the Lead Agency has not scheduled any public meetings or hearings regarding the proposed Project.

NAPA RENEWABLE RESOURCES PROJECT 2.0

Draft Environmental Impact Report

SCH No. 2023110393

January 2026



Prepared for:

City of Napa
Utilities Department
Solid Waste and Recycling Division
P.O. Box 660
Napa, CA 94559

Prepared by:

RCH Group, Inc.
PO Box 516
Rancho Murieta, CA 95683

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EXECUTIVE SUMMARY

ES.1 INTRODUCTION

The Napa Materials Diversion Facility (NMDF) site is an 18.6-acre fully permitted Solid Waste Facility located at 820 Levitin Way[1] and currently receives and processes all solid waste, compostable and recyclable materials generated within the City that are collected by the City's authorized operator Napa Recycling & Waste Services (NRWS). The NMDF site also receives, and processes materials delivered by haulers servicing surrounding jurisdictions (such as unincorporated Napa County) and by private (self-haul) customers. Current operations at the NMDF site include receiving, storing, processing, recycling, and composting waste materials from residential, commercial, and industrial sectors. The NMDF site operates under Solid Waste Facility Permit (SWFP) 28-AA-0030, which limits the facility to a maximum tonnage of 760 tons per day (tpd) and 386 vehicles per day.

This Environmental Impact Report (EIR) evaluates the proposed Napa Renewable Resources Project 2.0 (NRRP 2.0, the "Project"), which consists of an increase of the NMDF site's overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd, the construction and operation of a biomass conversion facility (BCF), and the construction and operation of an anaerobic digestion facility (ADF) as part of an initiative to enhance sustainable waste management at the NMDF site. The proposed daily permitted tonnage increase is reflective of recent equipment upgrades at the NMDF site (e.g., organics shredder, trommel screens, optical sorters, sorting robots, etc.) that have improved processing efficiency and would provide accommodations for peak days that have higher tonnage of certain waste streams (e.g., dirt, rock, grape pomace, leaf fall season, etc.).

The Project is subject to the California Environmental Quality Act (CEQA) because the Project is undertaken by a public agency and approval of any permits requires discretionary actions by public bodies. The City of Napa, which is the CEQA Lead Agency for environmental review, has determined that the Project has the potential to cause a significant environmental impact. For this reason, the City has concluded that an EIR is the appropriate level of environmental review for this Project.

[1] Assessor Parcel Number (APN): 057-110-049, -052, -065, -066, -067, and -068.

ES.2 PROJECT OBJECTIVES

Pursuant to State CEQA *Guidelines* 15124(b), the Project Description includes this statement of the project objectives. The objectives are intended to demonstrate the purpose of the Project. The primary objectives of the Project include the following:

- To expand NMDF site operations and support regional recycling and waste management efforts through new operational methodologies;
- To increase the City's ability to divert waste (including organics) from the landfill and continue to meet the state-mandated diversion goals provided in SB 1383, other state-mandates to reduce waste from landfill (AB 341) and reduce greenhouse gas (GHG) emissions (SB 32);
- To increase NMDF site efficiency, diversify operations, and operate more economically; and
- Implement renewable energy solutions at the NMDF site to reduce reliance on non-renewable power sources and reduce GHG emissions.



Source: RCH Group; Google Earth Pro, 2023

Figure ES-1
Regional Site Location

RCH GROUP
planning & environmental consulting

ES.3 PROJECT FACILITIES AND OPERATIONS

ES.3.1 PROJECT OVERVIEW

The Project consists of an increase of the NMDF site's overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd, the construction and operation of a biomass conversion facility (BCF), and the construction and operation of an anaerobic digestion facility (ADF) as part of an initiative to enhance sustainable waste management at the NMDF site. The proposed daily permitted tonnage increase is reflective of recent equipment upgrades at the NMDF site (e.g., organics shredder, trommel screens, optical sorters, sorting robots, etc.) that have improved processing efficiency and would provide accommodations for peak days that have higher tonnage of certain waste streams (e.g., dirt, rock, grape pomace, leaf fall season, etc.).

The Project would include a portion of the adjacent parcel to the south (formerly APN 057-090-060) located on the westerly side of Devlin Road between NMDF site to the north and Devlin Road Transfer Station to the south (See **Figure ES-1**). The parcel was purchased by the City in December 2023 and would be annexed into the City subject to approval by Local Agency Formation Commission (LAFCO) of Napa County. A sphere of influence (SOI) amendment would also be required by LAFCO to process the annexation. The existing parcel was subdivided to create a smaller 2.87-acre parcel (APN 057-090-087). The resulting 2.87-acre parcel, referred to as the Southern Annexation Parcel in this EIR, excludes the wetlands that have been identified in previous studies on the parcel that was formerly known as APN 057-090-060 (now APN 057-090-088). The Southern Annexation Parcel is currently undeveloped and includes an area that received soil material from 2019 to 2022. In addition to the development of the Southern Annexation Parcel, the EIR also analyzes the environmental impacts from the future annexation into the City, the pre-zoning of the parcel to Public, Quasi-Public: Airport Compatibility Overlay District (PQ-P:AC) to be consistent with the existing NMDF site zoning, and a General Plan Amendment (GPA) to designate the parcel in the General Plan as Public Serving to be consistent with the existing NMDF land use designation.

The Project would also use a portion of the parcel to the north that is owned by 600 Tower Road Holdings, LLC, an LLC with the same owners as NRWS (APN 057-110-025). The 600 Tower Road Parcel (See **Figure ES-1**) would be used for inert materials processing and storage (relocated from the existing NMDF site). The parcel is currently used for container, equipment, and vehicle storage. The parcel would remain under the same ownership and would allow for operational flexibility as it can be accessed directly from the NMDF site without using Tower Road.

The Project would be undertaken to allow the NMDF site greater flexibility in developing and implementing processes and operations that ultimately divert organics from the landfill, decrease GHG emissions, increase the recovery of materials and energy from waste, and allow the facility to operate more efficiently and economically.

ES.3.2 SITE ACCESS AND PARKING

The NMDF site is accessed via Levitan Way from Tower Road. The 600 Tower Road Parcel to the north is accessed via Tower Road at the end of the cul-de-sac and can also be accessed through the existing NMDF site. The proposed BCF on the Southern Annexation Parcel to be annexed into the City would be accessed via a new driveway off of Devlin Road and existing NMDF access at Levitin Way.

The NMDF site's administration office currently provides parking. The BCF on the Southern Annexation Parcel to be annexed into the City would be completely paved and would include additional parking spaces for staff and visitors. The 600 Tower Road Parcel would remain as is for inert materials processing and storage.

ES.3.3 INCREASED PERMITTED TONNAGE LIMITS

The NMDF site operates under SWFP 28-AA-0030, which limits the facility to a maximum tonnage of 760 tpd and 386 waste hauling vehicles per day. The Project would increase the overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd. The proposed daily permitted tonnage increase is reflective of recent equipment upgrades at the NMDF site (e.g., organics shredder, trommel screens, optical sorters, sorting robots, etc.) that have improved processing efficiency and accommodations for peak days that have higher tonnage of certain waste streams (e.g., dirt, rock, grape pomace, leaf fall season, etc.).

In addition to the existing overall maximum tonnage limit of 760 tpd, the NMDF site is limited to a peak daily tonnage for organic materials and transfer processing (MRF recyclables and CDI) of 500 tpd and 360 tpd, respectively. The NMDF site proposes to eliminate these waste subcategory limits with the Project along with the overall tonnage limit increase. The NMDF site does not propose to increase its permitted daily waste hauling vehicles limit since peak days are typically due to heavy trucks bringing in large loads, which results in less waste hauling vehicles to meet peak daily tonnage limits.

ES.3.4 BIOMASS CONVERSION FACILITY AND ANNEXATION OF SOUTHERN PARCEL

NRWS proposes the construction and operation of a BCF on the Southern Annexation Parcel to address the growing challenge of processing woody waste. These waste streams include tree trimmings, source-separated construction and demolition (C&D) wood, and compost overs. The BCF aims to convert wood waste into renewable energy, thereby providing a long-term, sustainable alternative to landfill disposal and open pile burning.

The BCF would be developed on the Southern Annexation Parcel, which is currently undeveloped and includes an area that received soil material from 2019 to 2022. The parcel was purchased by the City in December 2023 and would be annexed into the City subject to approval by LAFCO of Napa County. A SOI amendment would also be required by LAFCO to process the annexation. In addition to the development of the Southern Annexation Parcel, the EIR also analyzes the environmental impacts from the future annexation into the City, the pre-zoning of

the parcel to PQ-P:AC to be consistent with the existing NMDF site zoning, and a GPA to designate the parcel in the General Plan as Public Serving to be consistent with the existing NMDF land use designation.

The BCF is designed to generate 1.5 megawatts (MW**)** of renewable electricity to be used onsite to power NMDF operations, with excess electricity exported to the local electrical grid. The BCF would process approximately 16,000 tons of wood waste per year, enabling NRWS to process 5,000 to 6,000 tons of compost overs annually into suitable biomass feedstock, eliminating the need for offsite disposal and avoiding approximately four truck shipments per day or roughly 1,500 truck shipments per year. Approximately 3,300 tpy of biochar would be generated from the conversion process, which would be marketed and distributed to agricultural and environmental applications that align with carbon sequestration goals.

The BCF includes feed hoppers, gasifiers, biochar handling equipment, gas clean-up equipment, three 500-kilowatt (kW) output syngas-fueled engines by Jenbacher, and flares. Material handling operations would include the transfer of feedstock to the grinder and an oscillating screen, loading the dryer, and handling and loadout of the biochar. The syngas produced by the gasifier would be captured in a closed vent system and used as fuel for the three Jenbacher engines to produce electricity. Syngas that cannot be combusted in the engine would be disposed of in a limited-use flare assigned to each engine. The BCF building is currently proposed at roughly 45 feet in height at the highest point.

ES.3.5 ANAEROBIC DIGESTION FACILITY

Approved ADF

The existing NMDF site was approved for an ADF through the 2013 CEQA MND and subsequent Addendums. The ADF has not been constructed at NMDF. In May 2023, the City of Napa applied for a $10,000,000 grant with CalRecycle for funds to develop an ADF on the existing NMDF property. The City of Napa was awarded the grant in December 2023.

The approved ADF to be constructed at the existing NMDF site would require an approximately 22,000 square-foot footprint and would process up to 44,000 tpy of high biomethane potential material such as food waste supplemented with green waste to maintain a solid matrix that is suitable for a plug flow system. The food waste would come from commercial, multi-family dwellings (MFD), residential and self-haul (RSH) sources, and industrial sources. The green waste would be from commercial, MFD, and RSH sources. The amount of tonnage processed through the ADF is ultimately determined by the ratio of high methane producing food waste compared to green waste.

Proposed ADF

The ADF vendor selected by the City is Zero Waste Energy, LLC (ZWE), who is proposing the installation of a Thöni Environmental Engineering Wet Digestion system—specifically, a semi-dry, plug-flow digester. The proposed ADF would require 32,000 tpy of high biomethane potential feedstock or 44,000 tpy of low biomethane potential feedstock and would generate over

440,000 diesel gallon equivalents (dge) of renewable natural gas (RNG) annually, which would be used to fuel collections vehicles at NMDF.

The proposed ADF would be sited between the existing MRF building and existing organics processing buildings in an approximately 22,000 square foot area. The proposed ADF includes conveyors, receiving hoppers, a digestate sieve, the digester itself, a flare, a boiler, an emergency generator, biogas upgrading and fueling station equipment, and various other pieces of ancillary equipment and infrastructure and uses a continuous plug-flow system to produce biogas and digestate.

The AD system accepts preprocessed feedstock materials and the loading process is highly automated. Pre-processed feedstocks are conveyed to a walking floor loading bunker with speed regulated to meter feedstock to the digester via an infeed piping. From the loading bunker, the feedstock would be charged to a dual-shaft mixer that further homogenizes the feedstock and has the capability to add stored winery waste and digestate press water. Following mixing, the feedstock is hydraulically pumped through a heat exchanger tube that pre-heats the feedstock while it is pumped to the front of the AD system. The AD system uses a single plug-flow biological reactor where feedstock is loaded one on end, mixed with paddles, and digestate is unloaded on the other. Although the waste would be homogeneous, the stirrers have capacity to handle difficult materials and perform well with a variety of feedstocks.

The digestion process inside the AD system is based on an anaerobic, thermophilic, biological process that is characterized as High Solids Anaerobic Digestion. The high solids AD system generates and stores biogas. Biogas is captured in the headspace of the digester and piped to a biogas storage buffer. Biogas is a biological by-product of anaerobic digestion and is comprised primarily of methane and carbon dioxide. The stored biogas would then be routed to a biogas conditioning system where impurities like hydrogen sulfide and water are removed. The resulting RNG would be boosted to 3600 pounds per square inch (psi) and dispensed in an onsite time-fill fueling system which will supply NMDF collection vehicles.

Digestate would be extracted from AD system by a hydraulic pump to a dewatering station where it will be processed by a vibrating screen that separates the liquid and solid fractions. Recovered liquids, or “press water” is stored in concrete vault below the dewater system. Press water would be recirculated and mixed with incoming feedstock at the digester mixer or pumped to a truck for use as a liquid fertilizer. Recovered solids are temporarily stored in a bunker adjacent to the dewatering system. Solid digestate would be transferred by NRWS to the existing CASP system located at the NMDF for further processing.

ES.3.6 UTILIZATION OF A PORTION OF THE NORTHERN PARCEL

The Project would use a portion of the parcel to the north that is owned by 600 Tower Road Holdings, LLC, an LLC with the same owners as NRWS (APN 057-110-025). The 600 Tower Road Parcel would be used for inert materials processing and storage. The parcel is currently used for containers, equipment, and vehicle storage. The parcel would remain under the same ownership and would allow for operational flexibility as it can be accessed directly from the NMDF site without using Tower Road.

ES.4 PROJECT IMPACTS AND MITIGATION MEASURES

The potentially significant adverse effects of the Project are described in Chapters 3 and 4. Mitigation measures have been identified that would reduce all the specific Project significant impacts to a level of insignificance except for the impacts related to airport safety hazards (see Impact 3.7.2 and Impact 3.9.2) in the Section 3.7, Hazards and Hazardous Materials, and Section 3.9, Land Use and Land Use Planning.

Table ES-1, at the end of this chapter, presents a summary of potential environmental impacts, their level of significance before mitigation, mitigation measures, and the level of significance after mitigation.

ES.5 ALTERNATIVES TO THE PROJECT

CEQA requires an EIR to describe and evaluate the comparative merits of a range of reasonable alternatives to the project, or to the location of the project, that would feasibly attain most of the basic project objectives but would avoid or substantially lessen any of the project's significant effects (CEQA Guidelines Section 15126.6). Chapter 5 (Alternatives to the Project) of this EIR provides an analysis of the impacts anticipated from three alternatives to the Project. The Project alternatives considered in this EIR include (1) No Project Alternative; (2) Reduced Tonnage Alternative; and (3) Larger Biomass Conversion Facility (BCF) Alternative. The following provides a summary of each alternative and the EIR conclusions pertaining to it.

ES.5.1 NO PROJECT ALTERNATIVE

If the Project is not approved, the Southern Annexation Parcel would be developed for parking, equipment and material storage, and other non-solid waste processing uses and NMDF would continue its existing operations, receiving and processing all solid waste, compostable and recyclable materials generated within the City that are collected by NRWS, haulers servicing surrounding jurisdictions (such as unincorporated Napa County), and by private (self-haul) customers. NMDF operations would be constrained to its existing site and expanded operations supporting regional recycling, waste management, and landfill diversion would not be implemented. The proposed construction of waste-to-energy facilities, including the BCF and ADF, would not come to fruition. As a result, the region would lack the enhanced capacity to process and convert woody materials into syngas for electricity generation and food and green waste into RNG for fueling collection vehicles. Existing NMDF operations would continue to use fuel and electricity from regional sources rather than generate renewables onsite. The 600 Tower Road Parcel would continue to be used for container, equipment, and vehicle storage but would not be used for potential inert material storage and/or processing. Therefore, the No Project Alternative would not meet the Project objectives.

ES.5.2 REDUCED TONNAGE ALTERNATIVE

The Reduced Tonnage Alternative would include all the elements of the Project, except there would be a reduction in the increased permitted tonnage compared to the Project. Under the Reduced Tonnage Increase Alternative, the City would increase the NMDF's overall tonnage for

all waste types to a weekly average of 880 tons per day (tpd) with a daily peak of 1,250 tpd instead of a weekly average of 1,000 tpd with a daily peak of 1,500 tpd as proposed for the Project.

The Reduced Tonnage Alternative could meet each of the Project objectives because all the Project elements would still be developed, but the Reduced Tonnage Alternative would be limited in increasing the City's ability to divert waste (including organics) from the landfill compared to the Project because the NMDF would have to reject loads that put daily totals above 1,250 tpd (or the weekly average of 880 tpd).

ES.5.3 LARGER BIOMASS CONVERSION FACILITY (BCF) ALTERNATIVE

The Larger BCF Alternative would include all the elements of the Project, except a larger BCF would include three additional 500-kilowatt (kW) output syngas-fueled engines and associated equipment to generate twice as much electricity compared to the Project. The Larger BCF Alternative would generate approximately 3.0 megawatts (MW**)** of electricity compared to 1.5 MW under the Project. The Larger BCF would still be developed on the Southern Annexation Parcel within the same proposed footprint as the proposed Project's BCF. Under the Larger BCF Alternative, there would be an increased production of syngas and resulting electricity and biochar generation. Under the Larger BCF Alternative, all of the Project objectives would be met.

ES.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The EIR must assess the identified alternatives and determine which among the alternatives is the environmentally superior alternative. One of the alternatives to be assessed is the "No Project" alternative. If the No Project alternative is identified as the environmentally superior alternative, then another of the remaining alternatives must also be identified as the environmentally superior alternative.

Chapter 5 includes a comparison of each of the three alternatives to the proposed Project with regard to impacts for each of the resource areas in the EIR (see **Table 5-1**). Chapter 5 also assesses the ability of each of the three alternatives to meet the four Project objectives (see **Table 5-2**).

The No Project Alternative would not meet any of the Project objectives. While the No Project Alternative would have less impacts for many resources areas, it would have the same impacts for biological resources, cultural resources and TCRs, and hydrology and water quality, and greater impacts for GHG emissions and energy.

The Reduced Tonnage Alternative meets or partially meets all the Project objectives. The Reduced Tonnage Alternative meets Objective 1, 3 and 4. Under the Reduced Tonnage Alternative, there would be a reduction in the overall tonnage increase for all waste types received at NMDF compared to the proposed Project which would limit the City's ability to meet the state-mandated diversion goals listed in Objective 2.

The Larger BCF Alternative would meet all the Project objectives. Due to additional engines required to operate the Larger BCF Alternative, greater impacts to air quality, hazards and hazardous materials, and noise would occur compared to the Project.

Since the Reduced Tonnage Alternative substantially meets Project Objectives 1, 3 and 4, and partially meets Objective 2, while reducing impacts to air quality, noise, transportation, and energy, and having only one impact greater than the Project (GHG emissions), the Reduced Tonnage Alternative is the environmentally superior alternative.

ES.7 EIR PROCESS AND SCOPE

The City will circulate this Draft EIR for review by public agencies and interested persons and organizations for a 45-day public review period, in accordance with CEQA Guidelines §15105. Written comments will be accepted at the City of Utilities Department until 5:00 p.m. on March 16, 2026, the closing day of the Draft EIR review period. Details for comments on the Draft EIR are included in the Notice of Availability (NOA) at the front of this Draft EIR. The NOA and DEIR will also be posted on the City's website at:

https://www.cityofnapa.org/488/Solid-Waste-Recycling-Division

Written comments should be emailed to chrisjones@cityofnapa.org or submitted by March 16, 2026 to:

City of Napa Utilities Department
ATTN: Chris Jones, P.E.
RE: NRRP 2.0 EIR
P.O. Box 660
Napa, CA 94559-0660

At the close of the public review period, the City will evaluate the comments received on the environmental issues and prepare written responses, as required by CEQA Guidelines §15088. The comments and responses will be included in the Final EIR as a separate chapter, along with any revised EIR text necessitated by the response to comments.

ES.8 AREAS OF CONTROVERSY

In November 2023, the City prepared and circulated a Notice of Preparation (NOP) for this EIR (**Appendix A**), in accordance with CEQA Guidelines §15082, to seek comments from affected agencies and the public regarding the scope of the EIR. The City held a virtual scoping meeting via Zoom Webinar on November 15, 2023. Three comment letters were received during the 30-day NOP scoping period from interested governmental agencies (See **Appendix B**). No areas of controversy were addressed in the three comment letters. The City of Napa is also not aware of any areas of controversy related to the Project.

ES.9 REFERENCES

CalReycle, Solid Waste Facility Permit, Facility Number 28-AA-0030.

City of Napa. 2020. *Notice of Preparation (Notice) of an Environmental Impact Report (EIR) and Notice of Zoom Scoping Meeting for Napa Renewable Resources Project 2.0 (NRRP 2.0)*. November 15, 2023.

City of Napa. 2013. Napa Renewable Resources Project (NRRP) Initial Study/Mitigated Negative Declaration, State Clearinghouse Number: 2013092036, Approved November 7, 2013.

TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.1 AESTHETICS			
Impact 3.1.1: The Project could have a substantial adverse effect on a scenic vista.	None required.	LS	LS
Impact 3.1.2: The Project could substantially degrade the existing visual character of the Project site and its surroundings.	None required.	LS	LS
3.2 AIR QUALITY			
Impact 3.2.1: The Project could conflict with or obstruct implementation of the applicable air quality plan.	None required.	LS	LS
Impact 3.2.2: The Project construction activities could result in a cumulatively considerable net increase of emissions of criteria air pollutants and precursors.	**Mitigation Measure 3.2.2a: Implement BAAQMD Basic Dust Control Measures**: Construction-related activities, such as soil disturbance, grading, and material hauling, can also result in fugitive dust emissions. Based on the most recent BAAQMD's *CEQA Air Quality Guidelines* (see Table 5-2), for a project to have a less-than-significant air quality impact related to construction-related fugitive dust emissions, the project shall implement the following basic fugitive dust control measures for the duration of construction activities: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 mph. • All roadways, driveways, sidewalks, and building pads shall be laid after grading unless seeding or soil binders are used. • All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph. • All trucks and equipment, including their tires, shall be washed off prior to leaving the site. • Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel. • Publicly visible signs shall be posted with the telephone number and name of the person to contact at the City of Napa regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's General Air Pollution	S	LSM

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TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
	Complaints number shall also be visible to ensure compliance with applicable regulations.		
Impact 3.2.3: Project operational activities could result in a cumulatively considerable net increase of emissions of criteria air pollutants and precursors.	None required.	LS	LS
Impact 3.2.4: Project operational activities could expose sensitive receptors to substantial concentrations of TACs.	None required.	LS	LS
Impact 3.2.5: Project operations could generate odors that could adversely affect a substantial number of people.	**Mitigation Measure 3.2.5a: Update Odor Impact Minimization Plan**. The operator (NRWS) shall prepare an updated Odor Impact Minimization Plan in compliance with 14 CCR 17863.4 prior to operation of the ADF and BCF.	S	LSM
3.3 BIOLOGICAL RESOURCES			
Impact 3.3.1: The Project could impact animal species identified as a candidate, sensitive, or special status, either directly or through habitat modification.	**Mitigation Measure 3.3.1a:** The construction contractor developing the Southern Annexation Parcel shall implement the following precautionary measures for nesting birds: • Preconstruction nesting bird surveys shall be completed if initial ground-disturbing activities occur inside the nesting season (February 1- August 31). A survey shall be completed by a qualified biologist within seven days before the initial ground-disturbing activities. The survey area shall include the Southern Annexation Parcel and an appropriate buffer around Parcel to identify any nesting that could be impacted directly or indirectly by the Project-related activities. The survey shall follow established nesting search protocols described in Martin and Geupel (1993) and CDFW and USFWS protocols. If active nests are found, a "No Work Zone" buffer area shalll be demarcated around each nest site by the qualified biologist. The buffer distances for each bird nest shall be site-specific and established to protect the bird's normal behavior to prevent nesting failure or abandonment. The buffer distance shall vary by species, nest location, existing visual and topographical buffers, and intensity and extent of the construction-related disturbance. The buffer area may be as small as 25-50 feet for common, disturbance-adapted species or much larger (e.g., 100-250 feet) for sensitive species like raptors and owls. The "No Work Zone" shall be established in the field with flagging, fencing, or other appropriate material and remain in place until all young in the nest have fledged or the nest otherwise becomes inactive due to predation or other natural causes as determined by the qualified biologist. If the qualified biologist finds no active nests or breeding activity indicating nests are present, then work can proceed without restrictions. If there is a lapse in project-related activities for seven days or more, then a follow-up survey shall be required. • If active nests are identified during the survey and the nests are within the Southern Annexation Parcel or the buffer area and nesting would be adversely affected, a no-disturbance buffer area shall be demarcated around each nest site by the qualified biologist.	S	LSM

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TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
	Buffer distances for each bird's nest shall be site-specific and established to protect the bird's normal behavior and prevent nesting failure or abandonment. The buffer distance will vary by species, nest location, existing visual and topographical buffers, and intensity and extent of the construction-related disturbance. The buffer area may be as small as 25-50 feet for common, disturbance-adapted species or much larger (e.g., 100-250 feet) for sensitive species like raptors. The no-disturbance buffer area shall be established in the field with flagging, fencing, or other appropriate material and remain in place until all young in the nest have fledged or the nest otherwise becomes inactive due to predation or other natural causes as determined by the qualified biologist. The qualified biologist shall continue to monitor the behavior of the birds at the nest site during construction activities to ensure that they are not disturbed by the Project work. Nest monitoring shall continue until the nesting attempt is complete. If state and/or federally-listed birds are found breeding within the area, consultation with the CDFW and USFWS may be required; see below. • If initial ground-disturbing activities occur outside the nesting season (September 1 through January 31), then a preconstruction survey would not be required, and construction could begin unimpeded. **Mitigation Measure 3.3.1b:** The construction contractor developing the Southern Annexation Parcel shall implement the following precautionary measures for SHWA: • If construction commences at any time during the SWHA breeding season from February 1 through August 31, a preconstruction survey shall be completed. Surveys shall follow protocols outlined in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (SWHA TAC 2000). Surveys shall be completed by a qualified biologist and initiated early in the SWHA breeding season to maximize the potential to observe nesting behavior; the survey timing should be adjusted in consideration of early and late nesting seasons. Surveys shall be initiated during Period II (March 20 to April 5) or Period III (April 5 to April 20) and cover at least two periods as outlined in the protocol. The surveys shall be conducted within a minimum of a 0.5-mile radius around the Project. • If active SWHA nests are identified within 0.25 miles of the Southern Annexation Parcel or in any area that could be directly or indirectly affected by the Project, a no-disturbance buffer area shall be established around the nest site to avoid take or adverse impacts to active SWHA nests. The buffer distance will vary by nest location, existing visual buffers, and intensity and extent of the construction-related disturbance. The buffer area size and types of construction activities restricted within the buffer area shall be determined in consultation with CDFW. The no-disturbance buffer area shall be established in the field with flagging, fencing, or other appropriate material and remain in place until all young in the nest have fledged or the nest otherwise becomes inactive due to predation or other natural causes as determined by the qualified biologist.		

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TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
	• The qualified biologist shall monitor the behavior of the birds at the nest site during construction activities to ensure that they are not disturbed by the Project work. Nest monitoring should continue until the nesting attempt is complete. • If initial ground-disturbing activities occur outside of the nesting season (September 1 through January 31), then the preconstruction SWHA survey shall not be required, and construction could begin unimpeded.		
Impact 3.3.2: The Project could impact plant species identified as a candidate, sensitive, or special status.	None required.	LS	LS
Impact 3.3.3: The Project could impact wetlands, riparian habitat, or other sensitive natural communities.	**Mitigation Measure 3.3.3a:** The construction contractor developing the Southern Annexation Parcel shall implement the following: • For all wetlands, a wetland protection zone shall be identified. The wetland protection zone shall extend from the delineated boundary of the wetland and include a 50-foot buffer. All wetland protection zones shall be clearly delineated and marked before ground-disturbing activities. • Wetland protection fencing shall be installed before any site work. Fencing shall remain in place until construction is complete. Fencing shall be constructed of orange construction fencing or other high-visibility materials. • Wetland protection fencing should be installed before any site work. Fencing shall remain in place until construction is complete. Fencing shall be constructed of orange construction fencing or other high-visibility materials. Fencing shall be routinely inspected to ensure it is intact and functional. • No construction materials, equipment storage, or parking areas shall be located within the wetland protection zone. • Drainage plans shall be designed to prevent direct runoff into the adjacent wetlands.	S	LSM
3.4 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES			
Impact 3.4.1: The Project could either directly or indirectly result in impacts to cultural resources.	**Mitigation Measure 3.4.1a:** If previously unidentified cultural or tribal cultural resources are encountered during Project implementation, all work shall stop within a 50 foot radius of the discovered resources, and the Yocha Dehe Wintun Nation and a qualified professional archaeologist (meeting Secretary of the Interior Archaeology Standards) shall be contacted to evaluate the situation. If a tribal cultural resource is discovered, the Yocha Dehe Wintun Nation shall be consulted to determine the length of work stop, and process for treating and handling any tribal cultural resources. If an archaeological site is found, a qualified archaeologist (meeting Secretary of the Interior Archaeology Standards) shall determine the depth and significance of the resource in accordance with CEQA Guidelines §15064.5 and PRC §21083.2. If the resource is determined to be potentially significant per CEQA Guidelines §15064.5 and PRC §21083.2 and	S	LSM

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TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
	cannot be preserved in place, an archaeological testing program shall be conducted in accordance with applicable Federal, state, and local archaeological guidelines. If the testing program identifies the site to be National Register-eligible and preservation in place is not feasible, a data recovery program shall be developed in accordance with applicable Federal, state, and local archaeological guidelines and in consultation with the California Office of Historic Preservation. Project personnel shall not collect any cultural or tribal cultural resources that are encountered. Prehistoric resources could include but are not limited to, chert or obsidian flakes, projectile points, mortars, pestles, and dark friable soil containing shell and bone dietary debris, heat affected rock, or human burials. **Mitigation Measure 3.4.1b:** Although unlikely, if human remains are encountered, all work shall stop in the immediate vicinity of the discovered remains and the Napa County Coroner and a qualified archaeologist shall be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American or prehistoric, the Native American Heritage Commission (NAHC) shall be contacted by the Napa County Coroner so that a "Most Likely Descendant" (MLD) can be designated and further recommendations regarding treatment of the remains can be provided.		
Impact 3.4.2: The Project could either directly or indirectly result in impacts to tribal cultural resources.	**Mitigation Measure 3.4.2a:** Prior to the commencement of Project construction, the City shall execute a cultural sensitivity training agreement with the Yocha Dehe Wintun Nation and shall hold the training with all construction personnel associated with development of the Southern Annexation Parcel.	S	LSM
3.5 GEOLOGY, SOILS AND SEISMICITY			
Impact 3.5.1: The Project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	None required.	LS	LS
Impact 3.5.2: The Project could be subjected to hazards associated with weak and expansive soils and high soil moisture in the areas of new construction (Southern Annexation Parcel).	**Mitigation Measure 3.5.2a:** To accompany final foundation design of the BCF structure on the Southern Annexation Parcel of the Project site, as required by the City of Napa (Napa Municipal Code § 16.36.200), the applicant shall engage a California licensed Professional Geotechnical Engineer to conduct a final, design-level geotechnical investigation, using and updating information and data developed during the 2017 Bauer Associates Preliminary Geotechnical Investigation. The design-level geotechnical investigation, the recommendations developed through that investigation, the engineering approval, and the inspection responsibility are requirements of the City of Napa. The design-level investigation shall further assess and verify subsurface soil conditions on the portion of the parcel in which grading, foundation placement, and construction will occur and at a minimum, address the presence of the weak and expansive soils identified during the 2017 preliminary geotechnical investigation. The final, design-level geotechnical investigation shall	S	LSM

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TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
	include adequate subsurface exploration and laboratory soils testing to comprehensively inform feasible geotechnical recommendations appropriate to fully remedy potential adverse effects of near-surface soils classified as weak, expansive, or that are negatively impacted by saturated subsurface conditions or high groundwater. The geotechnical recommendations contained in the report shall be incorporated into the final Project design to address all identified unfavorable soil conditions and shall be implemented as required by the geotechnical engineer of record. Recommendations may include, but are not limited to, replacement of problematic native soils with adequately compacted geotechnically suitable imported soil material; reworking, reconditioning and recompacting onsite soils, as appropriate; or treating onsite soils in situ to increase their strength (i.e. lime treatment). Recommendations for geotechnical grading to route surface runoff away from structures to ensure continued stability of soil supporting building foundations shall also be incorporated into the Project design and implemented. The design-level geotechnical investigation findings, conclusions, and recommendations must be certified by a licensed California Geotechnical engineer. As required, the applicant shall submit the final design-level geotechnical investigation report and recommendations to the City of Napa for review and approval prior to the issuance of the building permit, and the City shall ensure through permit conditions and inspection that all geotechnical recommendations are implemented as part of the Project design.		
Impact 3.5.3: The Project could contribute to soil erosion and potentially the eventual sedimentation of downgradient water features during Project construction activities.	None required.	LS	LS
Impact 3.5.4 The Project could directly or indirectly destroy a unique geological feature or paleontological resource.	**Mitigation Measure 3.5.4a:** This measure applies to construction of the BCF on the Southern Annexation Parcel under the conditions that construction excavations reach vertical depths capable of penetrating the Late Pleistocene Alluvium that may be present beneath the Project site. The Applicant shall retain a qualified paleontologist meeting Society of Vertebrate Paleontology (SVP) standards to oversee the preparation of a paleontological resources monitoring plan (PRMP). The PRMP shall be prepared prior to the start of construction activities, reviewed and approved by the City of Napa (City), and implemented by a qualified paleontologist. The PRMP shall provide guidance for paleontological field surveys, fossil sampling, spot checking/monitoring, reporting, curation, and on-call response to fossil discoveries that occur for the duration of the Project construction. The PRMP shall detail the following components: a) ***Worker Training.*** The qualified paleontologist shall prepare and implement a worker training program to inform construction personnel of the possibility for fossil discoveries. The training program shall provide an overview of the paleontological sensitivity of the site and the potential to uncover fossil remains. The training program shall instruct personnel to immediately inform their supervisor if any bones, teeth, or other substantial fossil remains are unearthed. In such a case, workers shall	S	LSM

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Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
	immediately cease activity within a 25-foot radius of the discovery site until a qualified paleontologist can examine and evaluate the find per item (b) below. Work may not resume in the discovery area until it has been authorized by the City. The training shall be provided for new personnel prior to beginning work on the site and such trainings should be coordinated with the site manager and should coincide with spot checking/sampling visits. Verification of training will be provided as an appendix to the annual report submitted to the City. b) ***Evaluation and Salvage of Fossils.*** If any bones, teeth, or other fossil remains are unearthed in the course of ground disturbance, work will cease as directed in item (a) and a qualified paleontologist will examine and evaluate the find. In the event that the qualified paleontologist deems the fossil significant according to current SVP Guidelines and recommends it for curation, the qualified paleontologist shall propose salvage measures in consultation with the Applicant, and the salvage measures shall be reviewed and approved by the City and shall be carried out by or under the direct supervision of the qualified paleontologist. Curation shall follow the process directed in item (e). c) ***Paleontological Survey.*** At least 30 days prior to the start of surface disturbance in any new portion of the Project site, a paleontological survey shall be conducted by a qualified paleontologist for the area to be disturbed to allow for documentation and collection of surficial fossils. Following each survey, a paleontological survey memorandum shall be prepared. The first survey memorandum prior to the start of construction shall be submitted immediately upon completion to the City. Subsequent surveys during the life of the Project can be compiled and submitted as part of the annual paleontological mitigation report described in item (f). d) ***Spot Checks During Construction.*** A qualified paleontologist shall conduct periodic spot checks for the duration of construction activities that encounter Late Pleistocene alluvium. The qualified paleontologist shall check for the presence of any recently uncovered macrofossils or layers that should be sampled for microfossils. The need for, frequency, and timing of the spot checks shall be outlined in the PRMP, and during implementation the actual need, frequency, and timing shall be based on the PRMP and coordinated with the Applicant based on real-time excavation activities and locations. The frequency of spot-checking efforts in a given portion of the site area may be reduced at the recommendation of the qualified paleontologist with approval from the City if it is determined that only previously disturbed, imported, or Holocene-age alluvial sediments are being impacted, or if sediments are deemed to be non-conducive to fossil preservation. Dates and results of spot checks shall be recorded and reported as described in item (f). e) ***Sample Identification and Curation.*** The qualified paleontologist shall ensure that all fossils and bulk matrix samples collected at the Project site during work stoppages (if resources are found during ground disturbance), paleontological surveys, or spot checks		

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TABLE ES-1. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
	are removed to a secure paleontological laboratory within 30 days of collection from the field for preparation to the point of identification and curation in accordance with the current SVP Guidelines. All data, including the results of the analysis and research on the fossil collection, shall be compiled along with the fossil specimen inventory and detailed paleontological locality forms, maps, and photos for inclusion in the annual paleontological mitigation report described in item (f). f) ***Annual Reporting.*** The annual paleontological mitigation report shall be submitted to the City and, if fossils are discovered, to the University of California Museum of Paleontology (or other equivalent fossil repository). The annual paleontological mitigation report shall also include dates of field work, results of spot checking, survey and sampling, fossil analyses, significance evaluation, conclusions and future recommendations, locality forms, and an itemized list of specimens. Detailed survey reports and verification of new mining personnel paleontology trainings shall be included as appendices. The PRMP shall identify an annual due date for the report.		
3.6 GREENHOUSE GAS EMISSIONS			
Impact 3.6.1: The Project could generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	None required.	LS	LS
Impact 3.6.2: The Project could conflict with or obstruct implementation of CARB's 2017 and 2022 Scoping Plan.	None required.	LS	LS
3.7 HAZARDS, HAZARDOUS MATERIALS AND WILDFIRE			
Impact 3.7.1: Project construction and operation could create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous waste or through the reasonably foreseeable release of hazardous materials into the environment.	None required.	LS	LS
Impact 3.7.2: The Project could result in an airport safety hazard for people residing or working in the Project area.	**Mitigation Measure 3.9.2:** If it is determined that the Project is conditionally compliant with the ALUCP, the City shall agree to the conditions, as feasible. If it is determined that the Project does not comply with the ALUCP, the City shall consider ALUC feedback and amend (as feasible) and resubmit the Project for ALUC Executive Director Review.	S	SU
3.8 HYDROLOGY AND WATER QUALITY			
Impact 3.8.1: Construction of the Project could violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality.	None required.	LS	LS

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Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
Impact 3.8.2: Operation of the Project could violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality.	None required.	LS	LS
Impact 3.8.3: The Project could substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.	None required.	LS	LS
Impact 3.8.4: The Project could 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 result in substantial erosion or siltation on- or off-site.	None required.	LS	LS
Impact 3.8.5: The Project could 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 result in flooding on- or offsite.	None required.	LS	LS
Impact 3.8.6: The Project could 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 which could exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	None required.	LS	LS
Impact 3.8.7: The Project could 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 could impede or redirect flood flows.	None required.	LS	LS
Impact 3.8.8: The Project could conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	None required.	LS	LS

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Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
3.9 LAND USE AND LAND USE PLANNING			
Impact 3.9.1: Annexation of the southern parcel into the City could conflict with applicable annexation laws and regulations.	None required.	LS	LS
Impact 3.9.2: The Project could cause a significant environmental impact due to a conflict with an Airport Land Use Commission Plan.	**Mitigation Measure 3.9.2:** If it is determined that the Project is conditionally compliant with the ALUCP, the City shall agree to the conditions, as feasible. If it is determined that the Project does not comply with the ALUCP, the City shall consider ALUC feedback and amend (as feasible) and resubmit the Project for ALUC Executive Director Review.	S	SU
Impact 3.9.3: The Project could conflict with City of Napa 2040 General Plan Policies.	None required.	LS	LS
3.10 NOISE			
Impact 3.10.1: Construction of the Project could increase noise levels.	None required.	LS	LS
Impact 3.10.2: Operation of the Project could increase noise levels.	None required.	LS	LS
3.11 TRANSPORTATION			
Impact 3.11.1: The Project could conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	None required.	LS	LS
Impact 3.11.2: The Project could conflict with or be inconsistent with State CEQA *Guidelines* §15064.3, subdivision (b).	None required.	LS	LS
Impact 3.11.3: The Project could substantially increase hazards due to a geometric design feature or incompatible uses.	None required.	LS	LS
3.12 PUBLIC SERVICES, UTILITIES, AND SERVICE SYSTEMS			
Impact 3.12.1: The Project could require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, which could cause significant environmental effects.	None required.	LS	LS
Impact 3.12.2: The Project could have water demands greater than water supplies.	None required.	LS	LS

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Impact	Mitigation Measure	Impact Significance	
		Before Mitigation	After Mitigation
Impact 3.12.3: The Project could have an impact on a wastewater treatment provider.	None required.	LS	LS
Impact 3.12.4: The Project could generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure and would comply with federal, state and local management statutes and regulations related to solid waste.	None required.	LS	LS
3.13 ENERGY			
Impact 3.13.1: Project construction or operation could result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.	None required.	LS	LS
Impact 3.13.2: The Project could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	None required.	LS	LS

KEY: S - Significant SU – Significant and Unavoidable LS – Less than Significant LSM – Less than Significant with Mitigation NI – No Impact

CHAPTER 1
INTRODUCTION

1.1 PROJECT OVERVIEW AND BACKGROUND

1.1.1 PROJECT OVERVIEW

The Napa Materials Diversion Facility (NMDF) is an 18.6-acre fully permitted Solid Waste Facility located at 820 Levitin Way[1] and currently receives and processes all solid waste, compostable and recyclable materials generated within the City that are collected by the City's authorized operator Napa Recycling & Waste Services (NRWS). The NMDF also receives, and processes materials delivered by haulers servicing surrounding jurisdictions (such as unincorporated Napa County) and by private (self-haul) customers. Current operations at NMDF include receiving, storing, processing, recycling, and composting waste materials from residential, commercial, and industrial sectors. NMDF operates under Solid Waste Facility Permit (SWFP) 28-AA-0030, which limits the facility to a maximum tonnage of 760 tons per day (tpd) and 386 waste hauling vehicles per day.

This Environmental Impact Report (EIR) evaluates the proposed Napa Renewable Resources Project 2.0 (NRRP 2.0, the "Project"), which consists of an increase of the NMDF site's overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd, the construction and operation of a biomass conversion facility (BCF), and the construction and operation of an anaerobic digestion facility (ADF) as part of an initiative to enhance sustainable waste management at the NMDF site. The proposed daily permitted tonnage increase is reflective of recent equipment upgrades at the NMDF site (e.g., organics shredder, trommel screens, optical sorters, sorting robots, etc.) that have improved processing efficiency and would provide accommodations for peak days that have higher tonnage of certain waste streams (e.g., dirt, rock, grape pomace, leaf fall season, etc.).

The Project would include a portion of the adjacent parcel to the south (formerly APN 057-090-060) located on the westerly side of Devlin Road between NMDF site to the north and Devlin Road Transfer Station to the south. The parcel was purchased by the City in December 2023 and would be annexed into the City subject to approval by Local Agency Formation Commission (LAFCO) of Napa County. A sphere of influence (SOI) amendment would also be required by LAFCO to process the annexation. The existing parcel was subdivided to create a smaller 2.87-acre parcel (APN 057-090-087). The resulting 2.87-acre parcel, referred to as the Southern Annexation Parcel in this EIR, excludes the wetlands that have been identified in previous studies on the parcel that was formerly known as APN 057-090-060 (now APN 057-090-088). The

[1] Assessor Parcel Number (APN): 057-110-049, -052, -065, -066, -067, and -068.

Southern Annexation Parcel is currently undeveloped and includes an area that received soil material from 2019 to 2022. In addition to the development of the Southern Annexation Parcel, the EIR also analyzes the environmental impacts from the future annexation into the City, the pre-zoning of the parcel to Public, Quasi-Public: Airport Compatibility Overlay District (PQ-P:AC) to be consistent with the existing NMDF site zoning, and a General Plan Amendment (GPA) to designate the parcel in the General Plan as Public Serving to be consistent with the existing NMDF land use designation.

The Project would also use a portion of the parcel to the north that is owned by 600 Tower Road Holdings, LLC, an LLC with the same owners as NRWS (APN 057-110-025). The 600 Tower Road Parcel would be used for inert materials processing and storage (relocated from the existing NMDF site). The parcel is currently used for container, equipment, and vehicle storage. The parcel would remain under the same ownership and would allow for operational flexibility as it can be accessed directly from the NMDF site without using Tower Road.

The Project is subject to the California Environmental Quality Act (CEQA) because the Project is undertaken by a public agency and approval of any permits requires discretionary actions by public bodies. The City of Napa, which is the CEQA Lead Agency for environmental review, has determined that the Project has the potential to cause a significant environmental impact. For this reason, the City has concluded that an EIR is the appropriate level of environmental review for this Project.

The Project would be undertaken to allow the NMDF greater flexibility in developing and implementing processes and operations that ultimately divert organics from the landfill, decrease greenhouse gas (GHG) emissions, increase the recovery of materials and energy from waste, and allow the facility to operate more efficiently and economically.

1.1.2 HISTORY AND BACKGROUND OF THE PROJECT

The NMDF was developed in the early nineties to answer the call of the California Integrated Waste Management Act of 1989 (AB 939) to divert 50% of the waste stream from disposal by 2000, which has been surpassed. The City and the operator, NRWS maintain many local and state permits for the NMDF. The County of Napa approved Use Permit U-90-29, and certified a Negative Declaration (ND) in 1991, that has been modified several times over the years; February 9, 1994 (93248-MOD), September 16, 1994 (93530-MOD), April 16, 1995 (94129-MOD), March 20, 1996 (95172-MOD), and August 20, 1997 (96468-MOD), and with each Use Permit Modification, an ND was certified pursuant to the provisions of the CEQA. All these approvals occurred prior to the City of Napa purchasing the NMDF site and are no longer valid for current NMDF operations on the six core parcels that make up the existing NMDF.

The City of Napa has been highly successful since purchasing the MDF in 2004. The current Napa Renewable Resources Project 1.0 (NRRP 1.0) at the NMDF was approved in 2013 (Notice of Determination was filed in 2014) and through subsequent addenda. As a result of NRRP 1.0, a Conditional Use Permit (CUP) was issued by the City of Napa Planning Commission per Resolution PC-2013-15 (approved on November 7, 2013). This is the current CUP for the six core parcels owned by the City that make up the existing NMDF. Prior to the 2013 approval, a

Mitigated Negative Declaration (MND) was prepared pursuant to the provisions of CEQA. The 2013 MND for NRRP 1.0 analyzed covered composting, a 20,000 tons per year (tpy) ADF, a 1.0-megawatt (MW) biomass gasification facility (BGF), installation of improved stormwater treatment facilities, and solar panels on the roof of the NMDF building and shop building. The 2013 MND also allowed food waste and co-collected food waste to be received at the facility, increased the permitted maximum storage of organics onsite at any one time from 60,00 cubic yards (cy) to 90,000 cy, and changed facility hours to 24-hour operations to operate the blowers for covered composting and operating and the future ADF.

The six core parcels owned by the City that make up the existing NMDF were annexed into the City of Napa through LAFCO of Napa County on March 4, 2014. These six parcels have since been legally merged into a single parcel and are awaiting a new APN number from Napa County.

In 2014, the First Technical Addendum to the 2013 MND was approved, which increased the peak design capacity of the approved AD facility from 20,000 to 25,000 tpy, clarified the feedstocks for composting, and institutionalized the historical product depackaging operations.

In 2016, a Second Technical Addendum to the 2013 MND Addendum addressed an increased peak daily tonnage, a shift from the initial 500 tpd to 760 tpd. Furthermore, this addendum responded to specific inquiries from the Bay Area Air Quality Management District (BAAQMD), providing additional analysis for the electric sort line and organics processing equipment replacing diesel-powered machinery.

In 2017, a Third Technical Addendum (January 13, 2017) to the 2013 MND Addendum addressed an increased peak daily tonnage of organic materials to 760 tpd (the current facility tonnage limit for all waste types).

In 2018, noteworthy revisions continued through a Third Technical Addendum to the 2013 MND, which analyzed a Covered Aerated Static Pile (CASP) mass bed composting system with concrete slab, walls, and positive aeration system capable of composting 66,640 tpy, the modification of drainage pipelines to direct all stormwater on-site to a single detention pond capable of processing 1,000 gallons per minute, the installation of roof structures that cover operations, and adjusting the peak design capacity of the approved AD facility from 25,000 tpy to 44,000 tpy.

The approved ADF and BGF at NMDF site that were analyzed and approved through the 2013 MND and subsequent Addendums have not been constructed. In May 2023, the City of Napa applied for a $10,000,000 grant with the Department of Resources Recycling and Recovery (CalRecycle) for funds to develop an ADF on the existing NMDF property. The City of Napa was awarded the grant in December 2023. This EIR analyzes the environmental impacts of the ADF even though it is covered through previous CEQA review and documentation. This conservative approach allows for an assessment of cumulative impacts to key resource areas, such as air quality, greenhouse gas (GHG) emissions, and traffic.

Currently, the City and NRWS are moving forward with Syncraft to design and build the BCF. Since the BCF would be larger than facility analyzed in the 2013 MND and would be developed

outside of the current NMDF site, this EIR analyzes the BCF as a new Project element and does not rely on previous CEQA documentation.

1.2 EIR PREPARATION

This EIR has been prepared in conformance with CEQA (Public Resources Code sections 21000, et seq.), and the CEQA Guidelines for Implementing the California Environmental Quality Act (California Code of Regulations, Title 14 sections 15000 et seq.). As described in CEQA Guidelines section 15121(a), an EIR is a public information document that objectively assesses and discloses potential environmental effects of a proposed project, and identifies mitigation measures and alternatives to the project, which would reduce or avoid adverse environmental impacts. CEQA requires that lead, responsible, and trustee agencies consider the environmental consequences of projects over which they have discretionary authority.

The City of Napa is the Lead Agency for the preparation of the EIR and has discretionary approval of the Project. The intent of this EIR is to enable the City, responsible agencies, and other interested parties to understand the potential environmental effects of the Project, determine whether any feasible mitigation measures are necessary and available to reduce potentially significant environmental impacts, and to approve, modify, or deny approval of the Project. This EIR will need to be certified by the City as complete and adequate prior to other agency approvals.

As required under CEQA, the goals of this EIR are:

- To inform the public and governmental decision makers about the potential, significant environmental effects of the Project, and to solicit input on its potential environmental effects;
- To identify the ways that environmental damage can be avoided or significantly reduced;
- To prevent significant, avoidable damage to the environment by requiring changes in the Project using alternatives or mitigation measures when the governmental agency finds the changes to be feasible;
- To disclose to the public the reasons why a governmental agency approved the Project in the manner the agency chose, if significant environmental effects are involved; and
- To provide the City of Napa with a technically and legally adequate environmental document to be used as one basis for the decision-making processes for the Project; and to provide responsible regulatory agencies with environmental information necessary for issuing permits for the Project.

1.3 SCOPE AND ORGANIZATION OF THE EIR

Based on a preliminary review of potential Project impacts, the City determined that an EIR would be the appropriate level of environmental review for the Project. In November 2023, the City prepared and circulated a Notice of Preparation (NOP) for this EIR (**Appendix A**), in accordance with CEQA Guidelines §15082, to seek comments from affected agencies and the public regarding

the scope of the EIR. The City held a virtual scoping meeting via Zoom Webinar on November 15, 2023. Three comment letters were received during the 30-day NOP scoping period from interested governmental agencies (See **Appendix B**).

Based on the scoping process and the CEQA Guidelines, key issues that are evaluated in this EIR include:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources/Tribal Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services and Utilities
- Transportation
- Cumulative Impacts

This EIR is organized in the following manner:

Chapter 1 – Introduction: This chapter describes the project background, scope and organization of the EIR and details of the EIR review process.

Chapter 2 – Project Description: This chapter provides a description of the Project, site location, general existing conditions, project objectives, and the use of this document and future approvals required for the Project.

Chapter 3 – Environmental Setting, Impacts and Mitigation Measures: This chapter describes, for each environmental topic: existing conditions (settings); potential environmental impacts and their level of significance; and mitigation measures recommended to mitigate identified impacts.

Chapter 4 – Other CEQA Topics and Impact Overview: This chapter addresses CEQA mandated topics of growth-inducing impacts, cumulative impacts, unavoidable significant adverse impacts, significant irreversible environmental changes, and effects found not to be significant.

Chapter 5 – Alternatives: This chapter provides an evaluation Project Alternatives, including the CEQA-required No Project Alternative.

Chapter 6 – EIR Authors, Persons and Organizations Contacted: This chapter provides a list of persons who authored this document and supporting technical reports.

Chapter 7 – Acronyms: This chapter lists acronyms and abbreviations used in the EIR.

Appendices: Appendices include the NOP, NOP Comment Letters and Technical Appendices (information) for many of the resource areas analyzed in Chapter 3.

1.3.1 APPROACH TO ANALYSIS

CEQA Guidelines § 15125(a) addresses how a lead agency should establish the baseline conditions against which potential environmental impacts of a project are measured, as follows:

> "(1) Generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record.
>
> (2) A lead agency may use projected future conditions (beyond the date of project operations) baseline as the sole baseline for analysis only if it demonstrates with substantial evidence that use of existing conditions would be either misleading or without informative value to decision-makers and the public. Use of projected future conditions as the only baseline must be supported by reliable projections based on substantial evidence in the record.
>
> (3) An existing conditions baseline shall not include hypothetical conditions, such as those that might be allowed, but have never actually occurred, under existing permits or plans, as the baseline."

CEQA case law provides guidance as to the appropriate baseline for existing, permitted, facilities seeking modifications to permitted operations or activities. In *Fairview Neighbors v. County of Ventura* ([2d Dist. 1999] 70 Cal. App. 4th 238 [82 Cal. Rptr.2d 436]) the Court ruled that for an existing, permitted facility that was seeking a permit for a new or revised aspect of its operation, where the facility's previously permitted operations had previously undergone environmental review, the appropriate baseline should be the existing permitted operations, rather than the level of operations actually occurring at the time of the Notice of Preparation.

The NMDF regularly reaches its permitted maximum tonnage under its SWFP, which currently limits the facility to a maximum tonnage of 760 tpd, and State mandates to increase waste diversion from landfills will continue to increase demand for solid waste facilities. Therefore, the existing and active facility operations at NMDF at a maximum tonnage of 760 tpd, constitute the baseline against which potential impacts of the Project are measured in this EIR. As stated previously, this EIR presents a stand-alone analysis of the development and operation of the ADF and BCF.

1.4 THE EIR PROCESS

The City will circulate this Draft EIR for review by public agencies and interested persons and organizations for a 45-day public review period, in accordance with CEQA Guidelines §15105. Written comments will be accepted at the City of Napa Utilities Department until 5:00 p.m. on March 16, 2026, the closing day of the Draft EIR review period. Details for written comments on

the Draft EIR are included in the Notice of Availability at the front of this Draft EIR. The Notice of Availability and Draft EIR will also be posted on the City's website at:

https://www.cityofnapa.org/488/Solid-Waste-Recycling-Division

Written comments should be emailed to chrisjones@cityofnapa.org or submitted by March 16, 2026, at 5:00 p.m. to:

City of Napa Utilities Department
ATTN: Chris Jones, P.E.
RE: NRRP 2.0 EIR
P.O. Box 660
Napa, CA 94559-0660

At the close of the public review period, the City will evaluate the comments received on the environmental issues and prepare written responses, as required by CEQA Guidelines §15088. The comments and responses will be included in the Final EIR as a separate chapter, along with any revised EIR text necessitated by the response to comments.

1.5 REFERENCES

CalReycle, Solid Waste Facility Permit, Facility Number 28-AA-0030.

City of Napa. 2020. *Notice of Preparation (Notice) of an Environmental Impact Report (EIR) and Notice of Zoom Scoping Meeting for Napa Renewable Resources Project 2.0 (NRRP 2.0)*. November 15, 2023.

City of Napa. 2013. Napa Renewable Resources Project (NRRP) Initial Study/Mitigated Negative Declaration, State Clearinghouse Number: 2013092036, Approved November 7, 2013.

City of Napa. 2014. Napa Renewable Resources Project CEQA Technical Addendum. June 23, 2014.

City of Napa. 2016. Napa Renewable Resources Project CEQA Technical Addendum. May 24, 2016.

City of Napa. 2017. Napa Renewable Resources Project CEQA Technical Addendum. January 13, 2017.

City of Napa, 2018. Napa Renewable Resources Project CEQA Technical Addendum. March 5, 2018.

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CHAPTER 2
PROJECT DESCRIPTION

2.1 INTRODUCTION

This chapter of the Environmental Impact Report (EIR) presents a description of the Project that includes the Project background and site history, Project location and existing site characteristics, and Project elements. This chapter also provides a statement of Project objectives, the intended uses of the EIR, a list of public agencies that are expected to use this EIR, and a list of approvals and permits that may be required to implement the Project.

2.2 BACKGROUND AND SITE HISTORY

The Napa Materials Diversion Facility (NMDF) site is an 18.6-acre fully permitted Solid Waste Facility located at 820 Levitin Way[1] and currently receives and processes all solid waste, compostable and recyclable materials generated within the City that are collected by the City's authorized operator Napa Recycling & Waste Services (NRWS). The NMDF site also receives, and processes materials delivered by haulers servicing surrounding jurisdictions (such as unincorporated Napa County) and by private (self-haul) customers. Current operations at the NMDF site include receiving, storing, processing, recycling, and composting waste materials from residential, commercial, and industrial sectors. The NMDF site operates under Solid Waste Facility Permit (SWFP) 28-AA-0030, which limits the facility to a maximum tonnage of 760 tons per day (tpd) and 386 waste hauling vehicles per day.

The proposed Napa Renewable Resources Project 2.0 (NRRP 2.0, the "Project") consists of an increase of the NMDF site's overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd, the construction and operation of a biomass conversion facility (BCF), and the construction and operation of an anaerobic digestion facility (ADF) as part of an initiative to enhance sustainable waste management at the NMDF site. The proposed daily permitted tonnage increase is reflective of recent equipment upgrades at the NMDF site (e.g., organics shredder, trommel screens, optical sorters, sorting robots, etc.) that have improved processing efficiency and would provide accommodations for peak days that have higher tonnage of certain waste streams (e.g., dirt, rock, grape pomace, leaf fall season, etc.).

The NMDF site was developed in the early nineties to answer the call of the California Integrated Waste Management Act of 1989 (AB 939) to divert 50% of the waste stream from disposal by 2000, which has been surpassed. The City and the operator (NRWS) maintain many local and state permits for the NMDF site. The County of Napa approved Use Permit U-90-29, and

[1] Assessor Parcel Number (APN): 057-110-049, -052, -065, -066, -067, and -068.

certified a Negative Declaration (ND) in 1991, that has been modified several times over the years; February 9, 1994 (93248-MOD), September 16, 1994 (93530-MOD), April 16, 1995 (94129-MOD), March 20, 1996 (95172-MOD), and August 20, 1997 (96468-MOD), and with each Use Permit Modification, an ND was certified pursuant to the provisions of the California Environmental Quality Act (CEQA). All these approvals occurred prior to the City of Napa purchasing the NMDF site and are no longer valid for current NMDF operations on the six core parcels that make up the existing NMDF.

The City of Napa has been highly successful since purchasing the NMDF site in 2004. The current Napa Renewable Resources Project 1.0 (NRRP 1.0) at the NMDF site was approved in 2013 (Notice of Determination was filed in 2014) and through subsequent addenda. As a result of NRRP 1.0, a Conditional Use Permit (CUP) was issued by the City of Napa Planning Commission per Resolution PC-2013-15 (approved on November 7, 2013). This is the current CUP for the six core parcels owned by the City that make up the existing NMDF. Prior to the 2013 approval, a Mitigated Negative Declaration (MND) was prepared pursuant to the provisions of CEQA. The 2013 MND for NRRP 1.0 analyzed covered composting, a 20,000 tons per year (tpy) ADF, a 1.0-megawatt (MW) biomass gasification facility (BGF), installation of improved stormwater treatment facilities, and solar panels on the roof of the NMDF building and shop building. The 2013 MND also allowed food waste and co-collected food waste to be received at the facility, increased the permitted maximum storage of organics onsite at any one time from 60,00 cubic yards (cy) to 90,000 cy, and changed facility hours to 24-hour operations to operate the blowers for covered composting and the future ADF.

The six core parcels owned by the City that make up the existing NMDF were annexed into the City of Napa through Local Agency Formation Commission (LAFCO) of Napa County on March 4, 2014. These six parcels have since been legally merged into a single parcel and are awaiting a new APN number from Napa County.

In 2014, the First Technical Addendum (July 2, 2014) to the 2013 MND was approved, which increased the peak design capacity of the approved ADF from 20,000 to 25,000 tpy, clarified the feedstocks for composting, and institutionalized the historical product depackaging operations.

In 2016, a Second Technical Addendum (May 24, 2016) to the 2013 MND Addendum addressed an increased peak daily tonnage, a shift from the initial 500 tpd to 760 tpd. Furthermore, this addendum responded to specific inquiries from the Bay Area Air Quality Management District (BAAQMD), providing additional analysis for the electric sort line and organics processing equipment replacing diesel-powered machinery.

In 2017, a Third Technical Addendum (January 13, 2017) to the 2013 MND Addendum addressed an increased peak daily tonnage of organic materials to 760 tpd (the current facility tonnage limit for all waste types).

In 2018, noteworthy revisions continued through a Fourth Technical Addendum (March 5, 2018) to the 2013 MND, which analyzed a Covered Aerated Static Pile (CASP) mass bed composting system with concrete slab, walls, and positive aeration system capable of composting 66,640 tpy, the modification of drainage pipelines to direct all stormwater on-site to a single detention pond

capable of processing 1,000 gallons per minute, the installation of roof structures that cover operations, and adjusting the peak design capacity of the approved ADF from 25,000 tpy to 44,000 tpy.

The approved ADF and BGF at NMDF site that were analyzed and approved through the 2013 MND and subsequent Addendums have not been constructed. In May 2023, the City of Napa applied for a $10,000,000 grant with the Department of Resources Recycling and Recovery (CalRecycle) for funds to develop an ADF on the existing NMDF property. The City of Napa was awarded the grant in December 2023. This EIR analyzes the environmental impacts of the ADF even though it is covered through previous CEQA review and documentation. This conservative approach allows for an assessment of cumulative impacts to key resource areas, such as air quality, greenhouse gas (GHG) emissions, and traffic.

Currently, the City and NRWS are moving forward with Syncraft to design and build the BCF. Since the BCF would be larger than facility analyzed in the 2013 MND and would be developed outside of the current NMDF site, this EIR analyzes the BCF as a new Project element and does not rely on previous CEQA documentation.

2.3 PROJECT LOCATION AND EXISTING SETTING

The Project site includes the NMDF site located at 820 Levitin Way and adjacent parcels (see **Figure 2-1**). The NMDF site comprises approximately 18.6 acres, of which approximately 12 acres are used for organic material management operations such as composting and chip and grind; 1.2 acres for concrete recycling; 2.2 acres for soil stockpiling; 1.2 acres for material recovery facility (MRF) recyclables and product depackaging; and about 2.0 acres for support operations.

The existing site plan for NMDF site is shown in **Figure 2-2**. Existing improvements on the site include an organic material management operation, MRF, shop, administration office and parking, scales, recycling commodities storage area, wallboard stockpile, universal waste area, and inerts processing areas. The organic material management operation includes a biofilter, feedstock tipping area, green waste stockpile, two organics preprocessing buildings (one with a food waste depackager), processed compost feedstock stockpile, unprocessed and processed wood waste stockpiles, compost screening building, finished compost storage area, staging area for compost screening, compost curing area, CASP composting area, finished product storage area, and biochar machine. Stormwater infrastructure on site includes a stormwater filtration system, storage pond, settling pond, and retention pond.



Source: RCH Group; Google Earth Pro, 2023

Figure 2-1
Regional Site Location

RCH GROUP
planning & environmental consulting



Source: Edgar & Associates, 2023

Figure 2-2
Existing NMDF Site Plan

RCH GROUP
planning & environmental consulting

The Project would include a portion of the adjacent parcel to the south (formerly APN 057-090-060) located on the westerly side of Devlin Road between NMDF site to the north and Devlin Road Transfer Station to the south (See **Figure 2-1**). The parcel was purchased by the City in December 2023 and would be annexed into the City subject to approval by Local Agency Formation Commission (LAFCO) of Napa County. A sphere of influence (SOI) amendment would also be required by LAFCO to process the annexation. The existing parcel was subdivided to create a smaller 2.87-acre parcel (APN 057-090-087). The resulting 2.87-acre parcel, referred to as the Southern Annexation Parcel in this EIR, excludes the wetlands that have been identified in previous studies on the parcel that was formerly known as APN 057-090-060 (now APN 057-090-088). The Southern Annexation Parcel is currently undeveloped and includes an area that received soil material from 2019 to 2022. In addition to the development of the Southern Annexation Parcel, the EIR also analyzes the environmental impacts from the future annexation into the City, the pre-zoning of the parcel to Public, Quasi-Public: Airport Compatibility Overlay District (PQ-P:AC) to be consistent with the existing NMDF site zoning, and a General Plan Amendment (GPA) to designate the parcel in the General Plan as Public Serving to be consistent with the existing NMDF land use designation.

The Project would also use a portion of the parcel to the north that is owned by 600 Tower Road Holdings, LLC, an LLC with the same owners as NRWS (APN 057-110-025) (See **Figure 2-1**). The 600 Tower Road Parcel would be used for inert materials processing and storage (relocated from the existing NMDF site). The parcel is currently used for container, equipment, and vehicle storage. The parcel would remain under the same ownership and would allow for operational flexibility as it can be accessed directly from the NMDF site without using Tower Road.

Napa County airport is situated to the west/northwest of the Project site. Directly south of the airport, a range of facilities including hangars and parking are integrated into the airport's operations. Union Pacific Railroad runs adjacent to the western edge of the Project site, while Devlin Road runs adjacent to the eastern edge of the Project site (except for the Tower Road Parcel). Further east, opposite Devlin Road, lie several industrial parcels associated with the construction and building industry. The Project site is bordered to the north and northeast by industrial parcels used for equipment and vehicle storage and is bordered to the south and southeast by vacant land and the Devlin Road Transfer Station. Highway 29 is roughly 2,000 feet east of the Project site. The nearest residence is approximately 2,340 feet to the east of the Project site, across Highway 29 on Café Court. The nearest school is Napa Junction Magnet Elementary School, approximately 1.8 miles south of the Project site.

2.4 PROJECT OBJECTIVES

Pursuant to State CEQA *Guidelines* 15124(b), the Project Description includes this statement of the project objectives. The objectives are intended to demonstrate the purpose of the Project. The primary objectives of the Project include the following:

- To expand the NMDF site operations and support regional recycling and waste management efforts through new operational methodologies.
- To increase the City's ability to divert waste (including organics) from the landfill and continue to meet the state-mandated diversion goals provided in SB 1383, other state-mandates to reduce waste from landfill (AB 341) and reduce greenhouse gas (GHG) emissions (SB 32).
- To increase the NMDF site's efficiency, diversify operations, and operate more economically.
- Implement renewable energy solutions at the NMDF site to reduce reliance on non-renewable power sources and reduce GHG emissions.

2.5 PROJECT ELEMENTS

The Project evaluated in this EIR consists of several changes to NMDF site's existing operations and permits including but not limited to the SWFP and BAAQMD air quality permits. The Project would increase material processing capabilities while enhancing sustainable waste management at the NMDF site. Elements of the Project include:

- Increasing the NMDF site's overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd;
- Constructing and operating a BCF on the Southern Annexation Parcel;
- Constructing and operating an ADF on the existing NMDF site; and
- Using a portion of the 600 Tower Road Parcel to the north for relocating existing NMDF inert materials processing and storage.

2.5.1 INCREASED PERMITTED TONNAGE LIMIT

The NMDF site operates under SWFP 28-AA-0030[2], which limits the facility to a maximum tonnage of 760 tpd and 386 waste hauling vehicles per day. The NMDF site currently has days when waste tonnage would exceed 760 tons if not for the daily limit. Such peak days are typically the result of heavy vehicles delivering inerts (rock/dirt) or seasonal peaks for organics (e.g. grape pomace, leaf fall season, etc.). The Project would increase the overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd. The proposed daily permitted tonnage increase is reflective of recent equipment upgrades at the NMDF site (e.g., organics shredder, trommel screens, optical sorters, sorting robots, etc.) that have improved processing efficiency and accommodations for peak days that have higher tonnage of certain waste streams (e.g., dirt, rock, grape pomace, leaf fall season, etc.). It is expected that the new waste received under the proposed tonnage increase would be delivered by haulers servicing surrounding jurisdictions (such as unincorporated Napa County), as is the case under the existing condition.

In addition to the existing overall maximum tonnage limit of 760 tpd, the NMDF site is limited to a peak daily tonnage for organic materials and transfer processing (MRF recyclables and CDI) of 500 tpd and 360 tpd, respectively. The NMDF site proposes to eliminate these waste subcategory limits with the Project along with the overall tonnage limit increase.

The increase in tonnage limits and elimination of waste subcategory limits would assist in accommodating increased demands from new state regulations such as SB 1383[3], improved processing at the NMDF site due to recent equipment upgrades, as well as intermittent high tonnage days for inerts and seasonal fluctuations for organics (grape pomace).

The NMDF site does not propose to increase its permitted daily waste hauling vehicles limit since peak days are typically due to heavy trucks bringing in large loads, which results in less waste hauling vehicles to meet peak daily tonnage limits.

2.5.2 BIOMASS CONVERSION FACILITY AND ANNEXATION OF SOUTHERN PARCEL

NRWS proposes the construction and operation of a BCF on the Southern Annexation Parcel to address the growing challenge of processing woody waste. These waste streams include tree trimmings, source-separated construction and demolition (C&D) wood, and compost overs. The BCF aims to convert wood waste into renewable energy, thereby providing a long-term, sustainable alternative to landfill disposal and open pile burning.

A large impetus for this effort was the closure of many conventional biomass energy facilities that considerably increased the cost of diverting wood waste, particularly compost overs, from landfill disposal. NRWS's primary outlet—DTE in Woodland—has seen its capacity to accept

[2] https://www2.calrecycle.ca.gov/PublicNotices/Documents/8200
[3] California Department of Resources Recycling and Recovery (CalRecycle), https://calrecycle.ca.gov/organics/slcp/, accessed Sept. 26, 2023.

ground wood waste substantially reduced due to a statewide shift toward processing forest and agricultural waste, both of which are prioritized for wildfire mitigation and air quality improvements. As a result, the majority of Napa's ground wood now ends up in the landfill.

In recent years, securing beneficial reuse pathways for wood waste has become increasingly difficult and costly. NRWS seeks to establish a reliable, cost-effective, and environmentally responsible outlet for approximately 15,000 tons of woody biomass per year for the next 20-plus years. To address this challenge, NRWS has explored a wide range of biomass conversion technologies over several years, including pyrolysis, hydrogen production, and gasification. After in-depth evaluation, gasification[4] emerged as the most suitable technology to meet both the throughput and energy needs of the NMDF. The proposed BCF would serve the needs of NMDF by:

- Diverting wood waste[5] from incineration or landfill disposal;
- Reducing truck traffic associated air quality and GHG emissions associated with trucking wood waste;
- Generating clean, renewable electricity to power NMDF operations and selling excess renewable energy to the grid; and
- Producing biochar, a carbon-sequestering soil amendment.

The proposed BCF responds to statewide mandates under SB 1383, supports local organic waste diversion goals, and aligns with California's climate and renewable energy objectives by reducing landfill-bound organic waste, cutting GHG emissions, and producing carbon-negative byproducts.

In California, there are about two dozen active biomass to energy plants in operation. These plants are fueled primarily by wood waste and agricultural residues. Gasification typically refers to conversion in an oxygen- or air-deficient environment to produce fuel gases (e.g., synthesis gas, also known as "syngas"). The fuel gases are principally carbon monoxide, hydrogen, methane, and lighter hydrocarbons, but depending on the process used, can contain significant amounts of carbon dioxide and nitrogen, the latter mostly from air. Gasification also produces liquids (tars, oils, and other condensates) and solids (char, ash) from solid feedstocks.

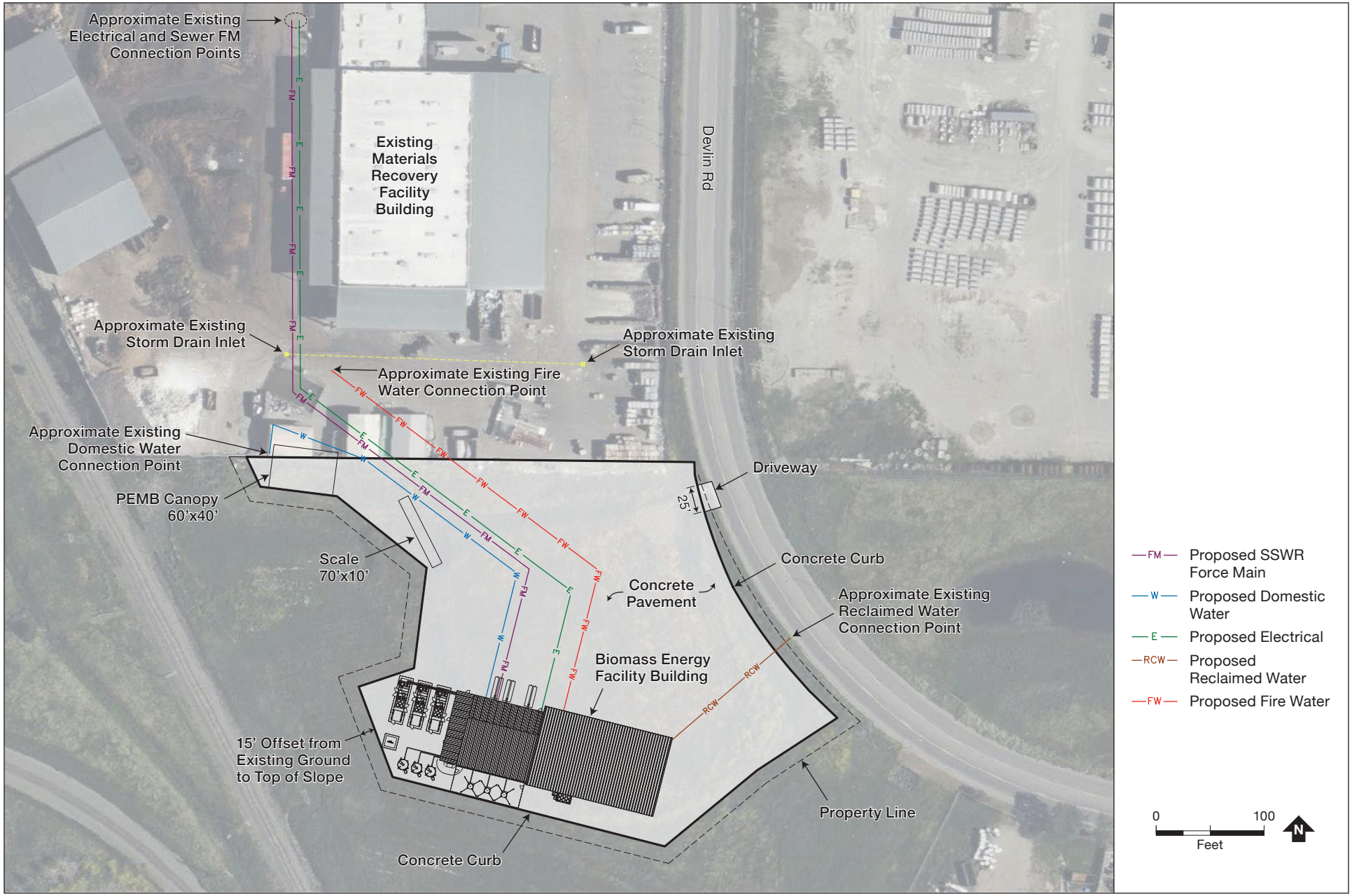
The BCF would be developed on the Southern Annexation Parcel, which is currently undeveloped and includes an area that received soil material from 2019 to 2022. The parcel was purchased by the City in December 2023 and would be annexed into the City subject to approval by LAFCO of Napa County. A SOI amendment would also be required by LAFCO to process the annexation. In addition to the development of the Southern Annexation Parcel, the EIR also analyzes the environmental impacts from the future annexation into the City, the pre-zoning of

[4] The Project does not meet the California definition (PRC Section 40106) for gasification and is thus referred to as a Biomass Conversion Facility (BCF). The word "gasification" is used in describing the technology in the context of the Federal EPA definition of gasification (40 CFR part 258).
[5] Treated Wood Waste (TWW) is disposed of and not diverted per California Department of Toxic Substances Control (DTSC) regulations.

the parcel to PQ-P:AC to be consistent with the existing NMDF site zoning, and a GPA to designate the parcel in the General Plan as Public Serving to be consistent with the existing NMDF land use designation.

The BCF is designed to generate 1.5 MW of renewable electricity to be used onsite to power NMDF operations, with excess electricity exported to the local electrical grid. The technology provider for the BCF is currently proposed to be Syncraft, a proven European biomass technology provider with multiple operational facilities. The BCF would process approximately 16,000 tons of wood waste per year, enabling NRWS to process 5,000 to 6,000 tons of compost overs annually into suitable biomass feedstock, eliminating the need for offsite disposal and avoiding approximately four truck shipments per day or roughly 1,500 truck shipments per year. Approximately 3,300 tpy of biochar would be generated from the biomass conversion process, which would be marketed and distributed to agricultural and environmental applications that align with carbon sequestration goals. The site plan for the BCF is shown in **Figure 2-3** and the equipment layout is shown in **Figure 2-4**.

The BCF includes feed hoppers, gasifiers, biochar handling equipment, gas clean-up equipment, three 500-kilowatt (kW) output syngas-fueled engines by Jenbacher, and flares. Material handling operations would include the transfer of feedstock to the grinder and an oscillating screen, loading the dryer, and handling and loadout of the biochar. The syngas produced by the gasifier would be captured in a closed vent system and used as fuel for the three Jenbacher engines to produce electricity. Syngas that cannot be combusted in the engine would be disposed of in a limited-use flare assigned to each engine. The BCF building is currently proposed at roughly 45 feet in height at the highest point.

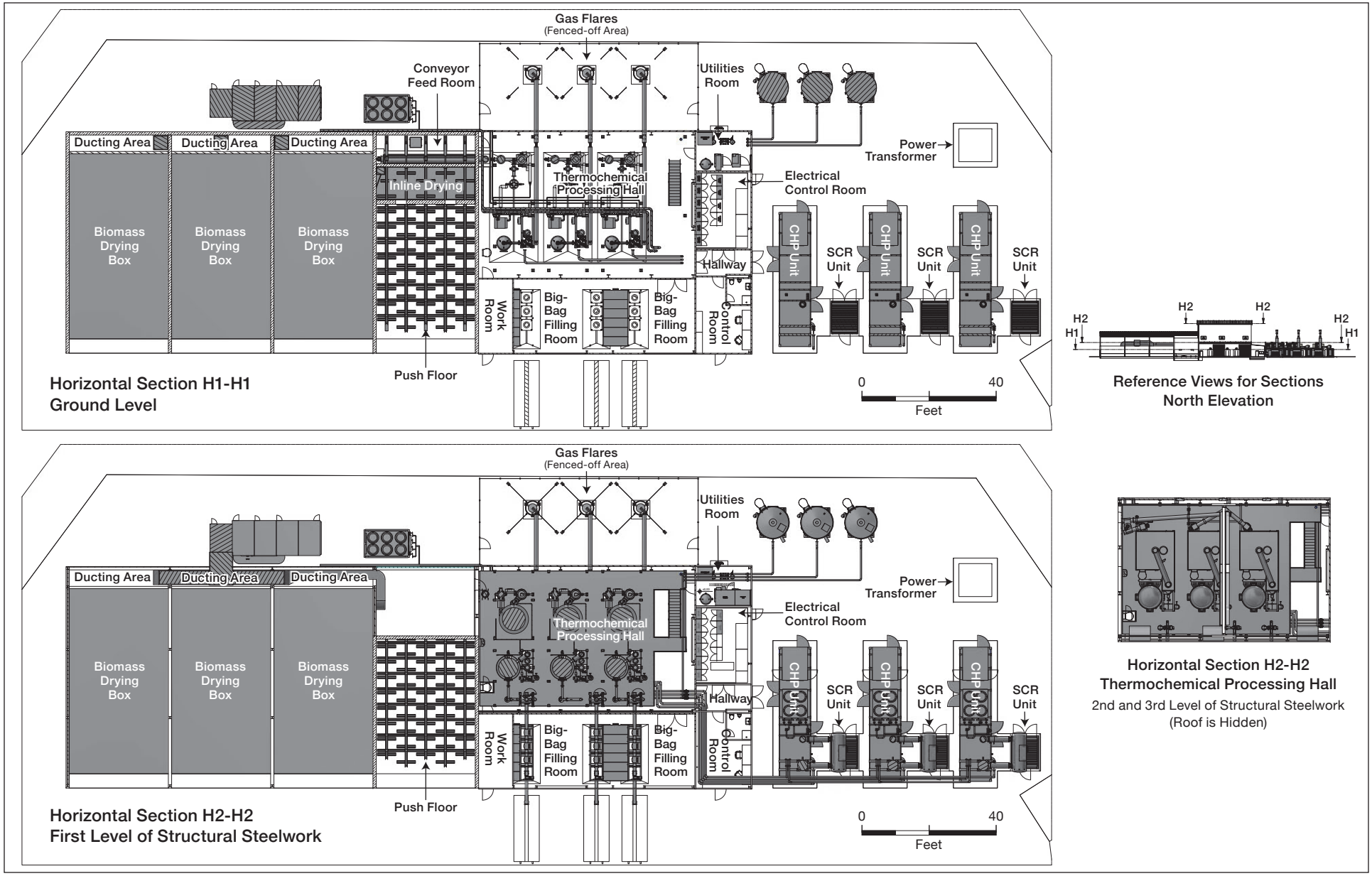


Source: Cunningham Engineering, 2025

Figure 2-3

Biomass Conversion Facility Site Plan

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Source: Syncraft, 2025

Figure 2-4

Biomass Conversion Facility Equipment Plan

RCH GROUP
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2.5.3 ANAEROBIC DIGESTION FACILITY

Approved ADF

The existing NMDF site was approved for an ADF through the 2013 CEQA MND and subsequent Addendums. The ADF has not been constructed at NMDF. In May 2023, the City of Napa applied for a $10,000,000 grant with CalRecycle for funds to develop an ADF on the existing NMDF property. The City of Napa was awarded the grant in December 2023.

The approved ADF to be constructed at the existing NMDF site would require an approximately 22,000 square-foot footprint and would process up to 44,000 tpy of high biomethane potential material such as food waste supplemented with green waste to maintain a solid matrix that is suitable for a plug flow system. The food waste would come from commercial, multi-family dwellings (MFD), residential and self-haul (RSH) sources, and industrial sources. The green waste would be from commercial, MFD, and RSH sources. The amount of tonnage processed through the ADF is ultimately determined by the ratio of high methane producing food waste compared to green waste.

Proposed ADF

The ADF vendor selected by the City is Zero Waste Energy, LLC (ZWE), who is proposing the installation of a Thöni Environmental Engineering Wet Digestion system—specifically, a semi-dry, plug-flow digester. Thöni is a respected vendor with over 30 years of experience and more than 170 facilities operating across 20 countries. As noted previously, the City secured a $10 million grant through CalRecycle's Organics Infrastructure Grant Program to support this effort. The proposed ADF would require 32,000 tpy of high biomethane potential feedstock or 44,000 tpy of low biomethane potential feedstock and would generate over 440,000 diesel gallon equivalents (dge) of renewable natural gas (RNG) annually, which would be used to fuel collections vehicles at NMDF. The proposed ADF would serve the needs of NMDF by offering:

- High flexibility with a wide range of organic input materials;
- A compact footprint with seamless integration with NMDF's current organic pre-processing systems and upcoming grant-funded organics depackager;
- Low labor requirements;
- Production of consistent RNG to fuel collection vehicles; and
- Digestate suitable for blending into the CASP composting process.

At 32,000 tpy of high biomethane potential feedstock, the proposed ADF is currently projected to use the following mix of feedstock:

- 13,000 tpy of foodwaste;
- 9,000 tpy of greenwaste; and

- 10,000 tpy of grape pomace.

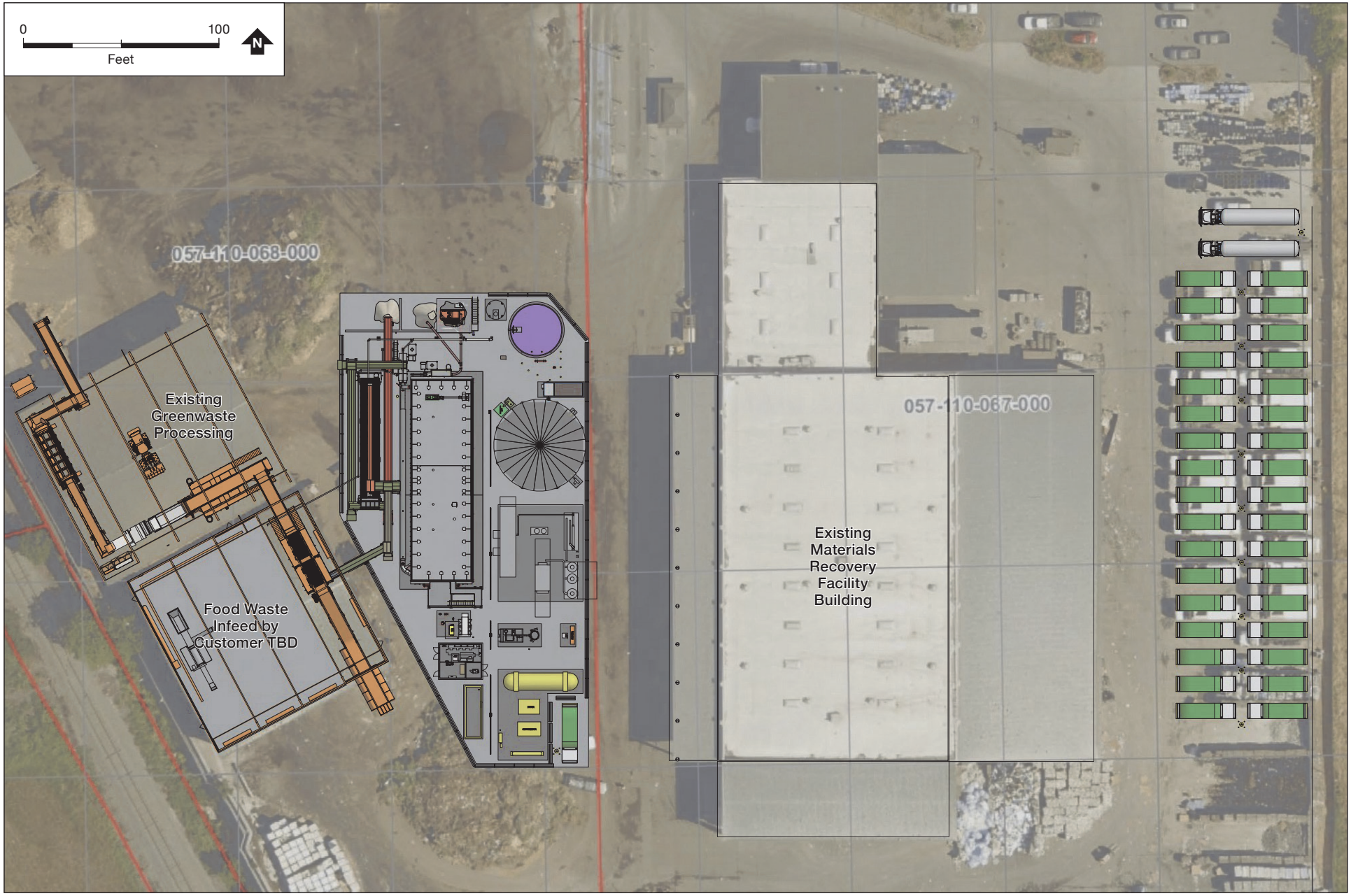
The proposed ADF would be sited between the existing MRF building and existing organics processing buildings in an approximately 22,000 square foot area as shown in **Figure 2-5**. The proposed ADF includes conveyors, receiving hoppers, a digestate sieve, the digester itself, a flare, a boiler, an emergency generator, biogas upgrading and fueling station equipment, and various other pieces of ancillary equipment and infrastructure as shown in **Figure 2-6** and uses a continuous plug-flow system to produce biogas and digestate.

The AD system accepts preprocessed feedstock materials and the loading process is highly automated. Pre-processed feedstocks are conveyed to a walking floor loading bunker with speed regulated to meter feedstock to the digester via an infeed piping. From the loading bunker, the feedstock would be charged to a dual-shaft mixer that further homogenizes the feedstock and has the capability to add stored winery waste and digestate press water. Following mixing, the feedstock is hydraulically pumped through a heat exchanger tube that pre-heats the feedstock while it is pumped to the front of the AD system. The AD system uses a single plug-flow biological reactor where feedstock is loaded one on end, mixed with paddles, and digestate is unloaded on the other. Although the waste would be homogeneous, the stirrers have capacity to handle difficult materials and perform well with a variety of feedstocks.

The digestion process inside the AD system is based on an anaerobic, thermophilic, biological process that is characterized as High Solids Anaerobic Digestion. The digester has a process temperature of approximately 131°F and an average dry substance content of >25%. Process temperature will be maintained via a process hot water system. The residence time of the feedstock in the digester is approximately 21 days but may range from 19 to 36 days depending on the volume of input material processed.

The high solids AD system generates and stores biogas. Biogas is captured in the headspace of the digester and piped to a biogas storage buffer. Biogas is a biological by-product of anaerobic digestion and is comprised primarily of methane and carbon dioxide. The biogas is collected until methane content reaches 22% at which point the purged biogas is combined with some of the stored biogas and sent to the burner/boiler system. The stored biogas would then be routed to a biogas conditioning system where impurities like hydrogen sulfide and water are removed. The resulting RNG would be boosted to 3600 pounds per square inch (psi) and dispensed in an onsite time-fill fueling system which will supply NMDF collection vehicles.

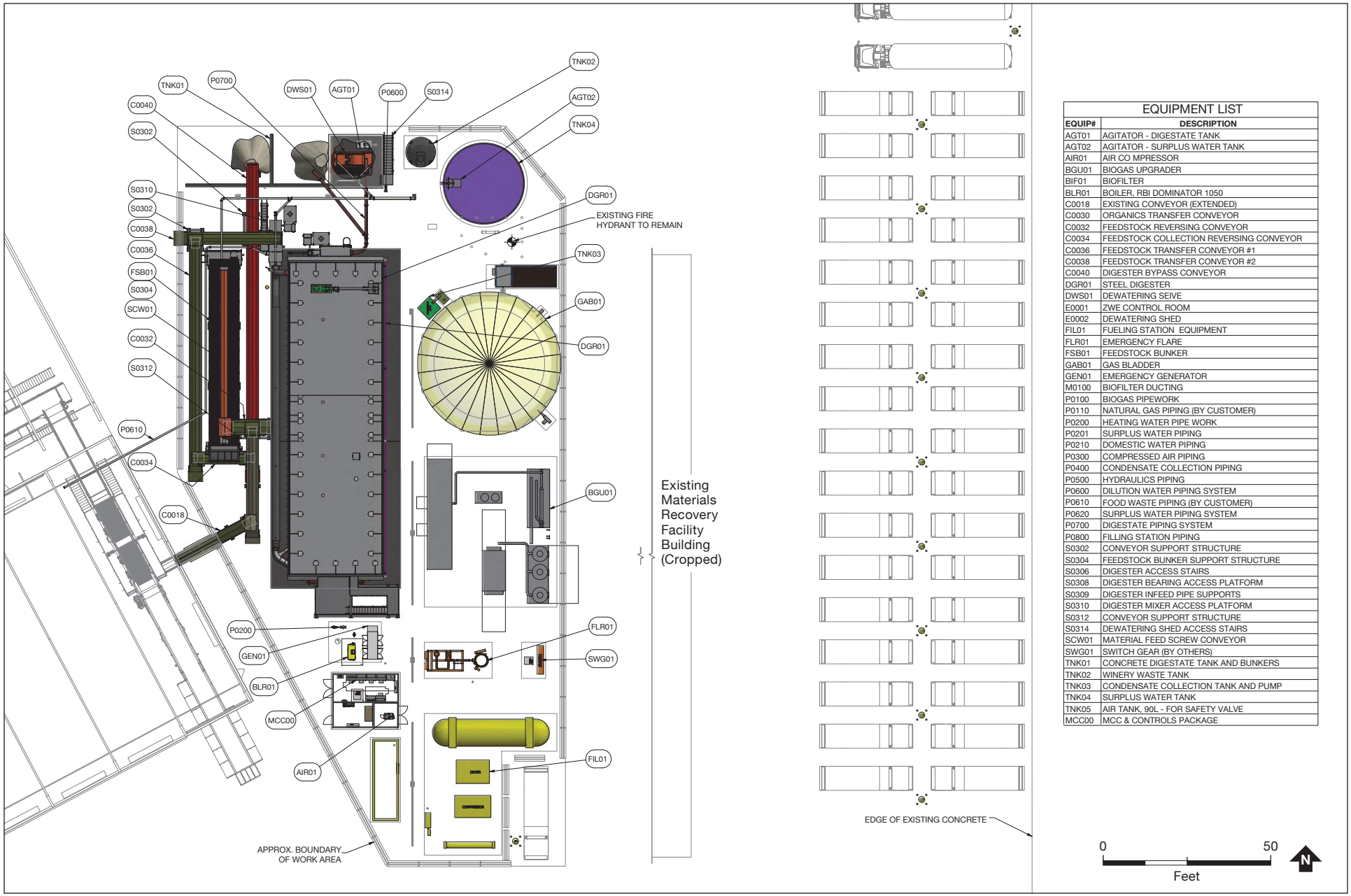
Digestate would be extracted from AD system by a hydraulic pump to a dewatering station where it will be processed by a vibrating screen that separates the liquid and solid fractions. Recovered liquids, or “press water” is stored in concrete vault below the dewater system. Press water would be recirculated and mixed with incoming feedstock at the digester mixer or pumped to a truck for use as a liquid fertilizer. Recovered solids are temporarily stored in a bunker adjacent to the dewatering system. Solid digestate would be transferred by NRWS to the existing CASP system located at the NMDF for further processing.



Source: Zero Waste Energy, 2024

Figure 2-5
Anaerobic Digestion Facility Site Plan

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EQUIPMENT LIST	
EQUIP#	**DESCRIPTION**
AGT01	AGITATOR - DIGESTATE TANK
AGT02	AGITATOR - SURPLUS WATER TANK
AIR01	AIR CO MPRESSOR
BGU01	BIOGAS UPGRADER
BIF01	BIOFILTER
BLR01	BOILER, RBI DOMINATOR 1050
C0018	EXISTING CONVEYOR (EXTENDED)
C0030	ORGANICS TRANSFER CONVEYOR
C0032	FEEDSTOCK REVERSING CONVEYOR
C0034	FEEDSTOCK COLLECTION REVERSING CONVEYOR
C0036	FEEDSTOCK TRANSFER CONVEYOR #1
C0038	FEEDSTOCK TRANSFER CONVEYOR #2
C0040	DIGESTER BYPASS CONVEYOR
DGR01	STEEL DIGESTER
DWS01	DEWATERING SEIVE
E0001	ZWE CONTROL ROOM
E0002	DEWATERING SHED
FIL01	FUELING STATION EQUIPMENT
FLR01	EMERGENCY FLARE
FSB01	FEEDSTOCK BUNKER
GAB01	GAS BLADDER
GEN01	EMERGENCY GENERATOR
M0100	BIOFILTER DUCTING
P0100	BIOGAS PIPEWORK
P0110	NATURAL GAS PIPING (BY CUSTOMER)
P0200	HEATING WATER PIPE WORK
P0201	SURPLUS WATER PIPING
P0210	DOMESTIC WATER PIPING
P0300	COMPRESSED AIR PIPING
P0400	CONDENSATE COLLECTION PIPING
P0500	HYDRAULICS PIPING
P0600	DILUTION WATER PIPING SYSTEM
P0610	FOOD WASTE PIPING (BY CUSTOMER)
P0620	SURPLUS WATER PIPING SYSTEM
P0700	DIGESTATE PIPING SYSTEM
P0800	FILLING STATION PIPING
S0302	CONVEYOR SUPPORT STRUCTURE
S0304	FEEDSTOCK BUNKER SUPPORT STRUCTURE
S0306	DIGESTER ACCESS STAIRS
S0308	DIGESTER BEARING ACCESS PLATFORM
S0309	DIGESTER INFEED PIPE SUPPORTS
S0310	DIGESTER MIXER ACCESS PLATFORM
S0312	CONVEYOR SUPPORT STRUCTURE
S0314	DEWATERING SHED ACCESS STAIRS
SCW01	MATERIAL FEED SCREW CONVEYOR
SWG01	SWITCH GEAR (BY OTHERS)
TNK01	CONCRETE DIGESTATE TANK AND BUNKERS
TNK02	WINERY WASTE TANK
TNK03	CONDENSATE COLLECTION TANK AND PUMP
TNK04	SURPLUS WATER TANK
TNK05	AIR TANK, 90L - FOR SAFETY VALVE
MCC00	MCC & CONTROLS PACKAGE

Source: Zero Waste Energy, 2024

Figure 2-6

Anaerobic Digestion Facility Equipment Plan

RCH GROUP
planning & environmental consulting

2.5.4 UTILIZATION OF A PORTION OF THE NORTHERN PARCEL

The Project would use a portion of the parcel to the north that is owned by 600 Tower Road Holdings, LLC, an LLC with the same owners as NRWS (APN 057-110-025) (See **Figure 2-7**). The 600 Tower Road Parcel would be used for inert materials processing and storage. The parcel is currently used for containers, equipment, and vehicle storage. The parcel would remain under the same ownership and would allow for operational flexibility as it can be accessed directly from the NMDF site without using Tower Road.

2.6 SITE ACCESS AND PARKING

The NMDF site is accessed via Levitan Way from Tower Road. The 600 Tower Road Parcel to the north is accessed via Tower Road at the end of the cul-de-sac and can also be accessed through the existing NMDF site. The proposed BCF on the Southern Annexation Parcel to be annexed into the City would be accessed via a new driveway off of Devlin Road (see **Figure 2-3**) and existing NMDF access at Levitin Way (see **Figure 2-2**).

The NMDF site's administration office currently provides parking. The BCF on the Southern Annexation Parcel to be annexed into the City would be completely paved and would include additional parking spaces for staff and visitors. The 600 Tower Road Parcel would remain as is for inert materials processing and storage.

2.7 PROJECT EMPLOYMENT

The Project would create temporary construction jobs and would also create permanent professional positions. The Project is expected to create 6 permanent professional positions for operating the ADF and BCF. NRWS would aim to provide jobs to a qualified, professional group of staff members that would best implement the goals and mission of the Project.

2.8 HOURS OF OPERATION

The NMDF site operates 24 hours per day, seven days per week for commingled and source separated recyclables processing and CASP composting. Future ADF operations are permitted to operate 24 hours per day per the SWFP. The proposed BCF would operate 24 hours per day, seven days per week. Mixed waste processing at the NMDF site is limited to 6 a.m. to 6 p.m. NMDF is closed New Year's Day, Easter, Thanksgiving, and Christmas. Receipt of refuse/waste/feedstock is permitted 7 days per week with commercial vehicles limited to 5 a.m. to 5 p.m. and public vehicles limited to 8 a.m. to 5 p.m. The Project does not propose any changes to NMDF hours of operation.



Source: RCH Group; Google Earth Pro, 2025

Figure 2-7
600 Tower Road Parcel

2.9 CONSTRUCTION

The Project would require construction activities on the Southern Annexation Parcel for development of the BCF and on the existing NMDF site for development of the ADF. To be conservative, it was assumed that the BCF and ADF would be constructed simultaneously for approximately 19 months. Construction phases would consist of site preparation, construction of footings/retaining walls, earthwork/rough grading, underground utilities, building construction/equipment installation, paving, and architectural coating. Approximately 4,864 cubic yards of material would be exported from the Southern Annexation Parcel during the earthwork phase, requiring a total of 608 truck trips. The existing NMDF site area for the ADF is currently paved and would receive new concrete for foundations. It is estimated that an average daily construction crew of 25 employees would be present on-site during construction. Construction would occur 7:00 a.m. to 7:00 p.m. Monday through Fridays and 8:00 a.m. to 5:00 p.m. on weekends, consistent with the City of Napa Municipal Code Section 8.08.025.

Other construction activities on the NMDF site would consist of moving existing equipment and storage areas to other areas of the NMDF site. These activities could happen with or without the Project. The 600 Tower Road Parcel would not require construction activities and would continue to be used for storage.

2.10 REGULATORY REQUIREMENTS, PERMITS AND APPROVALS

The City of Napa would be required to approve the Project prior to development of the Project. The City would use information contained in this EIR during the decision-making process. Permits and approvals from other agencies would be necessary prior to the development of the Project. Known entitlements, permits, and approvals required for the Project are identified below.

City of Napa:

- Certification of Final EIR;
- Adoption of a Mitigation Monitoring and Reporting Plan (MMRP), Findings, and Statement of Overriding Considerations (if necessary); and
- Approval of the Conditional Use Permit, Site Plan, Pre-Zoning, GPA and Other City permits such as Building and Grading Permits.

Other Governmental Agency Approvals:

- Annexation Approvals (including SOI amendment) from LAFCO and the County of Napa;
- Revisions to SWFP from CalRecycle;
- The BAAQMD requires an Authority to Construct/ Permit to Operate (ATC/PTO) for new or modified equipment that emits air pollution related to the operation of the Project (ADF and BCF); and
- The San Francisco Bay Regional Water Quality Control Board (RWQCB) requires a National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water

Discharges Associated with Construction and Land Disturbance Activities. Operation of the expanded NMDF would be subject to coverage under the NPDES Industrial Permit.

2.11 REFERENCES

CalReycle. Solid Waste Facility Permit, Facility Number 28-AA-0030.

City of Napa. 2020. *Notice of Preparation (Notice) of an Environmental Impact Report (EIR) and Notice of Zoom Scoping Meeting for Napa Renewable Resources Project 2.0 (NRRP 2.0)*. November 15, 2023.

City of Napa. 2013. Napa Renewable Resources Project (NRRP) Initial Study/Mitigated Negative Declaration, State Clearinghouse Number: 2013092036, Approved November 7, 2013.

City of Napa. 2014. Napa Renewable Resources Project CEQA Technical Addendum. June 23, 2014.

City of Napa. 2016. Napa Renewable Resources Project CEQA Technical Addendum. May 24, 2016.

City of Napa. 2017. Napa Renewable Resources Project CEQA Technical Addendum. January 13, 2017.

City of Napa, 2018. Napa Renewable Resources Project CEQA Technical Addendum. March 5, 2018.

CHAPTER 3

ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

3.1 AESTHETICS

3.1.1 SETTING

This section describes the regulatory framework and existing conditions of the Project related to aesthetics and evaluates the potential impacts of the Project on aesthetics and visual resources.

Visual Character of the Region and Project Vicinity

Napa County is home to hundreds of miles of scenic driving corridors from which can be distinguished by vineyards and hundreds of unique wineries (Napa County, 2008). Napa County has a great deal of visual diversity, from the lush forests and vineyards to the rural back-county areas, which are in many areas essentially unchanged from the county's historic period (Napa County, 2008). There are approximately 280 miles of county-designated scenic roadways. Although none of the roads are officially designated as Scenic Highways by the State of California, segments of State Route (SR) 29, 212 and 221 are eligible for scenic highway designation (Napa County, 2008).

The Napa Materials Diversion Facility (NMDF) site is within the City of Napa in a highly industrialized area of Napa County. The Project site also includes the adjacent parcel to the south to be annexed into the City (APN 057-090-087) that is currently undeveloped and received soil material from 2019 to 2022, and a portion of the 600 Tower Road Parcel (APN 057-110-025) that is currently used for equipment and vehicle storage (**See Figure 2-1**).

Highway 29 is approximately 2,000 feet east of the Project site. The nearest residence is located approximately 2,340 feet to the east of the Project site, across Highway 29 on Café Court. The Napa River is located approximately two miles west of the Project site. **Figure 3.1-1** identifies six vantage points of nearby views. **Figure 3.1-2** (Vantage Points 1 & 2) shows views on Tower Road near the existing NMDF site entrance. **Figure 3.1-3** (Vantage Points 3 & 4) present existing views on the Southern Annexation Parcel. **Figure 3.1-4** (Vantage Points 5 & 6) present the existing view on the Southern Annexation Parcel towards the Devlin Road Transfer Station and the existing view from Highway 29 towards Tower Road and the NMDF site.



Source: RCH Group; Google Earth Pro, 2024

Figure 3.1-1
Vantage Point Locations

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Vantage Point 1: View of Site near Levitin Way NMDF Entrance looking west on Tower Road.



Vantage Point 2: View of Site near Levitin Way NMDF Entrance looking east on Tower Road.

Source: RCH Group, 2024

Figure 3.1-2
Existing Views from Vantage Points 1 and 2



Vantage Point 3: View of surrounding industrial uses looking west from southern parcel.



Vantage Point 4: View of Site looking north toward NMDF from southern parcel.

Source: RCH Group, 2024

Figure 3.1-3
Existing Views from Vantage Points 3 and 4



Vantage Point 5: View of Devlin Road Transfer Station looking south from southern parcel.



Vantage Point 6: On Highway 29 looking west towards Tower Road and Project site. Site not visible from Highway 29.

Source: RCH Group, 2024

Figure 3.1-4
Existing Views from Vantage Points 5 and 6

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Regulatory Setting

State

The California Scenic Highway Program, maintained by the California Department of Transportation (Caltrans), protects State scenic highway corridors from diminishing the aesthetic value of lands adjacent to highways. The Scenic Highway Mapping System identifies the portion of Highway 29 that is east of the Project site as eligible for designation as a State Scenic Highway, however, that portion of Highway 29 is not an officially designated State Scenic Highway (Caltrans, 2019). The nearest officially designated State Scenic Highway is a portion of State Route (SR) 12 in Sonoma County, located approximately 14 miles northwest of the Project site. The Project site is not visible from this portion of SR 12.

Local

Napa County General Plan

The Napa County General Plan provides several goals and policies that are aimed to preserve and improve the important scenic character of the County. The following are relevant to the Project:

> Policy CC-8: Scenic roadways which shall be subject to the Viewshed Protection Program are those shown in Figure CC-3, or designated by the Board of Supervisors in the future.
>
> Policy CC-9: The County may consider pursuing formal scenic highway designation by the State of California for some roadways, provided that in each case the benefits of the designation are found to outweigh any costs.
>
> Policy CC-11: The County will work with the City of American Canyon to explore the possibility of jointly developing a Scenic Highway 29 Corridor plan within our respective jurisdictions to develop the Highway 29 Corridor in a comprehensive and aesthetically pleasing manner.
>
> Policy CC-12: Development projects on County-owned sites within the incorporated cities/town shall be designed to be visually compatible with their surroundings in terms of use, scale, and materials.

City of Napa 2040 General Plan

The City of Napa 2040 General Plan provides several goals and policies that support and improve the existing scenic character of the City. The following are relevant to the Project:

> LUCD 5-1: Improve the scenic character of important gateways into the City, including SR 29, SR 121, Soscol Avenue, Trancas Street, the SR 29/Imola intersection, and First Street, through undergrounding utilities where feasible, increased landscaping, street tree planting, and other improvements.
>
> LUCD 12-4: Ensure that industrial development is designed and operated to minimize – to the extent feasible – noise, heat, glare, dust, unscreened storage yards, air emissions, hazardous materials generation, and other negative effects.

Existing Conditions

Scenic vistas are generally interpreted as long-range views of a specific scenic feature. Public views are those which can be seen from vantage points that are publicly accessible, such as streets, freeways, parks, and vista points. Figure CC-3 in the Napa County General Plan identifies the segment of Highway 29 that is east of the Project site as a Scenic Roadway (Napa County, 2008). The City of Napa 2040 General Plan identifies scenic corridors as an area visible from a highway, waterway, railway or major hiking, biking or equestrian trail that provides vistas over water, across expanses of land, such as farmland, woodlands, or coastal wetlands, or from mountaintops or ridges (City of Napa, 2022). The City of Napa 2040 General Plan also assigns the greenbelt designation to specific sites at edges of the City that are to remain in open space, agricultural or resource conservation uses due to their high scenic value. The nearest greenbelt area is the Stanly Ranch South Wetlands Open Space located approximately two miles northwest of the Project site.

3.1.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the CEQA *Guidelines* states that a project would result in a significant impact to Aesthetics if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- In non-urbanized area, 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 an urbanized area, the Project conflicts with applicable zoning and other regulations governing scenic quality; or,
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Topics with No Impact

The Project site does not include visual resources such as trees, rock outcroppings, or historic buildings on the Project site visible from SR 12 (the nearest officially designated state scenic highway). Therefore, the Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway and the Project would have no impact. All exterior lighting would be located, designed, and shielded to confine direct rays (light) to the parcel where the lighting is located. Therefore, the Project would not create a new substantial source of light or glare which would adversely affect day or nighttime views in the area. These topics are not further discussed in this analysis.

Impact Analysis

Impact 3.1.1: The Project could have a substantial adverse effect on a scenic vista. (Less than Significant)

As discussed above, scenic vistas can be interpreted as long-range views of a specific scenic feature. Nearby scenic features include the Napa River and Stanly Ranch South Wetlands Open Space (greenbelt designation) both located approximately two miles to the west. At this distance, the Project site would not be visible from either location and would therefore not degrade the existing scenic views, nor would it block any long-range views at either location. As discussed above, Highway 29 (east of the Project site) is a County-designated Scenic Roadway. The Project site is not visible from Highway 29 (see **Figure 3.1-4**) and therefore would not degrade the existing scenic views from Highway 29 nor would it block any long-range views from Highway 29. Due to the Project's location and distance from any other areas of high scenic value, the Project site would not result in the degradation of any visually sensitive areas or natural features that could be considered scenic vistas. Therefore, impacts to scenic vistas would be less than significant.

Mitigation Measures

None required.

Impact 3.1.2: The Project could substantially degrade the existing visual character of the Project site and its surroundings. (Less than Significant)

The Project includes the development of an anaerobic digestion facility (ADF) on the existing NMDF site and a biomass conversion facility (BCF) on the Southern Annexation Parcel on the westerly side of Devlin Road. **Figure 3.1-5** shows a 3D rendering of the ADF. The existing visual character of the NMDF site is that of a solid waste facility and the proposed ADF would be sited between the existing Material Recovery Facility (MRF) building and existing organics processing buildings, which would not alter the existing visual character of the NMDF site or its surroundings.

The existing visual character surrounding the Southern Annexation Parcel is that of solid waste facilities and other heavy industrial uses (see **Figures 3.1-3 and 3.1-4** which show the NMDF site to the north, Devlin Road Transfer Station to the south, industrial parcels associated with the construction and building industry to the east, and Napa County airport to the west). **Figure 3.1-6** shows 3D renderings of the proposed BCF. The tallest structure associated with the proposed BCF would be approximately 45 feet tall, with other equipment and structures ranging from near ground level to approximately 33 feet tall. Tall structures are typical of industrial development and would not alter the existing visual character of the surrounding area, which is already dominated by solid waste facilities and other heavy industrial uses.

Development of the ADF and BCF would include the use of appropriate building materials to be consistent with the surrounding industrial visual character and would comply with applicable City

of Napa Design Requirements. Therefore, impacts to the existing visual character would be less than significant.

Mitigation Measures

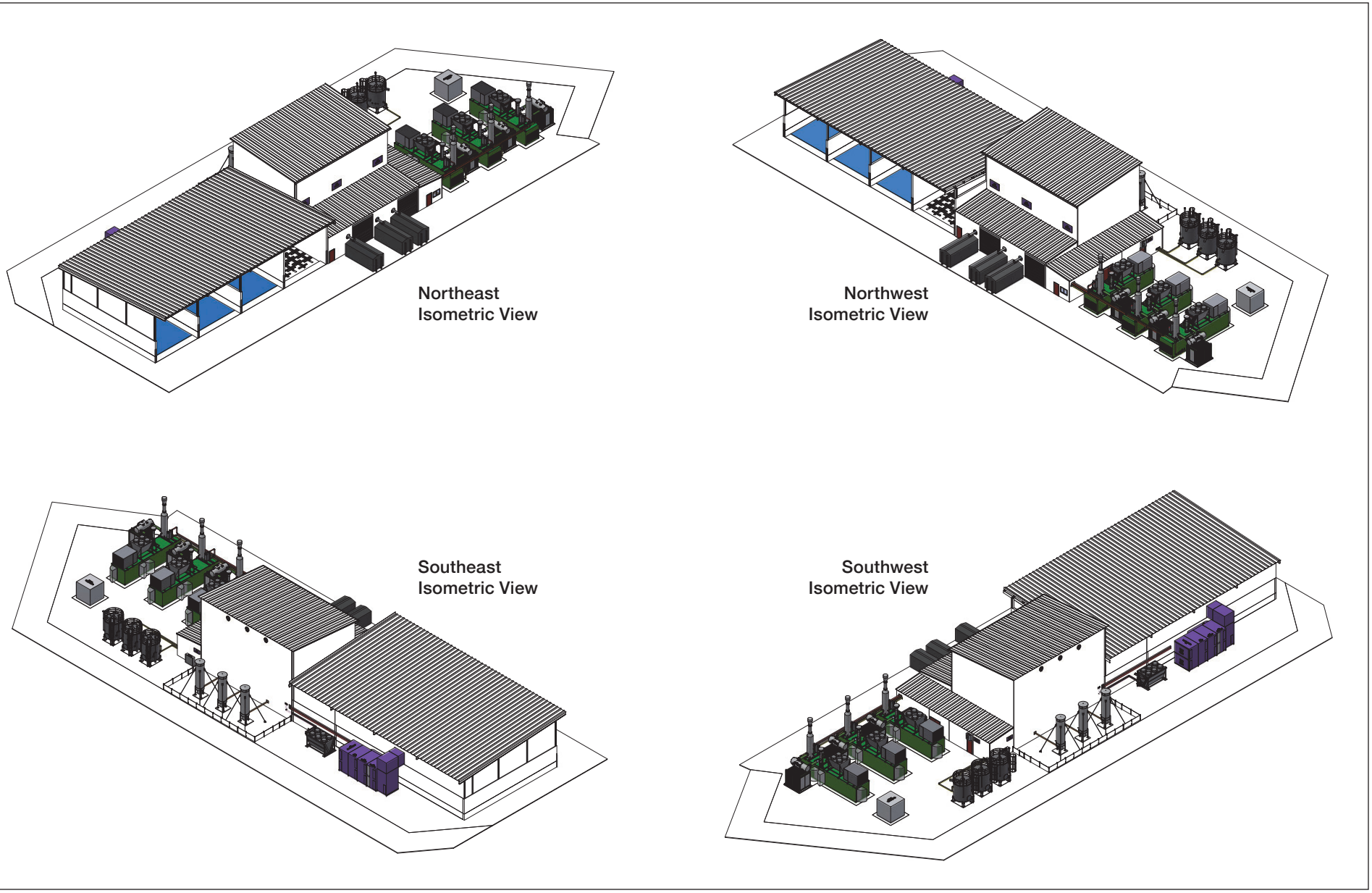
None required.



Source: Zero Waste Energy, 2024

Figure 3.1-5
3D Rendering of Anaerobic Digestion Facility

RCHGROUP
planning & environmental consulting



Source: Syncraft, 2025

Figure 3.1-6
3D Renderings of Biomass Conversion Facility

RCHGROUP
planning & environmental consulting

3.1.3 REFERENCES

Caltrans. 2019. California State Scenic Highway Scenic Highway System Map https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed January 10, 2025.

City of Napa. 2022. City of Napa 2040 General Plan.

Napa County. 2008. Napa County General Plan.

3.2 AIR QUALITY

This section evaluates the potential for the Project to cause air quality impacts and has been prepared using methods and assumptions recommended in the Bay Area Air Quality Management District's (BAAQMD's) *California Environmental Quality Act Air Quality Guidelines* (BAAQMD, 2023).

The air quality analysis includes a review of criteria pollutant[1] emissions such as carbon monoxide (CO)[2], nitrogen oxides (NOx)[3], sulfur dioxide (SO_2)[4], volatile organic compounds (VOC) as reactive organic gases (ROG)[5], particulate matter equal to or less than 10 micrometers (coarse or PM_{10}), and particulate matter equal to or less than 2.5 micrometers (fine or $PM_{2.5}$).[6]

Other issues related to air emissions covered include the assessment of emissions related to air quality health impacts and odor impacts.

3.2.1 SETTING

The Project site is located within the San Francisco Bay Area Air Basin (SFBAAB), which encompasses Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, Marin, and Napa Counties, and the southern portions of Solano and Sonoma Counties. The Air Basin is characterized by complex terrain consisting of coastal mountain ranges, inland valleys, and bays, all of which affect weather patterns in the region.

Regional Meteorology

Air quality is affected by the rate, amount, and location of pollutant emissions and the associated meteorological conditions that influence pollutant movement and dispersal. Atmospheric conditions, including wind speed, wind direction, stability, and air temperature, in combination

1 Criteria air pollutants refer to those air pollutants for which the United States Environmental Protection Agency (USEPA) and California Air Resources Board (CARB) has established National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) under the Federal Clean Air Act (CAA).

2 CO is a non–reactive pollutant that is a product of incomplete combustion of organic material, and is mostly associated with motor vehicle traffic, and in wintertime, with wood–burning stoves and fireplaces.

3 When combustion temperatures are extremely high, as in aircraft, truck and automobile engines, atmospheric nitrogen combines with oxygen to form various oxides of nitrogen (NOx). Nitric oxide (NO) and NO_2 are the most significant air pollutants generally referred to as NOx. Nitric oxide is a colorless and odorless gas that is relatively harmless to humans, quickly converts to NO_2 and can be measured. Nitrogen dioxide has been found to be a lung irritant capable of producing pulmonary edema.

4 SO_2 is a combustion product of sulfur or sulfur–containing fuels such as coal and diesel. SO_2 is also a precursor to the formation of atmospheric sulfate and particulate matter and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain.

5 VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, a precursor of ozone formation. ROG are any reactive compounds of carbon, excluding methane, CO, CO_2 carbonic acid, metallic carbides or carbonates, ammonium carbonate, and other exempt compounds. The terms VOC and ROG are often used interchangeably.

6 PM_{10} and $PM_{2.5}$ consists of airborne particles that measure 10 microns or less in diameter and 2.5 microns or less in diameter, respectively. PM_{10} and $PM_{2.5}$ represent fractions of particulate matter that can be inhaled into the air passages and the lungs, causing adverse health effects.

with local surface topography (i.e., geographic features such as mountains, valleys, and San Francisco Bay), determine the effect of air pollutant emissions on local air quality.

The climate of the SFBAAB is determined largely by a high-pressure system that is usually present over the eastern Pacific Ocean off the California Coast. During winter, the Pacific high-pressure system shifts southward, allowing more storms to pass through the region and reduce air pollution. During summer and early fall, when few storms pass through the region, emissions generated within the Bay Area may combine with abundant sunshine under the restraining influences of topography and subsidence inversions to create conditions that are conducive to the formation of photochemical pollutants, such as ozone, and secondary particulates, such as nitrates and sulfates.

The Project site is located at the southern end of Napa County, approximately seven miles south of the City of Napa, and falls within the Napa Valley climatological subregion. This area is characterized by Coastal Plain weather conditions. This subregion is indirectly affected by marine air flow. Marine air entering through the Golden Gate is blocked by the East Bay hills, forcing the air to diverge into northerly and southerly paths. The northern flow is directed up the bay, parallel to the hills, where it eventually passes over southern Marin County and Solano County. Precipitation averages approximately 20 inches per year. Air temperatures are moderated by the subregion's proximity to the Bay and to the sea breeze. Temperatures are slightly cooler in the winter and slightly warmer in the summer. During the summer months, average maximum temperatures are in the low-80s (degrees Fahrenheit). Average minimum winter temperatures are in the high to mid-30s (BAAQMD, 2010a).

Pollution potential may be high when sufficient sources of air contaminants occur locally or nearby. Summer and fall winds may effectively trap and concentrate pollutants when stable conditions are present, transporting ozone precursors northward from the Carquinez Strait Region to the Napa Valley. Surrounding mountains create upslope and downslope flows, recirculating air pollutants and contributing to buildup of air pollution. Air pollution sources include motor vehicles, agriculture, and wood burning fireplaces and stoves. Increasing motor vehicle traffic and congestion in the sub-region may increase Napa Valley pollution as well as that of its neighboring sub-regions (BAAQMD, 2010a).

Criteria Air Pollutants

The following provides a summary of the potential health and welfare effects and typical sources of each of the criteria air pollutants and other air pollutants.

Ozone

Ozone (or O_3) is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. O_3 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 VOC and NO_x. VOC and NO_x are known as precursor compounds for O_3. Substantial ozone production generally requires O_3 precursors to be present in a stable atmosphere with strong sunlight for approximately three

hours. O_3 is a regional air pollutant because it is not emitted directly by sources but is formed downwind of sources of VOC and NO_x under the influence of wind and sunlight. O_3 concentrations tend to be higher in the late spring, summer, and fall, when long sunny days combine with regional air subsidence inversions to create conditions conducive to the formation and accumulation of secondary photochemical compounds.

Carbon Monoxide

CO is a nonreactive pollutant that is a product of incomplete combustion of organic material, and is mostly associated with motor vehicle traffic, and in wintertime, with wood–burning stoves and fireplaces. 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 its oxygen-carrying capacity, resulting in reduced levels of oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia. CO measurements and modeling were important in the early 1980's when CO levels were regularly exceeded throughout California, but in more recent years, CO measurements and modeling are not a priority in most California air districts due to the retirement of older vehicles, fewer emissions from new vehicles, and improvements to fuels.

Nitrogen Oxides

When combustion temperatures are extremely high, as in aircraft, truck and automobile engines, atmospheric nitrogen combines with oxygen to form various oxides of nitrogen. Nitric oxide (NO) and nitrogen dioxide (NO_2) are the most significant air pollutants generally referred to as NO_x. Nitric oxide is a colorless and odorless gas that is relatively harmless to humans, quickly converts to NO_2 and can be measured. Nitrogen dioxide has been found to be a lung irritant capable of producing pulmonary edema. Inhaling NO_2 can lead to respiratory illnesses such as bronchitis and pneumonia.

Volatile Organic Compounds

VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide (CO_2), carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, is a precursor of ozone formation. VOC includes a variety of chemicals, some of which may have short- and long-term adverse health effects. VOC are emitted by a wide array of products numbering in the thousands. Examples include paints and lacquers, paint strippers, cleaning supplies, building materials and furnishings, as well as fuel storage and use.

VOC can cause eye, nose, and throat irritation; headaches, loss of coordination, nausea; and damage to liver, kidney, and central nervous system. Some organics can cause cancer in animals; some are suspected or known to cause cancer in humans. The ability of organic chemicals to cause health effects varies greatly from those that are highly toxic, to those with no known health

effects. As with other pollutants, the extent and nature of the health effect will depend on many factors including level of exposure and length of time exposed. Eye and respiratory tract irritation, headaches, dizziness, visual disorders, and memory impairment are among the immediate symptoms that some people have experienced soon after exposure to some organics.

Particulate Matter

PM_{10} and $PM_{2.5}$ consist of airborne particles that measure 10 micrometers or less in diameter and 2.5 micrometers or less in diameter, respectively. PM_{10} and $PM_{2.5}$ represent fractions of particulate matter that can be inhaled into the air passages and the lungs, causing adverse health effects. Particulate matter in the atmosphere results from many kinds of dust- and fume-producing industrial and agricultural operations, fuel combustion, wood burning stoves and fireplaces, and atmospheric photochemical reactions. Some sources of particulate matter, such as demolition, construction activities and mining, are more local in nature, while others such as vehicular traffic and wood burning stoves and fireplaces, have a more regional effect.

Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates can also damage materials and reduce visibility. Dust comprised of large particles (diameter greater than 10 micrometers) settles out rapidly and is easily filtered by human breathing passages. This dust is of concern more as a soiling nuisance rather than a health hazard. The remaining fractions, PM_{10} and $PM_{2.5}$, are a health concern particularly at levels above the federal and California ambient air quality standards. $PM_{2.5}$ (including diesel exhaust particles) is thought to have greater effects on health, because these particles are so small and thus penetrate to the deepest parts of the lungs.

Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, coughing, bronchitis, and respiratory illnesses in children. Mortality studies since the 1990s have shown a statistically significant direct association between mortality (premature deaths) and daily concentrations of particulate matter in the air. Despite important gaps in scientific knowledge and continued reasons for some skepticism, a comprehensive evaluation of the research findings provides persuasive evidence that exposure to fine particulate air pollution has adverse effects on cardiopulmonary health.

Sulfur Dioxide

SO_2 is a combustion product of sulfur or sulfur–containing fuels such as coal and diesel. SO_2 is also a precursor to the formation of atmospheric sulfate and particulate matter 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 released into the atmosphere via leaded gasoline products. The phase-out of lead-gasoline in California has resulted in dramatically decreased levels of atmospheric lead. The highest concentrations of lead in air are generally found near lead smelters and general aviation airports; where piston aircraft use leaded

fuel. Other stationary sources that generate lead emissions include waste incinerators, utilities, and lead-acid battery manufacturers.

Sulfates

Sulfates are the fully oxidized ionic form of sulfur produced when sulfur dioxide is fully oxidized in the atmosphere. Sulfates are produced by emissions from automobiles, power plants, and industrial activity, and contribute to general atmospheric haziness. Typical health effects associated with exposure to sulfates include respiratory illness and an increased risk of cardio-pulmonary disease.

Vinyl Chloride

Vinyl chloride is an artificially created colorless gas with a mild, slightly sweet odor. The gas is used in the manufacture of vinyl products, including polyvinyl chloride plastic. Vinyl chloride emissions are produced from the vinyl manufacturing process as well as from the breakdown of vinyl products in landfills and hazardous waste sites. The health effects associated with vinyl chloride include dizziness, headaches, and drowsiness from short-term exposure, and liver damage and cancer resulting from long-term exposure.

Hydrogen Sulfide

Hydrogen sulfide (H_2S) is a naturally occurring, colorless gas that at low concentrations produces a distinctive rotten egg odor. At higher concentrations, olfactory fatigue prevents detection of odor. The gas is produced through the bacteriological breakdown of organic materials as well as during oil and gas production and geothermal power generation. Health effects associated with H_2S include exposure to a disagreeable odor, coughing, irritation to eyes, and impairment of the respiratory system.

Visibility Reducing Particles

Visibility reducing particles are particulate matter composed of many different substances that are suspended in the atmosphere and contribute to haze and diminished visibility.

Ambient Air Quality Standards

Regulation of air pollutants is achieved through both national and state ambient air quality standards and emissions limits for individual sources. Regulations implementing the federal Clean Air Act (CAA) and its subsequent amendments established National Ambient Air Quality Standards (NAAQS) for the six criteria pollutants. California has adopted more stringent California Ambient Air Quality Standards (CAAQS) for most of the criteria air pollutants. In addition, California has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. There is considerable difference between state and federal standards in California.

The NAAQS and CAAQS are intended to protect public health and welfare, and they incorporate an adequate margin of safety. They are designed to protect those segments of the public most susceptible to respiratory distress, known as sensitive receptors, including asthmatics, the very young, elderly, people weak from other illness or disease, or persons engaged in strenuous work

or exercise. Healthy adults can tolerate occasional exposure to air pollution levels somewhat above the ambient air quality standards before adverse health effects are observed.

The goal is for localized project effects not to cause or contribute to an exceedance of the standards. Ambient air quality standards are classified as either "primary" or "secondary" standards. Primary standards define levels of air quality, including an adequate margin of safety, necessary to protect public health. Secondary ambient air quality standards define levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. The ambient air quality standards are shown in **Table 3.2-1.**

Under amendments to the federal CAA, USEPA has classified air basins or portions thereof, as either "attainment" or "nonattainment" for each criteria air pollutant, based on whether or not the NAAQS have been achieved. The California CAA, which is patterned after the federal CAA, also requires areas to be designated as "attainment" or "nonattainment" for the CAAQS. Thus, areas in California have two sets of attainment/nonattainment designations: one set with respect to the NAAQS and one set with respect to the CAAQS.

The Bay Area is currently designated "non-attainment" for 1-hour and 8-hour ozone CAAQS, the 8-hour ozone NAAQS, the PM_{10} CAAQS (annual and 24-hour), and the $PM_{2.5}$ CAAQS (annual) and NAAQS (24-hour). The Bay Area is "attainment" or "unclassified" with respect to the other ambient air quality standards. **Table 3.2-1** shows the attainment status of the Bay Area with respect to the NAAQS and CAAQS for different criteria pollutants and summarizes the principal sources for each pollutant.

Based upon the Bay Area's attainment status, pollutants of concern include criteria pollutant emissions such as NO_x and VOC, which in the presence of sunlight react to form ozone, as well as PM_{10} and $PM_{2.5}$.

TABLE 3.2-1. AMBIENT AIR QUALITY STANDARDS AND BAY AREA ATTAINMENT STATUS

Pollutant	Averaging Time	CAAQS	Bay Area Attainment Status for CAAQS	NAAQS	Bay Area Attainment Status for NAAQS	Major Pollutant Sources
Ozone	8 hour	0.070 ppm	Nonattainment	0.070 ppm	Nonattainment	Formed when ROG and NOx react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial/ industrial mobile equipment.
	1 hour	0.09 ppm	Nonattainment	---	---	
Carbon Monoxide	8 hour	9.0 ppm	Attainment	9 ppm	Attainment	Internal combustion engines, primarily gasoline-powered motor vehicles
	1 Hour	20 ppm	Attainment	35 ppm	Attainment	
Nitrogen Dioxide	Annual Average	0.030 ppm	---	0.053 ppm	Attainment	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads
	1 Hour	0.18 ppm	Attainment	0.100 ppm	Attainment	
Sulfur Dioxide	Annual Average	---	---	0.030 ppm	---	Fuel combustion, chemical plants, sulfur recovery plants and metal processing
	24 Hour	0.04 ppm	Attainment	0.14 ppm	---	
	1 Hour	0.25 ppm	Attainment	0.075 ppm	---	
Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 $\mu g/m^3$	Nonattainment	---	---	Dust- and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays)
	24 hour	50 $\mu g/m^3$	Nonattainment	150 $\mu g/m^3$	Unclassified	
Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean	12 $\mu g/m^3$	Nonattainment	9 $\mu g/m^3$	Unclassified/Attainment	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.
	24 hour	---	---	35 $\mu g/m^3$	Nonattainment	
Lead	Calendar Quarter	---	---	1.5 $\mu g/m^3$	Attainment	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	30 Day Average	1.5 $\mu g/m^3$	Attainment	---	---	

SOURCE: California Air Resource Board, *Ambient Air Quality Standards*, July 16, 2024, https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf, and Bay Area Air Quality Management District, *Air Quality Standards and Attainment Status*, January 5 2017, https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status
NOTE: (ppm = parts per million; µg/m3 = micrograms per cubic meter).

Toxic Air Contaminants

Toxic air contaminants (TACs) are regulated under both state and federal laws. Federal laws use the term "Hazardous Air Pollutants" (HAP) to refer to the same types of compounds that are referred to as TAC under state law. Both terms encompass essentially the same compounds. Under the 1990 Federal Clean Air Act Amendments, 189 substances are regulated as HAP.

With respect to state law, in 1983 the California legislature adopted Assembly Bill 1807 (AB 1807), which establishes a process for identifying TAC and provides the authority for developing retrofit air toxics control measures on a statewide basis. Air toxics in California may also be regulated because of another state law, the Air Toxics "Hot Spots" Information and Assessment Act of 1987, or Assembly Bill 2588 (AB 2588). Under AB 2588, TAC from individual facilities must be quantified and reported to the local air pollution control agency. The facilities are then prioritized by the local agencies based on the quantity and toxicity of these emissions, and on their proximity to areas where the public may be exposed. In establishing priorities, the air districts are to consider the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, and any other factors that the air district determines may indicate that the facility may pose a significant risk. High priority facilities are required to perform a Health Risk Screening Assessment, and if specific risk thresholds are exceeded, they are required to communicate the results to the public in the form of notices and public meetings. Depending on the health risk levels, emitting facilities can be required to implement varying levels of risk reduction measures.

BAAQMD is responsible for administering federal and state regulations related to TACs. Under federal law, these regulations include National Emission Standards for Hazardous Air Pollutants (NESHAPs) and Maximum Achievable Control Technology (MACT) for affected sources. BAAQMD also administers the state regulations AB 1807 and AB 2588 which were discussed above. In addition, BAAQMD requires that new or modified facilities that emit TACs perform air toxics screening analyses as part of the permit application. TAC emissions from new and modified sources are limited through the air toxics new source review program, which superseded the BAAQMD Risk Management Policy, in BAAQMD Regulation 2, Rule 5 for New Source Review of Toxic Air Contaminants. Sources must use the Best Available Control Technology for Toxics (T-BACT) if an individual source cancer risk of greater than 1 in a million, or a chronic hazard index greater than 0.20, is identified in health risk modeling.

Diesel Particulate Matter

Diesel exhaust is a complex mixture of numerous individual gaseous and particulate compounds emitted from diesel-fueled combustion engines. Diesel particulate matter is formed primarily through the incomplete combustion of diesel fuel. DPM is removed from the atmosphere through physical processes including atmospheric fall-out and washout by rain. Humans can be exposed to airborne DPM by deposition on water, soil, and vegetation; although the main pathway of exposure is inhalation. Cal/EPA has concluded that potential cancer risk from inhalation exposure to whole diesel exhaust outweigh the multi-pathway cancer risk from the speciated components.

In August 1998, the CARB identified DPM as an air toxic. CARB developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel- Fueled Engines and Vehicles* and *Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines* and approved these documents on September 28, 2000.[7] [8] The documents represent proposals to reduce DPM emissions, with the goal of reducing emissions and the associated health risk by 75 percent in 2010 and by 85 percent in 2020. The program aimed to require the use of state-of-the-art catalyzed DPM filters and ultra-low-sulfur diesel fuel.

In 2001, CARB assessed the state-wide health risks from exposure to diesel exhaust and to other toxic air contaminants. It is difficult to distinguish the health risks of diesel emissions from those of other air toxics, since diesel exhaust contains approximately 40 different TAC. The CARB study detected diesel exhaust by using ambient air carbon soot measurements as a surrogate for diesel emissions. The study reported that the state-wide cancer risk from exposure to diesel exhaust was about 540 per million population as compared to a total risk for exposure to all ambient air toxics of 760 per million. This estimate, which accounts for about 70 percent of the total risk from TAC, included both urban and rural areas in the state. The estimate can also be considered an average worst-case for the state, since it assumes constant exposure to outdoor concentrations of diesel exhaust and does not account for expected lower concentrations indoors, where most of time is spent. DPM is estimated to increase statewide cancer risk by 520 cancers per million residents exposed over a lifetime.[9]

Exposure to DPM results in a greater incidence of chronic non-cancer health effects, such as cough, labored breathing, chest tightness, wheezing, and bronchitis. Individuals particularly vulnerable to DPM are children, whose lung tissue is still developing, the elderly and people with illnesses who may have other serious health problems that can be aggravated by exposure to DPM. In general, children are more vulnerable than adults to air pollutants because they have higher inhalation rates, narrower airways, and less mature immune systems. In addition, children with allergies may have an enhanced allergic response when exposed to diesel exhaust.

Reducing diesel particulate matter (DPM) is one of the CARB's highest public health priorities and the focus of a comprehensive statewide control program that is reducing DPM emissions each year. In 1998, the CARB classified DPM as a TAC, citing its potential to cause cancer and other health problems. USEPA concluded that long-term exposure to diesel engine exhaust is likely to pose a lung cancer hazard to humans and can also contribute to other acute and chronic health effects. In September 2000, CARB adopted the Diesel Risk Reduction Plan, which recommends many control measures to reduce the risks associated with DPM and achieve a goal of 75 percent DPM reduction by 2010 and 85 percent by 2020.

As of June 2025, CARB has not published if their 2010 or 2020 Diesel Risk Reduction Plan goals were met. CARB's California Emissions Projection Analysis Model (CEPAM) data shows a 77

7 California Air Resources Board, Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, October 2000, http://www.arb.ca.gov/diesel/documents/rrpfinal.pdf

8 California Air Resources Board, Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines, October 2000, https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/rmgfinal.pdf

9 California Air Resources Board, Summary: Diesel Particulate Matter Health Impacts, April 12, 2016, https://www.arb.ca.gov/research/diesel/diesel-health_summ.htm

percent DPM emissions reduction for 2020 and projects an 86 percent DPM emissions reduction for 2030 compared to year 2000 DPM emissions. CARB's Diesel Risk Reduction Plan used 1990 as the benchmark year for their risk reduction goals, thus it is reasonable to assume that CARB met their Diesel Risk Reduction Plan goals and continue to work diligently to develop, implement, and enforce regulations and programs to reduce DPM emissions and associated health risks in the state.[10]

Asbestos

Asbestos is listed as a TAC by CARB and as a HAP by USEPA. Asbestos occurs naturally in mineral formations and crushing or breaking these rocks, through construction or other means, can release asbestiform fibers into the air. Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining. The risk of disease is dependent upon the intensity and duration of exposure. When inhaled, asbestos fibers may remain in the lungs and with time may be linked to such diseases as asbestosis, lung cancer, and mesothelioma.

Local Air Quality

The BAAQMD maintains a network of monitoring stations within the Air Basin that monitor air quality and compliance with applicable ambient standards. The monitoring station closest to the Project site is the Vallejo-Fairfield Monitoring Station at 304 Tuolumne Street, approximately eight miles south of the Project site. The Vallejo-Fairfield Monitoring Station measures levels of CO, ozone, $PM_{2.5}$, SO_2, and NO_2. The Vacaville Monitoring Station measures levels of PM_{10} at Merchant Street, approximately 17 miles northeast of the Project site.

Table 3.2-2 summarizes the most recent three years of data (2022 through 2024) from the BAAQMD's Vallejo-Fairfield Monitoring Station. The ozone and PM_{10} standards were not exceeded. The $PM_{2.5}$ standards were exceeded in 2022, 2023, and 2024. No other standards were exceeded at the Vallejo-Fairfield Monitoring Station during the three-year period.

[10] California Air Resources Board (CARB), Air Toxics Response Team, Personal communication, July 18, 2024.

TABLE 3.2-2. SUMMARY OF ANNUAL MONITORING DATA OF AMBIENT AIR QUALITY

Pollutant	Standard[a]	2022	2023	2024
Carbon Monoxide				
Highest 1-Hour Average (ppm)[b]	20	11.5	2.1	4.9
Highest 8-Hour Average (ppm)[b]	9	1.8	1.6	4.9
Ozone				
Highest 1-Hour Average (ppm)[b]	0.090	0.058	0.053	0.043
Highest 8-Hour Average (ppm)[b]	0.070	0.066	0.071	0.046
Coarse Particulate Matter (PM_{10})[c]				
Highest 24-Hour Average ($\mu g/m^3$)[b]	50	31	37	14.2
State Annual Average ($\mu g/m^3$)[b]	20	8.12	6.46	4.99
Fine Particulate Matter ($PM_{2.5}$)				
Highest 24-Hour Average ($\mu g/m^3$)[b]	35	**35**	**38**	26
State Annual Average ($\mu g/m^3$)[b]	12/9	**12.0**	**12.3**	**11.2**
Nitrogen Dioxide (NO_2)				
Highest 1-Hour Average (ppm)[b]	0.180/0.100	0.044	0.044	0.069
Annual Average (ppm) [b]	0.030/0.053	0.007	0.006	0.010

NOTES: Values in **bold** are in excess of at least one applicable standard.
Generally, state standards and national standards are not to be exceeded more than once per year.
ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter.
PM_{10} is not measured every day of the year. Number of estimated days over the standard is based on 365 days per year.
Source: United States Environmental Protection Agency, AirData, https://www.epa.gov/outdoor-air-quality-data/interactive-map-air-quality-monitors

Regional Air Quality Plans

BAAQMD adopted its *Bay Area 2010 Clean Air Plan* (CAP) (BAAQMD, 2010b) in accordance with the requirements of the California Clean Air Act (CCAA) to implement all feasible measures to reduce ozone; provide a control strategy to reduce ozone, particulate matter, air toxics, and GHG emissions in a single, integrated plan; and establish emission control measures to be adopted or implemented in the 2010 through 2012 timeframe.[11] The primary goals of the 2010 Bay Area CAP are to:

- Attain air quality standards;
- Reduce population exposure and protect public health in the Bay Area; and
- Reduce GHG emissions and protect the climate.

On April 20, 2017, BAAQMD released the *2017 Clean Air Plan* (BAAQMD, 2017a). The 2017 Clean Air Plan/Regional Climate Protection Strategy (CAP/RCPS) provides a roadmap for BAAQMD's efforts over the next few years to reduce air pollution and protect public health and the global climate. Measures of the 2017 CAP addressing the transportation sector are in direct

11 In 2015, the BAAQMD initiated an update to the 2010 CAP. On February 28, 2014, the District held a public meeting to report progress on implementing the control measures in the 2010 CAP, to solicit ideas and strategies to further reduce ozone precursors, particulate matter, toxic air contaminants, and greenhouse gases, and to seek input on innovative strategies to reduce greenhouse gases, mechanisms for tracking progress in reducing GHG, and how the Air District may further support actions to reduce GHG.

support of *Plan Bay Area 2040*, which was prepared by the Association of Bay Area Governments and the Metropolitan Transportation Commission and includes the region's Sustainable Communities Strategy and the 2040 Regional Transportation Plan.

When a public agency contemplates approving a project where an air quality plan consistency determination is required, BAAQMD recommends that the agency analyze the project with respect to the following questions: (1) Does the project support the primary goals of the air quality plan; (2) Does the project include applicable control measures from the air quality plan; and (3) Does the project disrupt or hinder implementation of any 2017 CAP control measures? If the first two questions are concluded in the affirmative and the third question concluded in the negative, the BAAQMD considers the project consistent with air quality plans prepared for the Bay Area.

Any project that would not support the 2017 CAP goals would not be considered consistent with the 2017 CAP. The recommended measure for determining project support of these goals is consistency with BAAQMD CEQA thresholds of significance. As presented in the preceding and subsequent impact discussions, the project would not exceed the BAAQMD significance thresholds; therefore, the project would support the primary goals of the 2017 CAP and would not hinder implementation of any of the CAP control measures.

Highlights of the 2017 Clean Air Plan control strategy include:

- Limit Combustion: Develop a region-wide strategy to improve fossil fuel combustion efficiency at industrial facilities, beginning with the three largest sources of industrial emissions: oil refineries, power plants, and cement plants.

- Stop Methane Leaks: Reduce methane emissions from landfills, and oil and natural gas production and distribution.

- Reduce Exposure to Toxics: Reduce emissions of toxic air contaminants by adopting more stringent limits and methods for evaluating toxic risks at existing and new facilities.

- Put a Price on Driving: Implement pricing measures to reduce travel demand.

- Advance Electric Vehicles: Accelerate the widespread adoption of electric vehicles.

- Promote Clean Fuels: Promote the use of clean fuels and low or zero carbon technologies in trucks and heavy-duty vehicles.

- Accelerate Low-Carbon Buildings: Expand the production of low-carbon, renewable energy by promoting on-site technologies such as rooftop solar and ground-source heat pumps.

- Support More Energy Choices: Support of community choice energy programs throughout the Bay Area.

- Make Buildings More Efficient: Promote energy efficiency in both new and existing buildings.

- Make Space and Water Heating Cleaner: Promote the switch from natural gas to electricity for space and water heating in Bay Area buildings.

Sensitive Receptors

Land uses such as schools, children's daycare centers, hospitals, and convalescent homes are considered to be more sensitive than the general public to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. The CARB has identified the following people as most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and those with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive population groups.

Residential areas are considered more sensitive to air quality conditions than commercial and industrial areas, because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational uses are also considered sensitive, due to the greater exposure to ambient air quality conditions and because the presence of pollution detracts from recreational experience. According to the BAAQMD, workers are not considered sensitive receptors because all employers must follow regulations set forth by the Occupation Safety and Health Administration to ensure the health and well-being of their employees.

BAAQMD considers the relevant zone of influence for an assessment of air quality health impacts to be within 1,000 feet of a project site. The Project site is surrounded by light industrial and open space. The nearest residence is approximately 2,340 feet to the east of the Project site, across Highway 29 on Café Court. The nearest school is Napa Junction Magnet Elementary School, approximately 1.8 miles south of the Project site.

According to the requirements under the California Public Resources Code, Division 13, Environmental Quality (§21000 – §21189.57), proposed projects located within ¼ mile of a school that involve the construction or alteration of a facility that might reasonably be anticipated to emit hazardous air emissions, and that may impose a health or safety hazard to persons who would attend or would be employed at the school, must meet all requirements per CEQA Guidelines §15186 (b)(1)(2). No schools are located with ¼ miles of the Project site.

Bay Area Air Quality Management District Rules and Regulations

Emissions sources subject to these rules are regulated through the BAAQMD's permitting process and standards of operation. Through this permitting process, including an annual permit review, the BAAQMD monitors generation of stationary emissions and uses this information in developing its air quality plans. Any sources of stationary emissions constructed as part of a project would be subject to the BAAQMD Rules and Regulations. Both federal and state ozone

plans rely upon stationary source control measures set forth in BAAQMD's Rules and Regulations.

With respect to the construction activities associated with Project development, applicable BAAQMD regulations would relate to portable equipment (e.g., gasoline- or diesel-powered engines used for power generation, pumps, compressors, and cranes), architectural coatings, and paving materials. Equipment used during Project construction would be subject to the requirements of BAAQMD Regulation 2 (Permits), Rule 1 (General Requirements) with respect to portable equipment unless exempt under Rule 2-1-105 (Exemption, Registered Statewide Portable Equipment); BAAQMD Regulation 8 (Organic Compounds), Rule 3 (Architectural Coatings); and BAAQMD Regulation 8 (Organic Compounds), Rule 15 (Emulsified and Liquid Asphalts). With respect to the operational phase of the Project, BAAQMD Regulation 2, Permits, would apply to any new or modified stationary sources, such as the anaerobic digestion facility (ADF) and biomass conversion facility (BCF).

City of Napa 2040 General Plan

City of Napa has developed the following goals and policies related to air quality as part of the City of Napa 2040 General Plan that are applicable to the Project:

GOAL NRC-5: Protect air quality within the City and support efforts for enhanced regional air quality.

> NRC 5-1: Coordinate with County, regional, State, and federal jurisdictions on air quality standards and seek to adopt local measures.
>
> NRC 5-2: Require that development projects incorporate BAAQMD's Basic Construction Mitigation Measures to reduce construction and operational emissions for reactive organic gases (ROG), nitrogen oxides (NOx), and particulate matter (PM_{10} and $PM_{2.5}$).
>
> NRC 5-3: Require contractors to use best management practices (BMPs) including regular materials and vehicle tire watering, covering of stockpiles, phasing or extension of grading operations, suspension of grading during high wind periods, and revegetation of graded areas—to reduce particulate emissions (including PM_{10} and $PM_{2.5}$) and dust associated with construction activities.
>
> NRC 5-4: Require all construction equipment to be maintained and tuned to meet appropriate USEPA and CARB emission requirements, including use of Tier 4 engines in off-road equipment and cleaner heavy-duty trucks to reduce NOx and PM exhaust emission levels.

GOAL NRC-6: Through various sustainability measures, reduce greenhouse gas emissions, fine particulate matter, and black carbon emissions into the air.

> NRC 6-1: Encourage new developments to incorporate sustainable building practices to reduce their carbon footprint and impact on the environment, as outlined in the Green Buildings Standards Code and the Napa Municipal Code.
>
> NRC 6-2: Implement regulations that will contribute to an improvement in air quality, and reduction of gases that are harmful to the environment and that cause climate change.

Example regulations include eliminating fossil fuels (natural gas) in heating spaces and water for new and significantly renovated buildings.

GOAL NRC-7: Seek to reduce mobile sources of air pollution by creating denser and walkable neighborhoods, promoting transit-oriented development, and improving bicycle infrastructure, with the goals to reduce the number of miles traveled in cars and improve regional air quality.

GOAL NRC-8: Protect sensitive receptors from exposure to substantial concentrations of toxic air contaminants and associated health risks.

NRC 8-3: Consider proximity to the nearest sensitive receptors when reviewing potential siting of new land uses within the Planning Area that may emit TAC emissions or odors.

GOAL CSPR-7: Provide solid waste and recycling services to meet the needs of current and future residents and businesses.

CSPR 7-1: Safely manage solid waste management services in a manner that provides for future growth of the City.

GOAL CSPR-8: Improve programs to reduce waste accumulation in landfills.

CSPR 8-4: Promote safe, attractive, and environmentally-sensitive new technologies that help further sustainable practices.

CSPR 8-5: Implement all aspects of SB 1383 (Mandatory Organics) including collection and capture of compostable and recyclable materials from residential, commercial and industrial generators within the City. SB 1383 is broad-reaching in scope with requirements for auditing, enforcement, edible food recovery and local use of organic products like compost and mulch.

CSPR 8-6: Incorporate BioEnergy and dry Anerobic Digestion technology at City's Materials Diversion Facility. Use of these technologies would capture and create renewable and sustainable energy from compostable organic materials. It would also provide a significant local contribution towards progress on climate action.

CSPR 8-7: Support programs to reach the statewide goal of ensuring that 75 percent of solid waste generated is either reduced at source, recycled, or composted from the year 2020 forward, per AB 341, SB 1383, and the City's own Disposal Reduction Policy (R2012-100).

The City of Napa 2040 General Plan specifically mentions biomass gasification and anaerobic digestion to promote efforts to reduce solid waste accumulation and promoting waste reduction strategies.

3.2.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the CEQA *Guidelines* states that a project would result in a significant impact to Air Quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- 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;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

As stated in Appendix G of the CEQA *Guidelines*, the significance criteria established by the applicable air quality district may be relied upon to make the above determinations. Thus, according to BAAQMD's *CEQA Air Quality Guidelines*, the Project would result in a significant impact to air quality if it would result in an exceedance of the following thresholds:

- Average daily construction exhaust emissions of 54 pounds per day of ROG, NO_x, or $PM_{2.5}$ or 82 pounds per day of PM_{10};
- Average daily operation emissions of 54 pounds per day of ROG, NO_x, or $PM_{2.5}$ or 82 pounds per day of PM_{10}; or result in maximum annual emissions of 10 tons per year of ROG, NO_x, or $PM_{2.5}$ or 15 tons per year of PM_{10};
- Exposure of persons by siting a new source or a new sensitive receptor to substantial levels of TAC resulting in (a) a cancer risk level greater than 10 in one million, (b) a noncancerous risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average $PM_{2.5}$ of greater than 0.3 micrograms per cubic meter ($\mu g/m^3$). For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers; or
- Frequently and for a substantial duration, create or expose sensitive receptors to substantial objectionable odors affecting a substantial number of people.

The BAAQMD air quality significance thresholds are found in **Table 3.2-3.**

TABLE 3.2-3. BAAQMD AIR QUALITY SIGNIFICANCE THRESHOLDS

Pollutant	Construction Thresholds	Daily Operational Thresholds	Annual Operational Thresholds
Criteria Air Pollutants			
ROG	54 pounds/day	54 pounds/day	10 tons/year
NOx	54 pounds/day	54 pounds/day	10 tons/year
PM_{10}	82 pounds/day (exhaust only)	82 pounds/day	15 tons/year
$PM_{2.5}$	54 pounds/day (exhaust only)	54 pounds/day	10 tons/year
CO	NA	9.0 ppm (8-hour) and 20.0 ppm (1-hour)	
Fugitive Dust	Best Management Practices	NA	
Project Health Risk and Hazards			
Excess Cancer Risk	10 per million		
Chronic Hazard Index	1.0		
Acute Hazard Index	1.0		
Incremental Annual Average $PM_{2.5}$	0.3 $\mu g/m^3$		
Cumulative Health Risk and Hazards			
Excess Cancer Risk	100 per million		
Chronic Hazard Index	10.0		
Acute Hazard Index	10.0		
Incremental Annual Average $PM_{2.5}$	0.8 $\mu g/m^3$		

SOURCE: BAAQMD, 2023.

Topics with No Impact

Localized CO Emissions

According to BAAQMD, a proposed project would result in a less-than-significant impact related to localized CO emission concentrations if all of the following conditions are true for the project:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plans, and local congestion management agency plans;
- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

As detailed in Section 3.11, Transportation, the Project would generate 6 new employee vehicles per day and 17 (average) to 56 (peak) new heavy truck trips per day. Daily travel within Napa County ranges from 40,000 to 70,000 vehicles per day (GHD, 2020). As a result, the Project represents less than 0.1 percent of the daily travel volume within Napa County. Therefore, based on the BAAQMD's screening criteria for localized CO emissions, the Project would not result in

substantial levels of localized CO at surrounding intersections or generate localized concentrations of CO that would exceed standards or cause health hazards. Therefore, the Project would result in no impact.

Impact Analysis

Impact 3.2.1: The Project could conflict with or obstruct implementation of the applicable air quality plan. (Less than Significant)

The Project would not conflict with or obstruct the implementation of the applicable air quality plan because the resulting emissions from the Project construction and operational activities are below BAAQMD's significance thresholds.

As discussed previously, the BAAQMD's *2017 Clean Air Plan* is the applicable air quality plan to the Project. The BAAQMD considers a project consistent with the *2017 Clean Air Plan* if it:

1. Supports the primary goals of the *2017 Clean Air Plan;*

2. Includes applicable control measures from the *2017 Clean Air Plan*; and

3. Does not disrupt or hinder implementation of any *2017 Clean Air Plan* control measures.

Supports the Primary Goals of the *2017 Clean Air Plan*

The primary goals of the *2017 Clean Air Plan* are to protect air quality and health at the regional and local scale and to protect the climate. Any project that would not support these goals would not be considered consistent with the *2017 Clean Air Plan*. The BAAQMD recommended measure for determining project support of these goals is consistency with the BAAQMD's thresholds of significance. As noted throughout this air quality analysis, the Project would not exceed BAAQMD's significance thresholds (See **Table 3.2-4** for construction emissions, **Table 3.2-7** for daily operational emissions, and **Table 3.2-8** for annual operational emissions), and all air quality impacts would be less than significant. Therefore, the Project supports the primary goals of the *2017 Clean Air Plan.*

Includes Applicable Control Measures from the *2017 Clean Air Plan*

The *2017 Clean Air Plan* contains 85 control strategies aimed at reducing air pollution and GHG emissions in the Bay Area. For consistency with climate planning efforts at the State level, the control strategies in the *2017 Clean Air Plan* are based on the same economic sector framework used by CARB, which encompass stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and super-GHG pollutants. None of the control strategies are applicable to individual development projects, such as the Project.

The Project is an expansion of an existing solid waste facility. The Project would not disrupt or hinder implementation of the *2017 Clean Air Plan* control measures. However, the Project would help facilitate many control measures such as Waste Management 3 (Green Waste Diversion) and

4 (Recycling and Waste Reduction) and Energy 1 (Decarbonize Electricity Production) and 2 (Decrease Electricity Demand).

Mobile Source Measures. These measures promote lower emission vehicles and equipment. These measures are aimed at reducing ozone precursor emissions (ROGs and NO_x) from mobile sources. Consistent with the California Airborne Toxic Control Measure (Title 13, Section 2485 of the CCR), limiting construction vehicle idling to five minutes or less and using electric, Tier 3 and 4 construction equipment requirements, as well as generating RNG for use in fleet vehicles. Thus, applicable control measures are included in the Project and the Project would not disrupt or hinder implementation of any Mobile Source Measures.

Energy and Climate Measures. These measures promote energy efficiency and conservation to reduce the amount of fossil fuel needed to produce electricity. The Project is consistent with Energy Control Measure 1 (ECM1) because the proposed facility incorporate the latest energy-efficient technologies. Thus, applicable measures are included in the Project and the Project would not disrupt or hinder implementation of any Energy and Climate Measures.

Therefore, the Project includes the applicable control measures from the *2017 Clean Air Plan*.

Does not Disrupt or Hinder Implementation of any *2017 Clean Air Plan* Control Measures

The Project does not include any component that would disrupt or hinder implementation of any of the *2017 Clean Air Plan* control measures. The BCF is estimated to generate up to 13,140 megawatt-hours (MWh) of electricity annually to be used onsite to power Napa Materials Diversion Facility (NMDF) operations, with excess electricity exported to the local electrical grid. Therefore, the Project would eliminate the need to import electricity to the Project site. The ADF would generate over 440,000 diesel gallon equivalents (dge) of renewable natural gas (RNG), which would be used to fuel collection vehicles at NMDF. This onsite generation of electricity and fuel would assist in the implementation of the *2017 Clean Air Plan*.

Lastly, as shown in Impact 3.2.2 and Impact 3.2.3, Project construction and operational emissions would be less than the thresholds of significance for ROG, NOx, PM_{10}, and $PM_{2.5}$. Without exceeding these thresholds, the Project would not disrupt the region's ability to achieve the ambient air quality standards and thus, the implementation of the *2017 Clean Air Plan.*

Implementation of the Project would not disrupt or hinder implementation of the *2017 Clean Air Plan* control measures.

Conclusion

In conclusion, the Project would not conflict with the *2017 Clean Air Plan* since it supports primary goals of the *2017 Clean Air Plan*, would help facilitate many of the control measures from the *2017 Clean Air Plan*, and would not disrupt or hinder implementation of any *2017 Clean Air Plan* control measures. Therefore, the Project would have a less-than-significant impact.

Mitigation Measures

None required.

Impact 3.2.2: The Project construction activities could result in a cumulatively considerable net increase of emissions of criteria air pollutants and precursors. (Significant)

Intermittent (short-term construction emissions that occur from activities, such as site-grading, paving, and building construction) were evaluated. The emissions generated from these construction activities include:

- Dust (including PM_{10} and $PM_{2.5}$) primarily from "fugitive" sources (i.e., emissions released through means other than through a stack or tailpipe) such as material handling and travel on unpaved surfaces; and

- Combustion exhaust emissions of criteria air pollutants (ROG, NO_x, CO, PM_{10}, and $PM_{2.5}$) primarily from operation of heavy off-road construction equipment, haul trucks, (primarily diesel-operated), and construction worker automobile trips (primarily gasoline-operated).

- VOC as ROG primarily from "fugitive" sources such as architectural coating and paving.

An estimated 4,864 cubic yards of soil/materials requiring offsite disposal would be generated during construction; requiring a total of 608 truck trips. Project construction would result in a total of 2.76 acres of grading and disturbance. Paving would require a total of 704 truck trips during construction. Up to 25 construction workers would be onsite daily. Project construction is anticipated to occur over a 19-month period. All construction equipment larger than 25 horsepower would be USEPA certified "Tier 4 final" emission standards for particulate matter.

Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1 (CAPCOA, 2022). Per BAAQMD's *CEQA Air Quality Guidelines*, the reported PM_{10} and $PM_{2.5}$ emissions are related to combustion exhaust only. Fugitive dust emissions are addressed via **Mitigation Measure 3.2.2a** per BAAQMD *CEQA Air Quality Guidelines* (Table 5-2). The average daily construction period emissions (i.e., total construction period emissions divided by the number of actual construction days) were compared to the BAAQMD significance thresholds.

Construction exhaust emissions are summarized in **Table 3.2-4** and would not exceed BAAQMD's thresholds of significance. Detailed modeling assumptions and results are provided in **Appendix C**.

TABLE 3.2-4. AVERAGE DAILY CONSTRUCTION EXHAUST EMISSIONS

Condition	ROG lbs/day	NOx lbs/day	PM_{10} lbs/day	$PM_{2.5}$ lbs/day
Average Daily Construction Emissions	1.46	4.09	0.08	0.08
BAAQMD Threshold of Significance	54	54	82	54
Potentially Significant?	No	No	No	No

NOTES:
PM10 and PM2.5 construction thresholds of significance apply to exhaust emissions only. Fugitive PM_{10} and $PM_{2.5}$ (fugitive dust) are less than significant if best management practices are implemented.

SOURCE: Yorke, 2025.

Construction-related fugitive dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. In the absence of mitigation, construction activities may result in significant quantities of dust, and as a result, local visibility and PM_{10} concentrations may be adversely affected on a temporary and intermittent basis during construction. In addition, the fugitive dust generated by construction would include not only PM_{10}, but also larger particles, which would fall out of the atmosphere within several hundred feet of the Project site and could result in nuisance-type impacts. The BAAQMD considers fugitive dust impacts to be significant unless best management practices are implemented. Therefore, this would be a potentially significant impact of the Project.

Mitigation Measures

Mitigation Measure 3.2.2a: Implement BAAQMD Basic Dust Control Measures: Construction-related activities, such as soil disturbance, grading, and material hauling, can also result in fugitive dust emissions. Based on the most recent BAAQMD's *CEQA Air Quality Guidelines* (see Table 5-2), for a project to have a less-than-significant air quality impact related to construction-related fugitive dust emissions, the project shall implement the following basic fugitive dust control measures for the duration of construction activities:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, sidewalks, and building pads shall be laid after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.

- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.

- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.

- Publicly visible signs shall be posted with the telephone number and name of the person to contact at the City of Napa regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

Level of Significance After Mitigation

Mitigation Measure 3.2.2a would reduce potentially significant impacts from fugitive dust during construction activities to a less-than-significant level.

Impact 3.2.3: Project operational activities could result in a cumulatively considerable net increase of emissions of criteria air pollutants and precursors. (Less than Significant)

ROG, NOx, PM_{10}, and $PM_{2.5}$ are the criteria air pollutants of primary concern in this analysis since the BAAQMD is designated as nonattainment for NAAQS and/or CAAQS for ozone (ROG and NOx are ozone precursors), PM_{10}, and $PM_{2.5}$. Project operations would generate emissions of ROG, NOx, PM_{10}, and $PM_{2.5}$ from motor vehicles, haul trucks, and onsite equipment. Operational emissions would also be generated through use of the BCF and ADF.

Baseline operational emissions are summarized in **Table 3.2-5** (average daily) and **Table 3.2-6** (annual), which represent baseline emissions prior to implementation of the proposed Project. Detailed modeling assumptions and results are provided in **Appendix C**.

TABLE 3.2-5. BASELINE AVERAGE DAILY OPERATIONAL EMISSIONS

Source	ROG lbs/day	NOx lbs/day	PM_{10} lbs/day	$PM_{2.5}$ lbs/day
Onroad Vehicle Exhaust	1.80	124	4.85	1.88
Offroad Equipment Exhaust	0.47	2.54	0.09	0.09
Onroad Vehicle Paved Road Dust	-	-	2.52	0.63
Onsite Paved Dust	-	-	3.42	0.86
Grind and Screen (Composting)	-	-	1.44	0.22
Material Handling (Composting)	-	-	0.40	0.06
Wind Erosion (Composting)	-	-	0.21	0.08
Composting POC (Composting)	418	-	-	-
Total Baseline Daily Operational Emissions	**420**	**126**	**12.9**	**3.82**

SOURCE: Yorke, 2025.

TABLE 3.2-6. BASELINE ANNUAL OPERATIONAL EMISSIONS

Source	ROG tons/year	NOx tons/year	PM_{10} tons/year	$PM_{2.5}$ tons/year
Onroad Vehicle Exhaust	0.33	22.39	0.88	0.34
Offroad Equipment Exhaust	0.09	0.46	0.02	0.02
Onroad Vehicle Paved Road Dust	-	-	0.46	0.11
Onsite Paved Dust	-	-	0.62	0.15
Grind and Screen (Composting)	-	-	0.26	0.04
Material Handling (Composting)	-	-	0.07	0.01
Wind Erosion (Composting)	-	-	0.04	0.01
Composting POC (Composting)	75.6	-	-	-
Total Baseline Annual Operational Emissions	**76.0**	**22.8**	**2.34**	**0.69**

SOURCE: Yorke, 2025.

The following criteria pollutant emissions estimates have been prepared for the following operational source categories, which are a direct result of the Project implementation:

Mobile Source Emissions

- Vehicle and Equipment Exhaust Emissions; and
- Fugitive Dust from Travel on On-site and Off-site Paved Roads.

Biomass Conversion Stationary Sources

- Material Handling;
- Grinding;
- Biomass Drying;
- Internal Combustion Engines; and
- Flare Pilot and Flares.

Anaerobic Digestion Stationary Sources

- Material Handling;
- Digestate Dewatering;
- Boiler;
- Flare pilot and Flare; and

- Natural Gas Emergency Generator.

The Project would contiue to implement facility fugitive dust cotrols such as limiting vehicle speeds on access roads to 15 mph and periodically watering and sweeping to eliminate visible material on roadways.

Project operational emissions associated vehicle trips, BCF, and ADF, were estimated using several methodologies. Detailed modeling assumptions and results are provided in **Appendix C**. The Project-related (Project minus Baseline) operational emissions are summarized in **Table 3.2-7** (average daily) and **Table 3.2-8** (annual) and would not exceed BAAQMD's thresholds of significance. These daily and annual emissions would occur as a result of the Project. Therefore, the Project would have a less-than-significant impact.

Notably, BAAQMD $PM_{2.5}$ emission (pounds per day and tons per year) significance threshold relates to combustion exhaust only. In contrast, Impact 3.2.4 estimates the annual ambient air $PM_{2.5}$ concentration (micrograms per cubic meter) at locations near the Project (i.e., residences and offsite workers) related to both combustion exhaust and fugitive dust. The Project would have a less-than-significant impact on $PM_{2.5}$ emissions and the Project would also have a less-than-significant impact on $PM_{2.5}$ concentrations.

TABLE 3.2-7. PROJECT AVERAGE DAILY OPERATIONAL EMISSIONS

Source	ROG lbs/day	NOx lbs/day	PM_{10} lbs/day	$PM_{2.5}$ lbs/day
Onroad Vehicle Exhaust	1.95	141	5.53	2.13
Offroad Equipment Exhaust	0.60	3.22	0.12	0.12
Onroad Vehicle Paved Road Dust	-	-	2.83	0.71
Onsite Paved Dust	-	-	2.98	0.74
Biomass Conversion (Material Handling)	-	-	0.07	0.01
Biomass Conversion (Grinding)	0.22	-	0.32	0.04
Biomass Conversion (Drying)	21.8	-	1.63	1.63
Biomass Conversion (Engines)	23.7	24.6	2.58	2.58
Biomass Conversion (Flare Pilot)	<0.01	0.02	<0.01	<0.01
Biomass Conversion (Flares)	1.19	3.78	0.15	0.15
Anaerobic Digestor (Material Handling)	-	-	0.08	0.01
Anaerobic Digestor (Digestate Dewatering)	1.17	-	-	-
Anaerobic Digestor (Boiler)	0.14	0.61	0.19	0.19
Anaerobic Digestor (Flare Pilot)	<0.01	<0.01	<0.01	<0.01
Anaerobic Digestor (Flare)	0.06	0.36	0.04	0.04
Anaerobic Digestor (Emergency Engine)	0.21	0.21	0.01	0.01
Grind and Screen (Composting)	-	-	1.44	0.22
Material Handling (Composting)	-	-	0.40	0.06
Wind Erosion (Composting)	-	-	0.21	0.08
Composting POC (Composting)	418	-	-	-
Total Baseline and Project Daily Operational Emissions	**469**	**174**	**18.6**	**8.74**
Total Baseline Daily Operational Emissions	**420**	**126**	**11.8**	**3.54**

Total Project-related Daily Operational Emissions	**48.8**	**47.9**	**6.79**	**5.20**
BAAQMD Threshold of Significance	54	54	82	54
Potentially Significant?	No	No	No	No

SOURCE: Yorke, 2025.

TABLE 3.2-8. PROJECT ANNUAL OPERATIONAL EMISSIONS

Source	ROG tons/year	NOx tons/year	PM_{10} tons/year	$PM_{2.5}$ tons/year
Onroad Vehicle Exhaust	0.35	25.6	1.00	0.39
Offroad Equipment Exhaust	0.11	0.58	0.02	0.02
Onroad Vehicle Paved Road Dust	-	-	0.51	0.13
Onsite Paved Dust	-	-	0.54	0.13
Biomass Conversion (Material Handling)	-	-	0.01	0.00
Biomass Conversion (Grinding)	0.04	-	0.06	0.01
Biomass Conversion (Drying)	3.94	-	0.30	0.30
Biomass Conversion (Engines)	4.29	4.44	0.47	0.47
Biomass Conversion (Flare Pilot)	<0.01	<0.01	<0.01	<0.01
Biomass Conversion (Flares)	0.22	0.68	0.03	0.03
Anaerobic Digestor (Material Handling)	-	-	0.01	<0.01
Anaerobic Digestor (Digestate Dewatering)	0.21	-	-	-
Anaerobic Digestor (Boiler)	0.02	0.11	0.03	0.03
Anaerobic Digestor (Flare Pilot)	<0.01	<0.01	<0.01	<0.01
Anaerobic Digestor (Flare)	0.01	0.07	0.01	0.01
Anaerobic Digestor (Emergency Engine)	0.04	0.04	<0.01	<0.01
Grind and Screen (Composting)	-	-	0.26	0.04
Material Handling (Composting)	-	-	0.07	0.01
Wind Erosion (Composting)	-	-	0.04	0.01
Composting POC (Composting)	75.6	-	-	-
Total Baseline and Project Annual Operational Emissions	**84.9**	**31.5**	**3.36**	**1.58**
Total Baseline Annual Operational Emissions	**76.0**	**22.8**	**2.14**	**0.64**
Total Project-related Annual Operational Emissions	**8.82**	**8.68**	**1.23**	**0.94**
BAAQMD Threshold of Significance	10	10	15	10
Potentially Significant?	No	No	No	No

SOURCE: Yorke, 2025.

Mitigation Measures

None required.

Impact 3.2.4: Project operational activities could expose sensitive receptors to substantial concentrations of TACs. (Less than Significant)

BAAQMD considers the relevant zone of influence for an assessment of air quality health impacts to be within 1,000 feet of a project site. The Project site is surrounded by light industrial and open space. Therefore, there are offsite workers located within 1,000 feet of the Project. The nearest residence is approximately 2,340 feet to the east of the Project site, across Highway 29 on Café Court. The nearest school is Napa Junction Magnet Elementary School approximately 1.8 miles south of the Project site. Therefore, a health risk assessment was completed. The health risk assessment determined the estimate of cancer risks, chronic impacts, acute impacts, and $PM_{2.5}$ concentration as a result of Project-related construction activities and operations and compared the results to the BAAQMD thresholds of significance for nearby residence and offsite workers.

Many VOC emitted through the BCF and ADF are classified by CARB as TAC (or by the USEPA as HAP) because exposure leads to elevated risk of cancer or other serious health risks. Examples of these VOC include acetaldehyde, ammonia, benzene, formaldehyde, methanol, and Naphthalene.

All stationary sources and associated equipment associated with the ADF and BCF require an Authority to Construct/Permit to Operate through the BAAQMD. Each facility would be subject to required health risk screening and analysis by the BAAQMD and would be subject to permit conditions to ensure BAAQMD rules and regulations would not be exceeded. New sources that require a permit from the BAAQMD, or existing sources that are being modified, are analyzed by the BAAQMD based on their potential to emit toxics.

A Health Risk Assessment (HRA) is required under BAAQMD Regulation 2-5 during air permitting if TAC emissions exceed trigger levels and the HRA would be conducted by BAAQMD. New facilities causing an increase in cancer risk greater than 10 in a million or a non-cancer score greater than one cannot be permitted by the BAAQMD. These are the same levels as BAAQMD CEQA health impact significance thresholds.

Therefore, a HRA was prepared to evaluate potential health risks associated with exposure of TACs including DPM generated by heavy-duty offroad equipment, vehicle idling, and truck traffic, as well as air toxics from stationary sources. The HRA was prepared based on the California Office of Environmental Health Hazard Assessment (OEHHA)'s Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA, 2015).

Table 3.2-9 displays the estimated health impacts from Project-related (Project minus Baseline) construction and operations.

The majority of the construction-related cancer risk is due to DPM emissions. The majority of the operational-related cancer risk is due to the ADF loaders (DPM) and dryer process (acetaldehyde and formaldehyde) as well as BCF loaders (DPM).

The maximum cancer risk from Project-related construction plus operational emissions would be 0.43 and 0.68 at a residence and offsite worker, respectively. The maximum cancer risk from

Project-related construction and operational emissions would be below the BAAQMD threshold of 10 per million and would be less than significant. The acute HI would be below the project-level threshold of 1. The chronic HI would be below the project-level threshold of 1. The Project-related maximum annual $PM_{2.5}$ concentration from construction and operations would be 0.13 and 0.12 µg/m^3, respectively. Thus, the Project-related annual $PM_{2.5}$ concentration due to Project-related construction and operations would be below the BAAQMD threshold of 0.3 µg/m^3. Therefore, the Project would have a less-than-significant impact.

TABLE 3.2-9 ESTIMATED PROJECT-RELATED HEALTH IMPACTS SUMMARY

Condition	Receptor type	Cancer Risk	Hazard Impact (acute/chronic)	$PM_{2.5}$ Concentration
Project Construction	Residence	0.07	*/0.0001	0.004
Project Construction	Offsite Worker	0.04	*/0.003	0.13
Project Operational	Residence	0.36	0.02/0.002	0.02
Project Operational	Offsite Worker	0.64	0.13/0.01	0.12
BAAQMD Significance Threshold		10.0	1.0	0.3
Potentially Significant?		No	No	No

NOTE: "*" indicates no value. OEHHA has not developed an acute reference exposure level for DPM therefore, acute DPM impacts were not evaluated in the HRA.

SOURCE: Yorke, 2025.

Mitigation Measures

None required.

Impact 3.2.5: Project operations could generate odors that could adversely affect a substantial number of people. (Significant)

The occurrence and severity of odor impacts depend on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies.

The main source of odors for existing NMDF operations are organics stockpiling and processing with the existing CASP system. The Project would allow the facility to accept additional organics with the development of the ADF and BCF. However, the nearest residence is approximately 2,340 feet to the east of the Project site, across Highway 29 on Café Court. Notably, the primary wind direction is from the south-southwest, thus any odorous emissions would be expected to be dispersed north towards light industrial uses surrounding the airport. The proposed BCF and ADF would include engines, flares, and boilers with control equipment which reduce air emissions and odors in a manner greater than fugitive emissions associated with composting facilities.

Secondly, NMDF has an Odor Impact Minimization Plan (OIMP) for its existing compostable materials handling operations, which would be required to be updated and approved by the Local Enforcement Agency (LEA) prior to issuance of the revised Solid Waste Facilities Permit (SWFP) and operation of the ADF and BCF. The OIMP regulatory requirements (14 CCR 17863.4) have been developed to allow an operator to aggressively devise an operational plan to prevent odors from occurring, and to provide clear procedures if odors do occur.

The OIMP also contains the site's complaint investigation procedures, which should include a 24-hour phone hotline for receipt of odor complaints, notification to the LEA, and emergency procedures for the cease and desist of any operations that are causing odor impacts. If the operator is not following the procedures in the OIMP, the LEA may issue a Notice and Order to require the operator either to comply with the OIMP, or to revise it. If the OIMP is being followed, but the odor impacts are still occurring, the LEA may issue a Notice and Order requiring the operator to take additional reasonable and feasible measures to minimize odors.

The BAAQMD significance threshold for odor impacts is five confirmed complaints per year averaged over three years. No odor complaints were issued to the BAAQMD for the period from January 1, 2020, to June 24, 2025 for the existing facility.[12] Given the existing OIMP, the facility's lack of odor complaints, and that the BCF and ADF would include emission controls, the Project is not expected to increase odors.

Based upon the limited number of sensitive receptors in the Project vicinity, the odor history of existing NMDF operations, and the required OIMP, the Project would not generate odors that could adversely affect a substantial number of people. However, if the OIMP was not updated for new operations handling odorous waste material, such as the ADF, odor complaints could arise in the Project vicinity. This would be a significant impact of the Project.

Mitigation Measures

Mitigation Measure 3.2.5a: Update Odor Impact Minimization Plan. The operator (NRWS) shall prepare an updated Odor Impact Minimization Plan in compliance with 14 CCR 17863.4 prior to operation of the ADF and BCF.

Level of Significance After Mitigation

Mitigation Measure 3.2.5a would reduce potentially significant impacts from odors to a less-than-significant level.

3.2.3 REFERENCES

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3.3 BIOLOGICAL RESOURCES

This section describes the environmental conditions of the Project area, analyzes potential impacts to biological resources, and provides Mitigation Measures to reduce potential biological impacts to a less-than-significant level. **Appendix D** provides the Biological Resources Assessment (BRA) prepared for the Project.

3.3.1 SETTING

Regulatory Considerations

This section summarizes the federal and state regulations that may pertain to the Project. This section also discusses pertinent local general plan policies related to the protection and preservation of biological resources.

Federal Regulations

Federal Endangered Species Act

The Federal Endangered Species Act (FESA), enacted in 1973, prohibits the taking, possession, sale, or transport of endangered species. Under the FESA, the Secretary of the Interior and the Secretary of Commerce jointly have the authority to list a species as threatened or endangered. Both the National Marine Fisheries Service (NMFS) and the U.S. Fish & Wildlife Service (USFWS) administer the FESA. NMFS is accountable for animals that are threatened or endangered (16 United States Code [USC] 1533[c]) and spend most of their lives in marine waters, including marine fish, most marine mammals, and anadromous fish such as Pacific salmon. The USFWS is accountable for all other federally listed plants and animals.

Pursuant to the requirements of the FESA, a federal agency reviewing a project within its jurisdiction must determine whether any federally listed threatened or endangered species could be present in the Study Area and whether the project will have a potentially significant impact on such species. In addition, federal agencies are required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3], [4]).

Projects that would result in a "take" of any federally listed threatened or endangered species are required to obtain authorization from NMFS and/or USFWS through either Section 7 (interagency consultation) or section 10(a) (incidental take permit) of FESA, depending on whether the federal government is involved in permitting or funding the project. The Section 7 authorization process is used to determine if a project with a federal nexus would jeopardize the continued existence of a listed species and what mitigation measures would be required to avoid jeopardizing the species. The Section 10(a) process allows take of endangered species or their habitat in non-federal activities.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) regulates or prohibits taking, killing, possession of, or harm to migratory bird species listed in Title 50 Code of Federal Regulations (CFR) Section 10.13. The MBTA is an international treaty for the conservation and management of bird species that migrate through more than one country and is enforced in the United States by the USFWS. Hunting of specific migratory game birds is permitted under the regulations listed in Title 50 CFR 20. The MBTA was amended in 1972 to include protection for migratory birds of prey (raptors).

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act regulates or prohibits taking, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). "Take" includes pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb (16 U.S.C. 668c; 50 CFR 22.3).

Federal Clean Water Act

The Clean Water Act (CWA) was passed by Congress in 1972 with a broad mandate "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." The chief purpose of the CWA is to establish the basic structure for regulating discharges of pollutants into waters of the U.S. The CWA authorizes the Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations, and includes programs addressing both point-source and nonpoint-source pollution. Point-source pollution is pollution that originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Nonpoint-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless specifically authorized by a permit; permit review is the CWA's primary regulatory tool.

Section 401: Water Quality Certification

The State Water Resources Control Board (SWRCB) has authority over wetlands through Section 401 of the CWA, as well as the Porter-Cologne Act, California Code of Regulations (CCR) Section 3831(k), and California Wetlands Conservation Policy.

The CWA requires that an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the U.S.) first obtain a certificate from the appropriate state agency stating that the fill is consistent with the State's water quality standards and criteria. In California, the authority to either grant certification or waive the requirement for permits is delegated by the SWRCB to the nine regional boards. The San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) is the appointed authority for Section 401 compliance in the Project area. The SWRCB additionally requires additional Waste Discharge Requirements under Porter-Cologne to protect aquatic resources that are outside federal jurisdiction.

A request for certification or waiver is submitted to the Regional Board at the same time an application is filed with the United State Army Corps of Engineers (USACE). The regional board

has 60 days to review the application and act on it. Because no USACE permit is valid under the CWA unless "certified" by the state, these boards may effectively veto or add conditions to any USACE permit.

Section 402: Permits for Stormwater Discharge

CWA Section 402 regulates construction-related storm water discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program, administered by EPA. In California, the SWRCB is authorized by EPA to oversee the NPDES program through the regional water boards.

NPDES permits are required for projects that disturb more than 1 acre of land. The NPDES permitting process requires the applicant to file a public notice of intent to discharge storm water and to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must include a site map, a description of proposed construction activities, and the best management practices (BMPs) that would be implemented to prevent soil erosion and discharge of other construction-related pollutants (e.g., petroleum products, solvents, paints, and cement) that could contaminate nearby water resources.

Section 404: Permits for Fill Placement in Waters of the U.S. (Including Wetlands)

Section 404 of the CWA identifies the USACE as the principal authority to regulate activity that could discharge fill or dredge material or otherwise adversely modify wetlands or waters of the U.S. The USACE implements the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no net loss of wetland values or function. U.S. Congress has authorized the EPA to have a specific oversight role over USACE's authority.

State Regulations

California Endangered Species Act

The California Endangered Species Act (CESA) was enacted in 1984. Under the CESA, the California Fish and Wildlife Commission (CFWC) has the responsibility for maintaining a list of threatened and endangered species, while The California Department of Fish & Wildlife (CDFW) is responsible for enforcement. CDFW also maintains lists of species of special concern. A Species of Special Concern (SSC) is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- is listed as Federally-, but not State-, threatened or endangered;
- meets the State definition of threatened or endangered but has not formally been listed;
- is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;

- has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

The CESA prohibits the take of California listed animals and plants in most cases, but CDFW may issue incidental take permits under special conditions. Pursuant to the requirements of the CESA, a State agency reviewing a project within its jurisdiction must determine whether any state-listed endangered or threatened species could be present in the site and determine whether the project would have a potentially significant impact on such species. In addition, CDFW encourages consultation on any project that could affect a listed or candidate species.

California Fish and Game Code – Sections 1600-1616

Under Sections 1600-1616 of the California Fish and Game Code (CFGC), the CDFW regulates activities that would alter the flow, bed, channel, or bank of streams and lakes. The limits of CDFW's jurisdiction are defined in the code as the "… bed, channel or bank of any river, stream, or lake designated by the department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit ..." (Section 1601). In practice, the CDFW usually marks its jurisdictional limit at the top of the stream or bank, or at the outer edge of the riparian vegetation, whichever is wider.

The CDFW also derives its authority to oversee activities that affect wetlands from state legislation. This authority includes Sections 1600-1616 of the CFGC (lake and streambed alteration agreements), Section 30411 of the California Coastal Act (CDFW becomes the lead agency for the study and identification of degraded wetlands within the Coastal Zone), CESA (protection of state listed species and their habitats - which could include wetlands), and the Keene-Nejedly California Wetlands Preservation Act of 1976 (states a need for an affirmative and sustained public policy program directed at wetlands preservation, restoration, and enhancement). In general, the CDFW asserts authority over wetlands within the state either through review and comment on USACE Section 404 permits, review and comment on CEQA documents, preservation of state listed species, or through stream and lakebed alteration agreements.

California Fish and Game Code – Sections 1900-1913

These Sections embody the Native Plant Protection Act, which is intended to preserve, protect, and enhance endangered or rare native plants in the state. The act directs CDFW to establish criteria for determining what native plants are rare or endangered. Under Section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens. Under the act, CDFW may adopt regulations governing the taking, possessing, propagation or sale of any endangered or rare native plant.

Section 1913 of that Act allows landowners in conducting certain activities to take actions that will destroy rare or endangered plants, provided that, where the CDFW has previously notified the owner "that rare or endangered plants are growing" on his or her land, the owner notifies CDFW "at least 10 days in advance of changing the land" to allow the state agency to come and "salvage" the plants. Subject to this requirement, section 1913 states that "the presence of rare or

endangered plants" on a property shall not restrict (1) timber operations conducted pursuant to an approved timber harvest plan, (2) "required mining assessment work pursuant to federal or state mining laws," (3) "the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, other right-of-way by the owner of the land or his agent," or (4) "the performance by a public agency or publicly or privately owned public utility of its obligation to provide service to the public."

Fish and Game Code – Sections 3503, 3503.5, 3513

CFGC Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. CFGC Section 3503.5 protects all birds-of-prey (raptors) and their eggs and nests. Section 3513 states that it is unlawful to take or possess any migratory non-game bird as designated in the MBTA.

California Fish and Game Code – Sections 3511, 4700, 5050, 5515

Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the CFGC designate certain species as "fully protected." Fully protected species, or parts thereof, may not be taken or possessed at any time, and no provision of the CFWC or any other law may be construed to authorize the issuance of permits of licenses to take any fully protected species. No such permits or licenses heretofore issued may have any force or effect for any such purpose, except that the CFGC may authorize the collecting of such species for necessary scientific research. Legally imported and fully protected species or parts thereof may be possessed under a permit issued by CDFW.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act established the SWRCB and each Regional Water Quality Control Board (RWQCB) as the principal state agencies for coordinating and controlling water quality in California. Responsibility for the protection of water quality in California rests with the SWRCB and nine RWQCBs. The SWRCB establishes statewide policies and regulations for the implementation of water quality control programs mandated by federal and state water quality statutes and regulations. Pursuant to the Act, each of California's nine regional boards must prepare and periodically update basin plans that set forth water quality standards for surface and groundwater, as well as actions to control point and non-point sources of pollution to achieve and maintain these standards. Basin plans offer an opportunity to achieve wetlands protection through enforcement of water quality standards.

The Porter-Cologne Water Quality Control Act provides that "All discharges of waste into the waters of the State are privileges, not rights." Waters of the State are defined in Section 13050(e) of the Porter-Cologne Water Quality Control Act as "…any surface water or groundwater, including saline waters, within the boundaries of the state." All dischargers are subject to regulation under the Porter-Cologne Water Quality Control Act, including both point and nonpoint source dischargers. The RWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within its jurisdiction.

In 2019, the SWRCB extended their water quality certification to include waste discharge requirements as adopted in the "State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State," which include elements of the CWA. These procedures also lay out the steps for the submission, review, and approval of applications for activities related to these activities.

Local Regulations

City of Napa 2040 General Plan

City of Napa has developed the following goals and policies for habitat and wildlife as part of the City of Napa 2040 General Plan that are applicable to the Project*:*

GOAL NRC-1: Manage natural resources, including riparian corridors, wetlands, and open space areas in and around the city to preserve and enhance plant and wildlife habitats.

> NRC 1-8: Require development projects to provide protection for significant on-site natural habitat whenever feasible, and protect significant species and groves or clusters of trees on project sites. Establish and support citywide training and support programs that provide the tools to help existing homeowners associations and residents accomplish habitat protection.

GOAL NRC-2: Recognize and support the preservation of rare, endangered, and threatened

> NRC 2-2: As part of development review on sites with sensitives species, require project proponents to either conserve any habitat areas, or identify any feasible means of avoiding any net loss of habitat or habitat value for endangered, threatened, and rare species. Establish programs that provide for the use of off-site mitigation when in the best interest of the public.

Methodology

As discussed above, a BRA was conducted by Swift Biological in September 2024 (Swift, 2024). The findings of the BRA are utilized in this analysis to evaluate the Project's potential impacts to biological resources. The Project site includes the Napa Materials Diversion Facility (NMDF) site, the Southern Annexation Parcel, and the 600 Tower Road Parcel. Biological surveys of the Project site were completed in February through May 2024 by Swift Biological, and August 9, 2017, October 30, 2018, and February through June 2024 by Jane Valerius Environmental Consulting. The field surveys followed the methods described in CDFW's *Protocols for Surveying and Evaluating Impacts to Special-status Native Plant Populations and Natural Communities* (CDFW, 2018) and Napa County's *Guidelines for Preparing Biological Resources Reconnaissance Surveys* (Napa County, 2016). The surveys were completed to 1) document and map vegetation communities, 2) compile a list of plant and animal species present, 3) evaluate the Project site for the presence of special-status species and their habitats, and 4) evaluate the Project site for jurisdictional aquatic features. Areas adjacent to the Project site were also observed for context and to evaluate the potential for impacts on off-site resources.

Before the surveys, a background review was completed to generate a list of potentially sensitive biological communities and special-status species that may occur within the Project site; see **Appendix D** (page 5 of the BRA). A base map of the site was produced before the field surveys,

with the parcel boundaries overlaid on an aerial photograph. The site boundaries and aerial data were also downloaded into the ESRI Field Maps application, and GPS field data on biological features were collected in the field. During the surveys, the entire site was systematically and thoroughly surveyed to inventory all biological resources present.

Plants

Botanical surveys of the Project site were conducted on February 22, April 2, May 6, and June 18, 2024, to describe the vegetation communities and evaluate the presence of special-status plants. Plant communities were identified and described based on the *Manual of California Vegetation* (CNPS, 2024a) definitions. This included protocol-level special-status plant species surveys performed in accordance with state and federal plant survey protocols (CDFW, 2018; USFWS 2000). Surveys were completed by Jane Valerius, botanist and wetland ecologist, of Jane Valerius Environmental Consulting. The surveys were conducted for the Project site and the adjacent wetlands that were mapped in 2018 but are no longer part of the development area. A meandering pattern was walked through each habitat to ensure that all areas were viewed. Protocol-level surveys for special-status plants were timed to coincide with peak blooming periods for special-status plants known to occur in the area based on database searches. The botanical surveys were floristic in nature, and every plant taxon that occurred on the site was identified at the taxonomic level necessary to determine rarity or listing status. All plants were identified using the *Jepson eFlora* (Jepson Flora Project, 2024) and *A Flora of Napa County* (Ruygt, 2020). A complete list of plant species observed on the Project site is presented in **Appendix D** (Table 2 of the BRA).

Wildlife

Wildlife surveys of the Project site were completed to describe the wildlife species and habitats present and evaluate for the presence of special-status species. Surveys were completed by Swift Biological on February 22, March 20, and 25, April 1, 9, 16, and 22, and May 9, 2024. Binoculars (Swarovski 10x42), spotting scope (Vortex Razor HD), and a high-resolution camera (Canon PowerShot SX70) were used. All wildlife species were identified by sight or sound, and details of wildlife behavior and activity were recorded. The surveys were carried out under suitable weather conditions to maximize the potential for the detection of wildlife species. The surveys included a daytime inspection of all vegetation and an evaluation of unique wildlife habitat features, such as drainages, small mammal burrows or other suitable aestivation holes, and nesting bird habitat. A complete list of wildlife species observed on the Project site is presented in **Appendix D** (Table 4 of the BRA).

Swainson's Hawk

In addition to general wildlife surveys, one year of protocol-level Swainson's hawk (SWHA) surveys were completed by Dana Riggs, SolEcology and species expert, and Jennifer Michaud, Swift Biological and trained surveyor, within the Project site from March through May 2024. Prior to conducting the surveys, CDFW's CNDDB and BIOS (2024a and 2024b) were consulted for the location of reported nesting activity in the Project's vicinity. The field surveys followed protocols outlined in the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee;

SWHA TAC 2000). Seven surveys were completed over three periods per the recommended timing in SWHA TAC (2000). Surveys were conducted on March 20, 25, and April 1 in Period II, April 9, 16, and 22 in Period III, and May 9 in Period IV; see Table 1. Surveys were performed in both the morning (between sunrise and 10:00 am) and evening (between 4:30 pm and sunset). Surveys were completed under suitable weather conditions to maximize the potential for detecting birds, bird nesting activity, and nests. Binoculars (Swarovski 10x42), a 65x Canon camera, and a spotting scope (Vortex Razor HD) were used during the surveys. The surveys focused on behavioral observations and vocalizations of each hawk encountered. Observations relied primarily on behavioral cues such as perched adults and adults displaying any of the following: copulating, positioning, aerial acrobatics, territorial displays (chasing), circular flight patterns, and nest building/or nest cleaning. Careful attention was paid to any vocal communications between hawks as this is common during territorial displays, courtship, and mating and during the nestling phase to communicate food is available or that a threat exists. Suitable nest trees were visually inspected for nest structures.

The surveys were primarily focused on the Southern Annexation Parcel as the remaining parcels within the Project site are fully developed and do not support SWHA habitat. The undeveloped wetland mitigation site adjacent to the Southern Annexation Parcel was also included in the survey due to its proximity to the Project site and potential for SWHA presence. Additional accessible lands and the adjacent Napa Valley Business Park were also visited, where SWHAs have previously been reported. Additional accessible lands included Fagan Creek, Devlin Road, North Kelly Road, Highway 221/12 interchange, and Napa Sanitation District property off Soscol Ferry Road. Locations outside the Project site were visited to determine the current status of SWHA nesting activity and the potential for use of the Project site if nesting nearby. During each survey, the Southern Annexation Parcel, wetland mitigation site, and other nearby sites (e.g., Fagan Creek along Devlin Road) were examined on foot. Driving or windshield surveys were performed from nearby roads to ensure coverage of all surrounding areas. This method is preferred over walking surveys as the observer can typically approach a hawk closer without causing a disturbance and causing the bird to fly off (SWHA TAC 2000). A summary of the SWHA Surveys in the Project area is presented in **Appendix D** (Table 1 of the BRA).

Wetlands

An assessment of jurisdictional wetlands and non-wetland waters (streams) was completed by Jane Valerius in 2018, with follow-up verification in the spring of 2024. This included evaluating the presence of wetlands, waters of the U.S. and State of California, and riparian habitat under the jurisdiction of the USACE, the RWQCB, and the CDFW. Wetland jurisdiction is determined based on a preliminary assessment of hydrophytic vegetation, hydric soils, and hydrology; a site must meet these three parameters to be considered jurisdictional (Corps, 1987, 2008b); wetland features were assessed where present. Waters and other drainage areas (non-wetland waters) are identified based on wetland indicators and other physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, or the presence of litter and debris to indicate the presence of an Ordinary High Water Mark based on the Corps' *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Corps, 2008a).

A jurisdictional delineation of an approximately 4-acre parcel, including the Southern Annexation Parcel, was completed on October 18, 2018, and follow-up surveys in spring 2024 confirmed that the boundaries had not changed. A jurisdictional delineation report was prepared by Jane Valerius Environmental Consulting in November 2018; *Delineation of Waters of the United States, including Wetlands, for the South Napa Waste Management Authority, Devlin Road, Napa, Napa County, California* (Jane Valerius Environmental Consulting, 2018). The report was submitted to the San Francisco District, USACE, and the wetland boundaries were verified by Sahrye Cohen, USACE project manager, during a site visit on January 23, 2019. The Southern Annexation Parcel boundaries were adjusted based on the presence of jurisdictional wetlands. The Project was reduced in size to avoid the wetlands and provide a 50-foot buffer from the delineated wetlands. The wetlands are no longer part of the Project site.

Existing Conditions

Physical Characteristics

The Project site includes three contiguous sites that are relatively flat and in a low-lying area of the lower Napa River watershed. The Southern Annexation Parcel has a slightly elevated topography due to soil placement in an upland area. Elevations within the Project site range from approximately 50 to 62 feet. The 600 Tower Road Parcel and the NMDF site are hard-packed soils due to their industrial uses; these sites are fully fenced. The Southern Annexation Parcel is comprised of part fill material and part undeveloped land. The sites are serviced by Devlin and Tower Roads. Fagan Creek, an intermittent creek and tributary to the Napa River, flows to the north of the 600 Tower Road Parcel. Seasonal wetlands are located around the Southern Annexation Parcel and to the east.

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service Soil Survey, the Project site is underlain by two soil mapping units: Clear Lake clay, drained, 0 to 2 percent slopes and Cole silt loam, 0 to 2 percent slopes (NRCS, 2024). The Clear Lake series consists of clays that are formed under poorly drained conditions on old alluvial fans and in basins. It is derived from igneous, metamorphic, and sedimentary rock. It is comprised of clay in the upper 60 inches. Permeability is slow. Runoff is high. Ponding is frequent. It is listed as hydric soil. This soil is used mainly for annual pastures. The plant cover is generally annual grasses with scattered oaks. The majority of the Project site is mapped as Clear Lake clay. The Cole series consists of somewhat poorly drained soils on alluvial fans and flood plains. It is derived from volcanic and sedimentary rock. It is comprised of silt loam in the upper 8 inches, clay loam from 8 to 41 inches, and clay loam/clay from 41 to 64 inches. It is somewhat poorly drained, permeability is moderately slow, and the run-off class is low. It is rarely subject to flooding or ponding. This soil is used mainly for vineyards. The plant cover is generally native grasses and oaks. The northwest corner of the Tower Road Parcel is mapped as Cole silt loam.

Plant Communities

The Project is in an industrial and commercial business park and includes three separate sites. The existing NMDF site and 600 Tower Road Parcel are fully developed, and there are no native plant communities according to botanical surveys conducted for the Project. The Southern Annexation

Parcel is comprised of ruderal non-native grassland with adjacent seasonal wetlands. These sites are described in detail below based on botanical surveys completed in 2024. Existing conditions are shown in Section 8 (*Photographs)* of the BRA and in Figures 3 through 5 of the BRA (**Appendix D)**. A complete list of plant species observed on the Project site is presented in **Appendix D** (Table 2 of the BRA)

600 Tower Road Parcel and the NMDF sites

The 600 Tower Road Parcel and the NMDF are developed sites with hard-packed surfaces, pavement, existing structures, and small areas of fringe ruderal non-native vegetation. The ruderal non-native vegetation is dominated by weedy, non-native grasses and forbs including wild oats (Avena fatua), ripgut brome (Bromus diandrus), ryegrass (Festuca perennis), annual bluegrass (Poa annua), hare barley (Hordeum murinum ssp. leporinum), fennel (*Foeniculum vulgare*), stinkwort (*Dittrichia graveolens*), wild radish (*Raphanus sativus*), Himalayan blackberry (*Rubus armeniacus*), and filarees (*Erodium* spp.). These sites do not support native plant communities, wetlands, or habitats for any special-status plant species.

Southern Annexation Parcel

The Southern Annexation Parcel includes an area that received soil material from 2019 to 2022. The soil was from the construction of ponds and active curing piles. The site is elevated from the surrounding area, including the wetlands that were delineated for the larger parcel in 2018. The soil was placed in a designated upland site. No wetlands were impacted by this soil placement.

Ruderal Non-Native Grassland

The Southern Annexation Parcel is dominated by non-native annual grasses and forbs and is classified as ruderal non-native grassland. Non-native grasses present include ryegrass, wild oats (*Avena barbata, A. fatua*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), soft chess (*Bromus hordaeceus*), ripgut brome, weedy brome (*Bromus caroli-henrici*), Harding grass (*Phalaris aquatica*), medusa head grass (*Elymus caput-medusae*), and velvet grass (*Holcus lanatus*). Weedy forb species include salsify (*Tragopogon porrifolius*), chicory (*Cichorium intybus*), bristly ox-tongue (*Helminthotheca echioides*), bindweed (*Convolvulus arvensis*), prickly lettuce (*Lactuca serriola*), Queen Anne's lace (*Daucus carota*), and wild radish. A few native coyote brush (*Baccharis pilularis*) have recently been established.

Seasonal Wetlands

The Southern Annexation Parcel is adjacent to seasonal wetlands. These areas were delineated in 2018, and boundaries were confirmed in 2024 (Jane Valerius Environmental Consulting, 2018). These wetlands encompass the lands to the west and south of the Parcel. They follow a drainage course from a culvert under Devlin Road to the southeast of the parcel and a culvert under the railroad tracks to the west. The property to the east of Devlin Road is a created wetland that was mitigation for the Devlin Road Transfer Station. The wetland drainage flows along the west side of the Parcel adjacent to the railroad tracks and flows into a drain inlet structure approximately mid-way between the Devlin Road Transfer Station and the NMDF site. All of these wetlands are outside of the Parcel and would be avoided. A 50-foot buffer would be maintained between the delineated wetland boundary and development on the Parcel (Napa County requires a 50-foot

setback from a delineated wetland boundary, unless reduced by a qualified professional biologist and approved by the County [Napa County Code Chapter 18.108.026]).

Wildlife Habitats

Wildlife use is directly related to a site's physical and biological components, including the type, size, and diversity of vegetation communities, human land use, and degree of disturbance. Wildlife require four basic habitat components: food and water for basic survival; shelter for many life functions such as nesting, predator avoidance, protection from weather, and rest; and space for foraging, finding mates, and establishing territories. As the quantity, type, and distribution of habitat components change, so do the types of wildlife species found within the habitat. Although characteristic assemblages of wildlife species occur predictably within certain vegetation types, relatively few animals are restricted to a single habitat, and, indeed, some may require more than one habitat type, especially during different life stages. The following discussion includes a general summary of wildlife species observed or typically associated with the habitats within the Project site.

The Project site is in a highly industrialized and commercial-use area. Two of the sites, 600 Tower Road Parcel and the NMDF, are fully developed, and there are no native plant communities and limited vegetation. The Southern Annexation Parcel is ruderal grassland with adjacent seasonal wetlands. Despite the developed nature of the site, there is some value for wildlife. Wildlife using the Project site are primarily species typical of developed environments. These include a variety of native and non-native species that can live and thrive in areas with a high level of human activities. These species generally have a high tolerance for human disturbance, utilize human food resources, and are typically omnivorous and generalist with regard to food and habitat.

A number of wildlife species use the NMDF site. Waste management sites provide abundant and permanent feeding opportunities for scavenging birds. A large number of birds, especially gulls, corvids, starlings, and blackbirds frequent these areas. Species observed during the surveys included the American crow, California gull, common raven, European starling, and rock pigeon. These birds may be a particular nuisance at the site as they can disrupt daily operations and also pose human health and safety issues. Vermin are also common; these include a number of non-native mice and rats. Native northern raccoons and non-native Virgina possums are also common visitors. The NMDF site is most likely used primarily for forage. Limited bird nesting and other wildlife breeding may occur on the site. The 600 Tower Road Parcel provides limited value for wildlife, and wildlife use is low.

The ruderal non-native grasslands of the Southern Annexation Parcel provide food, shelter, and space for wildlife, including birds, mammals, reptiles, amphibians, and invertebrates that can survive in disturbed environments. The area already experiences a high level of human activity, both from noise from nearby properties and the proximity to developed areas. The most common wildlife within the grasslands are birds. They may forage around the site, roost in shrubs, and nest on the site. Bird species observed on the Parcel during the surveys included American crow, Brewer's blackbird, golden-crowned sparrow, northern mockingbird, turkey vulture, western gull, and white-crowned sparrow. Fossorial mammal activity on the site was also observed; this

included several broad-footed mole mounds and tunnels of small mice. Black-tailed deer may forage and bed on the site as they were observed across the street. The Parcel is also directly adjacent to seasonal wetlands and the wetland mitigation site. These wetland habitats provide additional resources for wildlife that may use the wetlands as a seasonal water supply, breeding, and foraging habitat, and wildlife usage of the Annexed Parcel may increase due to the proximity to these seasonal wetlands. There are no trees on the Parcel, but there is a large eucalyptus tree and willows directly to the east that support nesting birds of prey. A complete list of wildlife species observed on the Project site is presented in **Appendix D** (Table 4 of the BRA).

Wildlife Connectivity

Wildlife movement is essential for their survival. This includes both the day-to-day movements needed for wildlife to acquire food, shelter, and mates, but also for dispersal and migration to ensure gene flow, recolonization of unoccupied habitat, and geographic shifts in response to climate change. Movement is necessary to maintain healthy ecological and evolutionary processes. Habitat linkages are landscape connections that facilitate movement between large, core habitat areas for diverse organisms and processes. These can be critical at both the local and regional levels. Wildlife crossings are structures that allow animals to cross over human-made barriers to allow collections between habitats or allow animals to navigate through areas where they would be prone to vehicle collisions. Barriers can include urban development, roads, fences, and open areas with limited cover. Crossings can range in size from small culverts and underpasses to larger overpasses or green bridges.

The Project site is currently fully developed or supports ruderal grassland with adjacent development. It is adjacent to a heavily trafficked roadway, Devlin Road. The 600 Tower Road Parcel and the NMDF site are fully fenced. The Southern Annexation Parcel is fenced along the northern boundary and shared fence line with the NMDF site; fencing is also located further to the south at the Devlin Road Transfer Station. There is an undeveloped wetland mitigation site to the east of the Southern Annexation Parcel and some open habitat to the west near the airport. However, the majority of the area is for industrial and commercial use. The area already experiences a high level of human activity. Wildlife using the Project site are likely habituated to human activity. Redevelopment of the 600 Tower Road Parcel and the NMDF site would not impact wildlife movement corridors. Wetlands surrounding the Southern Annexation Parcel would not be developed, and wildlife will still have access to these areas. There are no wildlife nursery sites within the Project site.

3.3.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the CEQA *Guidelines* states that a project would result in a significant impact to Biological Resources if it would:

- 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.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means.
- 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 native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Topics with No Impact

The Project would not 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 native wildlife nursery sites. The Project site is currently fully developed or supports ruderal grassland with adjacent development. It is adjacent to a heavily trafficked roadway, Devlin Road. The 600 Tower Road Parcel and the NMDF site are fully fenced. The Southern Annexation Parcel is fenced along the northern boundary and shared fence line with the NMDF site; fencing is also located further to the south at the Devlin Road Transfer Station. The majority of the area is for industrial and commercial use. The area already experiences a high level of human activity. Wildlife using the Project site are likely habituated to human activity. Therefore, the Project would result in no impact.

The Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance because the Project would not result in the removal of trees, nor would it conflict with local policies in the City of Napa 2040 General Plan, as no such policies are applicable to the Project. Therefore, the Project would result in no impact.

The Project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan, as no such plan is applicable to the Project site. Therefore, the Project would result in no impact.

Impact Analysis

Impact 3.3.1: The Project could impact animal species identified as a candidate, sensitive, or special status, either directly or through habitat modification. (Significant)

The background review of special-status animals identified several animal species with reported occurrences within the region. The potential for each species to occur on the Project site was evaluated based on the existing site conditions and habitat requirements for each species. **Appendix D** (Table 5) lists these species, their listing status, habitat requirements, local observations, potential for occurrence within the site, and justification for potential Project impacts.

Wildlife surveys of the Project were completed from February to May 2024. This included protocol-level Swainson's hawk surveys performed in accordance with state protocols (SWHA TAC 2000). No special-status animals were observed during the biological surveys of the Project site in 2024. In addition, no special-status animals were identified on the site during a wildlife survey in September 2017 (Wildlife Research Associates, 2017). The 600 Tower Road Parcel and the NMDF site are fully developed and do not support native habitats. The Southern Annexation Parcel is undeveloped and supports ruderal non-native grassland comprised of disturbed soils and weedy species and has limited occurrences of native plants. The 600 Tower Road Parcel, the NMDF site, and Southern Annexation Parcel that make up the Project site are located within a highly industrialized and commercial area. The current site conditions and plant community composition within areas of the proposed development make it unsuitable for special-status animals. However, protected native birds could use the Project site for nesting, as discussed below.

Protected Birds

Native birds are protected under several federal and state regulations, including the MBTA, Bald and Golden Eagle Protection Act of 1940, FESA, CESA and CFGC. All native nesting birds, with a few exceptions, are protected under these laws. Non-nesting protections extend to golden and bald eagles, CDFW fully protected species (e.g., golden eagle, white-tailed kite), and listed species and their habitats listed under the FESA and CESA. Burrowing owls, a California SSC and primarily winter-dwelling species in Napa County, are also protected.

Although the current site conditions and plant community composition within the areas of the proposed development make it unsuitable for most special-status animals, the project site supports breeding habitat for native birds typically associated with urban settings and tolerant of human disturbance. Construction activities in areas with nesting birds can result in the alteration of the nesting habitat and disruption of nesting activities. Construction activities (including grading, vegetation removal, and worker presence) can result in the destruction of eggs or

occupied nests, mortality of young, and the abandonment of nests with eggs or young birds before fledging. If construction-related activities are scheduled during the nesting season, Project construction could result in impacts to nearby nesting birds. These impacts would be significant.

Swainson's Hawk

The Project site is within the range of the SWHA. This species is state listed as threatened and protected under the CESA and CEQA. SWHA are also protected from direct take under the federal MBTA, and their nests, eggs, and young are protected under the CFGC. No SWHA have been documented at the Project site during protocol-level surveys in 2024. The closest known SWHA record to the Project site is approximately 0.15 miles from 600 Tower Road Parcel and the NMDF site and 0.35 miles from the Southern Annexation Parcel.

The 600 Tower Road Parcel and the NMDF site are fully developed and do not support foraging or nesting habitat for SWHA. The Project changes at these sites would include a change from one industrial use to another; there would be no new impacts on SWHA or their habitat. However, the Southern Annexation Parcel is an undeveloped parcel that supports ruderal non-native grassland comprised of disturbed soils and weedy species, which is low-quality foraging habitat, and does not support any trees for SWHA nesting. The Parcel is adjacent to a wetland mitigation with a documented raptor (red-tailed hawk) nest. The SWHA is a mobile species whose nesting locations can change yearly. Therefore, Project construction could result in impacts to SWHA. These impacts would be significant.

Mitigation Measures

Mitigation Measure 3.3.1a: The construction contractor developing the Southern Annexation Parcel shall implement the following precautionary measures for nesting birds:

- Preconstruction nesting bird surveys shall be completed if initial ground-disturbing activities occur inside the nesting season (February 1- August 31). A survey shall be completed by a qualified biologist within seven days before the initial ground-disturbing activities. The survey area shall include the Southern Annexation Parcel and an appropriate buffer around Parcel to identify any nesting that could be impacted directly or indirectly by the Project-related activities. The survey shall follow established nesting search protocols described in Martin and Geupel (1993) and CDFW and USFWS protocols. If active nests are found, a "No Work Zone" buffer area shalll be demarcated around each nest site by the qualified biologist. The buffer distances for each bird nest shall be site-specific and established to protect the bird's normal behavior to prevent nesting failure or abandonment. The buffer distance shall vary by species, nest location, existing visual and topographical buffers, and intensity and extent of the construction-related disturbance. The buffer area may be as small as 25-50 feet for common, disturbance-adapted species or much larger (e.g., 100-250 feet) for sensitive species like raptors and owls. The "No Work Zone" shall be established in the field with flagging, fencing, or other appropriate material and remain in place until all young in the nest have fledged or the nest otherwise becomes inactive due to predation or other natural causes as determined by the qualified biologist. If the qualified biologist finds no active nests or breeding activity indicating nests are present, then work can proceed without restrictions. If

there is a lapse in project-related activities for seven days or more, then a follow-up survey shall be required.

- If active nests are identified during the survey and the nests are within the Southern Annexation Parcel or the buffer area and nesting would be adversely affected, a no-disturbance buffer area shall be demarcated around each nest site by the qualified biologist. Buffer distances for each bird's nest shall be site-specific and established to protect the bird's normal behavior and prevent nesting failure or abandonment. The buffer distance will vary by species, nest location, existing visual and topographical buffers, and intensity and extent of the construction-related disturbance. The buffer area may be as small as 25-50 feet for common, disturbance-adapted species or much larger (e.g., 100-250 feet) for sensitive species like raptors. The no-disturbance buffer area shall be established in the field with flagging, fencing, or other appropriate material and remain in place until all young in the nest have fledged or the nest otherwise becomes inactive due to predation or other natural causes as determined by the qualified biologist. The qualified biologist shall continue to monitor the behavior of the birds at the nest site during construction activities to ensure that they are not disturbed by the Project work. Nest monitoring shall continue until the nesting attempt is complete. If state and/or federally-listed birds are found breeding within the area, consultation with the CDFW and USFWS may be required; see below.

- If initial ground-disturbing activities occur outside the nesting season (September 1 through January 31), then a preconstruction survey would not be required, and construction could begin unimpeded.

Mitigation Measure 3.3.1b: The construction contractor developing the Southern Annexation Parcel shall implement the following precautionary measures for SWHA:

- If construction commences at any time during the SWHA breeding season from February 1 through August 31, a preconstruction survey shall be completed. Surveys shall follow protocols outlined in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (SWHA TAC 2000). Surveys shall be completed by a qualified biologist and initiated early in the SWHA breeding season to maximize the potential to observe nesting behavior; the survey timing should be adjusted in consideration of early and late nesting seasons. Surveys shall be initiated during Period II (March 20 to April 5) or Period III (April 5 to April 20) and cover at least two periods as outlined in the protocol. The surveys shall be conducted within a minimum of a 0.5-mile radius around the Project.

- If active SWHA nests are identified within 0.25 miles of the Southern Annexation Parcel or in any area that could be directly or indirectly affected by the Project, a no-disturbance buffer area shall be established around the nest site to avoid take or adverse impacts to active SWHA nests. The buffer distance will vary by nest location, existing visual buffers, and intensity and extent of the construction-related disturbance. The buffer area size and types of construction activities restricted within the buffer area shall be determined in consultation with CDFW. The no-disturbance buffer area shall be established in the field with flagging, fencing, or other appropriate material and remain in place until all young in the nest have fledged or the nest otherwise becomes inactive due to predation or other natural causes as determined by the qualified biologist.

- The qualified biologist shall monitor the behavior of the birds at the nest site during construction activities to ensure that they are not disturbed by the Project work. Nest monitoring should continue until the nesting attempt is complete.

- If initial ground-disturbing activities occur outside of the nesting season (September 1 through January 31), then the preconstruction SWHA survey shall not be required, and construction could begin unimpeded.

Level of Significance After Mitigation

Mitigation Measures 3.3.1a and 3.3.1b would reduce potentially significant impacts to nesting birds and SWHA to a less-than-significant level.

Impact 3.3.2: The Project could impact plant species identified as a candidate, sensitive, or special status. (Less than Significant)

Botanical surveys of the Project site were completed from February to June 2024. This included protocol-level special-status plant species surveys performed in accordance with state and federal plant survey protocols (CDFW, 2018; USFWS, 2000). No special status plants were observed during the seasonal, protocol-level surveys in 2024. The 600 Tower Road Parcel and the NMDF site are fully developed and do not support native plant communities. The Southern Annexation Parcel supports non-native annual grassland and provides low habitat suitability for special-status plant species as it is dominated by non-native grasses and forbs, which typically outcompete native species. In addition, past land disturbances, such as soil placement, reduced the site's suitability to support special-status plant species. No special-status plant species are expected to occur within the Project site, and none were observed during the protocol level surveys. Therefore, this impact would be less than significant.

Mitigation Measures

None required.

Impact 3.3.3: The Project could impact wetlands, riparian habitat, or other sensitive natural communities. (Significant)

An assessment of potential jurisdictional features was completed for the Project. Seasonal wetlands are adjacent to the Southern Annexation Parcel. These areas were delineated in 2018, and boundaries were confirmed in 2024 (Jane Valerius Environmental Consulting, 2018). These wetlands encompass the lands to the west and south of the Parcel. There is no riparian habitat or other sensitive natural communities on the Project site. The property to the east of Devlin Road is a created wetland that was mitigation for the Devlin Road Transfer Station. These wetlands are outside of the Parcel and would be avoided. The proposed Project includes a 50-foot setback (in accordance with Napa County Code) for all development along the delineated wetland boundary. No direct impacts on jurisdictional wetlands are anticipated from the Project (Swift, 2024).

However, Project construction activities occurring adjacent to the wetlands have the potential to create adverse effects. These impacts would be significant.

Mitigation Measures

Mitigation Measure 3.3.3a: The construction contractor developing the Southern Annexation Parcel shall implement the following:

- For all wetlands, a wetland protection zone shall be identified. The wetland protection zone shall extend from the delineated boundary of the wetland and include a 50-foot buffer. All wetland protection zones shall be clearly delineated and marked before ground-disturbing activities.

- Wetland protection fencing shall be installed before any site work. Fencing shall remain in place until construction is complete. Fencing shall be constructed of orange construction fencing or other high-visibility materials.

- Wetland protection fencing should be installed before any site work. Fencing shall remain in place until construction is complete. Fencing shall be constructed of orange construction fencing or other high-visibility materials. Fencing shall be routinely inspected to ensure it is intact and functional.

- No construction materials, equipment storage, or parking areas shall be located within the wetland protection zone.

- Drainage plans shall be designed to prevent direct runoff into the adjacent wetlands.

Level of Significance After Mitigation

Mitigation Measure 3.3.3a would reduce potentially significant impacts to wetlands and other waters of the U.S. to a less-than-significant level.

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3.4 CULTURAL AND TRIBAL CULTURAL RESOURCES

This section describes the cultural resources and tribal cultural resources (TCRs) setting, evaluates potential impacts to cultural resources and TCRs, and provides Mitigation Measures to reduce impacts of the Project to a less-than-significant level. Cultural resources include sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include pre-historic resources, historic-era resources, and TCRs (the latter as defined by Assembly Bill (AB) 52, Statutes of 2014, in Public Resources Code [PRC] Section 21074). TCRs include site features, places, cultural landscapes, and sacred places or objects, which are of cultural value to a tribe. Much of the environmental setting information presented in this section was obtained from the Archaeological Survey Report prepared by Alta Archaeological Consulting (Alta) for the Project (Alta, 2024) (See confidential **Appendix E**).

3.4.1 SETTING

Physical Setting

The Project site is about 50 feet above mean sea level situated just south of Fagan Creek. The Project site is in an industrial area adjacent to Devlin Road, Tower Road, and the Napa County Airport. Part of the site is located at the edge of the wetlands formed by the Napa River as it flows to its outlet into San Pablo Bay. The Project area is characterized by a Mediterranean climate that averages about 20 inches of rainfall annually. The winters are cool and wet, and the summers are warm and dry (Alta, 2024).

Prehistoric Background

Over thousands of years, the hunter–gatherer–fisher peoples of the San Francisco Bay Area created a rich and diverse archaeological record. The development of complex hunter-gatherer societies in the Bay Area first appears about 4,000 years ago. Cultural complexity, social stratification, population density, and resource intensification increase through time. Proto-Utian groups, speakers of Costanoan and Miwok languages, are thought to have entered the Bay Area through the Delta Region about 4,500 years ago displacing Hokan speakers within this vicinity (Alta, 2024).

Three major taxonomic systems have been developed for the San Francisco Bay Area. These include (1) the Central California Taxonomic System, (2) the Archaic-Emergent Culture History Scheme, and (3) a Hybrid System that combines aspects of several schemes. The Central California Taxonomic System (CCTS) attempted to create horizons based on temporally diagnostic artifacts and mortuary customs. Three horizons were defined- Early, Middle, and Late. After the invention of radiocarbon dating technology in the 1950s, archaeologists attempted to test the relative sequence of the CCTS with chronometric dates. These studies found that the horizon system in the CCTS did not allow for regional and cultural inconsistencies and overstating the relationship between region and temporal change in artifacts (Alta, 2024). The Archaic-Emergent Culture History Scheme (AECHS) attempted to refine the variation of relative

chronologies into defined cultural units. Patterns are basic economic/cultural adaptations that are bound geographically, as were the three horizons of CCTS. Aspects are smaller-scale variants of patterns, which represent regional adaptations and styles and are bound more temporally. Phases are smaller scale variants of aspects, based on similarities and differences within related artifact types and trends. This taxonomic system has largely defined Bay Area archaeology and can be broken into four distinct patterns: the Borax Lake Pattern, the Windmiller Pattern, the Berkeley Pattern, and the Augustine Pattern. These patterns define distinct temporal regional trends in diet, tool manufacture, trade, and ceremonial artifacts (Alta, 2024).

Later studies have advocated for a hybrid of CCTS and AECHS. This system utilizes the Early-Middle-Late structure proposed in CCTS, while including cultural units of patterns, aspects and phases. These specific cultural units have been demonstrated through current shell bead chronology studies within the Bay Area, referred to as Dating Scheme D. Temporally distinct shell beads made of the purple olive snail (Olivella sp.) were widely traded beginning in the middle Holocene, extending as far as the central Great Basin. Because these are widely-distributed, relatively resilient organic artifacts, they have served as subjects for radiometric dating studies in order to solidify dates within relative chronologies throughout California and the Great Basin. These radiometric studies have resulted in the development of relative and exact chronologies, known widely as dating schemes (Alta, 2024).

Dating Scheme D refines Bennyhoff and Hughes's (1987) Scheme B1, which itself refined Heizer's (1958) Scheme A. While Scheme A was based on radiocarbon dates from 17 samples, and Scheme B was based on 180 uncalibrated dates from varied artifacts, Scheme D is based on 140 AMS radiocarbon dates from beads made of Olivella shells and radiometric dates from five mass bead-lots. Groza's work advanced the chronology of many bead types by as much as 200 years forward. These beads only represent units of time, not exact chronology. Accordingly, they have no implications for cultures specifically, but are used to identify relative chronology. These units of time are referred to as bead style horizons. In the present investigation, we intend to use this hybrid system that adopts conventional terminology consistent with the Scheme D dating sequence, with bead style horizons labeled within the Early, Middle, and Late Periods and based on the bead type nomenclature (Alta, 2024).

During the Early Holocene/Lower Archaic (8000-3500 B.C), peoples practiced a mobile foraging lifestyle. Material culture associated with this time includes generally large wide–stemmed and leaf–shaped projectile points associated with atlatls, milling slabs, and handstones. These artifacts, paired with archaeobotanical evidence, suggests a mixed economy of game hunting, acorn processing, and diversified use of floral and faunal resources. The Early Period/Middle Archaic (3500-500 B.C.) heralded an increase in sedentism, marked materially by the spread of the less–portable mortar and pestle. This period also saw a flourishing of shell bead types in burial lots, particularly rectangular cut beads (Alta, 2024). The Lower Middle Period/Initial Upper Archaic (500 B.C.-A.D. 430) is characterized by an abrupt disappearance of rectangular shell beads from the Bay Area as well as central and southern California. These were replaced by new round types such as split–beveled and tiny saucer Olivella beads, which Groza et al. (2011) classify as Bead Horizon M1. As such, a bead trading economy seems to have taken off at this

time. Mortar and pestle milling technology continued to spread, leaving milling slab technology mostly confined to coastal sites (Alta, 2024).

The saucer bead trade economy seems to have abruptly collapsed during the Upper Middle Period/Late Upper Archaic (A.D. 430-1050). Many bead–manufacturing sites dating to Bead Horizon M1 were abandoned at this time. Bead Horizon M2, characterized by wide chipped– and ground–edge Olivella saddle beads, generally replaced the saucer beads of Bead Horizon 1. Additionally, burial practices identified as the Meganos Aspect began to appear in the East Bay. This aspect, defined by extended burials, replaced flexed burials of previous times. Saucer beads decrease dramatically in these burial contexts over time (Alta, 2024).

The cultural practices of California Native peoples documented by Spanish colonists in the 1500s originate in the traditions of the Initial Late Period/Lower Emergent (A.D. 1050-1550). This time saw an increase in prestige items in burial contexts, suggesting an increase in social stratification. Accordingly, the Middle/Late Transition Bead Horizon demonstrates the widest diversity of Olivella bead types in California prehistory, including many shapes of split, shelved, saucer, and sequin beads in punched and perforated varieties. The advent of the bow and arrow occurred during this time, represented in central California by the Stockton serrated series (Alta, 2024). This reduction of projectile point size corresponds with an increase in manufacturing of finished points from Napa Glass Mountain obsidian at locations distant from the material source. Other items, including the flanged pipe, the Olivella callus cup bead, and the abalone "banjo" or "big head" pendant, appear at this time, indicating an elaboration of ritual and ceremonial practice. These trends all point towards a further increase in sedentism (Alta, 2024).

The arrival of the Spanish during the Terminal Late Period (post-A.D. 1550) coincided with the abandonment of the Olivella sequin and cup beads, replaced by lipped and spire–lopped types. The Bay Area saw an explosion of technological and material culture innovation at this time, including the "toggle harpoon, hopper mortar, plain corner–notched arrow–sized projectile point, clamshell disk beads, [and] magnesite tube beads" (Alta, 2024).

Cultural Setting

Ethnography

The term Patwin refers to the southernmost group of Wintu speaking people that inhabited the lands of Napa, Solano and Yolo Counties prior to Euro-American intrusion (Alta, 2024). The following ethnographic summary is not intended as a thorough description of Patwin culture but instead is meant to provide a background to the present cultural resource investigation. In this section, the past tense is sometimes used when referring to native peoples because this is a historical study. This convention is not intended to suggest that Patwin people only existed in the past. To the contrary, the Patwin have strong cultural and social identities today (Alta, 2024).

The Patwin lived freely across eastern Napa County, western Yolo County and northwestern Solano County. The Patwin were not a single homogenous group, but rather several separate tribelets with a close linguistic and cultural background (Alta, 2024). The Kuksu religion, practiced by the Patwin and other north central Californian native groups, formed an important

pillar of Patwin culture (Alta, 2024). The Patwin made use of a variety of food sources within the abundant rivers and wooded areas of their territories. Salmon, deer, waterfowl, and acorns were staples in their diet. The Patwin lived in villages located primarily along the Sacramento River, usually with one main village serving as a tribelet center, administrating several smaller surrounding villages. Their location between the Northern Coast Ranges and the Sacramento River Valley made the Patwin living in Southern Napa conduits between these two highly important cultural areas (Alta, 2024).

Regional History

In 1823, the Spanish Padre Jose Altamira visited the Napa Valley intending to establish a new mission. He made no permanent settlement there, instead locating the mission in nearby Sonoma. The first land grant in Napa County, Rancho Caymus, was made by Mexican governor Nicolás Gutiérrez to George C. Yount in 1836. Yount, a veteran of the War of 1812 and a professional hide hunter, is considered the first European-American to settle in Napa County. The Mexican government continued to grant land and award large tracts to citizens until the end of the Mexican-American War in 1848. After American acquisition, these land grants were examined for validity by the US District Court under the Land Act of 1851. Yount's claim to Rancho Caymus was upheld by the court in 1855, and he continued to live there until his death in 1865. Squatters frequently settled on Rancho lands, and Yount and other grantees were obliged to pursue legal options against them (Alta, 2024).

The city of Napa itself was established by Nathan Coombs, who settled in Napa valley on a small part of Rancho Tulucay in 1845. He purchased 80 acres of Rancho Entre Napa from Nicolas Higuera in 1847 and founded the city of Napa in 1848. The location of the town provided an excellent opportunity for trade and transportation as mills were being erected and agriculture was increasing throughout Napa County. As more immigrants came to the area, ranchos were broken up and sold for farms, ranches and vineyards (Alta, 2024).

George C. Yount was the first to plant wine grapes in Napa Valley, taking cuttings from Vallejo's vines in Sonoma. Various settlers planted grapes and produced wine that was originally consumed locally. In 1852, Charles Krug became the winemaker for John M. Patchett and produced wine in a little adobe building along the south bank of Napa creek. Later, Krug began making wine for Louis Bruck at Bale Mill Ranch, which his wife would come to inherit, and planted many vines on the property. Over time, wineries increased in the Napa Valley, including a winery built by brothers Jacob and Frederick Beringer in 1876, one a former foreman of Charles Krug (Alta, 2024).

The beginning of Prohibition in 1920 dealt a severe blow to the wine industry. The first few years of Prohibition actually saw a boom in the price of grapes and vineyard land. Illicit wine production and loopholes allowing for generous amounts of "home" winemaking briefly inflated the price of grapes in California. New vineyards were established to meet the new demand, driving up land prices. Soon however, prices dropped, and many vineyards and wineries defaulted on their loans and lost their land. Some producers survived on licensed small-scale operations, making sacramental wine and grape juice. By the time Prohibition ended in 1933, the number of legal wineries in California had dropped from more than 700 to 130. Though recovery came

slowly due to the Great Depression, the wine industry in California and in Napa Valley eventually became stronger than ever. Wine production and wine tourism continue to be the staples of the Napa Valley economy today (Alta, 2024).

Records Search and Map Review

Records Search Results

On October 24, 2023, and November 28, 2023, ALTA archaeologist Heather Warner conducted a records search (File Number 23-0539, 23-0747) at the Northwest Information Center (NWIC). The NWIC, an affiliate of the State of California Office of Historic Preservation is the official state repository of archaeological and historical records and reports for an 18-county area that includes Napa County. The records search included a review of all study reports and resources on file within a quarter-mile radius of the Project site (Alta, 2024). Sources consulted include archaeological site and survey base maps, survey reports, site records, and historic General Land Office (GLO) maps. Included in the review were:

- California Inventory of Historical Resources (CA Dept. of Parks and Rec. 1976)
- California Historical Landmarks for Napa County (CA-OHP 1990)
- California Points of Historical Interest (CA-OHP 1992)
- Built Environment Resources Directory Listing (BERD) (CA-OHP January 2020)
- Historic Properties Directory (CA-OHP April 2012), including the National Register of Historic Places, California Historical Landmarks, and California Points of Historical Interest

Review of historic registers and inventories indicate that no California Historical Landmarks or Points of Interest are present in the Project site. No National Register listed, or eligible properties are located within the half-mile visual area of the Project site (Alta, 2024). Review of archaeological site and survey maps revealed that 16 cultural resource studies have been previously performed within a quarter-mile radius of the Project site (Alta, 2024). Approximately 70% of the quarter-mile records search radius has been previously surveyed. One study has been conducted within the Southern Annexation Parcel of the Project site. The Parcel was surveyed in 1992 for the initial construction of the Devlin Road Transfer Station to the south (Alta, 2024). No cultural resources were identified during this study. Two cultural resources are documented within a quarter-mile radius of the Project site (Alta, 2024). These are identified below:

- (1) P-28-000642 is a prehistoric-era scatter of obsidian lithic flakes, and a single groundstone net weight. At the time of the recording, the site was noted to have been severely impacted by construction activity. The site is located about 0.75 miles northwest of the Project site (Alta, 2024).
- (2) NAP-HRI-001 is noted as the Farr Ranch. No documentation for the site was available from the NWIC (Alta, 2024). It appears to encompass a complex of buildings located on a parcel directly south of the Project site. The property was surveyed in 1992, and the historic buildings were noted, but not described or recorded (Alta, 2024). The buildings have since

been demolished, and the current Devlin Road Transfer Station is present on the site now. This site was located immediately south of the Project area (Alta, 2024).

Historic Map Review

Review of historic maps of the area was completed to better understand the timing of development within the Project site and recognize historic features. On the original GLO survey from 1863, the Project site is split between the land of Peter Fagan and William Middleton (Alta, 2024). Several houses with outbuildings and orchards are noted nearby, as well as a creek to the north. By 1876, the Napa Valley Railroad is shown running west of the Project site. By 1895, the Fagan tract is listed as belonging to James Kelly, though Middleton retains the adjacent property. Just south of the Project site, three rail lines converge at Napa Junction. No development appears within the Project site itself. On the 1902 USGS quad map for Napa, the rail line running west of the Project site is labelled as the Calistoga branch of the Southern Pacific Railroad. A few scattered structures are noted in the vicinity, though none in the Project site. USGS maps from the ensuing years show the area in less detail. Highway 29 appears on map in 1949, along with the Napa County Airport. No significant change is depicted in or near the Project site on the 1951 and 1983 maps (Alta, 2024).

Available ethnographic literature was reviewed to identify cultural resources in the vicinity of the Project site. The following sources were consulted:

- Barrett, Samuel A. 1908. The Ethno-Geography of the Pomo and Neighboring Indians. *University of California Publications in American Archaeology and Ethnology* 6(1):1–322.

- Bennyhoff, James A. 1977. *Ethnogeography of the Plains Miwok*. Center for Archaeological Research at Davis, Davis, CA.

- Johnson, Patti J. 1978. Patwin. In *California*, edited by Robert F. Heizer, pp. 350–360. Handbook of North American Indians 8. Smithsonian Institution, Washington, D.C.

- Kroeber, Alfred L. 1932. The Patwin and their Neighbors. *University of California Publications in American Archaeology and Ethnology* 29(4):253–423.

Sparse ethnographic information is available about the southern Hill Patwin prior to colonization. The Patwin and other groups located around the San Francisco Bay area were devastated by the Spanish missions. Few informants that could remember village locations remained when ethnographic information was gathered. Barrett identified a handful of villages in the area, the closest being Suscol, about 2.5 miles northwest of the Project site (Alta, 2024). Similarly, Kroeber was not able to gather much information south of Cache Creek, but he identifies Suscol as a tribelet center (Alta, 2024). The village of Aguasto was located somewhere to the south of Suscol, and likely served as a tribelet center (Alta, 2024). However, its exact location has not been confidently identified. It was likely in the vicinity of what is now Vallejo, at least five miles south of the Project site (Alta, 2024).

Native American Communication

Assembly Bill 52 (AB 52), which went into effect in July 2015, is an amendment to CEQA Section 5097.94 of the Public Resources Code. AB 52 established a proactive consultation process with all California Native American tribes who requested notification pursuant to Public Resources Code section 21080.3.1.[1] This process is implemented on projects that file a notice of preparation for an EIR or notice of intent to adopt a negative or mitigated negative declaration. Under AB 52, the Lead Agency is required to consult with tribes at tribal request. The bill further created a new class of resources under CEQA known as TCRs.

On December 18, 2023, consultation letters were sent to the Chairperson of the Confederated Villages of Lisjan Nation and the Tribal Historic Preservation Officer of the Dehe Wintun Nation. The Confederated Villages of Lisjan Nation responded to the City with an email dated January 19, 2024 and did not request AB 52 tribal consultation. The Yocha Dehe Wintun Nation responded to the City with a letter dated January 29, 2024 initiating formal consultation. A consultation meeting was conducted in May 2025 between the representatives of the Yocha Dehe Wintun Nation and the City. On July 9, 2025, the City sent a letter to the representatives of Yocha Dehe Wintun Nation agreeing to their suggested mitigation and concluding consultation pursuant to PRC Section 21080.3.2(b).

Geoarchaeological Background and Assessment

To evaluate the potential for buried archaeological sites within the Project site, this assessment takes into account factors that either encouraged or discouraged human use or occupation of certain landforms (e.g., geomorphic setting and distance to water), combined with those that affected the subsequent preservation (i.e., erosion or burial) of those landforms. It is well known, for instance, that prehistoric archaeological sites in California are most often found on relatively level landforms near natural water sources (e.g., spring, stream, river, or estuary), which is often where two or more environmental zones (ecotones) are present. Landforms with this combination of variables are frequently found at or near the contact between a floodplain and a higher and older geomorphic surface, such as an alluvial fan or stream terrace (Alta, 2024).

In general, most Pleistocene-age landforms have little potential for harboring buried archaeological resources, as they developed before the first evidence of human migration into North America (ca. 13,000 years before the present [B.P.]). However, Pleistocene surfaces buried below younger Holocene deposits do have a potential for containing archaeological deposits. Holocene alluvial deposits may contain buried soils (paleosols) that represent periods of landform

[1] Public Resources Code Section 21080.3.1(b): Prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project, the lead agency shall begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project if: (1) the California Native American tribe requested to the lead agency, in writing, to be informed by the lead agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe, and (2) the California Native American tribe responds, in writing, within 30 days of receipt of the formal notification, and requests the consultation.

stability before renewed deposition. The identification of paleosols within Holocene-age landforms is of particular interest because they represent formerly stable surfaces that have a potential for preserving archaeological deposits (Alta, 2024).

Given the above criteria, it is therefore possible to forecast the burial sensitivity by looking at the intersection of existing geomorphic, stratigraphic, and soils spatial variables, as well as any behavioral variables that may forecast human occupation. Consequently, the following describes the Project site in terms of these variables and generates a forecast on the basis of the intersection between these variables. In addition, the current site conditions and the levels of previous disturbance are considered to determine the likelihood of encountering intact buried deposits given the expected depths of proposed excavation. This is not an analysis of whether a particular area was attractive for human activity, but whether the conditions are favorable for buried archaeological deposits (Alta, 2024).

The Project site is situated within the Coast Range geologic province. The North Coast Ranges are comprised of numerous rugged north-south trending ridges and valleys that run parallel to a series of faults and folds. Formation of these ranges is generally attributed to events associated with subduction of the Pacific Plate beneath the western border of North America. The bedrock that underlies the region is a complex assemblage of highly deformed, fractured, and weathered sedimentary, igneous, and metamorphic rocks. Rocks of this formation, the oldest in the area, are often weakly metamorphosed, and consist of greywacke shale interspersed with discontinuous bodies of ultramafic rock such as greenstone, schist, and serpentine. The repeated folding and faulting are reflected in the complex structure of Franciscan rocks and area topography. The specific geology of the Project site is composed of Older Quaternary alluvium and marine deposits, dating to the Pleistocene. This formation is comprised primarily of unconsolidated alluvium (Alta, 2024).

Soils in the Project site consist of Clear Lake series clay. Soils of this series are very deep, poorly drained soils formed in fine alluvium, and are found on floodplains and drainage swales. The A horizon extends to approximately 13 inches below surface and consists of dark gray clay. The B horizon continues from the A horizon to approximately 60 inches below surface and consists of very dark gray clay that transitions to grayish brown at about 45 inches below surface (Alta, 2024).

In order to assess the potential for the Project actions to disturb buried archaeological deposits, a review was conducted of the comprehensive geoarchaeological study for northwestern California prepared by Meyer et al. (2011). The following analysis is adapted from the results of this study (Alta, 2024).

Early to Mid-Holocene age soils are often considered to have high probabilities of site burial because Holocene-age surface landforms in the Project site commonly contain multiple Holocene-age buried soils (i.e., former land surfaces); and within young surface landforms, the aggregate of time represented by Holocene-age buried soils is greater than the aggregate of time represented by buried soils in older surface landforms. Also, it is assumed that archaeological deposits from later time periods are more common overall due to higher population densities. On

the other hand, soil formations in the late Pleistocene to early Holocene category tend to have low potential for buried resources because the actual probability of finding a buried site in a landform of this age is considered low. This is because there was a very short 2,000- or 3,000-year window that humans could have occupied any one location on the landscape during the late Pleistocene or earliest Holocene, and human population densities are thought to have been comparatively low during that time, resulting in fewer site locations (Alta, 2024).

The Project site is located on an area of alluvial fan deposits along the edge of the Napa River estuary. The general age of this depositional landform is estimated to be between the Holocene and Historic periods, roughly 11,800 to 150 years old. The age of the alluvial landform and the presence of a known prehistoric site in the Project site vicinity, indicate that there is the potential for subsurface archaeological deposits to be present within the Project site. However, 20.9 of the roughly 24-acre Project Area have been built upon. Subsurface deposits in those areas would likely have been disturbed or destroyed by construction. As such, the potential for encountering subsurface archaeological deposits is considered low (Alta, 2024).

Staff archaeologist Heather Warner conducted a field survey of the Project site on December 8, 2023. Project design drawing, project maps and aerial imagery were used to correctly identify the Project study area. Ground surface visibility was poor, about 5%, throughout the survey area due to existing paving and facilities, stockpiled sediment, and dense grass cover (Alta, 2024). The existing Napa Materials Diversion Facility (NMDF) site and the 600 Tower Road Parcel are almost entirely paved and in use. No observable ground surface was present in those areas. The majority of the Southern Annexation Parcel is covered by about 1.5 meters of stockpiled fill. The full Project site was surveyed, totaling 24 acres of land. Undeveloped areas of the Project site were surveyed using intensive survey coverage with transects no greater than 10-meter intervals.

Study Findings

No cultural resources were identified within the Project site as a result of the records search, literature review, Native American consultation, archaeological field surveys or the subsurface sampling conducted on December 8, 2023 (Alta, 2024). The Archaeological Survey Report found that the Project would not cause a substantial adverse change in the significance of a Tribal cultural resource, defined in Public Resources Code Section 21074 as either 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 (Alta, 2024). The Archaeological Survey Report found that the Project would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5 (Alta, 2024).

Regulatory Setting

Federal Regulations

Antiquities Act of 1906

Antiquities Act of 1906, Title 16, United States Code, Sections 431, 432, and 433, and subsequent related legislation, policies, and enacting responsibilities allows for the protection of

any historic or prehistoric ruin or monument, or any object of antiquity situated on lands owned or controlled by the Government of the United States.

National Historic Preservation Act

The National Historic Preservation Act (NHPA), Title 16, United States Code, Section 470, establishes a national policy to preserve for public use historic sites, buildings, and objects of national significance for the inspiration and benefit of the people of the United States. The Secretary of the Interior is authorized to expand and maintain a National Register of Historic Places (NRHP) under the NHPA.

State Regulations

California Register of Historical Resources

The California Register of Historical Resources (CRHR) established a list of those properties which are to be protected from substantial adverse change (PRC Section 5024.1). A historical resource may be listed in the CRHR if it meets any of the following criteria:

- It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- It is associated with the lives of persons important in California's past.
- It 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 value.
- It has yielded or is likely to yield information important in prehistory or history.

The CRHR includes properties that are listed or have been formally determined to be eligible for listing in the NRHP, State Historical Landmarks, and eligible Points of Historical Interest. Other resources require nomination for inclusion in the CRHR. These may include resources contributing to the significance of a local historic district, individual historical resources, historical resources identified in historic resource surveys conducted in accordance with State Historic Preservation Office (SHPO) procedures, historic resources or districts designated under a local ordinance consistent with Commission procedures, and local landmarks or historic properties designated under local ordinance.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires public agencies to consider the effects of their actions on both "historical resources," "unique archaeological resources," and "tribal cultural resources." Pursuant to PRC Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment" and PRC Section 21084.2, a "project with an effect 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." Section 21083.2 requires agencies to determine whether projects would have effects on unique archaeological resources.

Historical Resources

"Historical resource" is a term with a defined statutory meaning (PRC, Section 21084.1; determining significant impacts to historical and archaeological resources is described in the State CEQA Guidelines, Sections 15064.5[a] and [b]). Under State CEQA Guidelines Section 15064.5(a), historical resources include the following:

- A resource listed in, or determined to be eligible by, the State Historical Resources Commission, for listing in the CRHR (PRC, Section 5024.1).

- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

- 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 may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the CRHR (PRC, Section 5024.1), including the following:
  - Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
  - Is associated with the lives of persons important in our past;
  - 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
  - Has yielded, or may be likely to yield, information important in prehistory or history.

- The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the PRC) or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1.

Unique Archaeological Resources

CEQA also requires lead agencies to consider whether projects will affect unique archaeological resources. PRC, Section 21083.2, subdivision (g), states that unique archaeological resource means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.

- Has a special and particular quality such as being the oldest of its type or the best available example of its type.

- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Tribal Cultural Resources

CEQA also requires lead agencies to consider whether projects will affect TCRs. PRC, Section 21074 states the following:

Tribal cultural resources are either of the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
  - Included or determined to be eligible for inclusion in the CRHR.
  - Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

- 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

- A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Health and Safety Code, Section 7052 and 7050.5

Section 7052 of the Health and Safety Code states that the disturbance of Native American cemeteries is a felony. Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the California NAHC.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural and Sacred Sites Act applies to both State and private lands. The Act requires that upon discovery of human remains, that construction or excavation activity cease and that the county coroner be notified. If the remains are of a Native American, the coroner must notify the NAHC. The NAHC then notifies those persons most likely

to be descended from the Native American's remains. The Act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

Public Resources Code, Section 5097

PRC, Section 5097 specifies the procedures to be followed in the event of the unexpected discovery of human remains on nonfederal land. The disposition of Native American burial falls within the jurisdiction of the NAHC. Section 5097.5 of the Code states the following:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate pale ontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

Assembly Bill 52

AB 52, signed by Governor Edmund G. Brown, Jr., in September of 2014, establishes a new class of resources under CEQA: "tribal cultural resources" (TCRs). AB 52, as codified in PRC Sections 21080.3.1, 21080.3.2, and 21082.3, requires that lead agencies undertaking CEQA review must, upon written request of a California Native American Tribe, begin consultation once the lead agency determines that the application for the project is complete, prior to the issuance of an NOP of an EIR or notice of intent to adopt a negative declaration or mitigated negative declaration. AB 52 also requires revision to CEQA Appendix G, the environmental checklist. This revision would create a new category for TCRs. As defined in PRC Section 21074, to be considered a TCR, a resource must be either:

- listed or determined to be eligible for listing, on the national, state, or local register of historic resources; or

- a resource that the lead agency determines, in its discretion and supported by substantial evidence, to treat as a tribal cultural resource pursuant to the criteria in PRC Section 50241(c). PRC Section 5024.1(c) provides that a resource meets criteria for listing as an historic resource in the California Register if any of the following apply:
  - It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
  - It is associated with the lives of persons important in our past.
  - It 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.
  - It has yielded, or may be likely to yield, information important in prehistory or history.

Local Regulations

Napa County General Plan

The Napa County General Plan provides policies and action items that are intended to ensure the long-term preservation of significant cultural and historical resources within Napa County (Napa County, 2008). The following policies are relevant to the Project:

> Policy CC-23: The County supports continued research into and documentation of the county's history and prehistory, and shall protect significant cultural resources from inadvertent damage during grading, excavation, and construction activities.

City of Napa 2040 General Plan

The City of Napa 2040 General Plan (Historic and Cultural Resources Element) aims to protect and enhance historically and culturally significant buildings, structures, objects, sites, and districts, and includes goals and policies to promote rehabilitating, retrofitting, and adaptively reusing Napa's historic assets to preserve resources and enhance Napa's sense of place (City of Napa, 2022). The following policies are relevant to the Project:

> Policy HCR 14-1: Consider federal and State procedures and requirements relating to the preservation and protection of archeological resources and sites, such as the National Historic Preservation Act's Section 106 process and the National Environmental Policy Act, when evaluating applications for development projects.
>
> Policy HCR 14-2: For development and redevelopment proposals in archaeologically or tribal cultural sensitive areas of Napa, require an assessment of the potential presence of archaeological and tribal cultural resources, including a site survey and a records search of the California Historical Resources Information System at the Northwest Information Center. As warranted by the results of the assessment, require additional studies to identify and address project-specific impacts on archaeological and tribal cultural resources. The City should incorporate the study recommendations as project conditions of approval to ensure that impacts on archaeological and/or tribal cultural resources are mitigated to the extent possible. Studies should be prepared according to National Register Bulletin 24: Guidelines for Local Surveys: A Basis for Preservation Planning and the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation

3.4.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the CEQA *Guidelines* states that a project would result in a significant impact to Cultural Resources and TCRs if it would:

- Cause a substantial adverse change in significance of a historical resource pursuant to Section 15064.5;
- Cause a substantial adverse change in significance of an archaeological resource pursuant to Section 15064.5;

- Disturb any human remains, including those interred outside of formal cemeteries; or
- Cause a substantial adverse change in the significance of a TCR, as defined by PRC Section 21074, and that is:
  - Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined by PRC Section 5020.1(k), or
  - 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Topics with No Impact

As discussed above, the Project site is not considered a historical resource pursuant to CEQA Section 15064.5. There are no historical resources on the Project site, therefore, there would be no impact related to historical resources pursuant to *CEQA Guidelines* Section 15064.5 (Alta, 2024). This issue is not further discussed in this section.

Impact Analysis

Impact 3.4.1: The Project could either directly or indirectly result in impacts to cultural resources. (Significant)

Direct impacts are those which may result from the immediate disturbance of resources, whether from vegetation removal, vehicle travel over the surface, earth-moving activities, excavation, or alteration of the setting of a resource. Indirect impacts are those which may result from increased erosion due to site clearance and preparation, or from inadvertent damage or outright vandalism to exposed resources due to improved visibility or access.

Exposure of cultural resources during pre-construction site preparation or during construction excavation can also have a beneficial effect by making the data accessible for research. If these resources and their temporal and spatial context receive proper protection and analysis, they can add to the understanding of human adaptation to the environment and their use of the land and its resources. Analysis of cultural resources also can provide a very important key to changes in population and human movement within and throughout a geographic region.

Although unlikely, cultural resources could be encountered during Project-related site preparation, grading, and excavation. Therefore, potential impacts to cultural resources would be a significant impact of the Project.

Mitigation Measures

Mitigation Measure 3.4.1a: If previously unidentified cultural or tribal cultural resources are encountered during Project implementation, all work shall stop within a 50 foot radius of the discovered resources, and the Yocha Dehe Wintun Nation and a qualified professional archaeologist (meeting Secretary of the Interior Archaeology Standards) shall be contacted to evaluate the situation. If a tribal cultural resource is discovered, the Yocha Dehe Wintun

Nation shall be consulted to determine the length of work stop, and process for treating and handling any tribal cultural resources. If an archaeological site is found, a qualified archaeologist (meeting Secretary of the Interior Archaeology Standards) shall determine the depth and significance of the resource in accordance with CEQA Guidelines §15064.5 and PRC §21083.2. If the resource is determined to be potentially significant per CEQA Guidelines §15064.5 and PRC §21083.2 and cannot be preserved in place, an archaeological testing program shall be conducted in accordance with applicable Federal, state, and local archaeological guidelines. If the testing program identifies the site to be National Register-eligible and preservation in place is not feasible, a data recovery program shall be developed in accordance with applicable Federal, state, and local archaeological guidelines and in consultation with the California Office of Historic Preservation.

Project personnel shall not collect any cultural or tribal cultural resources that are encountered. Prehistoric resources could include but are not limited to, chert or obsidian flakes, projectile points, mortars, pestles, and dark friable soil containing shell and bone dietary debris, heat affected rock, or human burials.

Mitigation Measure 3.4.1b: Although unlikely, if human remains are encountered, all work shall stop in the immediate vicinity of the discovered remains and the Napa County Coroner and a qualified archaeologist shall be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American or prehistoric, the Native American Heritage Commission (NAHC) shall be contacted by the Napa County Coroner so that a "Most Likely Descendant" (MLD) can be designated and further recommendations regarding treatment of the remains can be provided.

Level of Significance After Mitigation

Mitigation Measures 3.4.1a and 3.4.1b would reduce impacts to less than significant.

Impact 3.4.2: The Project could either directly or indirectly result in impacts to tribal cultural resources. (Significant)

The City of Napa mailed Project notification letters in December 2023 to the Yocha Dehe Wintun Nation and the Confederated Villages of Lisjan Nation per the requirements of Public Resources Code (PRC) 21080.3.1 and AB 52. Yocha Dehe Wintun Nation representatives responded with a letter to the City in January 2024 requesting formal consultation and additional Project information. A consultation meeting was conducted in May 2025 between the representatives of the Yocha Dehe Wintun Nation and the City. Yocha Dehe Wintun Nation representatives suggested cultural sensitivity training for any pre-Project personnel prior to commencement of construction activities. This was reiterated in a letter to the City dated May 27, 2025. Therefore, potential impacts to TCRs would be a significant impact of the Project without cultural sensitivity training. The City agreed to the cultural sensitivity training, which is implemented in Mitigation Measure 3.4.2a. Further, although unlikely, tribal cultural resources could be encountered during Project-related site preparation, grading, and excavation. Therefore, potential impacts to tribal cultural resources would be a significant impact of the Project and will be mitigated through the implementation of Mitigation Measure 3.4.1a (detailed above).

Mitigation Measures

Mitigation Measure 3.4.2a: Prior to the commencement of Project construction, the City shall execute a cultural sensitivity training agreement with the Yocha Dehe Wintun Nation and shall hold the training with all construction personnel associated with development of the Southern Annexation Parcel.

Level of Significance After Mitigation

Mitigation Measure 3.4.1a and Mitigation Measure 3.4.2a would reduce impacts to less than significant.

3.4.3 REFERENCES

Alta Archaeological Consulting (Alta). 2024. Archaeological Survey Report for the Napa Utilities Annex, 820 Levitin Way, Napa County, California, APN 057-090-060, 057-110-025, 057-110-049, 057-110-052, 057-110-065, 057-110-066, 057-110-067, 057-110-068. January 2, 2024.

City of Napa. 2022. City of Napa 2040 General Plan.

Napa County. 2008. Napa County General Plan.

Yocha Dehe Wintun Nation. 2025. RE: 820 Levitin Way Napa Renewable Resources Project YD-01112024-02. May 27, 2025.

Yocha Dehe Wintun Nation. 2024. RE: 820 Levitin Way Napa Renewable Resources Project YD-01112024-02. January 29, 2024.

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3.5 GEOLOGY, SOILS, AND SEISMICITY

This section describes the existing geologic and seismic setting and evaluates the potential for construction and operation of the Project elements to cause adverse impacts associated with surface and subsurface geologic materials, seismic ground shaking, soil conditions, and paleontological resources.

The analysis of geology, soils, and seismic impacts focuses primarily on the Southern Annexation Parcel and the proposed development of the biomass conversion facility (BCF). The proposed actions on the existing Napa Materials Diversion Facility (NMDF) site and the adjacent parcel to the north (600 Tower Road Parcel) would likely not contribute to or result in significant impacts to geology, soils, seismic activity, and loss of paleontological resources, primarily because they are currently developed, and the Project does not propose substantial grading or new construction on those sites. The Project does, however, propose the construction of a BCF on the Southern Annexation Parcel, which would require considerable grading, soil engineering, and new construction.

3.5.1 SETTING

Geologic Setting

The Project site is in southern Napa County within the California Coast Range geomorphic province, which is characterized as a geologically complex and seismically active region consisting of northwest-trending faults, mountain ranges, and valleys. The oldest bedrock units are the Jurassic-Cretaceous-age[1] Franciscan Complex and Great Valley sequence, which are overlain by younger rocks that include the Sonoma and Clear Lake Volcanics and various sedimentary formations. Extensive folding and thrust faulting between 11 and 130 million years ago created complex geologic conditions that underlie the highly varied topography present today.

The Project site is located at the southern end of the Napa Valley, which is a large northwest-trending alluvial plain flanked by the Mayacamas Mountains to the west and Howell Mountain to the east. At the southern end of the valley, the alluvial plain transitions to the mud flat and sloughs of the Napa River estuary; an area with little topographical relief. The three sites that make up the Project site are nearly level and bordered to the north by Fagan Creek, to the south by the Devlin Road Transfer Station, to the east by Devlin Road, and to the west by railroad tracks and the Napa County Airport.

The Project site is underlain by both Holocene[2] alluvial fan deposits (600 Tower Road Parcel and portions of the NMDF site) and late-Pleistocene[3] alluvial fan deposits (NMDF site and Southern Annexation Parcel) (Bezore, 2022, Helley and LaJoie, 1979). These deposits are primarily composed of gravel, sand, silt, and clay. The Holocene-aged sediments are younger and were

1 Jurassic Period ranged from 199 million years ago (mya) to 145 mya and the Cretaceous Age ranged from 145 mya to 65 mya.
2 The Holocene epoch ranges from 11,500 years to the present.
3 The Pleistocene epoch extended from 1.8 mya to 11.500 years ago.

deposited by streams emanating from the mountains as debris flows, hyper-concentrated mudflows, or braided stream flows. The older late-Pleistocene fan deposits are gently sloping, fan-shaped alluvial surfaces (Bezore, 2022).

Bauer Associates, Inc. (Bauer) conducted a 2017 preliminary geotechnical investigation on the Southern Annexation Parcel because of the proposed development of the biomass facility development on that parcel. Bauer's field investigation explored subsurface soils to a depth of about 21 feet below ground surface (bgs). Soil logging determined that the proposed development area is generally blanketed by about 3 to 4 feet of medium stiff to stiff, sandy clays with surface soils that appeared to be native; however, it was postulated that given the degree of development in surrounding area, old artificial fills could be present (Bauer, 2017). The upper 2 to 3 feet of surface soils are weak and could be prone to consolidation and collapse when saturated and under load. The surface soils are typically highly expansive. Moderately to highly expansive soils can heave and crack lightly loaded, shallow foundations and slabs-on-grade. Underlying the surface soils are heterogeneous layers of stiff to hard sandy clays that contain occasional lenses of gravel and medium dense sand. These materials have moderately high strength and are relatively incompressible.

Geotechnical investigations were not completed on the 600 Tower Road Parcel because that parcel would be used for inert materials processing and storage, a use comparable to that already occurring on the parcel. The Project does not propose structures requiring foundations and thus, a geotechnical evaluation was not necessary. The NMDF site is a previously developed parcel. A Geotechnical investigation was not required for the placement of the ADF facility equipment because it would be placed on ground that has been previously graded, engineered, compacted and paved.

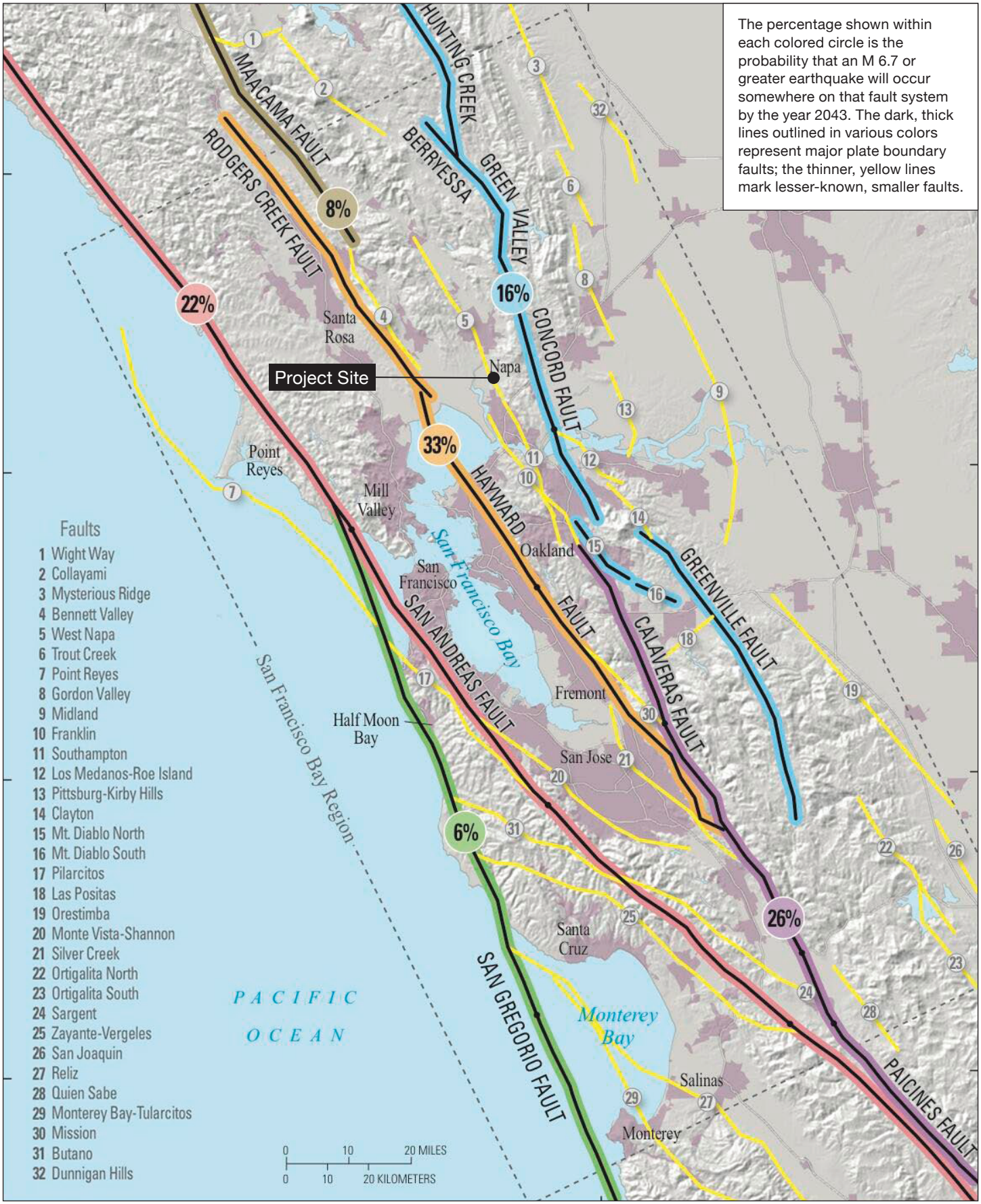
The soil type overlaying the Project site, as determined by the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS), are described as drained Clear Lake Loam, on 0 to 2 precent slopes. These soils are in Hydrologic Soil Group D [4], are considered hydric [5], are poorly drained, and have high runoff potential (NRCS, 2024). The NRCS description is consistent with the findings from the geotechnical investigation, which encountered wet to saturated sandy clays.

Seismic Setting

The southern Napa County region is within the seismically active San Francisco Bay Area and will therefore experience the effects of future earthquakes. As shown on **Figure 3.5-1**, there are numerous active faults in the San Francisco Bay area region and many earthquakes have occurred here throughout history. Napa County will likely experience ground shaking from a major regional earthquake during the life of the Project. The 2014 Working Group on California Earthquake Probabilities concluded from its updated 30-year earthquake forecast for California that there is a 72-percent probability of at least one earthquake of magnitude 6.7 or greater

4 Soils classified as NRCS Hydrologic Soil Group D are soils with very slow infiltration rate and high runoff potential when wet
5 Hydric soil is saturated, flooded, or ponded long enough during the growing season to create anaerobic conditions in the upper part of the soil.

occurring somewhere in the San Francisco Bay region before 2043 (USGS, 2016). The intensity of earthquake ground shaking will be dependent on several factors including distance from the site to the earthquake epicenter, depth of the earthquake, earthquake magnitude, and the response of the underlying soils (Bauer, 2017).



Source: USGS, 2016

Figure 3.5-1
Regional Fault Map

RCH GROUP
planning & environmental consulting

As shown in **Table 3.5-1**, relative to the Project site, the closest trace of the active West Napa Fault Zone is located about 3,170 feet to the west, the active Green Valley fault is located 9.4 miles to northeast, the active Rodgers Creek Fault is located approximately 9.6 miles to the west-southwest, and the active Hayward Fault is located 15.2 miles to the southwest. The San Andreas Fault Zone is approximately 30.5 miles west of the Project site. The West Napa Fault Zone is about 1.5 miles wide and 35 miles long, made up of several distinct traces clustered west of the city of Napa with two distinct traces extending southeast through American Canyon. It is considered a right-lateral, strike slip fault of Late Pleistocene-Holocene age and is thought to be the northern extension of the Calaveras Fault. The West Napa fault is the likely source for the magnitude 6.0 South Napa earthquake that occurred in Napa County on August 24, 2014 and the magnitude 5.2 Yountville earthquake, which occurred on September 3, 2000.

TABLE 3.5-1. ACTIVE FAULTS CAPABLE OF PRODUCING SIGNIFICANT GROUND SHAKING AT THE SITE

Fault Name	Distance from Site (miles)	Direction from Site	Maximum Moment Magnitude
West Napa Fault Zone	Less than 1 mile (3,170 ft)	West	6.0
Green Valley	9.4	Northeast	6.8
Rodgers Creek	9.6	West-Southwest	7.4
Hayward	15.2	Southwest	7.2
San Andreas Fault Zone	30.5	West	7.8

SOURCE: CGS, 2024, USGS, 2016

Geologic and Seismic Hazards

Fault Surface Rupture

Surface rupture occurs when movement on a fault deep within the earth breaks through to the ground surface. Earthquake faults that are delineated under the Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) (described below) are typically considered sufficiently active and well-defined and have experienced displacement within Holocene time (about the last 11,000 years) (Bryant and Hart, 2007). Faults that are zoned under the Alquist-Priolo Act can rupture at the surface during an earthquake causing considerable damage to structures and utilities. While the Project site is within a seismically active region, it is not located on a known active fault and is not located within an Alquist-Priolo Earthquake Fault Zone. However, a trace of the West Napa Fault, which is zoned under the Alquist-Priolo Act, is approximately 3,170 feet west of the Project site.

Ground Shaking

Earthquakes generated from seismically active faults in the Bay Area are likely to affect the site during the life of the Project. Major factors that affect the severity (intensity) of ground shaking include the size (magnitude) of the earthquake, the distance to the fault that generated the earthquake, and the underlying geologic materials. Thick, loose soils, such as non-compacted alluvium and artificial fill, tend to amplify and prolong the ground shaking, while bedrock is less

susceptible to prolonged ground shaking and soil failure. The alluvial soils beneath the Project site could amplify ground shaking compared with bedrock conditions at other upland locales.

Liquefaction

Liquefaction typically occurs in areas where groundwater is shallow and materials consist of poorly consolidated, well sorted [6] sands. Liquefaction occurs when saturated loose granular soils (i.e., sand and silt) take on the characteristics of a liquid during the intense shaking of an earthquake. Although fine-grained plastic soils (i.e., containing clay) are generally considered not susceptible to liquefaction, cohesionless soils and fine-grained soils of low plasticity, such as silts, are considered potentially liquefiable. Liquefaction can cause a loss of bearing and shear strength, initiate lateral spreading, cause upwelling of saturated sand (aka sand boils), or trigger landslides on saturated slopes. The occurrence of these effects is dependent on many complex factors, including the intensity and duration of ground shaking, particle-size distribution, and soil density. The California Geological Survey (CGS) has not yet evaluated the Project site and vicinity for liquefaction hazard susceptibility (discussed below) and the preliminary geotechnical investigation conducted in 2017 did not encounter soils that are prone to liquefaction or densification (Bauer Associates, 2017).

Settlement

Settlement of the ground surface can be accelerated and accentuated by earthquake ground motion (referred to a densification) but can occur under non-seismic conditions due to excessive weight on underlying compressible clays or weak soils. Settlement may not occur at the same rate in all locations (referred to as differential settlement), which most commonly occurs in loose, non-compacted materials of variable density and strength. Settlement of a soil mass can occur immediately or more gradually over time and occurs when the load applied to the soil reduces void spaces, rearranges soil particles, and/or causes water to be extruded from the soil. Settlements in a particular soil can be predicted through geotechnical investigation and testing and corrected by ground improvement techniques (e.g., compaction, grouting installation of soil piers, soil mixing). Settlement is expected with new construction and certain amounts are acceptable, however, sites with materials similar to the Project site must be evaluated through a geotechnical investigation to determine tolerable settlement rates and amounts.

Expansive Soils

Expansive soils possess a “shrink-swell” characteristic. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments as they become saturated (swell) and then dry out (shrink). The cyclic shrinking and swelling can damage foundations and structures. Expansive soils in natural or engineered slopes can cause “soil creep”, which can lead to severe cracking in dry soils and eventually result in damage to pavement and foundations. Cracking in the soil surface and in pavement can result in infiltration of surface water. The geotechnical investigation conducted on the Southern Annexation Parcel identified weak and expansive native surface soils that could lose strength and consolidate when saturated.

6 Well sorted refers to sand grains that are all roughly the same size.

Soil borings logged during the investigation found wet to saturated soil conditions from about 3 to 12 feet (Bauer Associates, 2017).

Paleontological Setting

Paleontological resources are the fossilized remains of plants and animals: vertebrates (animals with backbones; e.g., mammals, birds, fish), invertebrates (animals without backbones; e.g., starfish, clams, coral), and microscopic plants and animals (microfossils). Paleontological resources can include mineralized body parts, body impressions, or footprints and burrows. They are valuable, non-renewable, scientific resources, which are used to document the existence of extinct life forms and to reconstruct the environments in which they lived. The University of California Museum of Paleontology (UCMP, 2024) database indicates that the paleontological resources identified in Napa County occur in older (Permian to Miocene) [7] marine formations and are less likely in younger Quaternary [8] deposits.

Regulatory Setting

Alquist-Priolo Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) was passed in 1972 to mitigate the hazard of surface faulting in structures for human occupancy. In accordance with this act, the state geologist established regulatory zones, called "earthquake fault zones," around the surface traces of active faults and has published maps showing these zones. Within these zones, buildings for human occupancy cannot be constructed across the surface trace of active faults and must be set back from the fault (generally 50 feet). Each earthquake fault zone extends approximately 200 to 500 feet on either side of the mapped fault trace because many active faults are complex and consist of more than one branch that may experience ground surface rupture. The Alquist-Priolo Act does not apply to the Project as no active faults cross the site but it is included here for informational purposes because of the proximity to the West Napa fault.[9]

Seismic Hazards Mapping Act

The State of California passed the Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690–2699) to address the effects of strong ground shaking, liquefaction, landslides, and other ground failures due to seismic events. Under the Seismic Hazards Mapping Act, the State Geologist is required to delineate "seismic hazard zones." Cities and counties must regulate certain development projects within these zones until the geologic and soil conditions of their project sites have been investigated and appropriate mitigation measures, if any, have been incorporated into development plans. The State Mining and Geology Board provides additional regulations and policies to assist municipalities in preparing the Safety Element of their General Plan and encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety. Under Public Resources Code Section 2697, cities and counties must require, prior to the approval of a project located in a seismic hazard zone,

7 The Permian Epoch began 299 mya and the Miocene Epoch ended 5 mya)

8 The Quaternary Period ranges from 1.8 mya to present and includes the Pleistocene and Holocene Epochs.

9 California Geological Survey Earthquake Zones of Required Investigation. https://maps.conservation.ca.gov/cgs/EQZApp/app/ Accessed November 20, 2024

submission of a Preliminary Geotechnical Report defining and delineating any seismic hazard. The Project site is in a region that has not yet been evaluated by the CGS for seismic hazard zones (ground shaking, liquefaction, and landslide hazard susceptibility). It is likely that when this area is evaluated by the CGS, the Project site may be included in a regional seismic hazard zone for liquefaction due to its general geologic setting (alluvial deposits adjacent to the Napa River estuary). However, the 2017 preliminary geotechnical investigation has already verified that liquefaction hazard is not present on the Project site.

California Building Code

The California Building Code (CBC), which is codified in Title 24 of the California Code of Regulations, Part 2, was promulgated to safeguard the public health, safety, and general welfare by establishing minimum standards related to structural strength, means of egress facilities, and general stability of buildings. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all buildings and structures within its jurisdiction. The California Building Standards Commission administers Title 24, and, by law, is responsible for coordinating all building standards. Under state law, all building standards must be codified in Title 24 or they are not enforceable. The provisions of the CBC apply to the construction, alteration, movement, replacement, location, and demolition of every building or structure, or any appurtenances connected or attached to such buildings or structures throughout California.

The 2022 edition of the CBC is based on the 2021 International Building Code published by the International Code Council. The code is updated triennially, and the 2022 edition of the CBC, which was published by the California Building Standards Commission, took effect starting January 1, 2023. The 2022 CBC contains California amendments based on the American Society of Civil Engineers (ASCE) Minimum Design Standard ASCE/SEI 7-16, Minimum Design Loads for Buildings and Other Structures, provides requirements for general structural design, and includes means for determining earthquake loads as well as other loads (such as wind loads) for inclusion into building codes. Seismic design provisions of the building code generally prescribe minimum lateral forces applied statically to the structure, combined with the gravity forces of the dead and live loads of the structure, which the structure then must be designed to withstand. The prescribed lateral forces are generally smaller than the actual peak forces that would be associated with a major earthquake. Consequently, structures should be able to: (1) resist minor earthquakes without damage; (2) resist moderate earthquakes without structural damage but with some nonstructural damage; and (3) resist major earthquakes without collapse, but with some structural as well as nonstructural damage. Conformance to the current building code recommendations does not constitute any kind of guarantee that substantial structural damage would not occur in the event of a maximum magnitude earthquake. However, it is reasonable to expect that a structure designed in-accordance with the seismic requirements of the CBC should not collapse in a major earthquake. The structural elements of the Project components would comply with CBC requirements as required by the City of Napa.

Paleontological Resources - California Public Resources Code Sections 5097.5 and 30244

Other state requirements for paleontological resource management are included in Public Resources Code sections 5097.5 and 30244. Section 5097.5 prohibits the removal of any paleontological site or feature from public lands without permission of the jurisdictional agency. It defines the removal of paleontological sites or features as a misdemeanor and requires reasonable mitigation of adverse impacts to paleontological resources from developments on public (state, county, city, district) lands. Section 30244 requires that, where development would adversely impact archaeological or paleontological resources, as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Local Regulations

City of Napa 2040 General Plan

The City of Napa 2040 General Plan specifies policies to meet its relevant goal, which is to minimize risk to lives and property due to seismic and geologic hazards. The following goals and policies are applicable to the Project:

GOAL SN-1: Minimize the risk to life and property caused by seismic activity, soil erosion, and landslides.

> **Policy SN 1-1 -** Investigate and mitigate geologic and seismic hazards or establish regulations to provide for appropriate setbacks from such hazards, in order to preserve life and protect property, especially in areas that are prone to earthquakes and landslides, such as along the West Napa Fault Zone.
>
> **Policy SN 1-2 -** Work with State agencies and property developers to identify the location of faults where they are not known.
>
> **Policy SN 1-3 -** Identify appropriate legislative action by City Council to establish soil and geotechnical studies for significant new development in undeveloped areas within or proximate to fault zones, such as the southwestern area in the City's Rural Urban Limit (RUL) along Foster Road, developments that have a sensitive population (like schools or nursing homes), and buildings over three stories tall.
>
> Such studies should determine the actual extent of the seismic hazards, optimum location for structures, the advisability of special structural requirements, and the feasibility and desirability of a proposed facility in a specified location. Mitigation measures can be incorporated as conditions of any project approval.

City of Napa Grading Permit

A grading permit issued by the City would be required for the proposed Project. Grading permits are issued by the City of Napa, Building Inspection Division (City of Napa, 2022). Permit application requires submittal of a Grading Plan of sufficient clarity to indicate the nature and extent of the work proposed and show in detail the proposed work will comply with the City's Standard Specifications as well as all relevant laws, ordinances, regulations, and conditions of approval. Grading plans for engineered grading may only be prepared by a civil engineer. All

Civil Improvement Plans (e.g. Grading Plans, Sediment Control Plans, and Drainage Plans), where required, must be prepared by or under the direction of a registered civil engineer, licensed architect, professional land surveyor, or registered designer, unless waived by the City of Napa Building Inspection Division. All infrastructure improvements that are subject to the review and approval authority of the City of Napa shall conform to the design criteria set forth in these City Standard Specifications, as well as the City Standard Plans (which are hereby incorporated by reference into these City Standard Specifications).

3.5.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the CEQA *Guidelines* states that a project would result in a significant impact to Geology, Soils, and Seismicity if it would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
- 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;
    - Strong seismic ground shaking;
    - Seismic-related ground failure, including liquefaction; or
    - Landslides.
    - Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit 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;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- 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; or
- Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

Topics with No Impact

There are no known active, sufficiently active, or well-defined earthquake faults crossing or immediately adjacent to the Project site and the Project site does not lie within an Alquist-Priolo Earthquake Fault Zone, as verified through a review of the Alquist-Priolo Act maps provided by

the CGS (CGS, 2024). As discussed above, the active West Napa Fault Zone is located about 3,170 feet to the west, however, at that distance, there are no mapped traces crossing or directly adjacent to the Project site. Therefore, there would be no impacts related to surface fault rupture and, thus, fault rupture hazards are not discussed further in this analysis.

The Project site has little to no relief, so there is no potential for landslides or other slope failures, caused by static (non-earthquake) forces or those triggered by earthquakes. Furthermore, the Project would not cause or contribute to offsite slope instability and failure. Landsliding is not discussed further in this analysis.

The Project does not propose installing septic systems or alternative wastewater systems. The current and proposed facilities on the Project site would be served by municipal sewer systems. The suitability of the Project site soils to support septic tanks and Alternative Wastewater systems is not discussed further in this analysis.

Impact Analysis

Impact 3.5.1: The Project could directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. (Less than Significant)

This impact discussion addresses Significance Criteria topic a.ii. As discussed above, Napa County will likely experience ground shaking from a major regional earthquake during the life of the Project. Earthquakes on active faults near the Project site including the West Napa Fault (3,170 feet west), and the Green Valley fault (9.4 miles northeast), could cause moderate to violent ground shaking. However, the Project site could experience the effects from earthquakes on more distant regional faults including the Rodger's Creek fault, the Hayward fault and the San Andreas Fault Zone (see **Table 3.5-1**). The 2017 preliminary geotechnical investigation report for the Southern Annexation Parcel concluded that the Project is feasible from a geotechnical engineering viewpoint, but it will be necessary to design and construct the structures in accordance with current standards for earthquake-resistant construction (Bauer, 2017).

Structural damage and injury during an earthquake are inherent risks in seismically active regions like Napa County. Ground shaking could cause some structural damage to existing buildings and result in failure of concrete and compost stockpiles on the NMDF site and damage to stored equipment on the northern parcel; however, that would be an existing condition, as ground shaking and the structural damage on these sites would occur with or without the Project. The new construction proposed under the Project, specifically the anaerobic digestion facility (ADF) on the NMDF site and construction of the BCF on the Southern Annexation Parcel, could be subjected to ground shaking resulting in potential damage, loss, or injury. However, CBC building design criteria, adopted and required by the City of Napa for new building construction, are developed to address projected structural response to ground shaking and the corresponding seismic design criteria required for new constructions and renovations ensure that the risk of structural damage or collapse is adequately reduced or eliminated. While earthquake ground shaking would be felt at the Project site, seismic design criteria, as prescribed in the CBC, would reduce the risk of structural collapse and injury to site workers. Although conformance to CBC

recommendations do not guarantee that significant structural damage would not occur onsite in the event of a maximum magnitude earthquake, it can be expected that a well-designed and constructed modern buildings would not directly or indirectly expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. Furthermore, there is no evidence that development of the Project would increase seismic hazards over those experienced without the Project. Therefore, this impact would be less than significant.

Mitigation Measures

None required.

Impact 3.5.2: The Project could be subjected to hazards associated with weak and expansive soils and high soil moisture in the areas of new construction (Southern Annexation Parcel). (Significant)

This impact discussion addresses Significance Criteria topic a.iii, c, and d and focuses on the potentially problematic soil conditions on the Southern Annexation Parcel.

As discussed in the setting, above, the 600 Tower Road Parcel was previously graded and developed for material storage. Under the Project, the parcel would support inert materials processing and storage, onsite uses that are comparable to those already occurring. Other than the rearrangement of stockpiles and other materials, no construction requiring structures or foundations are proposed and thus, a geotechnical evaluation was not necessary. The NMDF site is also a developed parcel and geotechnical conditions on the NMDF site were likely evaluated prior to design and construction of the existing structures. The Project proposes placement of ADF equipment in an area of the site that has been previously graded, engineered, compacted and paved, and thus, no additional geotechnical evaluation was necessary.

The 2017 preliminary geotechnical investigation on the Southern Annexation Parcel assessed the geotechnical feasibility of constructing a biomass facility. At that time, specific building locations and structural designs were unknown, but it was expected that the facility would utilize concrete slab-on-grade foundations. As stated in the 2017 preliminary geotechnical investigation report, its purpose was to provide geotechnical comments to aid in purchase decisions and future development, but the report acknowledged that a design-level geotechnical investigation would be needed for final design of the Project and may include the need for additional subsurface exploration and more detailed laboratory testing, especially in the development areas not previously explored (Bauer, 2017). Design level geotechnical investigations consider the final footprint and structural design and provide a more rigorous subsurface soil exploration and soil testing program to ensure that the site soils would adequately support a project's structural components under the defined seismic criteria. Recommendations from the design-level geotechnical investigation would address problematic soil conditions where necessary and prescribe geotechnical remedies to correct them. Geotechnical recommendations could include removing problematic soils, strengthening soils or alternative foundation designs. These

geotechnical remedies for problematic soils are standard industry accepted methods that are used to address unfavorable soil conditions throughout the San Francisco Bay Area. The City of Napa would require a final design-level geotechnical investigation prior to issuance of a building permit.

Based on the finding of the 2017 preliminary geotechnical investigation, the primary geotechnical factors that must be considered in design and construction on the Southern Annexation Parcel are the presence of weak and expansive surface soils (Bauer, 2017). Saturated weak native surface soils, which can include old artificial fill with varying density (if present), can lose strength and consolidate rapidly under loads from additional surface fills or buildings, thereby leading to an intolerable degree of settlement and possible structural damage. These weak surface soils can also be highly expansive and experience volume changes that result in heaving and cracking of shallow, lightly loaded slab foundations and non-foundation (non-critical) slabs. Under their current condition and configuration, the shallow soils on the southern parcel of the Project site would not be suitable to support fills, foundations, slabs, or pavements (Bauer, 2017). Based on the observed saturated soils conditions and varying groundwater levels beneath the Project site, there is also a high potential for subsurface water to contribute to the instability of the weak and expansive soils.

Considering the presence of weak and expansive soils and the potential for subsurface water to exacerbate the instability of these soils, there is a potential that, if not corrected, these conditions could eventually result in structural damage, property loss, and injury to occupants. Therefore, this would be a significant impact of the Project.

Mitigation Measure

Mitigation Measure 3.5.2a: To accompany final foundation design of the BCF structure on the Southern Annexation Parcel of the Project site, as required by the City of Napa (Napa Municipal Code § 16.36.200), the applicant shall engage a California licensed Professional Geotechnical Engineer to conduct a final, design-level geotechnical investigation, using and updating information and data developed during the 2017 Bauer Associates Preliminary Geotechnical Investigation. The design-level geotechnical investigation, the recommendations developed through that investigation, the engineering approval, and the inspection responsibility are requirements of the City of Napa.

The design-level investigation shall further assess and verify subsurface soil conditions on the portion of the parcel in which grading, foundation placement, and construction will occur and at a minimum, address the presence of the weak and expansive soils identified during the 2017 preliminary geotechnical investigation. The final, design-level geotechnical investigation shall include adequate subsurface exploration and laboratory soils testing to comprehensively inform feasible geotechnical recommendations appropriate to fully remedy potential adverse effects of near-surface soils classified as weak, expansive, or that are negatively impacted by saturated subsurface conditions or high groundwater.

The geotechnical recommendations contained in the report shall be incorporated into the final Project design to address all identified unfavorable soil conditions and shall be implemented as required by the geotechnical engineer of record. Recommendations may include, but are not limited to, replacement of problematic native soils with adequately compacted

geotechnically suitable imported soil material; reworking, reconditioning and recompacting onsite soils, as appropriate; or treating onsite soils in situ to increase their strength (i.e. lime treatment). Recommendations for geotechnical grading to route surface runoff away from structures to ensure continued stability of soil supporting building foundations shall also be incorporated into the Project design and implemented. The design-level geotechnical investigation findings, conclusions, and recommendations must be certified by a licensed California Geotechnical engineer. As required, the applicant shall submit the final design-level geotechnical investigation report and recommendations to the City of Napa for review and approval prior to the issuance of the building permit, and the City shall ensure through permit conditions and inspection that all geotechnical recommendations are implemented as part of the Project design.

Level of Significance After Mitigation

Mitigation Measure 3.5.2a requires the applicant to retain a licensed California Geotechnical Engineer to conduct a final, design-level geotechnical investigation, verify subsurface conditions, and develop specific recommendations to address weak, expansive, or saturated soils. The findings and recommendations must be incorporated into project design, reviewed and approved by the City of Napa prior to permit issuance, and implemented during construction. Because the required measures include proven and standard engineering practices—such as soil removal and replacement, reconditioning or treatment of onsite soils, or alternative foundation systems—implementation of Mitigation Measure 3.5.2a would ensure that adverse effects from problematic soils are avoided or fully remedied. Therefore, this mitigation would reduce the impact to a less-than-significant level.

Impact 3.5.3: The Project could contribute to soil erosion and potentially the eventual sedimentation of downgradient water features during Project construction activities. (Less than Significant)

This impact discussion addresses Significance Criteria topic b and focuses on development on the Southern Annexation Parcel. During development of the Southern Annexation Parcel, site preparation and grading could expose unprotected native soils and temporary stockpiles to erosion and to potential downgradient sedimentation as soil particles are loosened and become entrained in the storm water runoff. The potential for this to occur is far lower in the post-construction, operational phase of the Project because most of the soil on the Project site would be covered by pavement or structures and not susceptible to erosion. Under the Construction General Permit (CGP), the applicant or their contractor(s) would implement stormwater controls [(aka Best Management Practices (BMPs)], as set forth in a detailed Stormwater Pollution Prevention Plan (SWPPP). SWPPPs must describe the specific erosion control and stormwater quality BMPs needed to reduce erosion and minimize pollutants in stormwater runoff with adequate details of their placement and proper installation. Considering that erosion would be adequately managed under the CGP during construction and that Project site improvements would convert exposed soil to hardscape and managed landscaping, the potential for the Project to contribute to substantial erosion or loss of topsoil is low. Therefore, this impact is less than significant.

Mitigation Measures

None required.

Impact 3.5.4: The Project could directly or indirectly destroy a unique geological feature or paleontological resource. (Significant)

The Project site is a relatively flat undeveloped parcel and is not considered nor does it contain a unique geological feature. A review of the University of California Museum of Paleontology (UCMP, 2024) database indicates that the paleontological resources identified in Napa County occur in older (Permian to Miocene) [10] formations such as the Purisima formation and rarely, if at all, in the younger Quaternary (Holocene) and Late Pleistocene alluvial fan deposits found beneath the Project site. The UCMP results identified one fossil locality (D8020) located east of Oat Hill in American Canyon and has been recorded as a Paleocene [11] invertebrate from the Purisima Formation. Fossil remains have not been identified on or in the vicinity of the Project site and the fossil locality (D8020) is approximately 1.6 miles to the south. However, because the late Pleistocene alluvial fan deposits are older, there is a higher potential for these units to contain fossilized remains. Vertebrate fossils have been identified in Late Pleistocene alluvium in the San Francisco Bay Area and that type and age material has been mapped near the Project site (Helley, LaJoie, 1979). These deposits underlie the younger Holocene deposits, native soils and disturbed surficial fill materials, as are the conditions at the Project site. Therefore, there is a potential that Late Pleistocene deposits may be present at depth beneath the Project site and it is possible that those deposits contain fossilized remains of vertebrate fauna. The potential to encounter paleontological resources, therefore, depends on the depths of excavation beneath the Project site. If the final foundation design of the BCF is a slab-on-grade concrete pad with standard depth utility trenching, the potential for encountering fossilized remains is negligible. However, if the development of the BCF requires deep foundations excavations, there is an increased potential for encountering fossilized remains in the underlying Late Pleistocene alluvium. Encountering and possibly destroying paleontological resources under these conditions would constitute a significant impact. Mitigation Measure 3.5.4a would require site evaluation and a detailed plan to reduce the potential for the destruction of paleontological resources in the event that the project requires deep excavations that penetrate or disturb Late Pleistocene alluvium.

Mitigation Measures

Mitigation Measure 3.5.4a: This measure applies to construction of the BCF on the Southern Annexation Parcel under the conditions that construction excavations reach vertical depths capable of penetrating the Late Pleistocene Alluvium that may be present beneath the Project site.

The Applicant shall retain a qualified paleontologist meeting Society of Vertebrate Paleontology (SVP) standards to oversee the preparation of a paleontological resources monitoring plan (PRMP). The PRMP shall be prepared prior to the start of construction activities, reviewed and approved by the City of Napa (City), and implemented by a qualified paleontologist. The PRMP shall provide guidance for paleontological field surveys, fossil sampling, spot checking/monitoring, reporting, curation, and on-call

10 The Permian Epoch began 299 mya and the Miocene Epoch ended 5 mya)
11 The Paleocene ranged from 66 mya to 56 mya.

response to fossil discoveries that occur for the duration of the Project construction. The PRMP shall detail the following components:

a) ***Worker Training.*** The qualified paleontologist shall prepare and implement a worker training program to inform construction personnel of the possibility for fossil discoveries. The training program shall provide an overview of the paleontological sensitivity of the site and the potential to uncover fossil remains. The training program shall instruct personnel to immediately inform their supervisor if any bones, teeth, or other substantial fossil remains are unearthed. In such a case, workers shall immediately cease activity within a 25-foot radius of the discovery site until a qualified paleontologist can examine and evaluate the find per item (b) below. Work may not resume in the discovery area until it has been authorized by the City. The training shall be provided for new personnel prior to beginning work on the site and such trainings should be coordinated with the site manager and should coincide with spot checking/sampling visits. Verification of training will be provided as an appendix to the annual report submitted to the City.

b) ***Evaluation and Salvage of Fossils.*** If any bones, teeth, or other fossil remains are unearthed in the course of ground disturbance, work will cease as directed in item (a) and a qualified paleontologist will examine and evaluate the find. In the event that the qualified paleontologist deems the fossil significant according to current SVP Guidelines and recommends it for curation, the qualified paleontologist shall propose salvage measures in consultation with the Applicant, and the salvage measures shall be reviewed and approved by the City and shall be carried out by or under the direct supervision of the qualified paleontologist. Curation shall follow the process directed in item (e).

c) ***Paleontological Survey.*** At least 30 days prior to the start of surface disturbance in any new portion of the Project site, a paleontological survey shall be conducted by a qualified paleontologist for the area to be disturbed to allow for documentation and collection of surficial fossils. Following each survey, a paleontological survey memorandum shall be prepared. The first survey memorandum prior to the start of construction shall be submitted immediately upon completion to the City. Subsequent surveys during the life of the Project can be compiled and submitted as part of the annual paleontological mitigation report described in item (f).

d) ***Spot Checks During Construction.*** A qualified paleontologist shall conduct periodic spot checks for the duration of construction activities that encounter Late Pleistocene alluvium. The qualified paleontologist shall check for the presence of any recently uncovered macrofossils or layers that should be sampled for microfossils. The need for, frequency, and timing of the spot checks shall be outlined in the PRMP, and during implementation the actual need, frequency, and timing shall be based on the PRMP and coordinated with the Applicant based on real-time excavation activities and locations. The frequency of spot-checking efforts in a given portion of the site area may be reduced at the recommendation of the qualified paleontologist with approval from the City if it is determined that only previously disturbed, imported, or Holocene-age alluvial sediments are being impacted, or if sediments are deemed to be non-conducive to fossil preservation. Dates and results of spot checks shall be recorded and reported as described in item (f).

e) ***Sample Identification and Curation.*** The qualified paleontologist shall ensure that all fossils and bulk matrix samples collected at the Project site during work stoppages (if resources are found during ground disturbance), paleontological surveys, or spot

checks are removed to a secure paleontological laboratory within 30 days of collection from the field for preparation to the point of identification and curation in accordance with the current SVP Guidelines. All data, including the results of the analysis and research on the fossil collection, shall be compiled along with the fossil specimen inventory and detailed paleontological locality forms, maps, and photos for inclusion in the annual paleontological mitigation report described in item (f).

f) ***Annual Reporting.*** The annual paleontological mitigation report shall be submitted to the City and, if fossils are discovered, to the University of California Museum of Paleontology (or other equivalent fossil repository). The annual paleontological mitigation report shall also include dates of field work, results of spot checking, survey and sampling, fossil analyses, significance evaluation, conclusions and future recommendations, locality forms, and an itemized list of specimens. Detailed survey reports and verification of new mining personnel paleontology trainings shall be included as appendices. The PRMP shall identify an annual due date for the report.

Level of Significance After Mitigation

Implementation of Mitigation Measure 3.5.4a would reduce the potential to inadvertently destroy paleontological resources during construction by conducting pre-construction surveys of areas that have the potential to contain such resources, by training workers to recognize such resources if they are uncovered during construction, and by ensuring that resources that are discovered during either surveys or excavation activities are treated appropriately. Because this measure would provide for the identification and curation of most or all fossils that could be encountered during the limited construction-period ground disturbance in high fossil potential areas, mitigation would reduce the impact to a less-than-significant level.

3.5.3 REFERENCES

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3.6 GREENHOUSE GAS EMISSIONS

This section describes the greenhouse gas (GHG) emissions setting and evaluates potential GHG emissions impacts. This section was prepared pursuant to California Environmental Quality Act (CEQA) *Guidelines* Section 15064.4 and CEQA *Guidelines* Appendix G, which requires a lead agency to make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project.

GHG emissions would be generated during Project operations from the direct use of electricity, natural gas, and petroleum fuels, as well as indirect uses related to water/wastewater conveyance and solid waste disposal. GHG emissions would also be generated during Project operations and the use of the biomass conversion facility (BCF) and anaerobic digestion facility (ADF). GHG emissions would also be temporarily generated by construction equipment and vehicles required for construction of the Project.

3.6.1 SETTING

Global Climate Change

Climate is defined as the average statistics of weather, which include temperature, precipitation, and seasonal patterns such as storms and wind, in a particular region. Global climate change refers to the long term and irrevocable shift in these weather-related patterns. Using ice cores and geological records, baseline temperature and carbon dioxide (CO_2) data extends back to previous ice ages thousands of years ago. Over the last 10,000 years, the rate of temperature change has typically been incremental, with warming and cooling occurring over the course of thousands of years. However, scientists have observed an unprecedented increase in the rate of warming over the past 150 years, roughly coinciding with the global industrial revolution, which has resulted in substantial increases in GHG emissions into the atmosphere. The anticipated impacts of climate change in California range from water shortages to inundation from sea level rise. Transportation systems contribute to climate change primarily through the emissions of certain GHGs (CO_2, methane (CH_4), and nitrous oxide (N_2O)) from nonrenewable energy (primarily gasoline and diesel fuels) used to operate passenger, commercial and transit vehicles. Land use changes contribute to climate change through construction and operational use of electricity and natural gas, and waste production.

The Intergovernmental Panel on Climate Change (IPCC) has reached consensus that human-caused emissions of GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increases in global average surface temperature from 1951 to 2010 were caused by the anthropogenic increase in GHG concentrations and other anthropogenic forces together. The IPCC predicts that the global mean surface temperature increases by the end of the 21st century (2081– 2100) relative to 1986–2005, could range from 0.5 to 8.7 degrees Fahrenheit. Additionally, the IPCC projects that global mean sea level rise will continue during

the 21st century, very likely at a faster rate than observed from 1971 to 2010. For the period 2081–2100 relative to 1986–2005, the rise will likely range from 10 to 32 inches (IPCC, 2013).

Greenhouse Gases

Gases that trap heat in the atmosphere are referred to as GHGs because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHGs has been implicated as the driving force for global climate change. The six primary GHGs are:

- CO_2, emitted when solid waste, fossil fuels (oil, natural gas, and coal), and wood and wood products are burned;
- CH_4, produced through the anaerobic decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, incomplete fossil fuel combustion, and water and wastewater treatment;
- N_2O, typically generated as a result of soil cultivation practices, particularly the use of commercial and organic fertilizers, fossil fuel combustion, nitric acid production, and biomass burning;
- hydrofluorocarbons (HFCs), primarily used as refrigerants;
- perfluorocarbons (PFCs), originally introduced as alternatives to ozone depleting substances and typically emitted as by-products of industrial and manufacturing processes; and
- sulfur hexafluoride (SF_6), primarily used in electrical transmission and distribution.

Although there are other contributors to global climate change, these six GHGs are identified by the U.S. Environmental Protection Agency (USEPA) as threatening the public health and welfare of current and future generations. GHGs have varying potential to trap heat in the atmosphere, known as global warming potential (GWP), and atmospheric lifetimes. GWP reflects how long GHGs remain in the atmosphere, on average, and how intensely they absorb energy. Gases with a higher GWP absorb more energy per pound than gases with a lower GWP and thus contribute more to warming Earth. For example, one ton of CH_4 has the same contribution to the greenhouse effect as approximately 28 tons of CO_2; hence, CH_4 has a 100-year GWP of 28 while CO2 has a GWP of 1. GWP ranges from 1 (for CO_2) to 23,500 (for SF_6).

In emissions inventories, GHG emissions are typically reported in terms of pounds or metric tons of CO_2 equivalents (CO_2e). CO_2e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH_4 and N_2O have much higher GWP than CO_2, CO_2 is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO_2e.

Regional GHG Emissions Estimates

In 2022, the United States emitted about 6,343 million metric tons of CO_2e or 5,489 million metric tons of CO_2e after accounting for sequestration from the land sector. Emissions increased in 2022 by 1 percent. The increase in total GHG emissions was driven largely by an increase in

CO_2 emissions from fossil fuel combustion. In 2022, CO_2 emissions from fossil fuel combustion increased by 1 percent compared to the previous year. This increase in fossil fuel consumption emissions was due in part to the continued rebound in economic activity after the height of the COVID-19 pandemic (USEPA, 2024).

According to USEPA, net emissions were 17 percent below 2005 levels. The recent decline is mostly due to a shift to less CO_2-intensive natural gas for generating electricity and a rapid increase in the use of renewable energy in the electric power sector. Transportation activities accounted for 28 percent of total GHGs emissions in 2022. Emissions from electric power accounted for the second largest portion (25 percent), while emissions from industry accounted for the third largest portion (23 percent) of total GHG in 2022 (USEPA, 2024).

In 2023, California emitted approximately 360 million metric tons of CO_2e, 11 million metric tons of CO_2e lower than 2022 levels and 60 million metric tons of CO_2e below the 2020 GHG limit of 431 million metric tons of CO_2e). The transportation sector represents 38 percent of the total GHG emissions. The industrial sector represents 22 percent of the total GHG emissions, followed by electricity (12 percent), and residential, agricultural, and commercial (10, 8, and 7 percent, respectively) (CARB, 2025).

In 2005, the City of Napa prepared a local GHG inventory, which quantified all GHG emissions and sinks (a process, activity, or mechanism that removes GHGs from the atmosphere) within the City. This inventory found that total emissions for 2005 were 455,062 metric tons CO_2e, primarily attributed to transportation sources (such as vehicle exhaust) and building operations (due to energy demand, solid waste generation, and water usage).

Regulatory Setting

Federal

The U.S. Supreme Court in Massachusetts et al. v. Environmental Protection Agency et al. ([2007] 549 U.S. 05-1120) held that the USEPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that establishes the GHG permitting thresholds that determine when Clean Air Act permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2014, the U.S. Supreme Court in Utility Air Regulatory Group v. EPA (134 S. Ct. 2427 [2014]) held that the USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

Greenhouse Gas Emissions and Fuel Efficiency

In September 2011, USEPA, in coordination with the National Highway Traffic Safety Administration (NHTSA), adopted fuel consumption and CO_2 emission standards to reduce GHG emissions of heavy-duty vehicles. These Phase 1 federal standards apply to model year 2014 and newer heavy-duty trucks, tractors, pick-up trucks, vans, and vocational vehicles. The category of specialized vocational vehicles includes delivery trucks, emergency vehicles, and refuse trucks such as the "packer" garbage collection trucks used to transport solid waste to transfer stations and landfills. The Phase 1 regulations do not include standards regarding the trailers pulled by these vehicles for improving aerodynamics and fuel efficiency.

In 2016, working together with NHTSA and CARB, USEPA implemented the next phase of federal GHG emissions and fuel-efficiency standards for medium- and heavy-duty vehicles and associated trailers. These federal Phase 2 standards build on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and aim to achieve further GHG reductions for 2018 and later model year heavy-duty vehicles. The progressively more stringent federal Phase 2 standards are more technology-driven than the Phase 1 standards, in that they require manufacturers to improve existing technologies or develop new technologies for heavy-duty trucks, tractors, and vocational vehicles to achieve the stricter standards. The Phase 2 federal standards were jointly adopted by the USEPA and NHTSA on October 25, 2016. California subsequently enacted its own Phase 2 standards for GHG emissions.

Federal Vehicle Standards

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the USEPA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014 through 2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the USEPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

In August 2016, the USEPA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO_2 emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program. On September 27, 2019, the USEPA and the NHTSA published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program." (84 Fed. Reg. 51,310 (Sept. 27, 2019.) The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the USEPA finalized rulemaking for SAFE Part Two, which sets CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light duty trucks, covering model years 2021 through 2026.

State

Executive Order S-3-05

Governor Schwarzenegger established Executive Order S-3-05 in 2005, in recognition of California's vulnerability to the effects of climate change. Executive Order S-3-05 set forth a series of target dates by which statewide emissions of GHG would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The executive order directed the Secretary of CalEPA to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary will also submit biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of CalEPA created the California Climate Action Team, made up of members from various state agencies and commissions. The report proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through state incentive and regulatory programs.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 established regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was to be accomplished by enforcing a statewide cap on GHG emissions that were to be phased in starting in 2012. To effectively implement the cap, AB 32 directed CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specified that regulations adopted in response to AB 1493 were used to address GHG emissions from vehicles. However, AB 32 also included language stating that if the AB 1493 regulations cannot be implemented, then CARB was to develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 required CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. Pursuant to AB 32, CARB identified 427 million MT CO_2e as the total Statewide aggregated 1990 GHG emissions level, which serves as the 2020 emissions limit. Using these criteria to reduce statewide GHG emissions to 1990

levels by 2020 represented an approximate 25 to 30 percent reduction in current emissions levels. However, CARB also had discretionary authority to seek greater reductions in more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not anticipated to significantly increase emissions. The goals of AB 32 were achieved within the 2002 timeline.

Climate Change Scoping Plan

AB 32 also required CARB to develop a Scoping Plan that describes the approach California will take to reduce GHG to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by CARB in 2008 and must be updated every five years. The initial AB 32 Scoping Plan contains the main strategies California will use to reduce the GHG that cause climate change. The initial Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 program implementation fee regulation to fund the program. In August 2011, the initial Scoping Plan was approved by CARB.

The 2013 Scoping Plan Update builds upon the initial Scoping Plan with new strategies and recommendations. The 2013 Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The 2013 Update defines CARB climate change priorities for the next five years and sets the groundwork to reach California's long-term climate goals set forth in Executive Orders S-3-05 and B-16-2012. The 2013 Update highlights California progress toward meeting the near-term 2020 GHG emission reduction goals defined in the initial Scoping Plan. In the 2013 Update, nine key focus areas were identified (energy, transportation, agriculture, water, waste management, and natural and working lands), along with short-lived climate pollutants, green buildings, and the cap-and-trade program.

On May 22, 2014, the First Update to the Climate Change Scoping Plan was approved by the Board, along with the finalized environmental documents. The First Update to the Climate Change Scoping Plan identified the 2020 emissions limit as 431 million metric tons of CO_2e and the 2020 business-as-usual forecast as 509 million metric tons of CO_2e. Finally, the Updated Scoping Plan provided recommendations for establishing a mid-term emissions limit that aligns with the long-term (2050) goals of Executive Order S-3-05. The recommendations covered energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green building, and cap-and-trade sectors.

In 2017, CARB approved the Second Update to the Climate Change Scoping Plan (2017 Scoping Plan). The 2017 Scoping Plan identified progress made to meet the near-term (2020) objectives of AB 32 and defined California's climate change priorities and activities for the next several years. The 2017 Scoping Plan identified the 2020 emissions limit as 431 million metric tons of CO_2e and the 2020 business-as-usual forecast as 509 million metric tons of CO_2e. The 2017 Scoping Plan provided strategies for meeting the mid-term 2030 greenhouse gas reduction target set by Senate Bill (SB) 32. The 2017 Scoping Plan also identified how the State can substantially advance

toward the 2050 greenhouse gas reduction target of Executive Order S-3-05, which consists of reducing greenhouse gas emissions to 80 percent below 1990 levels. The recommendations covered the key sectors, including energy and industry; transportation; natural and working lands; waste management; and water.

In 2022, CARB approved the Third Update to the Climate Change Scoping Plan (2022 Scoping Plan), which lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279 (CARB, 2022). The 2022 Scoping Plan:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands to the state's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

The recommended measures in the 2022 Scoping Plan and previous Scoping Plans are broad policy and regulatory initiatives that will be implemented at the State level and do not relate to the construction and operation of individual projects.

Low Carbon Fuel Standard

Under the Climate Change Scoping Plan, the CARB identified the low carbon fuel standard (LCFS) as one of the nine discrete early action measures to reduce California's GHG emissions. The LCFS is designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits.

In 2018, the CARB approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

The LCFS standards are expressed in terms of the "carbon intensity" (CI) of gasoline and diesel fuel and their respective substitutes. The program is based on the principle that each fuel has "life cycle" GHG emissions and the life cycle assessment examines the GHG emissions associated with the production, transportation, and use of a given fuel. The life cycle assessment includes direct emissions associated with producing, transporting, and using the fuels, as well as significant indirect effects on GHG emissions, such as changes in land use for some biofuels. The carbon intensity scores assessed for each fuel are compared to a declining CI benchmark for each year. Low carbon fuels below the benchmark generate credits, while fuels above the CI benchmark generate deficits. Credits and deficits are denominated in metric tons of GHG emissions. Providers of transportation fuels must demonstrate that the mix of fuels they supply for use in California meets the LCFS carbon intensity standards, or benchmarks, for each annual compliance period. A deficit generator meets its compliance obligation by ensuring that the credits it earns or otherwise acquires from another party is equal to, or greater than, the deficits it has incurred.

Executive Order No. B-30-15

On April 29, 2015, Executive Order No. B-30-15 was issued to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. Executive Order No. B-30-15 sets a new, interim, 2030 reduction goal intended to provide a smooth transition to the existing ultimate 2050 reduction goal set by Executive Order No. S-3-05 (signed by Governor Schwarzenegger in June 2005). It is designed so State agencies do not fall behind the pace of reductions necessary to reach the existing 2050 reduction goal. Executive Order No. B-30-15 orders “All State agencies with jurisdiction over sources of GHG emissions shall implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 targets.” The Executive Order also states that “CARB shall update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.” The CARB is currently moving forward with a second update to the Climate Change Scoping Plan to reflect the 2030 reduction target. The updated Scoping Plan will provide a framework for achieving the 2030 target. In September of 2016, AB 32 was extended to achieve reductions in GHG of 40 percent below 1990 levels by 2030. The new plan, outlined in SB 32, involves increasing renewable energy use, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

Executive Order No. B-55-18/Assembly Bill 1279

Executive Order B-55-18 was signed by Governor Brown on September 10, 2018. The order establishes an additional statewide policy to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter. As per Executive Order B-55-18, CARB is directed to work with relevant state agencies to develop a framework for implementation and accounting that tracks

progress toward this goal and to ensure future Climate Change Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Executive Order B-55-18 establishes a statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB intends to work with relevant State agencies to ensure that future scoping plan updates identify and recommend measures to achieve the carbon neutrality goal. On September 16, 2022, AB 1279, also known as the California Climate Crisis Act, codified the carbon neutrality goal established by EO B-55-18.

California Environmental Quality Act

Pursuant to the requirements of SB 97, the Resources Agency has adopted amendments to the *CEQA Guidelines* for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted *CEQA Guidelines* provide general regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. To date, a variety of air districts have adopted quantitative significance thresholds for GHGs.

California Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the state's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). The California Energy Code was established by CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and nonresidential buildings. CEC updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions.

The 2025 California Energy Code was adopted by the CEC on September 11, 2025, and applies to projects constructed after January 1, 2026. The building efficiency standards are enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary in response to local climatologic, geologic, or topographic conditions, provided that these standards exceed those in the California Energy Code.

California Green Building Standards Code (Title 24, Part 11)

The California Green Building Standards Code (CALGreen) is part 11 of Title 24, California Code of Regulations. CALGreen is the first-in-the-nation mandatory green building standards code, developed in an effort to meet the goals of California's landmark initiative AB 32, which established a comprehensive program of cost-effective reductions of GHG emissions to 1990 levels by 2020. CALGreen includes a waste diversion mandate, which requires that at least 65 percent of construction materials generated during new construction or demolition projects are diverted from landfills.

California Renewables Portfolio Standard Program

In 2002, a California State law established the basic policy framework for the increased use of renewable energy resources in California, known as the Renewables Portfolio Standard (RPS). RPS requires renewable energy resources to serve a certain percentage of electricity sales by all electricity utilities in the state, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators. Major eligible renewable energy resources, as defined by the California Energy Commission (CEC), include biomass, geothermal, solar, wind, and small hydroelectric facilities. CEC and the California Public Utilities Commission (CPUC) work collaboratively to implement RPS.

Electric utilities in California must procure a minimum quantity of sales from eligible renewable energy resources as specified by RPS requirements. To integrate renewable generators on the grid, optimize the delivery of growing amounts of renewable energy production, and facilitate achieving the targeted GHG reductions, the California legislature has also authorized energy agencies to establish energy storage procurement targets.

The Clean Energy and Pollution Reduction Act of 2015 [Senate Bill 350 (SB 350)] established California's state policy objectives on long-term energy planning and procurement as signed into law on October 7, 2015. The 100 Percent Clean Energy Act of 2018 [Senate Bill 100 (SB 100)] revised the RPS targets to establish the policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045.

With SB 350 and SB 100, California's objectives include:

- To set the RPS for the procurement of California's electricity from renewable sources at 33 percent by 2020, 50 percent by 2026, and 60 percent by 2030;
- To plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045; and
- To double the energy efficiency savings on electricity and natural gas end uses by retail customers by 2030.

California State legislation have steadily increased the renewable energy target, most recently from SB 100 (September 2018) which increased the RPS targets to 60 percent of California's electricity by 2030 and 100 percent of all retail electricity sold in California by 2045.

Regional

2017 Clean Air Plan

The BAAQMD's *2017 Clean Air Plan* (BAAQMD, 2017) includes the Bay Area's first-ever comprehensive Regional Climate Protection Strategy, which identifies potential rules, control measures, and strategies that BAAQMD can pursue to reduce GHG emissions in the Bay Area.

Measures of the *2017 Clean Air Plan* addressing the transportation sector are in direct support of Plan Bay Area 2040, which was prepared by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) and includes the region's transportation plan/ sustainable communities strategy. Highlights of the *2017 Clean Air Plan* control strategy include:

- *Limit Combustion*: Develop a region-wide strategy to improve fossil fuel combustion efficiency at industrial facilities, beginning with the three largest sources of industrial emissions: oil refineries, power plants, and cement plants.
- *Stop Methane Leaks*: Reduce methane emissions from landfills, and oil and natural gas production and distribution.
- *Reduce Exposure to Toxics*: Reduce emissions of toxic air contaminants by adopting more stringent limits and methods for evaluating toxic risks at existing and new facilities.
- *Put a Price on Driving*: Implement pricing measures to reduce travel demand.
- *Advance Electric Vehicles*: Accelerate the widespread adoption of electric vehicles.
- *Promote Clean Fuels*: Promote the use of clean fuels and low or zero carbon technologies in trucks and heavy-duty vehicles.
- *Accelerate Low-Carbon Buildings*: Expand the production of low-carbon, renewable energy by promoting on-site technologies such as rooftop solar and ground-source heat pumps.
- *Support More Energy Choices*: Support of community choice energy programs throughout the Bay Area.
- *Make Buildings More Efficient*: Promote energy efficiency in both new and existing buildings.
- *Make Space and Water Heating Cleaner*: Promote the switch from natural gas to electricity for space and water heating in Bay Area buildings.

Local

City of Napa 2040 General Plan

The City of Napa 2040 General Plan (City of Napa, 2022) formalizes a long-term vision for the physical evolution of Napa and outlines policies, standards, and programs to guide day-to-day decisions concerning Napa's development through the year 2040. The following goals and policies relate to GHG emissions and are applicable to the proposed Project:

GOAL CCS-1: Further the City's sustainability initiatives to reduce the community's GHG emissions, and foster green development patterns – including buildings, sites, and landscapes.

> CCS 1-1: Implement immediate and sustained actions in support of achieving net zero climate pollutants from public and private operations within the City by 2030.

CCS 1-3: Partner with local, regional, and County agencies and utility companies to achieve GHG reduction targets.

CCS 1-4: Expand local awareness of actions that residents and businesses can take to reduce climate impacts. Actively seek grants, and continue to provide community outreach and robust education through partnership opportunities with City residents. Develop an open data Community Climate Dashboard to engage residents in progress and accomplishments toward goals.

The City of Napa 2040 General Plan specifically mentions biomass gasification and anaerobic digestion to promote efforts to reduce solid waste accumulation and promoting waste reduction strategies.

City of Napa Sustainability Plan

At the local level, the City of Napa adopted its first Sustainability Plan (City of Napa, 2012) in July 2012 to meet GHG emissions reduction targets for 2020 set by AB 32. The Sustainability Plan includes 95 initiatives to promote sustainability within the Napa community and also within the City's internal government operations. The Sustainability Plan is arranged into focus areas that are the key components of community and City government operations. City government focus areas in the Sustainability Plan include energy, transportation, recycling and waste, water, and planning and land use. Community focus areas in the Sustainability Plan include energy, mobility and transportation, recycling and waste, natural and built environment, community connectedness, local business and economy, and local food.

Within each focus area, the Sustainability Plan identifies a number of initiatives, many of which will reduce GHG emissions within the City. The initiatives identify actions to be taken by the City, such as promoting existing energy conservation programs, encouraging a connected system of bike and walking paths, and adding a food scraps curbside composting program. The initiatives in the plan were developed by City staff, subject matter experts, and the community at large through public meetings, interviews, and surveys. Collectively, the sustainability initiatives within the Sustainability Plan will reduce the city's GHG emissions from its community and City government operations, consistent with the State's GHG reduction goals.

In 2012, the City formally adopted a Disposal Reduction Policy that mirrored AB 341 at a local level and set a local goal of 75 percent (or more) of recycling and composting by the year 2020.

The City of Napa Sustainability Plan includes the goal to build an anaerobic digester to convert food scraps into compressed natural gas. By installing an anaerobic digester, the City would have the ability to use the food waste collected from the curbside food composting program and convert it into compressed natural gas that could then fuel the hauling trucks that pick up business and residents' food waste, yard waste, recycling, and trash.

3.6.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Because the issue of global climate change is inherently a cumulative issue, the contribution of Project-related GHG emissions to climate change is addressed as a cumulative impact.

CEQA Guidelines Section 15064 and Appendix G recommend that a lead agency consider a project's consistency with relevant, adopted plans, and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. Consistent with Appendix G of the *CEQA Guidelines*, GHG emissions generated by the Project could have a cumulatively considerable contribution to global climate change if the Project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG.

CEQA Guidelines Section 15064.4 provides guidance to lead agencies for determining the significance of environmental impacts pertaining to GHG emissions. Section 15064.4(a) states that a lead agency should make a good-faith effort that is based, to the extent possible, on scientific and factual data to describe, calculate, or estimate the amount of GHG emissions that would result from implementation of a project. CEQA Guidelines Section 15064.4(b) also states that, when assessing the significance of impacts from GHG emissions, a lead agency should consider (1) the extent to which the project may increase or reduce GHG emissions compared with existing conditions, (2) whether the project's GHG emissions would exceed a threshold of significance that the lead agency has determined to be applicable to the project, and (3) the extent to which the project would comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Some counties, cities, and air districts have developed guidance and thresholds for determining the significance of GHG emissions that occur within their jurisdiction. The City of Napa is the CEQA lead agency for the Project and is, therefore, responsible for determining whether GHG emissions with the Project would have a cumulatively considerable contribution to climate change. The City of Napa has not adopted thresholds or approaches for evaluating a Project's GHG emissions.

BAAQMD's thresholds of significance consist of three options for project-level impacts:

a. Land use project design elements that must be included in a project,

b. Consistency with a local GHG reduction strategy, or

c. A stationary source threshold of 10,000 metric tons of CO_2e per year.

BAAQMD's *CEQA Air Quality Guidelines*, *Appendix B: CEQA Thresholds for Evaluating the Significance of Climate Impacts from Land Use Projects and Plans*, state the following in reference to the newly adopted land use project design elements significance thresholds:

> *"The Air District has developed these thresholds of significance based on typical residential and commercial land use projects and typical long-term communitywide planning documents such as general plans and similar long-range development plans. As such, these thresholds may not be appropriate for other types of projects that do not fit into the mold of a typical residential or commercial project or general plan update. Lead agencies should keep this point in mind when evaluating other types of projects. A lead agency does not necessarily need to use a threshold of significance if the analysis and justifications that were used to develop the threshold do not reflect the particular circumstances of the project under review. Accordingly, a lead agency should not use these thresholds if it is faced with a unique or unusual project for which the analyses supporting the thresholds as described in this report do not squarely apply. In such cases, the lead agency should develop an alternative approach that would be more appropriate for the particular project before it, considering all of the facts and circumstances of the project on a case-by-case basis."*

The proposed Project is not a typical land residential or commercial land use project. Thus, the land use project design elements significance threshold does not apply. Furthermore, the City of Napa has not adopted a local GHG reduction strategy or climate action plan, thus, that significance threshold is not applicable. CARB has suggested that "lead agencies have the discretion to develop evidence-based numeric thresholds consistent with the 2017 Scoping Plan, the State's long-term GHG goals, and climate change science" (CARB, 2017). For this reason, this analysis examines whether the Project would exceed BAAQMD's 10,000 metric tons of CO_2e per year significance threshold or conflict with CARB's 2017 and 2022 Scoping Plans.

Neither the City nor BAAQMD have an adopted threshold of significance for construction GHG emissions. BAAQMD recommends quantifying emissions and disclosing that GHG emissions would occur during construction. BAAQMD also recommends that the Lead Agency should decide on the significance of construction generated GHG emission impacts in relation to meeting AB 32 GHG reduction goals, as required by the Public Resources Code, Section 21082.2. Furthermore, BAAQMD encourages lead agencies to incorporate best management practices to reduce GHG emissions during construction, as feasible and applicable.

Impact Analysis

Impact 3.6.1: The Project could generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. (Less than Significant)

Construction

Construction-related activities would generate GHG emissions from off-road equipment used for site preparation, grading/excavation, trenching/utilities, paving, building construction/equipment

installation and architectural coating associated with Project elements; offroad equipment, on-road trucks used for material delivery, and worker commute trips.

Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1 (CAPCOA, 2022). Detailed modeling assumptions and results are provided in **Appendix C**. The estimated total construction GHG emissions are 694 metric tons of CO_2e. As indicated, 30-year amortized annual construction related GHG emissions would be approximately 23.1 metric tons of CO_2e.[1] The BAAQMD has not adopted a GHG emissions threshold for construction and BAAQMD guidance states that "Greenhouse gas emissions from construction represent a very small portion of a project's lifetime GHG emissions. (BAAQMD, 2023)." Construction GHG emissions would be offset by the reduction in GHG emissions during operations. Construction GHG emissions would be negligible in comparison to the overall Project, would not hinder the State in meeting GHG reduction targets, and would be less than significant.

Baseline Operations

Baseline operational GHG emissions are summarized in **Table 3.6-1** and represents baseline emissions which currently occur at the NMDF prior to implementation of the Project. The total GHG emissions during baseline condition are 47,462 metric tons of CO_2e per year. Detailed modeling assumptions and results are provided in **Appendix C**.

TABLE 3.6-1. BASELINE ANNUAL OPERATIONAL GHG EMISSIONS

Source	CO_2e metric tons/year
Onroad Vehicle Exhaust	11,047
Offroad Equipment Exhaust	806
Composting POC (Composting)	28,030
Landfill Emissions (BAU Wood Chip Disposal)	7,580
Total Baseline Emissions	**47,462**

SOURCE: Yorke, 2025

Project Operations

The CARB defines net zero as the point where GHG emitted into the atmosphere are balanced by removing the same amount of GHG from the atmosphere. This balance is achieved through a combination of reducing emissions and actively removing carbon through measures like sequestration in natural and technological sinks. California's goal is to achieve net-zero GHG emissions by 2045, and it defines "net zero" as a state where emissions are balanced by removals. The core principle is achieving a balance between GHG released and GHG removed from the atmosphere. **Appendix C** provides the *Napa Renewable Resource Project Emissions*[2] and *Net-*

1 Given that the BAAQMD does not have a policy, construction emissions were amortized over 30 years and added to operational GHG emissions consistent with SCAQMD's Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, December 5, 2008, https://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf

2 Yorke Engineering, *Napa Renewable Resource Project Baseline and Project Emissions*, December 2025

Zero Assessment for the Napa Renewable Resources Project 2.0[3] and calculates the emissions impacts and avoided emissions that will result from the Project. These documents demonstrate that the Project is net zero per the CARB definition.

This calculation takes into account the direct emissions from composting, the direct emissions from the BCF and ADF, and accounting for the electricity demands of all operations. In addition to these changes, the facility will be able to process more organic waste and be able to manage its wood waste on site.

Project operations would generate GHG emissions from motor vehicles, haul trucks, onsite equipment associated with the BCF and ADF, area sources, and energy use. Project operational GHG emissions are summarized in **Table 3.6-2**. As shown, the Project-related operational GHG emissions would result in a net reduction in GHG emissions when compared to the baseline condition. Detailed modeling assumptions and results are provided in **Appendix C**.

The total GHG emissions for Project Buildout operations (includes Baseline) are 43,919 metric tons of CO_2e per year. The total GHG emissions during Project-related operations (Project minus Baseline) would be a reduction of 3,544 metric tons of CO_2e per year, which is less than the significance threshold of 10,000 metric tons per year, and the Project would have a less-than-significant impact. That is, the future Project operations would produce 3,544 metric tons of CO_2e per year less GHG emissions than the baseline condition. This reduction in GHG emissions as a result of the Project implementation is due to the elimination of landfill emissions, the avoidance of energy use, and a biochar credit.

TABLE 3.6-2. PROJECT ANNUAL OPERATIONAL GHG EMISSIONS

Source[1]	CO_2e metric tons/year
Onroad Vehicle Exhaust	12,649
Offroad Equipment Exhaust	1,031
Engine Normal (Biomass Conversion)	10,407
Flare Pilot (Biomass Conversion)	<1
Flare (Biomass Conversion)	594
Water Use GHG (Biomass Conversion)	1
Energy GHG (Biomass Conversion)	-1,228
Biochar Credit (Biomass Conversion)	-8,403
Boiler (Anaerobic Digestion)	561
Flare Pilot (Anaerobic Digestion)	1
Flare DG (Anaerobic Digestion)	114
Emergency Engine (Anaerobic Digestion)	16
Energy Consumption (Anaerobic Digestion)	148
Composting POC (Composting)	28,030
Total Project Emissions	**43,919**
Total Baseline Emissions	**47,462**

[3] Edgar and Associates, *Net-Zero Assessment for the Napa Renewable Resources Project 2.0*, October 8, 2025

Total Project-related Emissions	**-3,544**
Significance Threshold	10,000
Potentially Significant?	No

SOURCE: Yorke, 2025.

NOTE: The dryer is heated by waste heat from the engines, so there are no combustion emissions associated with drying. Conceptually, they blow air across the radiator for the engine, and direct that heated air to the drying bunkers.

For the BCF engines, the gasifier fuel is wood which is part of the natural carbon cycle. Biomass fuels are fuels that are derived from biomass products and byproducts, wastes, and residues from plants, animals, and microorganisms. Under the GHG emissions accounting framework established by the Cap-and-Trade Regulation, CO_2 emissions from the combustion of biomass fuels that meet specified criteria in the regulations are considered biogenic fuels and are exempt from a compliance obligation under the Cap-and-Trade Regulation." [Biomass-Derived Fuels Guidance for California's Mandatory GHG Reporting Program, 1/11/19]

Accounting for the life cycle impacts of the materials managed under the facility would result in an even greater reduction in project-related GHG emissions (Yorke Engineering, *Napa Renewable Resource Project Baseline and Project Emissions*, December 2025 and Edgar and Associates, Net-Zero Assessment for the Napa Renewable Resources Project 2.0, October 8, 2025)

The BCF is estimated to generate up to 13,140 megawatt-hours (MWh) of electricity annually. The BCF is designed to generate renewable electricity to be used onsite to power NMDF operations, with excess electricity exported to the local electrical grid. Therefore, the Project would eliminate the need to import electricity to the Project site. The ADF would generate over 440,000 diesel gallon equivalents (dge) of renewable natural gas (RNG) annually, which would be used to fuel collection vehicles at NMDF.

Mitigation Measures

None required.

Impact 3.6.2: The Project could conflict with or obstruct implementation of CARB's 2017 and 2022 Scoping Plan. (Less than Significant)

The Project would generate GHG emissions during temporary construction activities but would reduce GHG emissions (relative to the baseline) during long-term operations. The total GHG emissions associated with construction activities and Project operations would be lower than the GHG emissions associated with the baseline condition.

While the proposed project is subject to compliance with the Global Warming Solutions Act (AB 32), the proposed project generated GHG emissions would not surpass GHG significance thresholds, which were prepared with the purpose of complying with the requirements of AB 32. Therefore, the proposed project would not conflict with AB 32.

The 2022 Scoping Plan is implemented at the State level, and compliance at a specific plan or project level is not addressed in the Plan. The Project would use vehicles and equipment that would meet current standards at the time of construction and operation and would not conflict with the statewide programs designed to address GHG emissions reduction goals. As previously noted, the Project operations would result in lower GHG emissions than the baseline condition. The Project would not conflict with any applicable plan, policy, or regulation of an agency

adopted for the purpose of reducing GHG emissions and would have a less than significant impact on GHG emissions.

The Project would be consistent with the applicable strategies in the 2022 Scoping Plan, adopted for the purpose of reducing GHG emissions. These strategies address the project's incremental contribution to climate change and thus the project's incremental contribution is not cumulatively considerable. These standards are intended to encourage more sustainable and environmentally friendly practices, including the conservation of natural resources. In conclusion, the Project would reduce GHG emissions during the facility operations compared to baseline conditions and thus, would be consistent with the applicable strategies in the 2022 Scoping Plan.

Construction

The BAAQMD CEQA Guidelines do not identify a GHG emissions threshold for construction-related emissions; however, they do recommend that GHG emissions from construction be quantified and disclosed and a determination regarding the significance of the GHG emissions be made with respect to whether the project in question is consistent with state goals regarding reductions in GHG emissions.

As noted in BAAQMD's *CEQA Air Quality Guidelines*, *Appendix B,* GHG emissions from construction represent a very small portion of a project's lifetime GHG emissions and operational emissions represent the vast majority of project GHG emissions. Construction emissions are a one-time release and would not result in a significant impact on the environment. Construction of the Project would utilize fuel efficient equipment and trucks consistent with state regulations and would be consistent with state regulations intended to reduce the inefficient, wasteful, or unnecessary consumption of energy, such as anti-idling and emissions regulations.

Construction would generate temporary GHG emissions to develop the Project operations that would increase waste diversion and provide renewable energy, which would provide GHG emission reductions annually after the start of operations. In addition, construction activities would utilize fuels that are subject to the State's LCFS, which addresses the carbon intensity of fuels in the State and is a key GHG reduction measure in CARB's 2017 and 2022 Scoping Plans. There are no specific GHG reduction measures or policies related to construction activities in CARB's 2017 and 2022 Scoping Plans, therefore Project construction would not conflict with CARB's 2017 and 2022 Scoping Plans. Thus, Project construction would result in a less-than-significant impact.

Operation

While the implementation and operation of the Project would generate GHG emissions, the Project would not conflict with CARB's 2017 and 2022 Scoping Plans because the Project would increase waste diversion and generate renewable energy (electricity and renewable natural gas), providing GHG emissions reductions and other co-benefits (See **Table 3.6-2** and supporting net zero assessment). On-site combustion equipment and motor vehicles would utilize fuels that are subject to the State's LCFS, which addresses the carbon intensity of fuels in the State and is a key GHG reduction measure in CARB's 2017 and 2022 Scoping Plans.

CARB's 2022 Scoping Plan highlights the need for expanded infrastructure to reduce landfill disposal, while also noting the need to expand markets for products made from organic waste. The Project would provide expanded organics processing infrastructure for the State, which is critical for achieving the State's GHG reduction goals. Furthermore, the Project would implement innovative organics processing technology that maximizes overall efficiency, and the Project would create a local market for biochar generated by the proposed BCF.

The Project would provide significant GHG reduction benefits and would help the City of Napa and the State achieve mandates for diverting organics from landfills. Diverting waste from landfills is a major goal of CARB's 2017 and 2022 Scoping Plans and the Project would allow NMDF to process wood onsite through the BCF rather than haul it to local landfills for disposal.

As shown in Impact 3.6.1, the 30-year amortized annual construction related GHG emissions would be approximately 23.1 metric tons of CO_2e while the project-related operational GHG emissions would be a reduction of 3,544 metric tons of CO_2e per year. Therefore, the GHG emissions for the construction plus operations of the Project would be less than the significance threshold of 10,000 metric tons per year. Secondly, the overall reduction in GHG emissions (compared to the baseline) as a result of the Project would assist in achieving the goals of the CARB's 2017 and 2022 Scoping Plan, and therefore, the Project would have a less-than-significant impact. Without the Project, the existing facility would continue to produce GHG emissions (see **Table 3.6-1**) and would not achieve the GHG emission reductions associated with the increased waste diversion and renewable energy generation.

Mitigation Measures

None required.

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3.7 HAZARDS AND HAZARDOUS MATERIALS

This section describes the regulatory framework and existing conditions related to hazards and hazardous materials and analyzes potential impacts that could occur as a result of the Project.

3.7.1 SETTING

Introduction

Hazardous Waste Regulation Definitions

Certain chemical and physical properties of substances cause them to be considered hazardous. The terms hazardous material and hazardous waste are legal terms defined in State regulations. California Code of Regulations (CCR) Title 22 defines hazardous material as a substance or combination of substances, which because of quantity, concentration, or physical, chemical or infectious characteristics, may either: (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of, or otherwise managed (CCR, Title 22, Chapter 10, Article 2, §66260.10). Title 22 classifies hazardous substances according to four properties: toxicity, ignitability, corrosivity, and reactivity. Carcinogens (substances known to cause cancer) are a special class of toxic substances. Explosives, volatile fuels, and landfill gas are examples of reactive materials. Hazardous wastes are hazardous residues or discards that no longer have practical use, such as substances that have been discarded, spilled, contaminated, or disposed (CCR, Title 22, Chapter 11, Article 2, §66261.10).

The United States Environmental Protection Agency (USEPA) considers Household Hazardous Waste (HHW) as products that can catch fire, react, or explode under certain circumstances, or that are corrosive or toxic as HHW. Products, such as paints, cleaners, oils, batteries, and pesticides can contain hazardous ingredients and require special care when disposed (USEPA, 2020).

Department of Toxic Substances Control (DTSC) implements its Unified Program on hazardous materials and wastes locally through the Certified Unified Program Agency (CUPA) for the city or county. Temporary and permanent household hazardous waste collection facilities (HHWCFs) operate under Permit by Rule authorization pursuant to CCR Title 22, §66270.60 and are overseen by the CUPA. As discussed below, the CUPA for Napa County is the Napa County Division of Environmental Health (NCDEH).

Hazard Exposure

The four common exposure pathways are inhalation, ingestion, direct contact (with skin or eyes), and injection (skin puncture or cut). Pathways of exposure to a hazardous material or waste depend on the chemical and physical properties of the waste and the type of occurrence or accident that released it. Exposure to hazardous compounds or disease organisms can occur through transport by: air of potentially toxic materials released in gaseous form or as smoke emitted by a fire; animal vectors, such as scavenging birds, rodents, or insects; and transport by

surface water or groundwater where hazardous materials leave a site due to leaks, spills, or uncontrolled runoff. Factors that influence the health effects of exposure to hazardous material include the dose to which the person is exposed, the frequency of exposure, the exposure pathway, and individual susceptibility. A material may be hazardous by one exposure pathway but not another; for example, a chemical might be toxic if ingested but not if touched.

Effects of Exposure

Health effects of exposure to hazardous chemicals can vary greatly and are specific to each chemical. Possible health effects of exposure may be acute (immediate, or of short-term severity) or chronic (long-term, recurring, or resulting from repeated exposure). Acute effects, usually resulting from a single exposure, might include burns or injury to body organs or systems such as from exposure to corrosive, reactive, or ignitable materials. Chronic effects, usually resulting from repeated or long-term exposure to a toxic material (as in a poorly ventilated workplace, for example), could also include systemic or organ damage. Chronic toxic effects of particular concern are birth defects and cancer.

Sensitive Receptors

Regarding public health and safety, a sensitive receptor is an individual or population that resides near or encounters a potential health hazard. Napa County airport is situated to the west/northwest of the Project site. Directly south of the airport, a range of facilities including hangars and parking are integrated into the airport's operations. Further east, opposite Devlin Road, lie several industrial parcels associated with the construction and building industry. The Project site is bordered to the north and northeast by industrial parcels used for equipment and vehicle storage and is bordered to the south and southeast by vacant land and the Devlin Road Transfer Station. Therefore, the sensitive receptors surrounding the Project site consist of temporary airport users and daily workers; the nearest residence is approximately 2,340 feet to the east of the Project site. The nearest school is Napa Junction Magnet Elementary School, approximately 1.8 miles south of the Project site.

Regulatory Setting

The use, production, and disposal of hazardous materials and waste are regulated extensively by federal, state, regional, and local regulations, and guidance, with the major objective of protecting the public health and the environment. These regulations and guidance were developed primarily for application in industrial and manufacturing environments where worker health and safety and waste production as a byproduct of manufacturing occurs. Myriad laws and regulations at the federal, state, and local levels affect the management of hazardous materials, as described below. In addition, implementation of the Project involves development adjacent to a public airport (Napa County Airport) and thus the regulatory context includes federal and state agencies and statutes that address airport safety and development near airports.

Federal

The United States Environmental Protection Agency

The USEPA is the lead agency responsible for enforcing federal regulations that affect public health and the environment. The USEPA is responsible at the federal level for enforcing regulations pertaining to hazardous materials. The applicable federal regulation pertaining to hazardous materials are contained primarily in the Code of Federal Regulations (CFR) Titles 29, 40 and 49. Hazardous materials are listed and classified in 49 CFR 172.101. Regulations governing the use, management, handling, transportation and disposal of hazardous materials and waste are administered by federal, state and local governmental agencies. Federal regulations governing hazardous materials and waste include the Resource Conservation, and Recovery Act of 1976 (RCRA); the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA); and the Superfund Amendments and Re-authorization Act of 1986 (SARA). Federal statute 49 CFR regulates shipment of hazardous materials by ground, air, and vessel. The Department of Transportation (DOT), which includes the Federal Motor Carrier Safety Administration (FMCSA), is responsible for enforcing 49 CFR.

Federal Aviation Administration (FAA)

Federal Aviation Administration (FAA) is responsible for regulating and overseeing all aspects of civil aviation in the United States. Its primary mission is to ensure the safety and efficiency of civil aviation, including air traffic control, certification of personnel and aircraft, and setting airport standards. The FAA sets and enforces safety regulations for aircraft design, manufacturing, and operation; manages the National Airspace System, including air traffic control towers, radar systems, and flight service stations; certifies aircraft, pilots, mechanics, and other aviation professionals; and sets standards for airport design, construction, and operation.

Project proponents proposing construction or alternations must submit form 7460-1, “Notice of Proposed Construction or Alteration.” The purpose of the FAA referral would be to determine if the proposed construction would constitute a potential hazard or obstruction to flight. Proposed structures in developed areas that would be shielded by existing structures or by natural terrain or equal or greater height, where it is obvious that the proposal would not adversely affect air safety, do not require FAA referral.

State

Hazardous Materials Regulations

The USEPA designates much of its regulatory authority to the individual states. In California, the USEPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). CalEPA serves as the umbrella agency for six boards/departments: the California Air Resources Board (CARB), the Department of Pesticide Regulation (DPR), the DTSC, the Department of Resources Recycling and Recovery (CalRecycle), the Office of Environmental Health Hazard Assessment (OEHHA), and the State Water Resource Control Board (Water Board) and associated Regional Water Quality Control Boards (RWQCB). State regulations require planning and management to ensure that hazardous materials are handled, stored, and disposed of properly to reduce health risks to humans environmental risk.

The DTSC works in conjunction with the USEPA to enforce and implement specific laws and regulations pertaining to hazardous wastes. California legislation, for which DTSC has primary enforcement authority, includes the Hazardous Waste Control Act and the Hazardous Substance Account Act. Most state hazardous waste regulations are contained in Title 27 of the CCR. The DTSC generally acts as the lead agency for soil and groundwater cleanup projects and establishes cleanup and action levels for subsurface contamination that are equal to, or more restrictive than, federal levels.

Under the authority of CalEPA, the Water Board and DTSC are responsible for overseeing the remediation of contaminated soil and groundwater sites. The provisions of Government Code 65962.5 (also known as the Cortese List) require the Water Board, DTSC, the California Department of Health Care Services (CDHCS), and CalRecycle to submit information pertaining to sites associated with solid waste disposal, hazardous waste disposal and/or hazardous materials releases to CalEPA. The Cortese List, which is updated at least annually, is used by state and local agencies, as well as developers, to identify potential contamination issues when planning development projects. The Water Board maintains Geotracker, a data management system for sites that impact groundwater or have the potential to impact groundwater. Geotracker contains sites that require groundwater cleanup including Leaking Underground Storage Tanks (LUST), Department of Defense, and Site Cleanup Program, as well as permitted facilities that could impact groundwater such as irrigated lands, oil and gas production, operating USTs and land disposal sites. The DTSC maintains Envirostor, an online data management system for tracking the cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known or suspected contamination issues.

State worker health and safety regulations related to construction activities are enforced by the California Division of Occupational Safety and Health (CalOSHA). Regulations include exposure limits and requirements for protective clothing and training to prevent exposure to hazardous materials. CalOSHA regulations concerning the use of hazardous materials in the workplace, as detailed in Title 8 of the CCR, include requirements for safety training, availability of safety equipment, implementation and maintenance of accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. Title 8 regulations (§3203) include requirements for worker safety training and injury/illness prevention programs contained in Senate Bill 198, which was adopted in 1990. CalOSHA enforces hazard communication program regulations that contain training and information requirements, including procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees at hazardous waste sites.

In accordance with the significance criteria assigned to the analysis of hazards and hazardous materials under CEQA, this section includes a discussion of the potential release of hazardous compounds from the proposed anaerobic digestion facility (ADF) and biomass conversion facility (BCF). However, airborne toxic compounds and potential associated health risks are discussed in more detail in Section 3.2, Air Quality. The following state agencies that have varying regulatory authority over emissions from ADFs and BCFs in the state of California.

- CalEPA oversees various environmental regulations that may apply to ADFs and renewable natural gas (RNG) production, including air quality, solid waste, and water quality regulations. Within CalEPA, the California Department of Resources Recycling and Recovery (CalRecycle) is involved with regulations related to organic waste management and diversion, which can include anaerobic digestion.

- The California Air Resources Board (CARB): CARB is primarily involved in regulating greenhouse gas emissions and establishing the Low Carbon Fuel Standard (LCFS) program. The LCFS program mandates that producers of petroleum-based transportation fuels reduce their carbon intensity, and RNG is included as a low-carbon fuel option, potentially generating credits within the program. CARB also plays a role in the implementation of regulations aimed at reducing methane emissions from waste sources, such as those mandated by SB 1383.

- California Department of Food and Agriculture (CDFA): The CDFA has a role in regulating certain aspects of RNG production, particularly concerning the use of anaerobic digesters that handle agricultural waste and packinghouse waste.

California Airport Land Use Planning Handbook

The California Airport Land Use Planning Handbook (CALUPH), published by the California Department of Transportation (Caltrans), Division of Aeronautics, is a statewide guidance document used to support airport-land use compatibility planning. The Handbook provides guidance, best practices, and recommended criteria to help Airport Land Use Commissions (ALUCs) and local agencies ensure that new land uses around airports remain safe, compatible with airport operations, and protected from aviation-related hazards. Chapter 4.5 Airspace Protection, outlines hazards to flight, which include physical hazards, wildlife, visual hazards, electronic hazards, and thermal hazards.

Section 21674.7 of the Public Utilities Code mandates that the CALUPH, published by the Division of Aeronautics of the Department of Transportation, must be used to guide the creation, adoption, or modification of an ALUCP. The handbook helps ensure that local agencies use criteria related to height, use, noise, safety, and density that are compatible with airport operations, aiming to prevent incompatible land uses near airports.

Section 21096 of the Public Resources Code requires a CEQA lead agency preparing an EIR for a project within an ALUCP boundary to utilize the CALUPH, as stated below:

21096. Technical Resources to Assist in Preparation of Environmental Impact Report as it Relates to Airport-Related Safety Hazards and Noise Problems; Use of Airport Land Use Planning Handbook; Negative Declaration for a Project

(a) If a lead agency prepares an environmental impact report for a project situated within airport land use compatibility plan boundaries, or, if an airport land use compatibility plan has not been adopted, for a project within two nautical miles of a public airport or public use airport, the Airport Land Use Planning Handbook published by the Division of Aeronautics of the

Department of Transportation, in compliance with Section 21674.5 of the Public Utilities Code and other documents, shall be utilized as technical resources to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems.

Local

Napa County Division of Environmental Health (NCDEH)

The NCDEH is the CUPA for Napa County. As the CUPA, the NCDEH coordinates and enforces numerous local, state, and federal hazardous materials management and environmental protection programs in the county. The NCDEH is responsible for implementation, enforcement, and administration of the Hazardous Materials Business Plan (HMBP) program for facilities located in Napa County (Napa County, 2025a). A HMBP is a document that businesses handling hazardous materials must create and maintain to protect public health, safety, and the environment. It details information about the types and quantities of hazardous materials handled, emergency response procedures, and employee training related to hazardous materials.

City of Napa 2040 General Plan

The City of Napa 2040 General Plan specifies policies to meet its relevant goal, which is to minimize risk to lives and property due to hazards and hazardous materials. The following goals and policies pertaining to hazardous materials that are relevant to the Project:

GOAL SN-2: Protect Napa residents from health and safety impacts related to the use, storage, manufacture, and transport of hazardous materials.

> SN 2-1: Promote cleanup of hazardous sites and safe disposal of hazardous materials.
>
> SN 2-2: Carefully evaluate new uses that rely extensively on the use of hazardous materials to weigh their public health risks against their benefit.
>
> SN 2-3: Continue to monitor and educate property owners with Underground Storage Tanks (USTs) to prevent leakage. Assist property owners with site cleanup if the site is to be redeveloped.

Napa County Airport Land Use Commission (ALUC)

The creation of ALUCs and the preparation of compatibility plans are requirements of the California State Aeronautics Act (Public Utilities Code Section 21670 et seq). Provisions for the creation of ALUCs were first established under state law in 1967. With limited exceptions, an ALUC is required in every county in the state. The fundamental purpose of ALUCs is to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. Many of the procedures that govern how ALUCs operate are defined by state law. Statutory provisions in the Public Utilities Code establish the requirements for ALUC adoption of compatibility plans, which airports must have these plans, and some of the steps involved in plan adoption. The law also dictates the requirements for airport land use

compatibility reviews by the ALUC. Two specific limitations on the powers of ALUCs are set in the statutes. First, ALUCs have no authority over areas "already devoted to incompatible uses (Public Utilities Code Section 21674a). The common interpretation of this clause is that ALUCs have no jurisdiction over existing land uses even if those uses are incompatible with airport activities. An ALUC cannot, for example, require that an existing incompatible use be converted to something compatible (Napa County, 2024).

Napa County Airport Land Use Compatibility Plan (ALUCP)

As adopted by the ALUC, the basic function of this ALUCP is to promote compatibility between the two airports and future land use development in their surrounding areas. The plan accomplishes this function through the establishment of a set of compatibility criteria applicable to new development around each airport. Additionally, the ALUCP serves as a tool for use by the ALUC in fulfilling its duty to review plans and regulations, and Major Land Use Actions of local agencies for consistency with the ALUCP criteria. Airport development plans, including plans for any new heliport anywhere in the county, are also subject to review by the ALUC. However, neither the ALUCP nor the ALUC have authority over existing land uses or over the operation of the airports. The 2024 ALUCP updates and entirely replaces the ALUCP adopted by the Napa County ALUC in April 1991 and amended in December 1999. The need for the comprehensive update arose primarily because of a desire to bring the plan up to current standards, reflect current airport layout plans (ALPs), and address stakeholder needs. The 2024 ALUCP applies to lands around the two public-use airports in the county: Napa County Airport and Angwin Airport – Parrett Field.

Bay Area Air Quality Management District (BAAQMD)

The BAAQMD is the public agency responsible for regulating stationary sources of air pollution in the nine-county San Francisco Bay Area. Its main goal is to protect public health and improve air quality by controlling emissions from various sources. The BAAQMD covers the nine counties surrounding the San Francisco Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, and portions of Solano and Sonoma. The agency regulates stationary sources of air pollution, which include factories, power plants, and other businesses that emit pollutants into the air and issues permits to these sources, ensuring they comply with air quality regulations. The agency also enforces these regulations, investigating complaints and taking action against violations.

Existing Hazardous Materials Conditions on Project Site

600 Tower Road (Northern) Parcel

The Project includes the parcel to the north (APN 057-110-025), referred to as the 600 Tower Road Parcel. Under the Project, this parcel would be used for inert materials processing and storage and equipment storage and is currently used for containers, equipment, and vehicle storage. Review of the Geotracker and Envirostor databases reveal that this site has no history of hazardous materials incidents, legacy contamination, or ongoing remediation. The Phase I Environmental Assessment conducted for the Southern Annexation Parcel did not identify the

600 Tower Road Parcel as a site with recognized environmental conditions and this site has not subject to reported hazardous materials releases (EGS, 2017).

The Napa Materials Diversion Facility (NMDF) Site

The NMDF is listed on several regulatory databases including National Pollutant Discharge Elimination System (NPDES), Registered Hazardous Waste Transporter Database (HWT), Active, Closed and Inactive Landfills - Solid Waste Information System, (SWF/LF -(SWIS)[1], Emissions Inventory Data (EMI),[2] Certified Processors Database (PROC), RCRA NonGen/NLR,[3] Facility Index System (FINDS)[4] and the Enforcement & Compliance History Information (ECHO)[5]. Inclusion on these databases are primarily for operational permitting. The NMDF (CERS ID[6] 0357147) operates in accordance with an Emergency Response Plan, Aboveground Storage Tank (AST) and hazardous materials inventory; Solid Waste Permit 28-AA-0030; Waste Discharge ID (WDID) 2281022443; and a current SWPPP dated 2015 (prepared by Frog Environmental, Inc.). According to NCDEM (CUPA) records available on the OnBase Database, the operational permits appear to be current (Napa County, 2025a).

Southern Annexation Parcel

The Southern Annexation Parcel is a 2.87-acre portion of the adjacent parcel to the south of the existing NMDF (formerly APN 057-090-060). The existing parcel was subdivided to create a smaller 2.87-acre parcel (APN 057-090-087). It has remained undeveloped since at least 1947. The adjacent waste facilities, NMDF to the north and Devlin Road Transfer Station to the south, were built around 1994. Prior to 1994, the site and its surroundings were part of a rural residential and agricultural hay farm in Middleton. The previous farm's residence, barn, and other buildings were located where the Devlin Road Transfer Station now stands. According to the Geotracker and Envirostor databases, the Southern Annexation Parcel has no reported hazardous materials

[1] Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

[2] Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

[3] RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined RCRA. This category within RCRAInfo identifies facilities that are not currently generating hazardous waste. This could include facilities that have ceased hazardous waste generation but may still be involved in other RCRA activities like storage or disposal, may have generated hazardous waste in the past but are no longer doing so, or be involved in activities related to hazardous waste management but are not classified as generators.

[4] The Facility Index System is a database maintained by the U.S. Environmental Protection Agency (EPA) that identifies facilities regulated by the EPA. It's a central system that provides a unique identification number (EPA-ID) for each facility and links to other EPA databases for more detailed information.

[5] ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

[6] CERS (California Environmental Reporting System) IDs are assigned to individual facilities. A facility is a building or buildings, or structure or structures at a fixed location where hazardous materials or wastes are used, handled, or stored.

incidences, soil and groundwater investigations, or required remediation. The Phase 1 Environmental assessment conducted for the parcel by EGSs in 2017 did not identify recognizable environmental conditions on this parcel (EGS, 2017).

Hazardous Materials Conditions at Neighboring Sites

Development surrounding the Project site area consists of mixed-use warehousing and light industrial including a concrete culvert/pipe manufacturing and storage facility to the east; the Napa-Vallejo Waste Authority's Devlin Road Transfer Station to the south; and the Napa County Airport across the railroad tracks to the west. Information on environmental concerns on properties neighboring the Project site was obtained through the Geotracker and Envirostor databases. The Geotracker database lists three sites with previous environmental concerns within one-quarter mile of the Project site:

Stucco Stone Products (Geotracker Global ID No. T0605500145; SWRCB Case No. 28-0161; NCDEH No. 0422). This site is shown to be located adjacent and to the east across Devlin Road from the NMDF site. In October 1991, a leak in an underground gasoline storage tank was discovered and then stopped during tank closure activities. The LUST case was completed closed by the SWRCB and NCDEH in 1995; however, a report on the extent of soil contamination and subsequent soil cleanup remediation activities was not available (Water Board, 2025).

Syar Industries – Napa Shop (Geotracker Global ID No. T0605500296 SWRCB Case No. 28-0343; NCDEH No. 0139). This site is shown to be located adjacent and to the north across Tower Road from the NMDF site. Information available about this case indicates that a leak in an underground diesel tank was discovered and stopped in November 1991. No information on the extent of contamination or cleanup activities was available but the case was closed by the lead agency (NCDEH) in November 2001 and no further action was required (Water Board, 2025).

Hydro Conduit Corporation (Geotracker Global ID No. T0605500067; SWRCB Case No. 28-0072; NCDEH Case No. 0037). This site is located approximately one-quarter mile east of the NMDF site (385 Tower Road). Information available about this case indicates that a leak was discovered in an underground diesel tank in September 1988. No additional clean-up information was available. The regulatory actions were completed, and the case was closed in October 1992.

The DTSC's Envirostor database of hazardous materials and cleanup sites identified one hazardous waste site as located at 800 Tower Road. This site was operated under the name of Asbury Environmental Services/PRC Patterson Inc. According to the database entry, this business is considered historical and non-operating. As of January 2016, this facility was determined to be "clean and closed" with a closure document uploaded to the Envirostor database (DTSC, 2025).

Schools

There are no existing schools within one-quarter mile of the Project site. The nearest school is Napa Junction Magnet Elementary School, approximately 1.8 miles south of the Project site.

Airports

Napa County airport is situated to the west/northwest of the Project site. Directly south of the airport, a range of facilities including hangars and parking are integrated into the airport's operations. The Project site is within Napa County's ALUCP for the Napa County airport.

3.7.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the *CEQA Guidelines* states that a Project would result in a significant impact to Hazards and Hazardous Materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- 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;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- 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 create a significant hazard to the public or environment;
- 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, result in a safety hazard or excessive noise for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Topics with No Impact

Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

The proposed BCF and ADF have the potential to emit a range of toxic air pollutants, depending on feedstock type, conversion process, and emission controls. These may include particulate matter with adsorbed metals or organics, hazardous air pollutants such as benzene, formaldehyde, and polycyclic aromatic hydrocarbons, as well as trace dioxins, furans, and heavy metals from combustion or gasification. Anaerobic digestion systems can also release hydrogen sulfide, ammonia, and volatile organic compounds if biogas is not properly captured and controlled. The BCF and ADF would not involve the use, storage, or disposal of acutely hazardous materials and are not anticipated to generate emissions at levels that would be classified as acutely hazardous.

Both facilities would be subject to regulatory oversight by the BAAQMD, which imposes stringent air toxics and criteria pollutant limits to ensure compliance with applicable federal, state, and local air quality standards. Adherence to these regulations provides a robust framework for minimizing potential health risks and environmental impacts associated with facility operations. Furthermore, the permitting process requires ongoing monitoring and implementation of Best Available Control Technologies (BACT), which collectively ensure that emissions from the BCF and ADF remain within acceptable thresholds and do not result in significant adverse impacts on surrounding communities or regional air quality. The Project site is not within one-quarter mile of an existing or proposed school. The closest school to the Project site is 1.8 miles to the south and the industrial setting and proximity to the Napa County Airport would preclude development of new schools in this area. Therefore, there is no impact, and this topic is not analyzed further.

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 create a significant hazard to the public or environment.

As discussed above, California Government Code 65962.5 requires CalEPA to compile and update a list of hazardous waste sites and facilities also known as the "Cortese List". The "Cortese List" consists of a collection of databases maintained by select California agencies and Boards that include properties involved in hazardous materials use, hazardous waste, or sites with confirmed soil and groundwater contamination. Geotracker and Envirostor are the two primary databases. The Project site parcels are not included on lists of hazardous waste sites generated in compliance with California Government Code 65962.5. As discussed in the setting above, neighboring sites have a history of closed hazardous materials cases with no evidence of ongoing contamination or risk to the Project site. Therefore, there is no impact, and this issue is not analyzed further.

Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The 600 Tower Road Parcel and the NMDF site are existing developed light industrial properties located on paved county-maintained roads with clear ingress and egress. The intended uses of the Tower Road Parcel and the proposed Project improvements at the NMDF site would not restrict public roadways or obstruct emergency use of Tower or Devlin Roads. While the Project would increase vehicle traffic and construct a new driveway off Devlin Road for secondary access to the Southern Annexation Parcel, it would not restrict or obstruct the use of Tower, Devlin and South Kelly Roads and emergency evacuation access to Highway 29. Therefore, there is no impact and this issue is not analyzed further.

Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

The potential Project impacts associated with wildland fires are addressed in Chapter 4, Other CEQA Topics. This topic is not further analyzed in this section.

Impact Analysis

Impact 3.7.1: Project construction and operation could create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous waste or through the reasonably foreseeable release of hazardous materials into the environment. (Less than Significant)

Construction Operations

Project construction activities could involve the use, transport, and disposal of hazardous materials such as gasoline, diesel fuel, oils, lubricants/greases, paints, solvents and other hazardous substances that are standard for construction activities. These materials are typically packaged, transported, stored, and used in consumer qualities under manufacturer recommendations. Fuels for construction equipment is usually brought onsite to service equipment rather than being stored temporarily on the construction site. Hazardous material releases can occur during vehicle refueling, application of building materials, and other inadvertent mishaps. Releases typically involve minor spillages of motor vehicle fuels and oils, and other substances used for heavy equipment or the release of paints, solvents and glues.

Accidental releases of substances that are hazardous to workers and the public or detrimental to the environment are responded to and addressed in accordance with the Stormwater Pollution Prevention Plan (SWPPP) that is required for construction sites under the current NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). Spills of hazardous materials on construction sites are typically handled in accordance with the SWPPP by the construction contractors and are contained and cleaned up in a timely manner utilizing Project-specific Best Management Practices (BMPs).

Project Operations

The proposed use of the 600 Tower Road Parcel for inert materials processing/storage and equipment storage would not involve hazardous material handling, processing, or transportation and thus there is a low potential for the release of hazardous materials that would represent a hazard to the public or the environment.

The NMDF does not accept, process, or transport hazardous wastes and thus the proposed increase in daily tonnage would not represent an increased risk of hazardous material exposure to the public or environment. Non-hazardous emissions and odors from the existing NMDF facility would not substantially increase.

The production and storage of biogas during operation of the proposed ADF could result in the release of secondary compounds produced during the biomethane production process that are classified as hazardous by USEPA such as volatile organic compounds (VOC). Examples of these VOC include acetaldehyde, ammonia, benzene, formaldehyde, methanol, and Naphthalene. During biogas production and conditioning of RNG, the proposed ADF would implement stringent toxic emission controls, including gas scrubbing, particulate filtration, and continuous monitoring of air toxics, to minimize the release of harmful substances such as hydrogen sulfide,

volatile organic compounds, and trace metals. In addition, it would employ BACT as applicable, which represent the most effective and technologically feasible methods for reducing emissions, further limiting the release of pollutants and ensuring compliance with regulatory standards. Safety procedures are carefully followed throughout the production process, including gas leak detection, confined space protocols, fire and explosion prevention measures, and regular equipment inspections, to protect both workers and the surrounding community. While modern ADF facilities that produce RNG are designed to minimize emissions, there remains a potential for small releases of toxic gases if controls fail or operational anomalies occur, emphasizing the importance of robust monitoring, emergency response plans, and regulatory compliance.

In California, RNG production is primarily regulated by CARB, which oversees air quality and greenhouse gas emissions statewide. CARB's Low Carbon Fuel Standard (LCFS) program encourages the use of low-carbon fuels, including RNG, by setting annual carbon intensity reduction targets and providing credits for qualifying fuels. Locally, the BAAQMD regulates air quality in Napa County, including emissions from stationary sources such as RNG production facilities. BAAQMD enforces air pollution control measures and issues permits to ensure compliance with air quality standards.

The proposed BCF would not accept, transport, process, or store hazardous materials or waste. However, in some cases, by-products from the biomass conversion process could produce and emit secondary compounds such as VOCs.[7] The production and release of hazardous air emissions from BCFs are regulated under California air quality laws, including the California Health and Safety Code, guidance from the CARB on air toxics, and BAAQMD regulations specifically addressing emissions from biomass conversion and anaerobic digestion processes. The BCF would be subject to rigorous BAAQMD review and permitting, which includes air toxics screening to identify potential emissions of hazardous compounds such as particulate matter, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and nitrogen oxides (NOx). To minimize these emissions, the facilities would be required to implement BACT, as applicable. BACT is enforced through BAAQMD Regulation 2 Rule 2 (New Source Review) during the permitting process. BAAQMD regulations are enforceable by law and are under the regulatory framework of the Clean Air Act. BACT measures for biomass conversion typically include high-efficiency particulate filters or baghouses to capture fine particles, wet or dry scrubbers to remove acid gases and VOCs, selective catalytic reduction (SCR) or non-catalytic reduction systems to reduce NOx, and optimized combustion control to limit formation of toxic byproducts. By incorporating these controls, emissions of hazardous air pollutants would be substantially reduced, ensuring that air toxics remain below BAAQMD significance thresholds and that potential impacts on public health are minimized.

Project construction and operations would not create a significant hazard to the public or the environment through the use or disposal of hazardous materials. Although the ADF and BCF processes could emit secondary air toxics, the use of BACT—including high-efficiency filters, scrubbers, NOx reduction systems, and optimized combustion controls—combined with ongoing monitoring and BAAQMD oversight, would reduce emissions of particulate matter, VOCs, NOx,

[7] VOCs can include acetaldehyde, ammonia, benzene, formaldehyde, methanol, and Naphthalene.

and other hazardous pollutants to well below significance threshold. BAAQMD ongoing monitoring would consist of source testing to verify emissions comply with specific permit conditions, emissions monitoring and report submission of monitoring data, and BAAQMD inspections and audits. Additionally, a Health Risk Assessment (HRA) was conducted (see Section 3.2, Air Quality) to evaluate potential exposure to air toxics from the facility. The HRA was conducted in accordance with requirements from the BAAQMD, which oversees air quality permitting for new and modified sources of toxic emissions, and follows guidance from the OEHHA. The results of the HRA concluded that health risk impacts would be less than significant (Section 3.2, Air Quality). Therefore, the potential for air toxics to pose a hazard is minimized, and this impact is less than significant.

Mitigation Measures

None required.

Impact 3.7.2: The Project could result in an airport safety hazard for people residing or working in the Project area. (Significant)

The Project site is adjacent and east of the Napa County Airport and within the Napa County ALUCP. The distance from the east terminus of Runway 24 to the Tower Road Parcel, the NMDF site and the Southern Annexation Parcel is 1,300, 1,500 and 2,000 feet, respectively. The ALUCP designates eight "Airport Compatibility Zones" (A, B1, B2, B3, C, C1, D2, and E) that correspond to certain geographic areas depending on factors including distance from the airport and orientation to runways. The Project components of concern for this analysis are the ADF on the NMDF site and the BCF on the Southern Annexation Parcel. Development must be compatible with the ALUCP and Chapter 18.80 of the Napa County Code of Ordinances.

600 Tower Road Parcel

Based on review of the Napa County Airport 2024 ALUCP Compatibility Policy Map (ALUCP Compatibility Map), the 600 Tower Road Parcel is at least partially within Compatibility Zone A. Within ALUCP Zone A, which is considered the runway protection zone, land uses are limited to open space, pasture, auto parking, aircraft tie-down, and agricultural uses that do not cause a hazard to flight. This is an area of high risk from low flying aircraft (§18.80.060 Napa County Code of Ordinances). The Project does not propose development on the 600 Tower Road Parcel and the current uses on the parcel (storage of containers, vehicles, and equipment) are compatible with the ALUCP.

ADF on the Existing NMDF Site

Prior to the 2024 ALUCP Update, the NMDF site was not deemed an incompatible use by the ALUC. The 2024 ALUCP Compatibility Map indicates that the NMDF site is within Compatibility Zones A (small section at the northern end of the parcel), B1, and B2. Zones B1 (Inner Approach Departure Zone) and B2 (Inner Turning Zone) are areas restricted to low intensity uses such as golf courses, nurseries, outdoor storage, and mini storage. These zones

represent a substantial risk to low flying aircraft. Certain uses are normally not acceptable in Compatibility Zone B based on concerns related to size, density of use, mobility, noise sensitivity or propensity to attract birds. According to the Basic Compatibility Criteria for the Napa County Airport as presented in the 2024 ALUCP, solid waste disposal and transfer facilities, landfills, incineration, and recycling facilities are listed as incompatible in Zones B1 and B2 because of their potential to attract birds, generate dust, produce smoke or steam plumes, create electronic interference, or otherwise pose hazards to flight (Napa County, 2024).

The proposed ADF could be considered an incompatible use under the 2024 ALUCP if it were to be sited outside the boundaries of an existing land use, however the ADF would be sited on the existing NMDF site. The ALUC reviews new or changed land use proposals against the ALUCP. The existing use on the NMDF site is vested and would not conflict with the ALUCP.

The CALUPH, Chapter 4.5 Airspace Protection, outlines hazards to flight (CALUPH, beginning on pg. 4-34), which include physical hazards, wildlife, visual hazards, electronic hazards, and thermal hazards. The proposed ADF on the NMDF site would not increase physical hazards as the building would be consistent with the height of the adjacent MRF building and would not exceed 35 feet. Wildlife hazards would not increase at the NMDF site because organics are processed "in-vessel" with the ADF and would not increase bird attraction to the site. Visual hazards (i.e., dust, steam or smoke) would not noticeably increase compared to existing conditions because the biogas is converted into renewable natural gas (RNG) for vehicle fueling onsite and the overall process produces negligible dust, steam, and smoke. Electronic and thermal hazards would not significantly increase compared to existing conditions at the NMDF, as the ADF does not require a large electrical load that could interfere with radio communications or navigation signals, and the converted RNG would be combusted by collection vehicles, primarily offsite. As stated in Section 3.10, Noise, the project would not result in any airport noise impacts, as the ADF is an industrial facility on the existing NMDF site with limited onsite employees.

BCF on the Southern Annexation Parcel

According to the ALUCP Compatibility Map, the Southern Annexation Parcel is located in Compatibility Zone B2. The proposed BCF may represent an incompatible land use due to its renewable energy and bioenergy component and because its height may exceed maximum height requirements for this compatibility zone (currently proposed at roughly 45 feet in height). Due to the proposed use and height, ALUC referral is required for the BCF under Napa Municipal Code Section 17.34.070. Section 17.34.070(A). The development of the BCF would constitute new construction on an existing vacant parcel, and thus, the ALUC would be required to make a compatibility determination prior to Project approval. In addition, due to its proposed height, the BCF would require FAA approval. The Project sponsor is required to submit FAA form 7460, Notice of Proposed Construction or Alteration. A 7460 analysis, more formally known as an Obstruction Evaluation/Airport Airspace Analysis (OE/AAA), is a process by which the FAA evaluates proposed construction projects near airports to identify and mitigate potential hazards to navigable airspace and to ensure that new structures, alterations, or temporary obstructions would not pose a risk to aircraft during takeoff, landing, or flight operations. In addition to these physical hazards the FAA also evaluates the potential for electromagnetic interference effects

upon navigable airspace and air navigation facilities. The FAA then issues a determination letter, which may be conditional or require adjustments to the project. The proposed structure must be built according to the approved plans and any conditions specified in the FAA's final determination letter (FAA, 2025).

The Project sponsor submitted FAA Form 7460 on June 3, 2025, and the FAA issued its Determination Letter on July 29, 2025 (see **Appendix H**). The FAA study evaluated the facility's structures, including their height, location, and use, to determine if they posed a hazard to air navigation. The FAA concluded that the structures do not exceed obstruction standards and do not present a hazard to air navigation. While no marking or lighting is required for aviation safety, the FAA recommended voluntary compliance with its guidelines. The FAA study also confirmed that the proposed BCF presents no risk to national security.

As noted previously, the ALUC would be required to make a compatibility determination prior to project approval. If the ALUC determines that the proposed land use action (the "Project") is inconsistent with the ALUCP, the ALUC must notify the City of Napa in writing and include the reasons for the inconsistency determination. If the City wishes to proceed with the Project, they must overrule the ALUC determination in accordance with the provisions of state law.[8] The City must make specific findings that the proposed action (the "Project") is consistent with the purposes of the ALUC statutes as set forth in the Public Utilities Code and the findings must be supported by substantial evidence. Specifically, the City must make findings that project will not:

- Impair the orderly, planned expansion of the airport;
- Adversely affect the utility or capacity of the airport (such as by reducing instrument approach procedure minimums); or
- Expose the public to excessive noise and safety hazards.

In accordance with the ALUC statutes, the City must also

- Provide to the ALUC and Caltrans a copy of the proposed decision and findings to overrule the ALUC at least 45 days prior to the hearing date.
- Hold a public hearing on the matter. The public hearing shall be publicly noticed consistent with the agency's established procedures.
- Include any comments received from the ALUC, Caltrans, the FAA, Airport owner, or the public in the public record of any final decision to overrule the ALUC.
- Make a decision to overrule the ALUC by a two-thirds vote of its governing body.

[8] See Public Utilities Code Section 21670(a), 21675.1(d), 21676 and 21676.5(a).

The ALUC statutes indicate that if a local agency other than the airport owner overrules the ALUC, then the agency owning and operating the airport "shall be immune from liability for damages to property or personal injury caused by or resulting directly or indirectly from the City's decision to overrule the ALUC's compatibility determination or recommendation.

Although the BCF on the Southern Annexation Parcel could be considered an incompatible land use due to its proximity to the Napa County Airport, this is a planning and policy matter, not a significant environmental effect under CEQA. Inconsistency with a plan, such as the ALUCP, is not, by itself, an adverse physical effect on the environment.[9]

The CALUPH, Chapter 4.5 Airspace Protection, outlines hazards to flight (CALUPH, beginning on pg. 4-34), which include physical hazards, wildlife, visual hazards, electronic hazards, and thermal hazards. The FAA concluded that the structures associated with the BCF do not exceed obstruction standards and do not present a physical hazard to air navigation.

The BCF would not increase bird attraction to the project area compared to existing conditions because the feedstock does not attract birds. The FAA *Advisory Circular, Hazardous Wildlife Attractants on or Near Airports*, states that branches and woodchips generally do not attract wildfire that is hazardous to air travel (FAA, 2020). Since the BCF uses woody feedstock only, bird attraction is not an issue.

No significant smoke or steam or dust emissions are produced as the biogas is converted into renewable electricity and the overall process produces negligible dust, steam, and smoke. In regards to electronic and thermal hazards, the FAA review of the project did not indicate the potential for thermal or electromagnetic interference effects upon navigable airspace and air navigation facilities. This is likely because of the small-scale and overall power output of the facility (1.5 MW).

Furthermore, the BCF would not be considered critical community infrastructure, as it is designed to provide power to NMDF operations, which is also served by PG&E. Potential damage to the BCF would not result in significant adverse effects to public health and welfare beyond the immediate vicinity of the facility. As stated in Section 3.10, Noise, the project would not result in any airport noise impacts, as the BCF is an industrial facility with limited onsite employees.

Therefore, based on the information available to the City, there are no known hazards associated with the BCF that could significantly impact public safety, including possible hazards to the airport or surrounding community. However, in an abundance of caution, given that the ALUC

[9] *Lighthouse Field Beach Rescue v. City of Santa Cruz (2005) 131 Cal.App.4th 1170, 1207* ("an inconsistency between a project and other land use controls does not in itself mandate a finding of significance. It is merely a factor to be considered in determining whether a particular project may cause a significant environmental effect."].) Quoted from the California Natural Resources Agency, November 2018, *Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines,* OAL Notice File No. Z-2018-0116-12, page 95, Available at: https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2018_CEQA_Final_Statement_of%20Reasons_111218.pdf?utm

has not yet considered the Project and the City has not received feedback on the Project design in relation to airport hazards, the development of the BCF would be a significant impact.

Mitigation Measures

Mitigation Measure 3.9.2: If it is determined that the Project is conditionally compliant with the ALUCP, the City shall agree to the conditions, as feasible. If it is determined that the Project does not comply with the ALUCP, the City shall consider ALUC feedback and amend (as feasible) and resubmit the Project for ALUC Executive Director Review.

Level of Significance After Mitigation

Implementation of Mitigation Measure 3.9.2 (See Section 3.9, Land Use and Land Use Planning) would reduce this impact, but without knowing the specific conditions or feedback from the ALUC, and if ALUC conditions or potential changes to Project design are feasible, the impact would be significant and unavoidable.

3.7.3 REFERENCES

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3.8 HYDROLOGY AND WATER QUALITY

This section describes water resources related federal, State, and local laws, ordinances, and regulations relevant to the Project as well as baseline conditions relating to surface water and groundwater hydrology and water quality for the Project site. The section then analyzes the Project's impacts to surface water and groundwater hydrology and water quality, including whether the Project would violate water quality standards or waste discharge requirements, alter existing drainage patterns of the site or area, contribute to or create polluted runoff, degrade surface and groundwater quality, or increase flood risks on- or off-site.

3.8.1 SETTING

Regulatory Setting

Federal Regulations

Executive Order 11988

Under Executive Order 11988, FEMA is responsible for management of floodplain areas defined as the lowland and relatively flat areas adjoining inland and coastal waters subject to a one percent or greater chance of flooding in any given year (the 100-year floodplain). FEMA requires that local governments covered by federal flood insurance pass and enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year floodplain. As discussed below under "Existing Conditions", the Project site is not within a FEMA 100-year floodplain.

Clean Water Act

Under the Clean Water Act (CWA) of 1977, the U.S. Environmental Protection Agency (USEPA) seeks to restore and maintain the chemical, physical, and biological integrity of the nation's waters. The statute employs a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The CWA authorizes the USEPA to implement water quality regulations. The relevant sections of the CWA are summarized below.

CWA Section 303: Water Quality Standards and Implementation Plans

Section 303 of the CWA requires states to designate beneficial uses for water bodies or segments of water bodies and to establish water quality standards to protect those uses for all waters of the U.S. Under Section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of impaired waters. Impaired waters are waters that do not meet water quality standards established by the state, even after point sources of pollution have been equipped with the minimum required levels of pollution control technology. The law requires that these jurisdictions establish a priority ranking for listed waters and develop action plans to improve water quality. Inclusion of a water body on the Section 303(d) List of Impaired Water Bodies triggers development of a Total Maximum Daily Load (TMDL) for that water body and a plan to control the associated pollutant/stressor on the list. The TMDL is the maximum amount of a

pollutant/stressor that a waterbody can assimilate and still meet the water quality standards. Typically, a TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. In accordance with Section 303(d), the Regional Water Quality Control Board (RWQCB) has identified impaired water bodies within its jurisdiction, and the pollutant or stressor responsible for impairing the water quality. Detailed discussion of impaired water bodies relevant to the Project, including the pollutants that cause the impairments, and the potential sources of the pollutants are discussed under "Surface Water Quality," below.

CWA Section 401: Water Quality Certification

Section 401 of the CWA (33 United States Code [USC.] §1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into navigable waters to obtain a certification from the State in which the discharge originates. The certification ensures that the discharge will comply with the applicable effluent limitations and water quality standards. The RWQCB is responsible for implementing Section 401 of the CWA in California.

CWA Section 402: National Pollutant Discharge Elimination System (NPDES)

The NPDES permit program under Section 402 of the CWA is one of the primary mechanisms for controlling water pollution through the regulation of sources that discharge pollutants into waters of the United States. The USEPA has delegated authority of issuing NPDES permits in California to the State Water Resources Control Board (SWRCB), which has nine regional boards. The San Francisco Bay RWQCB regulates water quality in the Project area. The NPDES permit program is discussed in detail under State Regulations, below.

CWA Section 404: Permits for Fill Placement in Waters of The United States (Including Wetlands)

At the federal level, "waters of the United States" are regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the CWA. The term "waters of the United States" is defined in the Code of Federal Regulations (33 Code of Federal Regulations [CFR] 328.3[a]; 40 CFR 230.3[s]), and includes waters that could be used in interstate or foreign commerce, interstate wetlands, and other waters such as intrastate lakes, rivers, streams (including intermittent streams), mud flats, sand flats, sloughs, wet meadows, playa lakes, or natural ponds, where the use, degradation, or destruction of which could affect interstate or foreign commerce. Waters of the United States do not include prior converted cropland, stock watering ponds, and agricultural irrigation ditches created in upland areas. Wetlands are defined by the federal government (CFR, Section 328.3[b]) as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Any activity that involves a discharge of dredged or fill material into waters of the United States, including wetlands, is subject to regulation by the USACE.

A jurisdictional wetland delineation report for the Project site was submitted to the USACE, and the wetland boundaries were verified by Sahrye Cohen, Corps project manager, during a site visit on January 23, 2019 (Swift Biological, 2024). The Project site boundaries were adjusted based on

the presence of jurisdictional wetlands to ensure that the Project avoids identified wetlands and a 50-foot buffer from all delineated wetlands has been established. No wetlands are located within the Project site. See Section 3.3, Biological Resources, for additional details.

California Toxics Rule, 40 CFR 131.38

On May 18, 2000, the USEPA promulgated numeric water quality criteria for priority toxic pollutants and other provisions for water quality standards to be applied to waters within California. USEPA promulgated this rule based on the Administrator's determination that the numeric criteria are necessary in California to protect human health and the environment. The rule fills a gap in California water quality standards that was created in 1994 when a state court overturned the state's water quality control plans containing water quality criteria for priority toxic pollutants. Thus, the state of California has been without numeric water quality criteria for many priority toxic pollutants as required by the CWA, necessitating this action by USEPA. These federal criteria are legally applicable in the state of California for inland surface waters, enclosed bays, and estuaries for all purposes and programs under the CWA. The USEPA and the SWRCB have the authority to enforce these standards, which are incorporated into the NPDES permits that regulate existing discharges in the project area. The NPDES permit program is discussed in detail under State Regulations, below.

State Regulations

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) provides the basis for water quality regulation within California. This Act establishes the authority of the SWRCB and the nine RWQCBs. The SWRCB administers water rights, sets State policy for water pollution control, and implements various water quality functions throughout the State, while the RWQCBs conduct planning, permitting, and most enforcement activities.

Under State law anybody discharging "waste" (including clean fill, riprap or other revetment, excavation sidecasting, dredge spoils, soil displaced while clearing vegetation, etc.) where it could affect waters of the State (any surface or sub-surface water) must first file a "report of waste discharge" (WDR, see discussion below) with the appropriate RWQCB, which will regulate the discharge as necessary to protect the beneficial uses of the waters. This is completed during the Section 401 process for those waters of the State also covered under the CWA. For waters of the State not covered under the CWA, the RWQCB regulates discharges using the Porter-Cologne Water Quality Control Act.

The Porter-Cologne Water Quality Control Act requires the SWRCB and/or the RWQCBs to adopt statewide and/or regional water quality control plans, the purpose of which is to establish water quality objectives for specific water bodies. The RWQCB has prepared the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan) (RWQCB, 2019) that establishes water quality objectives and implementation programs to meet the stated objectives and to protect the beneficial uses of the water bodies (discussed under "Surface Water Quality", below). The act also authorizes the NPDES program under the CWA, which establishes effluent limitations and

water quality requirements for discharges to waters of the state. Most of the implementation of SWRCB's responsibilities is delegated to the nine regional boards.

NPDES Waste Discharge Program

The federal CWA established the NPDES program to protect the water quality of receiving waters of the United States. Under the CWA, Section 402, discharging pollutants to receiving waters of the United States is prohibited unless the discharge complies with an NPDES permit. Effluent limitations serve as the primary mechanism in NPDES permits for controlling discharges of pollutants to receiving waters both from construction activities and from discharges from operation of municipal or industrial facilities. When developing effluent limitations for an NPDES permit, a permit applicant must consider limits based on both the technology available to control the pollutants (i.e., technology-based effluent limits) and limits that are protective of the water quality standards of the receiving water (i.e., water quality-based effluent limits[1] if technology-based limits are not sufficient to protect the water body). For inland surface waters and enclosed bays and estuaries, the water-quality-based effluent limitations are based on criteria in the National Toxics Rule and the California Toxics Rule, and objectives and beneficial uses defined in the applicable Basin Plan. There are two types of NPDES permits: individual permits tailored to an individual facility and general permits that cover multiple facilities or activities within a specific category. The NPDES permits relevant to the Project are described below.

NPDES Construction General Permit

California adopted the current NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order no. WQ 2022-0057-DWQ) (Construction General Permit or CGP) on September 8, 2022, and which became effective on September 1, 2023, superseding Order 2009-0009-DWQ as amended by Order 2010-0014-DWQ and 2012-0006-DWQ. The CGP regulates construction site stormwater management. Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the general permit for discharges of stormwater associated with construction activity. The Project would be required to comply with the permit requirements to control stormwater discharges during construction. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation, as well as construction of buildings or other facilities.

In the Project area, the Construction General Permit is implemented and enforced by the San Francisco Bay RWQCB, which administers the stormwater permitting program. To obtain coverage under this permit, project operators must electronically file Permit Registration Documents, which include a Notice of Intent (NOI), a Stormwater Pollution Prevention Plan (SWPPP), and other compliance-related documents. The SWPPP identifies BMPs that must be implemented to reduce construction effects on receiving water quality based on potential pollutants. The BMPs identified are directed at implementing both sediment and erosion control measures and other measures to control potential chemical contaminants. In addition, the SWPPP

[1] Water quality-based effluent limits specify the level of pollutant (or pollutant parameter), generally expressed as a concentration, that is allowable

is required to contain a visual monitoring program and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Examples of typical construction BMPs include scheduling or limiting certain activities to dry periods, installing sediment barriers such as silt fence and fiber rolls, and maintaining equipment and vehicles used for construction. Non-stormwater management measures include installing specific discharge controls during certain activities, such as paving operations, vehicle and equipment washing and fueling. The SWPPP also includes descriptions of the BMPs to reduce pollutants in stormwater discharges after all construction phases have been completed at the site (post-construction BMPs). Dischargers are responsible for notifying the RWQCB of violations or incidents of non-compliance, as well as for submitting annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected.

The Construction General Permit includes requirements for a site-specific risk-level assessment,[2] an active stormwater effluent monitoring and reporting program during construction (for Risk Level 2 and 3 sites), and numeric effluent limitations for pH and turbidity as well as requirements for qualified professionals who prepare and implement the plan. A state-certified Qualified SWPPP Developer (QSD) must prepare the risk assessment and Construction SWPPP, and a state-certified Qualified SWPPP practitioner (QSP) must oversee implementation of the Construction SWPPP.

NPDES Industrial General Permit

In November 1990, as part of the CWA, the USEPA published final regulations that establish application requirements for stormwater permits. The regulations require specific categories of industrial facilities which discharge stormwater to obtain coverage under the NPDES General Permit No. CAS000001 for Discharges of Storm Water Associated with Industrial Activities (NPDES Industrial Permit or IGP). The NPDES Industrial Permit requires regulated facilities to (among other things):

- Prepare and maintain a SWPPP (discussed below);
- Implement stormwater BMPs to minimize discharge of pollutants in runoff;
- Conduct regular inspections of the facility during both wet and dry weather;
- Collect and analyze samples of runoff at least twice per year from each discharge location; and
- Prepare and submit annual reports on stormwater management activities.

Industrial facilities that discharge stormwater either directly to surface waters or indirectly, must be covered by a permit. This includes the discharge of "sheet flow" through a drainage system or

2 The Construction General Permit defines three levels of risk (Risk Levels 1, 2, and 3) that may be assessed for a construction site. Risk is calculated based on the "project sediment risk," which determines the relative amount of sediment that can be discharged given the project and location details, and the "receiving water risk" (the risk sediment discharges pose to the receiving waters). Risk Level 1 corresponds to a low risk, Risk Level 2 to a moderate risk, and Risk Level 3 to a high risk.

other conveyance. The permit also prohibits non-stormwater discharges into an industrial stormwater system and is intended to authorize discharges composed entirely of industrial stormwater.

The NPDES Industrial Permit requires dischargers to file a Notice of Intent requesting coverage under this permit, which has been done for the Napa Materials Diversion Facility (NMDF) site (SWRCB, 2023). The NPDES Industrial Permit also requires dischargers to prepare and implement both a SWPPP and a SWPPP Monitoring and Reporting Program (MRP) and to submit these plans to the RWQCB. Consistent with NPDES requirements, a SWPPP and an MRP have been prepared (NCMR, 2020) and implemented for the NMDF site.

Waste Discharge Requirements

California's regional boards also oversee permitting as authorized under the Porter-Cologne Water Quality Control Act. If a project does not require federal permitting, such as an Industrial NPDES Permit for discharges to waters of the United States, it may still require a state permit. Found in Division 7 of the California Water Code, the Porter-Cologne Act requires persons who discharge waste that could affect the quality of waters of the State to file a Report of Waste Discharge with the appropriate regional board. Each regional board can adopt Waste Discharge Requirement (WDR) General Orders (GOs) or individual WDR orders to regulate such discharges, and a given discharger will be subject to Waste Discharge Requirements (WDRs) either under a GO or a project specific state permit, or both. WDRs usually include discharge prohibitions and discharge specifications including flow volumes and water quality constituent limitations to which a discharger must adhere. WDRs usually impose water quality monitoring requirements and may require liner systems or other engineered features.

The limitations imposed by WDRs vary from region to region and from project to project, depending upon proposed discharge characteristics, and sensitivities of affected resources. In this manner, WDRs protect waters of the State from significant water quality degradation. Alternatively, if no degradation of water quality is anticipated from a proposed discharge, the regional board may issue a conditional waiver of WDRs.

General Order for Commercial Composting Operations

The SWRCB adopted a General Order for Commercial Composting Operations (Order WQ 2015-0121-DWQ General Waste Discharge Requirements for Composting Operations; Compost General Order) that applies to commercial composting operations that accept, store, and process materials that produce finished compost product. Acceptable materials would include green material, food material, residentially co-collected or food and green materials, vegetative food material, paper material, agricultural material, manures, and biosolids. These materials have the potential to affect the quality of waters of the State.

The General Order imposes general requirements on composting operations, but the General Order is not an NPDES permit. Therefore, an additional federal NPDES permit is required for any compost facility that discharges to Waters of the United States. There are two levels of compliance, Tier I and Tier II, based on the types of feedstocks used, volume of compost on-site, and hydrogeologic site conditions. The General Order also contains prohibitions, specifications,

and general procedures to protect surface water and groundwater quality related to composting facility operations and specifies the terms and conditions of discharges from composting operations.

Dischargers obtain coverage under the General Order by submitting a Notice of Intent, a technical report, and the appropriate fees to the RWQCB, who review the Notice of Intent and technical report, confirm that the individual composting operation meet all the terms and conditions of the General Order, and issue a Notice of Applicability.

Anti-Degradation Policy

The SWRCB Anti-Degradation Policy, formally known as the Statement of Policy with Respect to Maintaining High Quality Water in California (SWRCB Resolution No. 68-16), restricts degradation of surface and ground waters. Specifically, this policy protects water bodies where existing quality is higher than necessary for the protection of beneficial uses and requires that existing high quality be maintained to the maximum extent possible.

Under the Anti-Degradation Policy, any actions that can adversely affect water quality in all surface and groundwaters must: (1) be consistent with maximum benefit to the people of California; (2) not unreasonably affect present and anticipated beneficial use of the water; and (3) not result in water quality less than that prescribed in water quality plans and policies. Furthermore, any actions that can adversely affect surface waters are also subject to the federal Anti-Degradation Policy (40 CFR Section 131.12) developed under the CWA. Discharges from the Project that could affect surface water quality would be required to comply with the Anti-Degradation Policy, which is included as part of the NPDES permit requirements for point discharges.

Local Regulations

Grading Permit

A grading permit issued by the City would be required for the Project. Grading permits are issued by the City of Napa, Building Inspection Division (City of Napa, 2022). Permit application requires submittal of a Grading Plan of sufficient clarity to indicate the nature and extent of the work proposed and show in detail the proposed work will comply with the City's Standard Specifications as well as all relevant laws, ordinances, regulations, and conditions of approval. Grading plans for engineered grading may only be prepared by a civil engineer. All Civil Improvement Plans (e.g. Grading Plans, Sediment Control Plans, and Drainage Plans), where required, must be prepared by or under the direction of a registered civil engineer, licensed architect, land surveyor, or registered designer.

City of Napa 2040 General Plan

The City of Napa 2040 General Plan contains the following goals and policies relevant to the Project (City of Napa, 2022):

GOAL CSPR-6: Improve programs to conserve water, especially during drought.

CSPR 6-1 Promote sustainability measures for businesses and residents to reduce water consumption. Encourage water recycling, reduced water runoff, and low-impact development strategies.

GOAL NRC-1: Manage natural resources, including riparian corridors, wetlands, and open space areas in and around the city to preserve and enhance plant and wildlife habitats.

NRC 1-2 Review future waterway improvement projects (e.g., flood control, dredging, private development), as well as all development adjacent to the waterways, to protect and minimize effects on the riparian and aquatic habitats.

GOAL NRC-9: Protect and enhance the City's potable water, surface water, and groundwater quality.

NRC 9-1 Continue to participate in regional efforts to proactively manage surface and groundwater resources and ensure their long-term health and viability, including implementation of the Napa-Sonoma Valley Groundwater Subbasin Groundwater Sustainability Plan being prepared by the Napa County Sustainability Agency.

GOAL NRC-10: Promote utilization of green infrastructure and low Impact Development (LID) strategies; water conservation, reuse, and collection; and other sustainability measures to limit pollution runoff.

NRC 10-2 Explore options for water saving and treatment technology when planning future developments to conserve water and keep the City's water safe and clean.

NRC 10-3 Preserve natural drainage courses in their natural state wherever feasible.

Existing Conditions

Surface Water Hydrology

The Project site is located in a low-lying area of the lower 426-square-mile Napa River watershed (**Figure 3.8-1**). Land use surrounding the Project site is a mix of industrial and undeveloped parcels. Industrial land uses surrounding the Project site include Napa County Airport to the west/northwest, airport hangars and parking to the south, industrial parcels associated with the construction and building industry to the east, industrial storage facilities to the north, and the Devlin Road Transfer Station to the south. The Fagan Marsh State Marine Park and the Napa River are located east of the Project. The northern edge of the Project site is 200 feet south of Fagan Creek, an intermittent creek (Swift Biological Consulting, 2024) that flows from east to west and drains into the tidally influenced portion of the Napa River via Fagan Slough. Fagan Creek and the Napa River are part of the San Pablo Basin. The Project area receives 24.6 inches of rain annually with the majority occurring from November to March.



Source: Frog Environmental; Google Earth Pro, 2024

Figure 3.8-1
Project Hydrologic Setting

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Existing Site Drainage

The Project site is comprised of three contiguous sites. The Project site includes the NMDF site located at 820 Levitin Way (NMDF site) and adjacent parcels to the north and south (**Figure 2-1**). To the north, the Project would include the reuse of an industrial parcel (APN 057-110-025) (600 Tower Road Parcel). To the south, the Project would include a 2.87-acre portion of an approximately 4-acre undeveloped parcel (APN 057-090-060) (Southern Annexation Parcel) located on the westerly side of Devlin Road between NMDF to the north and Devlin Road Transfer Station to the south. The three sites are relatively flat, with elevations within the Project site ranging from approximately 50 to 62 feet. Generally, Project site drainage flows to Fagan Creek through man-made and natural channels. Fagan Creek flows around the Napa County Airport and then into Fagan Slough, a tributary of the tidal portion of the Napa River. The following sections describe site drainage at each of the three sites moving from north to south.

The 600 Tower Road Parcel is currently used for containers, equipment, and vehicle storage. The 600 Tower Road Parcel is generally paved, with stormwater runoff draining to an unnamed municipal stormwater drainage channel that borders the parcel to the east and flows to Fagan Creek. No stormwater retention or treatment facilities are located on the 600 Tower Road Parcel.

Stormwater on the NMDF site is regulated under the NPDES Industrial Permit. Consistent with NPDES requirements, a SWPPP and an MRP have been prepared (NCMR, 2020) and implemented for the NMDF site. With the exception of landscaped areas, surfaces at the NMDF site covered under the NPDES Industrial Permit are impervious. Per the NPDES Industrial Permit, stormwater and leachate (stormwater that has contacted waste materials) that comes in contact with compost piles cannot be conveyed off-site and must be retained on-site to be reused, dewatered, or hauled off-site to an appropriate wastewater facility. Stormwater from the MRF operations can be treated on-site and discharged to the municipal storm drain line which conveys stormwater to Fagan Creek. Stormwater and leachate on the NMDF site are captured by multiple in-ground drain inlets and collection systems that convey stormwater either to the site's large retention basin which does not discharge off-site or to the site's retention and treatment system before being discharged to the municipal storm drain line (see **Figure 3.8-2**), which conveys stormwater to Fagan Creek. There is minimal to no flow that runs onto the site. Therefore, the facility is not impacted by run-on flow.

Stormwater infrastructure on the NMDF site includes three hydrologically connected retention and treatment (sediment) basins located along the northwestern perimeter of the site. The stormwater system includes a stormwater filtration system, storage pond, settling pond, and retention pond. The series of settling/retention/biofiltration ponds capture and treat most of the stormwater generated at the NMDF site. From north to south, the basin sizes are 142,000-gal, 74,000-gal, and 1,410,000-gal.

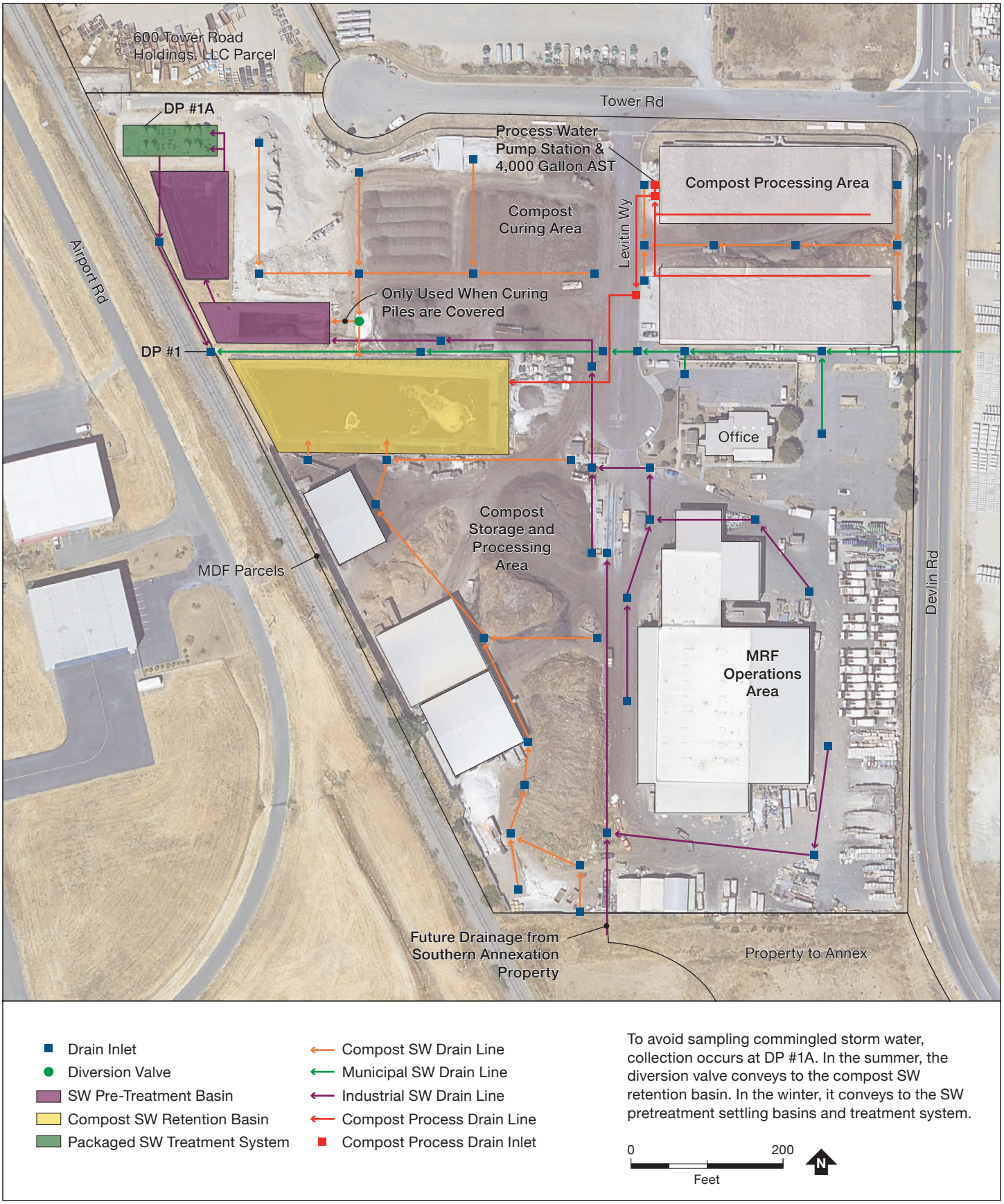
Stormwater generated from the MRF operations are conveyed to a 74,000-gal pre-treatment basin then to a 142,000-gal detention basin, both located along the northwest site perimeter.

From the 142,000-gal detention basin a packaged stormwater treatment system, located in the northwest site corner, polishes and removes remaining contaminants prior to discharging to the

municipal storm drain line. The current treatment system operates at a throughput of 500 gallons per minute (gpm) and is scheduled to be expanded to 1,000 gpm in 2025. The treatment system is a chemically-enhanced sand filtration (CESF) system that utilizes a multi-stage treatment process including chemical pretreatment, gravity settling, sand filtration, bag filtration, and adsorptive media. Stormwater is pumped from the 142,000-gal detention basin into a sequence of tanks for settling and chemical dosing, followed by sand and bag filtration. Inline sensors continuously monitor pH and turbidity to ensure treated water meets NPDES Industrial Permit discharge standards.

Stormwater from the compost processing, curing, and storage areas is conveyed to the 1,410,000-gal retention basin. Per the NPDES Industrial Permit, stormwater that comes in contact with compost piles cannot be discharged off-site. Therefore, the stormwater in this retention basin is reused on-site in the composting operation or hauled off-site to an appropriate wastewater facility.

As shown on **Figure 3.8-2**, there is a diversion valve on the north side of the 1,410,000-gal retention pond that can allow stormwater generated in the curing pile area to the north to either flow into that large basin or be diverted to the 74,000-gal pre-treatment basin. The compost curing piles are covered during the winter season which precludes stormwater from coming into contact with compost, therefore, stormwater generated in the curing area can be discharged on site. When the compost piles are covered, the diversion valve directs stormwater from the compost curing area to the 74,000-gal pre-treatment basin and then to the treatment system before discharge off-site as described above.



Source: NCMR, 2020; Google Earth Pro, 2024

Figure 3.8-2
Monitoring and Drainage Diagram

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The Southern Annexation Parcel is an undeveloped mostly flat site dominated by non-native annual grasses and forbs and is classified as ruderal non-native grassland. Seasonal wetlands are adjacent to the Parcel to the west and south. The site is naturally drained via surface flow to the wetlands and the unnamed municipal drainage channel. The wetlands bordering the site follow a drainage course from a culvert under Devlin Road to the southeast of the Parcel and a culvert under the railroad tracks to the west. The property to the east of Devlin Road is a created wetland that was mitigation for the Devlin Road Transfer Station. The wetland drainage flows along the west side of the Southern Annexation Parcel adjacent to the railroad tracks and flows into a drain inlet structure approximately mid-way between the Devlin Road Transfer Station and the NMDF site. All of these wetlands are outside of the Southern Annexation Parcel. The Southern Annexation Parcel was subdivided to create a smaller 2.87-acre parcel that excludes the existing wetland. A 50-foot buffer between the delineated wetland boundary and development on the Southern Annexation Parcel has been established as part of the Project.

The Southern Annexation Parcel includes an area that received soil material from 2019 to 2022. The soil was from the construction of ponds and active curing piles. The site is elevated from the surrounding area, including the wetlands that were delineated for the larger parcel in 2018. The soil was placed in a designated upland site. No wetlands were impacted by this soil placement.

Surface Water Quality

The quality of surface water is primarily a function of land uses in the Project area (described under “Surface Water Hydrology”, above). Local land uses influence the quality of surface waters through point source discharges (i.e., discrete discharges from discharge pipes) and nonpoint source discharges (e.g., direct storm runoff from slopes). Surface water runoff is generated by precipitation that cannot be absorbed into the ground in the period following a storm. Pollutants and sediments are transported in watersheds by stormwater runoff that reaches streams, rivers, and storm drains. As described above, stormwater runoff from the NMDF site is conveyed into the facility’s stormwater collection and treatment system and either reused on site or discharged to the municipal drain line, which is conveyed to Fagan Creek, the nearest receiving water. Stormwater from the 600 Tower Road Parcel and Southern Annexation Parcel either infiltrates into underlying soils or is conveyed via surface drainages to an unnamed municipal drainage ditch and then to Fagan Creek. The amount of surface water runoff is a factor of precipitation, ground saturation, and available permeable or pervious ground surfaces. Permeability is a measure of how quickly water can penetrate a surface area.

Section 303(d) of the Clean Water Act (see Regulatory Setting) requires states, territories and authorized tribes to develop lists of impaired waters – waters that do not meet water quality standards even after point sources of pollution have been outfitted with the minimum required levels of pollution control technology. Fagan Creek, the nearest receiving water body to the Project site, is not listed on the 2020/2022 303(d) list of impaired waters (SWRCB, 2022). The tidal portion of the Napa River is listed on the 2020/2022 303(d) list of impaired waters for nutrients, pathogens, and mercury.

The law requires jurisdictions to establish priority rankings for 303(d) listed waters and develop action plans, known as TMDLs, to improve water quality. The TMDL is a tool that establishes

the allowable loadings or other quantifiable parameters for a waterbody and thereby the basis for the States to establish water quality-based controls. The purpose of TMDLs is to ensure that beneficial uses are restored and that water quality objectives are achieved. A TMDL for diazinon was adopted in 2007 and the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan, discussed below) was amended to incorporate the TMDL (SWRCB, 2024). Because the Project site does not directly discharge into any of the regionally identified 303(d) listed impaired waterbodies (NCMR, 2020) the TMDLs do not apply to the Project site.

Beneficial Uses

The Porter-Cologne Water Quality Control Act requires the SWRCB and RWQCB to adopt statewide and/or regional water quality control plans, the purpose of which is to establish water quality objectives for specific water bodies. The regional board has prepared the *Water Quality Control Plan for the San Francisco Bay Basin* (the Basin Plan) that identifies existing and potential beneficial uses[3] for surface and ground waters, provides numerical and narrative water quality objectives designed to protect those uses, and contains implementation plans and policies for all waters within the jurisdictional area covered by the Basin Plan.

The designated beneficial uses for Fagan Creek are water contact recreation (REC-1); non-contact water recreation (REC-2); warm freshwater habitat (WARM); and wildlife habitat (WILD). As described under "Surface Water Hydrology", above, Project site drainage flows to Fagan Creek through man-made and natural channels, then into Fagan Slough, a tributary of the Napa River. Water Quality Objectives (WQO) defined in the Basin Plan for these surface waters include bacteria, bioaccumulation, biostimulatory substances, color, dissolved oxygen, floating material, oil and grease, pH, toxic substances, salinity, sediment, settleable material, suspended materials, sulfides, taste and odor, temperature, toxicity, turbidity, un-ionized ammonia, and some selected toxic pollutants. Stormwater discharged directly or indirectly to receiving waters is required to conform to NPDES effluent limitations based on the WQOs established in the Basin Plan.

Flood Hazards

The 100-Year floodplain denotes an area that has a one percent chance of being inundated during any 12-month period. Floodplain zones (Special Flood Hazard Areas [SFHA]) are determined by the Federal Emergency Management Agency (FEMA) and used to create Flood Insurance Rate Maps (FIRMs). These tools assist communities in mitigating flood hazards through land use planning. FEMA also outlines specific regulations, intended to be adopted by the local jurisdictions, for any construction, whether residential, commercial, or industrial within 100-year floodplains. On the latest FIRM for the Project site (FEMA, 2023), the Project site is identified as being in an area of minimal flood hazard (i.e., not within the 100-year or 500-year floodplain).

3 Aquatic resources provide many different benefits. Beneficial uses are those resources, services, and/or qualities of aquatic systems that are to be maintained and are the ultimate goals for protecting and achieving high water quality.

3.8.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the CEQA *Guidelines* states that a project would result in a significant impact to Hydrology and Water Quality if it would:

- Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality;
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- 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:
    - Result in substantial erosion or siltation on- or off-site;
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    - 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
    - Impede or redirect flood flows;
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or,
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Topics with No Impact

The Project site is not located near an ocean, bay, or other large body of water and would not be subject to inundation due to tsunami, or seiche. The Project site is not located within a designated 100-year flood hazard area. The Project site is located within FEMA Flood Zone X, designating areas of minimal flood hazard, which are the areas outside the Special Flood Hazard Areas and higher than the elevation of the 0.2-percent-annual-chance (i.e., 500-year flood risk) flood. Because the Project would not be in a flood hazard, tsunami, or seiche zone, it would not result in an increased risk of release of pollutants due to Project inundation due to flooding. No impact would occur under this criterion and, therefore, this issue is not discussed further within this section.

Impact Analysis

Compliance with applicable federal, state, and local laws and regulations is assumed in the analysis of impacts because these regulatory requirements are mandatory and the application of the associated protective measures (such as BMPs, Monitoring and Reporting Plans, and the application of corrective actions) are non-discretionary, and are proven to minimize and/or avoid hydrologic or water quality impacts. Further, regulatory agencies with technical jurisdiction and authority for oversight would require adherence to regulatory requirements as a condition of Project or permit approval and would continue to enforce applicable requirements throughout Project construction and operation phases.

Impact 3.8.1: Construction of the Project could violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality. (Less than Significant)

Construction of new or alteration of existing Project facilities at the Project site would include earthwork activities (i.e., grading, excavation, and other soil-disturbing activities) and the placement of imported engineered soils. Under the proposed Project, the Southern Annexation Parcel will be developed and stormwater inlets and piping will be constructed to convey stormwater from the parcel to the existing industrial stormwater drain pipelines on the NMDF site. Stormwater runoff from disturbed soils associated with construction activities is a common source of pollutants (sediment) to receiving waters. Earthwork activities can render soils and sediments more susceptible to erosion from stormwater runoff and result in the migration of soil and sediment in stormwater runoff to downstream water bodies. Excessive and improperly managed grading or vegetation removal can lead to increased erosion of exposed earth and sedimentation of watercourses during rainy periods. In addition, construction would involve the use of various materials typically associated with construction activities such as paint, solvents, oil and grease, petroleum hydrocarbons, concrete and associated concrete wash-out areas. If improperly managed, these materials could result in pollutants being mobilized and transported off-site by stormwater runoff (nonpoint source pollution) and degrade receiving water quality.

Because the Southern Annexation Parcel (biomass conversion facility [BCF] Project site) exceeds one acre in size, construction activities would be required to comply with NPDES regulations and obtain coverage under the State CGP. Under the CGP, the Applicant or their contractor(s) would be required to implement construction BMPs as set forth in a detailed SWPPP. SWPPPs are a required component of the CGP and must be prepared by a Qualified SWPPP Developer (QSD) and implemented by a Qualified SWPPP Practitioner (QSP). SWPPPs must describe the specific erosion control and stormwater quality BMPs being implemented to minimize pollutants in stormwater runoff, and detail their placement and proper installation. The BMPs are designed to prevent pollutants from coming into contact with stormwater and to keep all products of erosion and stormwater pollutants associated with construction activities from moving off-site into receiving waters. Typical BMPs to be implemented at construction sites include placement of fiber rolls or gravel barriers to detain small amounts of sediment from disturbed areas, and temporary or permanent covering of stockpiles to prevent rainfall from contacting the stockpiled material. In addition to erosion control BMPs, SWPPPs also include BMPs for preventing the discharge of pollutants other than sediment (e.g. paint, solvents, concrete, petroleum products) to

downstream waters. BMPs for pollutants include conducting routine inspections of equipment for leaks, maintaining containers of supplies such that the contents are clearly labeled, the integrity of the containers is not compromised, and ensuring that construction materials are disposed of in accordance with applicable regulations.

Under the provisions of the CGP, the State-certified QSD is responsible for determining site risk level for sediment transport, developing the SWPPP, and managing its implementation. Site risk level is determined using a combination of the sediment risk of the project and the receiving water quality risk. Projects can be characterized as Risk Level 1, Level 2, or Level 3, and the minimum BMPs (stormwater controls) and monitoring that must be implemented during construction are based on the risk level. Under the direction of the QSD, the QSP is required to conduct routine inspections of all BMPs, conduct surface water sampling, when necessary, and report site conditions to the State and/or Regional Water Quality Control Board as part of CGP compliance monitoring and reporting using the Stormwater Multi-Application Reporting and Tracking System (SMARTS). Compliance with the CGP is required by law and has proven effective in protecting water quality at construction sites.

During construction, it is possible dewatering of excavation trenches may be required to ensure a dry work environment. Typical construction-related dewatering effluent can contain pollutants (e.g., sediment, residual petroleum hydrocarbons, and other contaminants) that must be removed before discharge to avoid potential water quality impacts. Construction-related dewatering would result in a significant impact if contaminated dewatering effluent were not managed properly and were released untreated to surface waters. Such a release would violate water quality standards and waste discharge requirements and degrade the quality of receiving waters. Construction earthwork activities would mainly involve grading and shallow subsurface excavation. If shallow groundwater were encountered during excavation activities, it would have to be pumped out of the construction trench to create a dry work area. If excavations intersect shallow groundwater and dewatering activities are required, dewatering would be temporary, highly localized, and would typically involve the extraction of low volumes of shallow groundwater from excavation trenches. The components proposed to be constructed are generally outside of areas of known contamination. Under the proposed Project, any construction related groundwater dewatering effluent would be conveyed to the existing stormwater system for water quality treatment to reduce pollutant levels to the applicable NPDES permit limits, which are protective of defined beneficial uses for receiving water bodies and water quality standards. Following treatment, any construction dewatering effluent would be either retained onsite for reuse or discharged to the municipal drain consistent with NPDES Industrial Permit requirements. Additionally, the CGP (and associated Construction SWPPP) outlines BMPs, construction water-handling procedures, and requirements that apply to dewatering discharges. Consistent with the CGP, non-stormwater discharges are authorized for construction activities that are not subject to a separate general NPDES permit adopted by a regional board when the following conditions are met:

- Dischargers shall not violate any discharge prohibitions contained in applicable Basin Plans or statewide water quality control plans.

- The discharge does not cause or contribute to a violation of any water quality standard;

- The discharge is not prohibited by the applicable Basin Plan;
- The discharger has included and implemented specific BMPs required by the Construction General Permit to prevent or reduce the contact of the non-stormwater discharge with construction materials or equipment.
- The discharge does not contain toxic constituents in toxic amounts or (other) significant quantities of pollutants;
- The discharge is monitored and meets the applicable numeric action levels; and
- The discharger reports the sampling information in the annual report.

Compliance with the requirements of the CGP, including the implementation of associated BMPs as part of the SWPPP, as well as incorporation of erosion and sediment controls required under the City's Standard Specifications and implemented via a City Grading Permit, would prevent the discharge of pollutants to surface waters or groundwater and minimize or eliminate potential degradation of surface water or groundwater quality during construction of the Project. With adherence to these mandatory practices, water quality impacts related to violation of water quality standards or degradation of water quality due to discharge of construction-related stormwater runoff from construction of the Project would be less than significant.

Mitigation Measures

None required.

Impact 3.8.2: Operation of the Project could violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality. (Less than Significant)

Operation of Proposed On-Site Facilities

During operation, the primary sources of wastewater generated by the Project would be process water/leachate from the composting piles; stormwater that has been in contact with organic materials/compost or other waste materials; and, truck washout wastewater. Additionally, stormwater runoff which has not come into contact with any waste materials or compost/feedstock would be generated from other existing or proposed impervious areas, such as the BCF facility on the Southern Annexation Parcel, building roofs, and parking areas. Pollutants transported in compost process water, leachate, and stormwater, if released to surface and/or groundwaters, could degrade the quality of receiving waters.

Operation of the Project would be subject to coverage under the NPDES Industrial Permit. The NPDES Industrial Permit (General Permit Order 2014-0057-DWQ) regulates discharges associated with industrial activities. The Industrial General Permit requires the implementation of management measures that will achieve the performance standard of best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT). The

Industrial General Permit also requires the implementation of a SWPPP and MRP with requirements for annual reporting of water quality compliance and any corrective actions implemented. In addition, the SWPPP identifies sources of pollutants and describes the actions to be implemented to manage the sources to reduce stormwater pollution. Consistent with the requirements of the Industrial General Permit, the NMDF site has implemented a SWPPP and associated MRP (NCMR, 2020).

Operation of the Project, including new facilities and operations on the 600 Tower Road Parcel and Southern Annexation Parcel, would be subject to the requirements of the NPDES Industrial Permit and associated SWPPP and MRP. The SWPPP for industrial activities at the existing NMDF facility specifies implementation of BMPs sufficient to reduce significant hydrologic and water quality impacts, including the concentration of pollutants found in Project site stormwater runoff. Erosion control measures are specified in the SWPPP. During the wet season, erosion and sediment control devices, such as sediment traps, are used to minimize sediment transport to downstream drainage facilities and the stormwater collection system. As described in detail in Section 3.8.1 under "NPDES Industrial General Permit", industrial facilities that discharge stormwater either directly or indirectly to surface waters, must be covered by a permit. When an industrial facility covered under the NPDES Industrial Permit expands, the SWPPP must be updated to accurately reflect all new sources of pollutants, stormwater conveyance features, BMPs, and monitoring points. The NPDES Industrial Permit requires dischargers to submit any revised SWPPP and MRP plans to the RWQCB. Expansion of a facility onto an adjacent parcel, as proposed, would require the existing SWPPP to be revised to include a new facility description and updated site maps detailing facilities, drainage areas, and stormwater discharge points. By revising the SWPPP to identify all potential pollutant sources at the expanded facility, and requiring site-specific BMPs, the NPDES Industrial Permit ensures that discharges are controlled to the maximum extent practicable (MEP). The expanded MRP ensures that if stormwater pollutants exceed benchmark values, the facility must revise BMPs and take corrective actions under the Industrial Permit's Exceedance Response Action (ERA) requirements. Because the facility remains covered under the NPDES Industrial General Permit, failure to revise and implement the SWPPP could result in enforcement action by the RWQCB. The permit is enforceable under the Clean Water Act (CWA) §402 (see Section 3.8.1). By Adhering to the requirements of the NPDES Industrial Permit, including a revised SWPPP that incorporates BMPs for the expanded facility, no new water quality impacts would occur because any discharges would be controlled, monitored, and adjusted as needed in line with regulatory requirements.

The standards and specific BMPs required as part of the SWPPP are industry-accepted methods and proven effective at attenuating concentrated stormwater flows, reducing erosion, and minimizing or avoiding the transport of pollutants in stormwater. The BMPs required under the NPDES Industrial General Permit are drawn from:

- **USEPA's National Menu of Stormwater BMPs** (developed after decades of applied research and field implementation across the U.S.).

- **California Stormwater Quality Association (CASQA) BMP Handbook** – the standard technical reference in California, relied upon by RWQCBs, consultants, and municipalities.

- **State Water Board IGP guidance** – specifies required BMP categories (e.g., good housekeeping, spill prevention, erosion control, run-on diversion, treatment controls).

These BMPs are recognized nationwide and internationally as the standard of practice for controlling stormwater pollution from industrial sites. A robust evidence base documenting the effectiveness of BMPs implemented under a SWPPP required by the NPDES permit program exists. For example, the USEPA (National Stormwater BMP Database) contains nationwide performance monitoring data showing reductions in TSS, nutrients, metals, and oil/grease from implemented BMPs. Also, California Industrial General Permit compliance data**,** which is publicly available, documents that facilities subject to SWPPPs and BMP implementation show reduced exceedances over time, with corrective ERA actions ensuring adaptive management and compliance with regulatory water quality objectives.

As supported by the evidence described above, implementation of BMPs under the SWPPP are adequate to provide protection against water quality degradation provided they are maintained effectively and monitored regularly. The SWPPP includes a monitoring and maintenance element with periodic scheduled monitoring of BMP performance. The performance of BMPs, including any related failures, improvements, and corrective actions taken as a result of periodic monitoring conducted by erosion control specialists are described in annual regulatory reports submitted to the RWQCB as required under the SWPPP.

In addition to the SWPPP, there are various other regulatory requirements relevant to the existing and proposed NMDF facility that pertain directly or indirectly to the goal of preventing stormwater pollution, including:

- Hazardous Material Business Plan;

- Compost General Order (Order 2015-0121-DWQ)

- Hazardous Waste Regulations and Permits;

- Wastewater Discharge Requirements; and

- Clean Water Act Section 401 Water Quality Certifications and Section 404 Permits.

All requirements relevant to preventing stormwater pollution from the above listed plans and regulatory requirements are currently incorporated into the existing SWPPP and would also be incorporated into any revised SWPPP to cover proposed facilities and operations. Compliance with the requirements of the NPDES Industrial Permit, including the implementation of associated BMPs as part of the associated SWPPP covering operations, which incorporates requirements related to discharge prohibitions, monitoring, and corrective actions under the MRP, would prevent the discharge of pollutants to surface waters or groundwater and minimize or

eliminate potential degradation of surface water or groundwater quality during operation of the Project.

Stormwater Treatment and Discharge

Under the Project, stormwater would be collected, retained, and re-used, as currently occurs, to minimize discharges. However, some discharges of treated stormwater from the NMDF site to the municipal drain line would continue, as occurs under existing conditions, consistent with the Facility's coverage under the NPDES Industrial Permit. The ADF proposed is proposed on the compost side of the existing NMDF site, which is operated as a zero discharge operation and, as such, the proposed ADF will not increase the amount of runoff being treated and discharged via the municipal drain line; stormwater from the proposed ADF would be conveyed into the existing compost contact water pond. Stormwater from the Southern Annexation Parcel is proposed to be collected, conveyed, treated, re-used, and/or discharged via the existing stormwater system at the NMDF facility. The Southern Annexation Parcel is proposed to be graded to direct all stormwater runoff across the surface toward the existing stormwater collection and management system on the NMDF site. Additionally, as described in Impact 3.8.1, stormwater inlets and piping may be installed in the Southern Annexation Parcel to convey stormwater from the parcel to the existing industrial stormwater drain pipelines on the NMDF site. The existing stormwater collection and management system on the NMDF facility site is equipped to manage, convey, and treat runoff in accordance with the applicable regulatory requirements and water quality standards described above under "Operation of Proposed On-Site Facilities". With implementation of the Project, the Southern Annexation Parcel would effectively act as a contributing drainage area to the NMDF stormwater management system, integrating with the existing stormwater infrastructure to manage runoff without the need for additional stormwater facilities. Therefore, following Project implementation, the volume of stormwater being treated would increase with the development of the Southern Annexation Parcel. However, the existing stormwater treatment and retention system has been designed for throughput of 1000 gpm, The existing system, in combination with the stormwater retention ponds is sufficient to ensure stormwater treatment and all discharges to the municipal drain line conform to NPDES Permit requirements. Further, the existing stormwater collection system and retention pond at the NMDF facility, which would receive runoff from the Southern Annexation Parcel, are sized to accommodate stormwater generated from an 85th percentile, 24-hour storm event. The Southern Annexation Parcel would not introduce flow that exceeds the capacity of the current system.

Regulations require that stormwater discharges from the Project be designed to ensure that operation of the Project would not violate WDRs defined in the NPDES permit, which incorporate the Basin Plan water quality objectives and that discharges do not result in erosion, scour, or hydromodification of receiving waters as a result of peak flows, upon discharge. Further, the Project would be required to comply with the MRP requirements of the NPDES Permit. Implementation of an MRP ensures technical and monitoring data is provided to the RWQCB to determine the Discharger's compliance with NPDES effluent limitations and other requirements to assess the need for further investigation or enforcement action, and to protect public health and safety and the environment. Reports submitted under the MRP would contain a description of any noncompliance and its cause; the period of noncompliance, including exact

dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Discharges would not be allowed if they do not conform to the NPDES effluent limitations that are prescribed for the protection of receiving water quality and beneficial uses. Adherence to regulatory requirements would ensure that stormwater discharges do not degrade the quality of receiving waters or impair designated beneficial uses. Adherence to NPDES effluent limits and Basin Plan WQOs would ensure Project discharges do not substantially increase the concentration of constituents in receiving waters as compared to baseline conditions. The proposed stormwater drainage design ensures compliance with regional hydrology standards and protects downstream water quality. Impacts relating to the violation of water quality standards, waste discharge requirements, or the degradation of surface and/or groundwater quality due to operation of the Project would be less than significant.

Mitigation Measures

None required.

Impact 3.8.3: The Project could 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)

The Project would not deplete groundwater resources because, other than short-term, temporary and limited low-volume dewatering during construction (discussed under Impact 3.8-1, above), the Project would not require continuous long-term extraction of groundwater for water supply. The 600 Tower Road Parcel is proposed to be used for inert materials processing and storage and equipment storage. The parcel is currently used for containers, equipment, and vehicle storage. Development of the 600 Tower Road Parcel in regard to the addition of impervious surface area following implementation of the Project is not proposed (see Section 2.5.4). On the existing NMDF site, the majority of the site is currently developed and largely covered by impervious surfaces and so does not contribute significant substantial recharge to local aquifers used for water supply. The Southern Annexation Parcel would be developed and paved, however, it would not add a sufficient area of impervious surface such that regional groundwater recharge from rainfall infiltration into soils would be substantially reduced as the soils on-site are poorly drained, and have high runoff potential (see Section 3.5.1) and, as such, do not significantly contribute to regional recharge of the underlying groundwater basin. Further, as described under Impact 3.8.2, above, stormwater from the Southern Annexation Parcel would be conveyed to the existing stormwater system for re-use on site or discharge off-site into the municipal drain line and then to downgradient surface waters, contributing to regional groundwater recharge. Therefore, impacts to groundwater from implementation of the Project would be less than significant.

Mitigation Measures

None required.

Impact 3.8.4: The Project could 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 result in substantial erosion or siltation on- or off-site. (Less than Significant)

The Project would not involve the direct alteration of a stream or river. As described in the Project Description, the proposed site plan avoids disturbance of onsite sensitive resources, including the wetland areas and associated surface drainages on the Southern Annexation Parcel. As described under Impact 3.8.1 and 3.8.2, above, implementing actions and BMPs required under the NPDES Permit, the construction SWPPP, and the industrial operations SWPPP, would prevent significant water quality impacts associated with construction and operation activities, including those associated with discharges of treated stormwater from the NMDF site (which occur under baseline conditions), and would minimize adverse water quality conditions (i.e., erosion and sedimentation) in on- and off-site receiving waters, resulting in less-than-significant water quality impacts. As described in Chapter 2, Project Description, while the BCF and associated impervious surface on the Southern Annexation Parcel, are entirely new, the majority of the Project elements proposed at the NMDF site are revisions or improvements to existing facilities and operations and the reuse of the 600 Tower Road Parcel would not result in new impervious surfaces or the alteration of drainage patterns as compared to drain line baseline conditions.

The discharge of stormwater would occur following on-site collection, retention, treatment, and reuse of retained stormwater such that discharges are avoided or minimized. Discharges would be conducted in a manner consistent with existing operations, using the existing discharge point to the municipal storm drain line (see **Figure 3.8-2**), which conveys stormwater to Fagan Creek (see Section 3.8.1 under "Existing Site Drainage"). As described in detail under Impact 3.8.2, the discharge of stormwater, including the point of discharge to the municipal storm drain line, is monitored and regulated under the requirements of the NPDES Industrial Permit to ensure erosion and scour of receiving water channel bed and banks does not occur. Project design in combination with adherence to regulatory requirements would ensure impacts related to erosion and/or siltation due to altered drainage patterns would be less than significant.

Mitigation Measures

None required.

Impact 3.8.5: The Project could 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 result in flooding on- or offsite. (Less than Significant)

The Project site is not located within a FEMA defined flood hazard risk area associated with a 100-year flood and, as described under Impact 3.8.4, above, the Project would not result in substantially altered on-site drainage patterns or increased peak stormwater discharge rates or volumes as compared to existing conditions. Stormwater runoff associated with the 600 Tower Road Parcel would not be increased in volume or rate as compared to existing conditions. Stormwater runoff associated with the NMDF site would be collected and reused on-site and/or treated prior to discharge, as occurs under existing conditions. Stormwater runoff from the Southern Annexation Parcel would be collected, retained, treated on-site, and re-used for operations via the existing stormwater system on the NMDF site or discharged off-site, as described under Impact 3.8.2. The existing NMDF stormwater collection system, which would receive runoff from the Southern Annexation Parcel, has sufficient capacity to accommodate stormwater generated from an 85th percentile, 24-hour storm event and the additional stormwater contributed from the Southern Annexation Parcel would not introduce flow that exceeds the capacity of the current system (see Impact 3.8.2). Therefore, peak stormwater discharge rates and volumes from the Project site would remain at or below those occurring under existing conditions. Project design in combination with regulatory requirements would ensure impacts related to flooding due to altered drainage patterns would be less than significant.

Mitigation Measures

None required.

Impact 3.8.6: The Project could 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 which could exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. (Less than Significant)

As described above under Impact 3.8.2, 3.8.4, and 3.8.5, the existing stormwater management system has been designed consistent with regulatory requirements, including those related to volume-based and flow-based treatment controls required under the NPDES Industrial Permit and detailed in the SWPPP (NCMR, 2020). Stormwater treatment measures are incorporated into the design of the stormwater management system to ensure pollutants are not mobilized and transported to downgradient receiving waters, as required by NPDES permits as well as the Compost General Order. Peak stormwater discharge rates and volumes from the Project site would remain at or below existing conditions. As described in detail under Impact 3.8.1 and Impact 3.8.2, the Project would not result in new sources of pollutants as a result of construction or operation that could be transported via stormwater runoff. Project design in combination with regulatory requirements would ensure impacts related to exceeding stormwater conveyance infrastructure or creating additional sources of polluted runoff would be less than significant.

Mitigation Measures

None required.

Impact 3.8.7: The Project could 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 could impede or redirect flood flows. (Less than Significant)

As described above under Impact 3.8.2, 3.8.4, and 3.8.5, implementation of the Project would not result in the alteration of the course of a stream or river and would not result in the installation of any facilities within a 100-year or 500-year flood zone. The Project's stormwater management system would avoid or minimize stormwater discharges, as currently occurs under existing conditions, in order to retain stormwater onsite for use in operations for moisture/dust control. Stormwater runoff would be retained onsite in existing retention ponds and would not be concentrated into drainage ditches or culverts in a manner that would redirect stormwater flows from large storms that could redirect flood flows off-site. Therefore, the Project would not impede or redirect flood flows. Impacts related to impeding or redirecting flood flows would be less than significant.

Impact 3.8.8: The Project could conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. (Less than Significant)

As described above under Impact 3.8.1, 3.8.2, and 3.8.4, the Project would not cause any significant impact related to surface or groundwater quality degradation. The Basin Plan water quality objectives which apply to the Project are designed to preserve and enhance water quality and protect the beneficial uses of all regional terrestrial surface water bodies (e.g., creeks, rivers, streams, and lakes) and groundwaters within the RWQCB's jurisdictional area. The Project would comply with the requirements of the NPDES Permit program during construction and operation, including implementation of BMPs and other requirements of a SWPPP, which are designed to ensure stormwater discharges associated with construction and operation of the Project comply with the Basin Plan water quality standards and WQOs. As described under Impact 3.8.3, implementation of the proposed Project would not require ongoing groundwater extraction or substantially alter groundwater recharge, and therefore would not conflict with or obstruct implementation of a sustainable groundwater management plan. Impacts relating to conflict or obstruction of implementing a water quality control plan or sustainable groundwater management plan would be less than significant.

Mitigation Measures

None required.

3.8.3 REFERENCES

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3.9 LAND USE AND LAND USE PLANNING

This section describes and discusses existing land uses in the Project vicinity and identifies potential impacts of the Project on land use and land use planning. This section evaluates the compatibility of the Project with existing or future land uses and applicable adopted land use plans.

SETTING

Existing Land Uses and Designations

As discussed in Chapter 2**,** the Project site includes the Napa Materials Diversion Facility (NMDF) site located at 820 Levitin Way (APNs 057-110-049, -052, -065, -066, -067, and -068) (see **Figure 2-1**). The NMDF site is zoned Public, Quasi-Public: Airport Compatibility Overlay District (PQ-P:AC) and is in the City of Napa designated as Public Serving in the General Plan. The NMDF site was annexed into the City of Napa in 2014 and is surrounded by unincorporated Napa County land. The NMDF site comprises approximately 18.6 acres, of which approximately 12 acres are used for organic material management operations such as compositing and chip and grind; 1.2 acres for concrete recycling; 2.2 acres for soil stockpiling; 1.2 acres for material recovery facility (MRF) recyclables and product depackaging; and about 2.0 acres for support operations.

The Project would also use a portion of the parcel to the north on 600 Tower Road (APN 057-110-025) (see **Figure 2-1**). This parcel compromises approximately 8.32 acres and is zoned as Industrial: Airport Compatibility Overlay District (I:AC) and is in unincorporated Napa County. The 600 Tower Road Parcel would be used for inert materials processing and storage and equipment storage under the Project and is currently used for containers, equipment, and vehicle storage. The 600 Tower Road Parcel would remain under the same ownership in Napa County and would not be annexed to the City limits.

The Project would include a portion of the adjacent parcel to the south (formerly APN 057-090-060) located on the westerly side of Devlin Road between NMDF site to the north and Devlin Road Transfer Station to the south (See **Figure 2-1**). The parcel was purchased by the City in December 2023 and would be annexed into the City subject to approval by Local Agency Formation Commission (LAFCO) of Napa County. A sphere of influence (SOI) amendment would also be required by LAFCO to process the annexation. The existing parcel was subdivided to create a smaller 2.87-acre parcel (APN 057-090-087). The resulting 2.87-acre parcel, referred to as the Southern Annexation Parcel in this EIR, excludes the wetlands that have been identified in previous studies on the parcel that was formerly known as APN 057-090-060 (now APN 057-090-088). The Southern Annexation Parcel is currently undeveloped and includes an area that received soil material from 2019 to 2022. In addition to the development of the Southern Annexation Parcel, the EIR also analyzes the environmental impacts from the future annexation into the City, the pre-zoning of the parcel to PQ-P:AC to be consistent with the existing NMDF site zoning, and a General Plan Amendment (GPA) to designate the parcel in the General Plan as Public Serving to be consistent with the existing NMDF land use designation.

Napa County airport is situated to the west/northwest of the Project site. Directly south of the airport, a range of facilities including hangars and parking are integrated into the airport's operations. Union Pacific Railroad runs adjacent to the western edge of the Project site, while Devlin Road runs adjacent to the eastern edge of the Project site (except for the Tower Road Parcel). Further east, opposite Devlin Road, lie several industrial parcels associated with the construction and building industry. The Project site is bordered to the north and northeast by industrial parcels used for equipment and vehicle storage and is bordered to the south and southeast by vacant land and the Devlin Road Transfer Station. Highway 29 is roughly 2,000 feet east of the Project site. The nearest residence is approximately 2,340 feet to the east of the Project site, across Highway 29 on Café Court. The nearest school is Napa Junction Magnet Elementary School, approximately 1.8 miles south of the Project site.

Regulatory Setting

Napa County LAFCO

Napa County LAFCO is responsible for approving all proposed changes of organization involving cities and special districts in Napa County. LAFCO may approve or disapprove proposed changes of organization with or without amendments consistent with its written policies and procedures. LAFCO may also condition its approval as long as it does not directly regulate land use, property development, or subdivision requirements. Changes of organization include all of the following:

- Annexations (Cities and Districts)
- Detachments (Cities and Districts)
- Consolidations (Cities and Districts)
- Incorporations and Dissolutions (Cities)
- Formations, Dissolutions, Mergers (Districts)
- Activation of Latent Powers/Elimination of Existing Powers (Districts)

Additionally, all changes of organization or reorganization are considered "projects' and subject to CEQA.

An application submittal is required by the Commission to include resolution/petition, map, pre-zoning (for city annexations) and a legal description, applicable fees, CEQA compliance documents, and a comprehensive plan for services. Notice of Commission hearing is given by the Executive Officer, and given by posting, publication, or mailing to property owners and registered voters within 300 feet at least 21 days before the date of hearing. At the hearing, the Commission shall consider the staff report and factors related to the proposal, testimony of affected agencies and parties, service plan, CEQA documentation, and shall make determinations (Napa County, 2024a).

Napa County LAFCO Policy on CEQA

It is the LAFCO's policy to adopt the Guidelines approved by the State Department of Resources and as amended from time to time, in the preparation of all environment documentation. Whenever an agency other than the Commission is involved in the approval of a project, the Commission prefers that the other agency be designated as the "Lead Agency" (LAFCO of Napa County, 2021 – page 1 of 2). For annexations and/or reorganizations involving annexation to a city, the city shall act as the Lead Agency under CEQA for the proposal. CEQA processing shall be undertaken in accordance with the most recent version of CEQA, the Guidelines, and the Commission's adopted policies. Notably, the Commission has identified additional areas of local interest that shall be addressed by the Lead Agency in the preparation of any CEQA document (LAFCO of Napa County, 2021). These include:

1. Cumulative and regional impacts;

2. Impacts to public services, including but not limited to, water supply and distribution systems; wastewater treatment and sewer collection systems; solid waste disposal capacity and collection; public school districts, fire and police protection; and public facilities, including discussion on the ability of the receiving entities (i.e. water district, sewer district, school district) to provide the services to the proposed boundary change area;

3. Conversion of prime agricultural lands to urban uses and protection/preservation of prime agricultural lands and resources;

4. Consistency with general and specific plans; and

5. Availability of affordable housing.

Napa County Airport Land Use Commission (ALUC)

The creation of Airport Land Use Commissions (ALUCs) and the preparation of compatibility plans are requirements of the California State Aeronautics Act (Public Utilities Code Section 21670 et seq). Provisions for the creation of ALUCs were first established under state law in 1967. With limited exceptions, an ALUC is required in every county in the state. The fundamental purpose of ALUCs is to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. Many of the procedures that govern how ALUCs operate are defined by state law. Statutory provisions in the Public Utilities Code establish the requirements for ALUC adoption of compatibility plans, which airports must have these plans, and some of the steps involved in plan adoption. The law also dictates the requirements for airport land use compatibility reviews by the ALUC. Two specific limitations on the powers of ALUCs are set in the statutes. First, ALUCs have no authority over areas "already devoted to incompatible uses (Public Utilities Code Section 21674a). The common interpretation of this clause is that ALUCs have no jurisdiction over existing land uses even if those uses are incompatible with airport activities. An ALUC cannot, for example, require that an existing incompatible use be converted to something compatible (Napa County, 2024b).

Napa County Airport Land Use Compatibility Plan (ALUCP)

As adopted by the ALUC, the basic function of this Airport Land Use Compatibility Plan (ALUCP) is to promote compatibility between the two airports and future land use development in their surrounding areas. The plan accomplishes this function through the establishment of a set of compatibility criteria applicable to new development around each airport. Additionally, the ALUCP serves as a tool for use by the ALUC in fulfilling its duty to review plans and regulations, and Major Land Use Actions of local agencies for consistency with the ALUCP criteria. Airport development plans, including plans for any new heliport anywhere in the county, are also subject to review by the ALUC. However, neither the ALUCP nor the ALUC have authority over existing land uses or over the operation of the airports. The 2024 ALUCP updates and entirely replaces the ALUCP adopted by the Napa County ALUC in April 1991 and amended in December 1999. The need for the comprehensive update arose primarily because of a desire to bring the plan up to current standards, reflect current airport layout plans (ALPs), and address stakeholder needs. The 2024 ALUCP applies to lands around the two public-use airports in the county: Napa County Airport and Angwin Airport – Parrett Field (Napa County, 2024b).

Federal Aviation Administration Notification and Referral

Federal Aviation Administration (FAA) is responsible for regulating and overseeing all aspects of civil aviation in the United States. Its primary mission is to ensure the safety and efficiency of civil aviation, including air traffic control, certification of personnel and aircraft, and setting airport standards. The FAA sets and enforces safety regulations for aircraft design, manufacturing, and operation; manages the National Airspace System, including air traffic control towers, radar systems, and flight service stations; certifies aircraft, pilots, mechanics, and other aviation professionals; and sets standards for airport design, construction, and operation.

Project proponents proposing construction or alternations must submit form 7460-1, “Notice of Proposed Construction or Alteration.” The purpose of the FAA referral would be to determine if the proposed construction would constitute a potential hazard or obstruction to flight. Proposed structures in developed areas that would be shielded by existing structures or by natural terrain or equal or greater height, where it is obvious that the proposal would not adversely affect air safety, do not require FAA referral.

California Airport Land Use Planning Handbook

The California Airport Land Use Planning Handbook (CALUPH), published by the California Department of Transportation (Caltrans), Division of Aeronautics, is a statewide guidance document used to support airport-land use compatibility planning. The Handbook provides guidance, best practices, and recommended criteria to help ALUCs and local agencies ensure that new land uses around airports remain safe, compatible with airport operations, and protected from aviation-related hazards. Chapter 4.5 Airspace Protection, outlines hazards to flight, which include physical hazards, wildlife, visual hazards, electronic hazards, and thermal hazards.

Section 21674.7 of the Public Utilities Code mandates that the CALUPH, published by the Division of Aeronautics of the Department of Transportation, must be used to guide the creation, adoption, or modification of an ALUCP. The handbook helps ensure that local agencies use

criteria related to height, use, noise, safety, and density that are compatible with airport operations, aiming to prevent incompatible land uses near airports.

Section 21096 of the Public Resources Code requires a CEQA lead agency preparing an EIR for a project within an ALUCP boundary to utilize the CALUPH, as stated below:

21096. Technical Resources to Assist in Preparation of Environmental Impact Report as it Relates to Airport-Related Safety Hazards and Noise Problems; Use of Airport Land Use Planning Handbook; Negative Declaration for a Project

(a) If a lead agency prepares an environmental impact report for a project situated within airport land use compatibility plan boundaries, or, if an airport land use compatibility plan has not been adopted, for a project within two nautical miles of a public airport or public use airport, the Airport Land Use Planning Handbook published by the Division of Aeronautics of the Department of Transportation, in compliance with Section 21674.5 of the Public Utilities Code and other documents, shall be utilized as technical resources to assist in the preparation of the environmental impact report as the report relates to airport-related safety hazards and noise problems.

City of Napa Municipal Code

The City of Napa Municipal Code has not been updated since the adoption of the Napa County 2024 ALUCP, thus there are no regulations in the Municipal Code applicable to the ALUC zones the project is within. The following is required by the Municipal Code:

§ 17.34.070 **ALUC referral**.

A. General. General Plan Amendments, specific plans, zoning or subdivision ordinance amendments, "Not normally acceptable uses," and structure heights over applicable height limits within ALUCP compatibility zones shall be referred to and reviewed by the County Airport Land Use Commission (ALUC) for a consistency determination prior to final approval.

B. Process. When projects are referred to the ALUC, the following process shall be followed:

> 1. The Planning Commission shall hold a public hearing and make a recommendation on the application and refer the project to the ALUC.
>
> 2. The project shall be reviewed by the ALUC and the ALUC shall provide a ALUCP consistency determination. The ALUC may make recommendations to modify the project for consistency with the ALUCP.
>
> 3. The city decision-making body shall then hold a public hearing and take final action on the project. If the ALUC finds the project to be inconsistent with the ALUCP, the City Council may override that decision in accordance with state law.

§ 17.34.080 **Filing materials.**

In addition to standard application materials, the applicant shall provide the following filing materials:

A. Special Requirements In/Near Zone C. Subdivisions and new construction proposed in Zone D within 100 feet of Zone C, or within Zone C shall provide building envelopes, approach surfaces and the extended runway centerline on the plans.

B. Design Response, All Projects. The applicant shall address how the building or use has been designed so that it does not create smoke, glare, distracting lights, or electrical interference that may constitute a hazard to aircraft flight.

C. Uses Not Normally Acceptable. For projects identified as being Not Normally Acceptable, the applicant shall also address how their use has been appropriately designed to address identified criteria.

§ 17.34.090 **Findings**.

A. Except as provided in subsection C, the city shall make the following findings for a General Plan Amendment, specific plan, zoning or subdivision ordinance amendment, or use permit for a "Not Normally Acceptable" use:

1. The proposed project has been referred to the ALUC for a consistency determination; and

2. The ALUC has determined that proposed project is consistent with ALUCP compatibility policies and standards.

B. Design Review. In approving a design review permit for new development, the decision-making body must find that the building or structure has been designed to meet Airport Land Use Commission design requirements.

C. Local Override. To override a determination by the ALUC that a proposed project or use is inconsistent with the ALUCP, the City Council, by a two-thirds vote, must make specific findings defined by state law that the action is consistent with the purposes of the ALUC statute.

California Government Code Section 56742

The California Government Code (CGC), Section 56742 states:

a. Notwithstanding Section 56741, upon approval of the commission a city may annex noncontiguous territory not exceeding 300 acres if the territory meets all of the following requirements:

    1. It is located in the same county as that in which the city is situated.

    2. It is owned by the city.

    3. It is used for municipal purposes at the time commission proceedings are initiated.

b. Territory which is used by a city for the reclamation, disposal, and storage of treated wastewater may be annexed to the city pursuant to this section without limitation as to the size of the territory.

c. If territory is annexed pursuant to this section, the annexing city may not annex any territory not owned by the city, not used for municipal purposes, and not contiguous to the city, although the territory is contiguous to the territory annexed pursuant to this section.

d. Notwithstanding any other provision of this section, a city which annexes territory pursuant to this section may annex additional territory in the same county as that in which the city is situated which is owned by the United States government or the State of California and which is contiguous to the first annexed territory if the total acreage of the first annexed and the subsequently annexed territory together does not exceed 300 acres in area. If after the completion of the subsequent annexation, the city sells any or all of the first annexed territory, the subsequently annexed territory shall cease to be part of the city if the subsequently annexed territory is no longer contiguous to territory owned by the city.

e. When any or all of the territory annexed to a city pursuant to this section is sold by the city, all of the territory that is no longer owned by the city shall cease to be a part of that city.

f. A city may lease territory annexed pursuant to this section for any of the purposes authorized pursuant to Sections 37380 to 37396, inclusive, as well as enter into leases for the construction and operation of electrical generation, transmission, and distribution. If, however, a city enters into a lease on and after April 24, 2002, pursuant to Section 37395, 37396, or any other provision of law, that would authorize the development of a shopping center, hotel, motel, or lodging house on territory annexed pursuant to this section, the affected territory shall cease to be a part of the city.

g. When territory ceases to be part of a city pursuant to this section, the legislative body of the city shall adopt a resolution confirming the detachment. The resolution shall describe the detached territory and shall be accompanied by a map indicating the territory. Immediately upon adoption of the resolution, the city clerk shall make any filing required by Chapter 8 (commencing with Section 57200) of Part 4.

h. If territory annexed to a city pursuant to this section becomes contiguous to the city, the limitations imposed by this section shall cease to apply.

City of Napa 2040 General Plan

The City of Napa 2040 General Plan includes a Land Use and Community Design (LUCD) Element that guides the location, form and character of new development (City of Napa, 2022). The following policies are relevant to the Project:

> Policy LUCD 1-3: Work cooperatively with Napa County and other agencies to support maintaining the land surrounding the City as agriculture, greenbelt and rural uses while permitting the City to annex appropriate properties for urban uses.

Policy LUCD 6-1: Maintain a balance of land uses, including residential and commercial uses, and – given the City's position as the principal urban center of Napa County – industrial and service commercial uses that support the broader Napa Valley economic needs.

Goal LUCD-9: Recognize the importance of annexing unincorporated islands as a City services issue.

Policy LUCD 9-1: Support annexation of unincorporated islands to improve delivery of municipal services, support compatible land use planning, promote community cohesion, and enable representation in City municipal matters.

Goal LUCD-12: Promote diverse industrial opportunities in suitable locations to provide employment for Napa residents and promote economic growth in the City.

Policy LUCD 12-2: Support retention of industrial uses within the City when possible.

Policy LUCD 12-4: Ensure that industrial development is designed and operated to minimize–to the extent feasible–noise, heat, glare, dust, unscreened storage yards, air emissions, hazardous materials generation, and other negative effects.

IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the CEQA *Guidelines* states that a project would result in a significant impact to Land Use and Land Use Planning if it would:

- Physically divide an established community;
- 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;

Topics with No Impact

The annexation (and SOI amendment), pre-zoning, and GPA for the 2.87-acre property (Southern Annexation Parcel) into the City and subsequent development of the biomass conversion facility (BCF), as well as the expanded use of the 600 Tower Road Parcel would not physically divide an established community. The Southern Annexation Parcel is currently vacant and bordered by the existing NMDF site to the north and the Devlin Road Transfer Station to the south. The 600 Tower Road Parcel is bordered by the existing NMDF site and other industrial parcels. Other Project elements would occur on the existing NMDF site, such as the development of the anaerobic digestion facility (ADF). The Project vicinity includes existing solid waste facilities (NMDF and Devlin Road Transfer Station) and other heavy industrial uses. No established communities are within the Project vicinity as the nearest residence is approximately 2,340 feet east of the Project site, across Highway 29. Thus, no impact would occur, and this impact is not further discussed in this analysis.

Impact Analysis

Impact 3.9.1: Annexation of the southern parcel into the City could conflict with applicable annexation laws and regulations. (Less than Significant).

As discussed above, the City is proposing to annex the 2.87-acre property to the south (APN-057-090-060) located on the westerly side of Devlin Road between NMDF to the north and Devlin Road Transfer Station to the south and is pre-zoning the parcel to PQ-P:AC to be consistent with the existing NMDF site zoning. A GPA would also be required to designate the parcel in the General Plan as Public Serving to be consistent with the existing NMDF land use designation.

The Southern Annexation Parcel compromises approximately 2.87 acres and is currently zoned I:AC. The current Napa County zoning designation is intended to provide an environment exclusively for and conducive to the development and protection of a variety of industrial uses and facilities that are industrial in character.

Section 56742 of the CGC permits cities to annex noncontiguous territory upon approval of the Commission if all the criteria in CGC Section 56742 is met. The Southern Annexation Parcel would meet all the requirements of CGC Section 56742(a)-(h) because it is located in the same county as that the City of Napa is situated in (Napa County), it is owned by the City, and it is used for municipal purposes. Therefore, the parcel would be considered eligible to be annexed into the City per Section 56742 of the CGC.

Napa County LAFCO would be responsible for approving the proposed annexation of the Southern Annexation Parcel into the City. Napa County LAFCO policies require that all properties be pre-zoned prior to annexation. Thus, the City is proposing to pre-zone the Southern Annexation Parcel with the PQ-P:AC designation, consistent with LAFCO policies. The Public, Quasi-Public district provides for publicly owned properties dedicated to community servicing purposes, including government offices, public safety facilities and related community serving facilities. The NMDF is zoned PQ-P:AC and is dedicated to a community serving purpose. Thus, applicability of the PQ-P:AC designation to the Southern Annexation Parcel is the appropriate pre-zoning designation.

Napa County LAFCO amended its *Policy on CEQA* in October 2021, which identifies additional areas of local interest that shall be addressed in the preparation of any CEQA document. The first topic is cumulative and regional impacts, and as noted in Chapter 4 of this EIR, Other Topics and Impact Overview, the Project would not result in significant cumulative impacts. The second topic is public services and as noted in Section 3.12, Public Services, Utilities, and Service Systems, the Project would not result in significant impacts to these areas. The third topic is conversion of prime agricultural lands and resources, and as noted in Chapter 4 of this EIR, Other Topics and Impact Overview, no agricultural land exists on the Project site and no impact would result. The fourth topic is consistency with general and specific plans, and as noted throughout this section, the Project would be consistent with the City of Napa 2040 General Plan and no City of Napa specific plan covers the Project area. The fifth and final topic is the availability of affordable housing, and as noted in Chapter 4 of this EIR, Other Topics and Impact Overview, the Project (including the annexation of the southern parcel) would not hinder housing availability in

the region as the Department of Housing and Community Development (HCD) determined the Southern Annexation Parcel qualifies as "exempt surplus land" that is not appropriate for housing purposes (HCD, 2023). Therefore, the Project would be consistent with Napa County LAFCO's *Policy on CEQA*.

If approved, the annexation of the Southern Annexation Parcel would conform with all applicable CGC laws and regulations as well as all applicable Napa County LAFCO policies and regulations. Therefore, the Project would result in a less-than-significant impact.

Mitigation Measures

None required.

Impact 3.9.2: The Project could cause a significant environmental impact due to a conflict with an Airport Land Use Commission Plan. (Significant)

The Project site is adjacent and east of the Napa County Airport and within the Napa County ALUCP. The distance from the east terminus of Runway 24 to the 600 Tower Road Parcel, the NMDF site and the Southern Annexation Parcel is 1,300, 1,500 and 2,000 feet, respectively. The ALUCP designates eight "Airport Compatibility Zones" (A, B1, B2, B3, C, C1, D2, and E) that correspond to certain geographic areas depending on factors including distance from the airport and orientation to runways. The Project components of concern for this analysis are the ADF on the NMDF site and the BCF on the Southern Annexation Parcel. Development must be compatible with the ALUCP and Chapter 18.80 of the Napa County Code of Ordinances.

600 Tower Road Parcel

Based on review of the Napa County Airport 2024 ALUCP Compatibility Policy Map (ALUCP Compatibility Map), the 600 Tower Road Parcel is at least partially within Compatibility Zone A. Within ALUCP Zone A, which is considered the runway protection zone, land uses are limited to open space, pasture, auto parking, aircraft tie-down, and agricultural uses that do not cause a hazard to flight. This is an area of high risk from low flying aircraft (§18.80.060 Napa County Code of Ordinances). The Project does not propose development on the 600 Tower Road Parcel and the current uses on the parcel (storage of containers, vehicles, and equipment) are compatible with the ALUCP.

ADF on the Existing NMDF Site

Prior to the 2024 ALUCP Update, the NMDF site was not deemed an incompatible use by the ALUC. The 2024 ALUCP Compatibility Map indicates that the NMDF site is within Compatibility Zones A (small section at the northern end of the parcel), B1, and B2. Zones B1 (Inner Approach Departure Zone) and B2 (Inner Turning Zone) are areas restricted to low intensity uses such as golf courses, nurseries, outdoor storage, and mini storage. These zones represent a substantial risk to low flying aircraft. Certain uses are normally not acceptable in Compatibility Zone B based on concerns related to size, density of use, mobility, noise sensitivity

or propensity to attract birds. According to the Basic Compatibility Criteria for the Napa County Airport as presented in the 2024 ALUCP, solid waste disposal and transfer facilities, landfills, incineration, and recycling facilities are listed as incompatible in Zones B1 and B2 because of their potential to attract birds, generate dust, produce smoke or steam plumes, create electronic interference, or otherwise pose hazards to flight (Napa County, 2024b).

The proposed ADF could be considered an incompatible use under the 2024 ALUCP if it were to be sited outside the boundaries of an existing land use, however the ADF would be sited on the existing NMDF site. The ALUC reviews new or changed land use proposals against the ALUCP. The existing use on the NMDF site is vested and would not conflict with the ALUCP.

The CALUPH, Chapter 4.5 Airspace Protection, outlines hazards to flight (CALUPH, beginning on pg. 4-34), which include physical hazards, wildlife, visual hazards, electronic hazards, and thermal hazards. The proposed ADF on the NMDF site would not increase physical hazards as the building would be consistent with the height of the adjacent MRF building and would not exceed 35 feet. Wildlife hazards would not increase at the NMDF site because organics are processed "in-vessel" with the ADF and would not increase bird attraction to the site. Visual hazards (i.e., dust, steam or smoke) would not noticeably increase compared to existing conditions because the biogas is converted into renewable natural gas (RNG) for vehicle fueling onsite and the overall process produces negligible dust, steam, and smoke. Electronic and thermal hazards would not significantly increase compared to existing conditions at the NMDF, as the ADF does not require a large electrical load that could interfere with radio communications or navigation signals, and the converted RNG would be combusted by collection vehicles, primarily offsite. As stated in Section 3.10, Noise, the project would not result in any airport noise impacts, as the ADF is an industrial facility on the existing NMDF site with limited onsite employees.

BCF on the Southern Annexation Parcel

According to the ALUCP Compatibility Map, the Southern Annexation Parcel is located in Compatibility Zone B2. The proposed BCF may represent an incompatible land use due to its renewable energy and bioenergy component and because its height may exceed maximum height requirements for this compatibility zone (currently proposed at roughly 45 feet in height). Due to the proposed use and height, ALUC referral is required for the BCF under Napa Municipal Code Section 17.34.070. Section 17.34.070(A). The development of the BCF would constitute new construction on an existing vacant parcel, and thus, the ALUC would be required to make a compatibility determination prior to Project approval. In addition, due to its proposed height, the BCF would require FAA approval. The Project sponsor is required to submit FAA form 7460, Notice of Proposed Construction or Alteration. A 7460 analysis, more formally known as an Obstruction Evaluation/Airport Airspace Analysis (OE/AAA), is a process by which the FAA evaluates proposed construction projects near airports to identify and mitigate potential hazards to navigable airspace and to ensure that new structures, alterations, or temporary obstructions would not pose a risk to aircraft during takeoff, landing, or flight operations. In addition to these physical hazards the FAA also evaluates the potential for electromagnetic interference effects upon navigable airspace and air navigation facilities. The FAA then issues a determination letter, which may be conditional or require adjustments to the project. The proposed structure must be

built according to the approved plans and any conditions specified in the FAA's final determination letter (FAA, 2025).

The Project sponsor submitted FAA Form 7460 on June 3, 2025, and the FAA issued its Determination Letter on July 29, 2025 (see **Appendix H**). The FAA study evaluated the facility's structures, including their height, location, and use, to determine if they posed a hazard to air navigation. The FAA concluded that the structures do not exceed obstruction standards and do not present a hazard to air navigation. While no marking or lighting is required for aviation safety, the FAA recommended voluntary compliance with its guidelines. The FAA study also confirmed that the proposed BCF presents no risk to national security.

As noted previously, the ALUC would be required to make a compatibility determination prior to project approval. If the ALUC determines that the proposed land use action (the "Project") is inconsistent with the ALUCP, the ALUC must notify the City of Napa in writing and include the reasons for the inconsistency determination. If the City wishes to proceed with the Project, they must overrule the ALUC determination in accordance with the provisions of state law.[1] The City must make specific findings that the proposed action (the "Project") is consistent with the purposes of the ALUC statutes as set forth in the Public Utilities Code and the findings must be supported by substantial evidence. Specifically, the City must make findings that project will not:

- Impair the orderly, planned expansion of the airport;
- Adversely affect the utility or capacity of the airport (such as by reducing instrument approach procedure minimums); or
- Expose the public to excessive noise and safety hazards.

In accordance with the ALUC statutes, the City must also

- Provide to the ALUC and Caltrans a copy of the proposed decision and findings to overrule the ALUC at least 45 days prior to the hearing date.
- Hold a public hearing on the matter. The public hearing shall be publicly noticed consistent with the agency's established procedures.
- Include any comments received from the ALUC, Caltrans, the FAA, Airport owner, or the public in the public record of any final decision to overrule the ALUC.
- Make a decision to overrule the ALUC by a two-thirds vote of its governing body.

The ALUC statutes indicate that if a local agency other than the airport owner overrules the ALUC, then the agency owning and operating the airport "shall be immune from liability for

[1] See Public Utilities Code Section 21670(a), 21675.1(d), 21676 and 21676.5(a).

damages to property or personal injury caused by or resulting directly or indirectly from the City's decision to overrule the ALUC's compatibility determination or recommendation.

Although the BCF on the Southern Annexation Parcel could be considered an incompatible land use due to its proximity to the Napa County Airport, this is a planning and policy matter, not a significant environmental effect under CEQA. Inconsistency with a plan, such as the ALUCP, is not, by itself, an adverse physical effect on the environment.[2]

The CALUPH, Chapter 4.5 Airspace Protection, outlines hazards to flight (CALUPH, beginning on pg. 4-34), which include physical hazards, wildlife, visual hazards, electronic hazards, and thermal hazards. The FAA concluded that the structures associated with the BCF do not exceed obstruction standards and do not present a physical hazard to air navigation.

The BCF would not increase bird attraction to the project area compared to existing conditions because the feedstock does not attract birds. The FAA *Advisory Circular, Hazardous Wildlife Attractants on or Near Airports*, states that branches and woodchips generally do not attract wildfire that is hazardous to air travel (FAA, 2020). Since the BCF uses woody feedstock only, bird attraction is not an issue.

No significant smoke or steam or dust emissions are produced as the biogas is converted into renewable electricity and the overall process produces negligible dust, steam, and smoke. In regards to electronic and thermal hazards, the FAA review of the project did not indicate the potential for thermal or electromagnetic interference effects upon navigable airspace and air navigation facilities. This is likely because of the small-scale and overall power output of the facility (1.5 MW).

Furthermore, the BCF would not be considered critical community infrastructure, as it is designed to provide power to NMDF operations, which is also served by PG&E. Potential damage to the BCF would not result in significant adverse effects to public health and welfare beyond the immediate vicinity of the facility.

As stated in Section 3.10, Noise, the project would not result in any airport noise impacts, as the BCF is an industrial facility with limited onsite employees.

Therefore, based on the information available to the City, there are no known hazards associated with the BCF that could significantly impact public safety, including possible hazards to the airport or surrounding community. However, in an abundance of caution, given that the ALUC

[2] *Lighthouse Field Beach Rescue v. City of Santa Cruz (2005) 131 Cal.App.4th 1170, 1207* ("an inconsistency between a project and other land use controls does not in itself mandate a finding of significance. It is merely a factor to be considered in determining whether a particular project may cause a significant environmental effect."].) Quoted from the California Natural Resources Agency, November 2018, *Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines,* OAL Notice File No. Z-2018-0116-12, page 95, Available at: https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2018_CEQA_Final_Statement_of%20Reasons_111218.pdf?utm

has not yet considered the Project and the City has not received feedback on the Project design in relation to airport hazards, the development of the BCF would be a significant impact.

Mitigation Measures

Mitigation Measure 3.9.2: If it is determined that the Project is conditionally compliant with the ALUCP, the City shall agree to the conditions, as feasible. If it is determined that the Project does not comply with the ALUCP, the City shall consider ALUC feedback and amend (as feasible) and resubmit the Project for ALUC Executive Director Review.

Level of Significance After Mitigation

Implementation of Mitigation Measure 3.9.2 would reduce this impact, but without knowing the specific conditions or feedback from the ALUC, and if ALUC conditions or potential changes to Project design are feasible, the impact would be significant and unavoidable.

Impact 3.9.3: The Project could conflict with City of Napa 2040 General Plan Policies. (Less than Significant)

A GPA would be required to designate the parcel in the General Plan as Public Serving to be consistent with the existing NMDF land use designation. **Table 3.9-1** includes analysis of relevant goals and policies in the City of Napa 2040 General Plan that are discussed in the Regulatory Setting above. As detailed in **Table 3.9-1**, the Project would not conflict with land use goals and policies related to the Project. Furthermore, the Project would not conflict with applicable City of Napa 2040 General Plan policies that are discussed in various resource sections throughout Chapter 3 of this EIR. Therefore, impacts related to the Project conflicting with applicable goals and policies of the City of Napa 2040 General Plan would be less than significant.

Mitigation Measures

None required.

TABLE 3.9-1. PROJECT CONSISTENCY WITH GENERAL PLAN POLICIES

General Plan Policies	Consistent?	Analysis
Policy LUCD 1-3: Work cooperatively with Napa County and other agencies to support maintaining land surrounding the City as agriculture, green belt and rural uses while permitting the City to annex appropriate properties for urban uses.	Consistent	If approved, the Southern Annexation Parcel would be annexed to the City and would be used as an urban industrial use that would be dedicated to a community serving purpose. Annexation of the 2.87-acre property would not result in loss of agriculture, green belt and rural uses.
Policy LUCD 6-1: Maintain a balance of land uses, including residential and commercial uses, and – given the City's position as the principal urban center of Napa County – industrial and service commercial uses that support the broader Napa Valley economic needs.	Consistent	If approved, the Project would continue to support the City's economic needs by providing a community serving use to the residents of the City that supports the broader Napa Valley's economic needs.
Goal LUCD-9: Recognize the importance of annexing unincorporated islands as a City services issue.	Consistent	The Project would annex the Southern Annexation Parcel (an unincorporated island owned by the City) into the City.
Policy LUCD 9-1: Support annexation of unincorporated islands to improve delivery of municipal services, support compatible land use planning, promote community cohesion, and enable representation in City municipal matters.	Consistent	The Project would annex the Southern Annexation Parcel (an unincorporated island owned by the City) into the City. This would improve delivery of municipal services as the Southern Annexation Parcel is adjacent to the existing NMDF site and is compatible with the solid waste facility/industrial nature of the Project area.
Goal LUCD-12: Promote diverse industrial opportunities in suitable locations to provide employment for Napa residents and promote economic growth in the City.	Consistent	The Project would provide a diverse industrial opportunity adjacent to the existing NMDF site, compatible with the solid waste facility/industrial nature of the Project area. The Project would provide 6 additional jobs and promote economic growth in the City.
Policy LUCD 12-2: Support retention of industrial uses within the City when possible.	Consistent	The Project would support industrial operations that would benefit residents of the City.
Policy LUCD 12-4: Ensure that industrial development is designed and operated to minimize—to the extent feasible—noise, heat, glare, dust, unscreened storage yards, air emissions, hazardous materials generation, and other negative effects.	Consistent	Negative environmental effects, such as noise, GHG emissions, glare, dust, aesthetics, air quality, and hazardous materials, have been analyzed throughout this EIR and mitigation measures have been incorporated, when necessary, to reduce significant impacts. The Project would not result in significant and unavoidable environment effects.

SOURCE: City of Napa, 2022.

REFERENCES

California Department of Housing and Community Development. 2023. RE: HCD's Review of the Napa-Vallejo Waste Management Authority's Resolution No. 2024-02 Declaring APN 057-090-060 as "Exempt Surplus Land." September 14, 2023.

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LAFCO of Napa County, 2021. *Policy on CEQA*, Last Amended: October 4, 2021. https://napalafco.specialdistrict.org/files/8e9d5c537/Policy_CEQA_10-4-21.pdf, Accessed July 3, 2025.

Napa County. 2024a. *Local Agency Formation Commission of Napa County, Changes of Organization,* https://napa.lafco.ca.gov/changes-of-organization, Accessed July 1, 2025.

Napa County, 2024b. Countywide Airport Land Use Compatibility Plan: Angwin – Parrett Field and Napa County Airport. Adopted by the Napa County Airport Land Use Commission, December 4, 2024. Prepared by Mead and Hunt.

Napa County. 1991. *Napa County Airport Land Use Commission, Airport Land Use Compatibility Plan.*

3.10 NOISE

This section evaluates the potential noise impacts of the Project. This section provides a brief technical background on "sound", as well as existing noise sources and levels in the Project vicinity. This evaluation reviews applicable State and local noise regulations followed by analysis of noise impacts of construction and operation of the Project.

3.10.1 SETTING

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise is defined as unwanted sound. Sound pressure level has become the most common descriptor used to characterize the "loudness" of an ambient sound level. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain. Decibels are measured using different scales, and it has been found that A-weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. All references to decibels in this report will be A-weighted unless noted otherwise. **Table 3.10-1** identifies decibel levels for common sounds heard in the environment.

TABLE 3.10-1. TYPICAL NOISE LEVELS

Noise Level (dB)	Outdoor Activity	Indoor Activity
90+	Gas lawn mower at 3 feet, jet flyover at 1,000 feet	Rock Band
80-90	Diesel truck at 50 feet	Loud television at 3 feet
70-80	Gas lawn mower at 100 feet, noisy urban area	Garbage disposal at 3 feet, vacuum cleaner at 10 feet
60-70	Commercial area	
40-60	Quiet urban daytime, traffic at 300 feet	Large business office, dishwasher next room
20-40	Quiet rural, suburban nighttime	Concert hall (background), library, bedroom at night
10-20		Broadcast / recording studio
0	Lowest threshold of human hearing	Lowest threshold of human hearing

SOURCE: RCH Group, Inc. (modified from Caltrans Technical Noise Supplement, 1998)

With regard to increases in A-weighted noise level, the following relationships occur (Caltrans, 1998).

- Under controlled conditions in an acoustics laboratory, the trained healthy human ear is able to discern changes in sound levels of 1 dB;
- Outside of such controlled conditions, the trained ear can detect changes of 2 dB in normal environmental noise;

- It is widely accepted that the average healthy ear, however, can barely perceive noise levels changes of 3 dB;
- A change in level of 5 dB is a readily perceptible increase in noise level; and
- A 10-dB change is recognized as twice as loud as the original source.

Several time-averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are the equivalent A–weighted sound level over a given time period (Leq)[1]; average day–night 24-hour average sound level (Ldn)[2] with a nighttime increase of 10 dB to account for sensitivity to noise during the nighttime; and community noise equivalent level (CNEL)[3], also a 24-hour average that includes both an evening and a nighttime sensitivity weighting. Other frequently used noise descriptors are summarized below:

- Lx: the noise level that is equaled or exceeded x percent of the specified time period.
- Lmax: the instantaneous maximum noise level for a specified period of time.

Noise Attenuation

Stationary point sources of noise, including construction equipment, attenuate (lessen) at a rate of 6 to 7.5 dB per doubling of distance from the source, depending on ground absorption. Soft sites attenuate at 7.5 dB per doubling because they have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. Hard sites have reflective surfaces (e.g., parking lots or smooth bodies of water) and therefore have less attenuation (6.0 dB per doubling). A street or roadway with moving vehicles (known as a "line" source), would typically attenuate at a lower rate, approximately 3 to 4.5 dB each time the distance doubles from the source, that also depends on ground absorption (Caltrans, 1998). Physical barriers located between a noise source and the noise receptor, such as berms or sound walls, would increase the attenuation that occurs by distance alone. Noise from large construction sites would have characteristics of both "point" and "line" sources, so attenuation would likely range between 4.5 and 7.5 dB per doubling of distance.

Sensitive Receptors

The Napa County General Plan identifies noise-sensitive land uses as residences, churches, schools and outdoor recreation areas. The Project site is bordered by industrial uses and Tower Road to the north, industrial uses and Devlin Road to the east, Napa County airport to the west, and vacant land and Devlin Road Transfer Station to the south. There are no noise-sensitive receptors nearby. The nearest residence is located approximately 2,340 feet to the east of the Project site, across Highway 29 on Café Court.

[1] The Equivalent Sound Level (Leq) is a single value of a constant sound level for the same measurement period duration, which has sound energy equal to the time–varying sound energy in the measurement period.

[2] Ldn is the day–night average sound level that is equal to the 24-hour A-weighted equivalent sound level with a 10-decibel penalty applied to night between 10:00 p.m. and 7:00 a.m.

[3] CNEL is the average A-weighted noise level during a 24-hour day, obtained by addition of 5 decibels in the evening from 7:00 to 10:00 p.m., and an addition of a 10–decibel penalty in the night between 10:00 p.m. and 7:00 a.m.

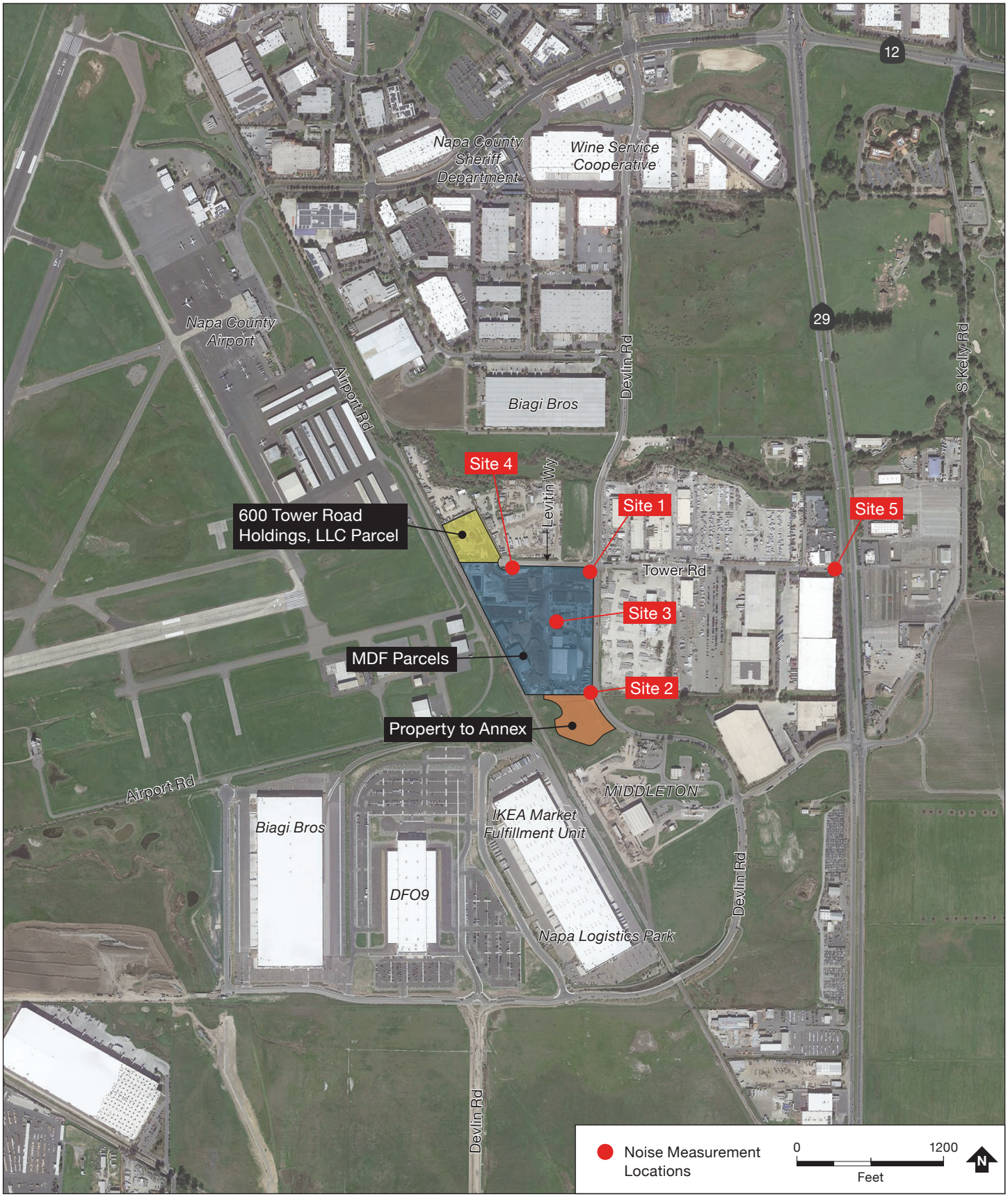
Existing Noise Sources

To quantify existing ambient noise levels, RCH Group conducted two long-term (72-hour) and several short-term (10-minute) noise measurements on and nearby the Project site. Long-term noise measurements were made using Metrosonics db308 Sound Level Meters calibrated before and after the measurements. Short-term measurements were made using a Larson Davis SoundTrack LxT Sound Level Meter calibrated before and after measurements. **Table 3.10-2** summarizes the locations and results of the noise measurements. **Figure 3.10-1** shows the locations of the noise measurements. The main source of noise in and around the Project vicinity is traffic-related noise on Devlin Road, Tower Road, and Highway 29 and existing Napa Materials Diversion Facility (NMDF) operations. See **Appendix F** for 24-hour noise plots for Sites 1 and 2.

TABLE 3.10-2 EXISTING NOISE LEVELS

Location	Time Period	Noise Levels (dB)	Noise Sources
Site 1: Northeastern NMDF boundary, attached to a tree, 60 feet south of intersection of Tower Road and Devlin Road.	Tuesday April 2, 12:00 a.m. Through April 4, 11:59 p.m., 2024 Tuesday – Thursday 72-hour measurement	Hourly Leq's ranged from 52-76 CNELs: 73, 73, 74	Unattended noise measurements do not identify noise sources
Site 1: Northeastern NMDF boundary, attached to a tree, 60 feet south of intersection of Tower Road and Devlin Road.	Monday April 1, 2024 10:04 a.m. to 10:14 a.m.	5-minute Leq's: 69, 71	Traffic on Devlin Road and Tower Road was 77-85 dB. Distant back-up beeper was 70 dB.
Site 2: Southeastern NMDF boundary, attached to a fence, 60 feet west of centerline of Devlin Road.	Tuesday April 2, 12:00 a.m. Through April 4, 11:59 p.m., 2024 Tuesday – Thursday 72-hour measurement	Hourly Leq's ranged from 44-74 CNELs: 66, 65, 69	Unattended noise measurements do not specifically identify noise sources
Site 2: Southeastern NMDF boundary, attached to a fence, 60 feet west of centerline of Devlin Road.	Monday April 1, 2024 10:19 a.m. to 10:29 a.m.	5-minute Leq's: 60, 62	Traffic on Devlin Road was 68-74 dB. Forklift from Project site operating nearby was 62 dB.
Site 3: Middle of the NMDF, near the entrance to the vehicle scale.	Monday April 1, 2024 9:18 a.m. to 9:28 a.m.	5-minute Leq's: 76, 64	Vehicle noise from large trucks and passenger vehicles leaving and entering the NMDF was 59-87 dB.
Site 4: Northern boundary of the NMDF, nearby adjacent industrial uses.	Monday April 1, 2024 9:45 a.m. to 9:55 a.m.	5-minute Leq's: 66, 61	Large trucks leaving industrial site to the north was 75 dB. Maintenance worker operating lawn mower nearby was 59-68 dB. Distant operational noise from NMDF was 65 dB.
Site 5: 100 feet west of Intersection of Tower Road and Highway 29	Friday April 5, 2024 9:06 a.m. to 9:16 a.m.	5-minute Leq's: 66, 68	Constant traffic from Highway 29 was 70-83 dB.

SOURCE: RCH GROUP, 2024



Source: RCH Group; Google Earth Pro, 2024

Figure 3.10-1
Noise Measurement Locations

Regulatory Context

Pertinent local noise regulations are discussed within the following section. There are no applicable federal or State noise requirements.

Local

Napa County General Plan

The Napa County General Plan's Community Character Element provides a framework to regulate excessive noise levels and promotes compatibility of land uses with respect to noise. The Napa County General Plan identifies vehicle traffic on highways and streets, construction, agricultural activities, commercial and industrial operations, and trash pick-up as the major sources of noise in the County (Napa County, 2008).

Napa County Municipal Code – Noise Ordinance

The Napa County Noise Ordinance (Chapter 8.16 of the Municipal Code) regulates excessive noises that are detrimental to the public health, welfare, safety and quality or life of Napa County. The following regulations are applicable to the Project:

> Per Section 8.16.080(2)(a), operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of seven p.m. and seven a.m., such that the sound therefrom creates a noise disturbance across a residential or commercial real property line shall be prohibited, except for emergency work of public service utilities or by variance issued by the appropriate authority.
>
> Per Section 8.16.080(2)(b), where technical and economically feasible, construction activities shall be conducted in a manner that the maximum noise levels at affected properties will not exceed those listed in Table 8.16.080 (see **Table 3.10-3**).

TABLE 3.10-3. NOISE LIMITS FOR CONSTRUCTION ACTIVITIES

	Residential	Commercial	Industrial
Daily: 7 a.m. to 7 p.m.	75 dBA	80 dBA	85 dBA
Daily: 7 p.m. to 7 a.m.	60 dBA	65 dBA	70 dBA

SOURCE: Napa County Municipal Code, Table 8.16.080.

City of Napa 2040 General Plan

The City of Napa 2040 General Plan Safety and Noise Element provides a framework to minimizing risks posed by excessive noise. The City of Napa 2040 General Plan identifies vehicle traffic on highways and streets, trains, aircraft, car washes, construction, agricultural activities, landscaping, and HVAC equipment as the major sources of noise in the City (City of Napa, 2022).

City of Napa Municipal Code

The City of Napa Municipal Code provides allowable construction hours. The following regulation is relevant to the Project.

> Per Section 8.08.025, Any person engaged in construction activity, other than construction activity on an existing residential unit which such a person owns or rents, pursuant to any provision of this code, shall limit said construction activity as follows: (A) Construction activities throughout the entire duration of the project shall be limited to the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday. There will be no start up of machines nor equipment prior to 8:00 a.m., Monday through Friday; no delivery of materials nor equipment prior to 7:30 a.m. nor past 5:00 p.m., Monday through Friday; no cleaning of machines nor equipment past 6:00 p.m., Monday through Friday; no servicing of equipment past 6:45 p.m., Monday through Friday; and construction on weekends or legal holidays shall be limited to the hours of 8:00 a.m. to 4:00 p.m., unless a permit shall first have been secured from the City Manager, or designee, pursuant to Section 8.08.050 of this code. The City Manager, or designee, shall grant such permit: (1) For emergency work; (2) Other work, if work and equipment will not create noise that may be unreasonably offensive to neighbors as to constitute a nuisance; or (3) If necessary to protect public health, safety, and welfare. (B) All muffler systems on construction equipment shall be properly maintained. (C) All construction equipment shall not be placed adjacent to developed areas unless said equipment is provided with acoustical shielding. (D) All construction and grading equipment shall be shut down when not actively in use. (E) Construction activity by or on behalf of a public agency, which is necessary to avoid a disruption of a public project or to protect the public health, safety, and welfare, shall be exempt from the time limitations of this section.

3.10.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the CEQA *Guidelines* states that a project would result in a significant impact to Noise if it would:

- Generate a substantial temporary or permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generate excessive groundborne vibration or groundborne noise levels; or
- 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, expose persons residing or working in the project area to excessive noise levels.

Topics with No Impact

Construction activities have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. In most cases, vibration induced by typical construction equipment does not result in adverse effects on people or structures (Caltrans, 2013). At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely

results in structural damage. Vibratory motion is commonly described by identifying the peak particle velocity (PPV). For vibration, a PPV threshold of 0.5 inches per second or greater can cause architectural damage and minor structural damage. The FTA recommends a threshold of 0.5 PPV for modern residential and commercial structures (FTA, 2006). Vibrational effects from typical construction activities are only a concern within 25 feet of existing structures (Caltrans, 2002). Project construction would utilize typical construction equipment (i.e., no equipment that generates high vibration like pile driving or blasting) and would occur at distances far greater than 25 feet of existing structures, thus, vibration from construction equipment would be well below the 0.5 PPV threshold at all off-site structures. Therefore, construction of the Project would not result in significant vibration impacts, and these impacts are not further discussed in this analysis.

The Project is located directly east of the Napa County Airport. Figure CC-1 of the Napa County General Plan shows the northwest portion of the Project site lies within the 55 dB, CNEL noise contour. Since people currently working at the NMDF already are subject to noise levels within the 55 dB, CNEL contour from the Napa County Airport, implementation of the Project would not result in an increase in existing airport noise that would expose people working at the Project site to excessive noise levels because the Project does not contain any facilities that would result in an increase to the existing airport noise levels. Therefore, the Project would not result in any airport noise impacts. Airport noise impacts are not further discussed in this analysis.

Impact Analysis

Impact 3.10.1: Construction of the Project could increase noise levels. (Less than Significant)

Construction Related Noise Impacts

Construction would result in a temporary increase in noise levels in the vicinity of the Project. Construction activities would include site grading, clearing and excavation work. Construction would require noise-generating equipment, such as excavating machinery (e.g., excavators, loaders, etc.) and other construction equipment (e.g., scrapers, dozers, compactors, trucks, etc.). The noise levels generated by construction equipment can vary greatly depending upon factors such as the type and specific model of the equipment, the operation being performed, the condition of the equipment and the prevailing wind direction. The maximum noise levels for various types of construction equipment that could be used during construction are provided in **Table 3.10-4**. Maximum equipment noise levels could range from 74 to 89 dB, Lmax at 50 feet.

TABLE 3.10-4. TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT (Lmax)

Construction Equipment	Noise Level (dB, Lmax at 50 feet)
Dump Truck	76
Air Compressor	78
Backhoe	78
Dozer	82

Compactor (ground)	83
Crane	81
Excavator	81
Flat Bed Truck	74
Paver	77
Grader	85
Compressor (Air)	78
Generator	81
Roller	80
Vibratory Concrete Mixer	80
Concrete Mixer Truck	79
Jackhammer	89

NOTES: Lmax = maximum sound level

SOURCE: Federal Highway Administration (FHWA) Roadway Construction Noise Model User's Guide, 2006.

As discussed above, the Project site is surrounded by industrial uses with no noise-sensitive receptors nearby. Per Section 8.16.080(2)(b), construction activities shall be conducted in a manner that the maximum noise levels at affected properties will not exceed 85 dB, Lmax at the nearest industrial property line during daytime (7:00 a.m. to 7:00 p.m.). The nearest industrial property line is approximately 70 feet from the closest construction activities that could occur on the Southern Annexation Parcel. A potentially significant impact would occur if construction noise exceeding 85 dB, Lmax at the nearest industrial property would occur during daytime hours

Construction equipment would not all operate at the same time or location because construction equipment would not be in constant use during each workday at any given location or construction phase (e.g., foundations, post-construction finishing, etc). For example, a dozer and an excavator may be working on the Project site simultaneously but would not be working in close proximity to one another at a given time due to the nature of their respective operations. An excavator, loader, and dump truck were analyzed together for construction noise impacts (due to their likelihood of being used in conjunction with one another) using the FHWA's Roadway Construction Noise Model (RCNM) (See **Appendix F** for construction noise modeling).

Based on these assumptions, grading operations using an excavator, loader, and dump truck at the nearest industrial property line would be 77.8 dB, Lmax. These noise levels would not exceed the 85 dB, Lmax daytime construction noise standard. This estimated construction noise level for grading operations is very conservative because it is assumed that all equipment that is proposed to be used for grading is present and operating simultaneously at the closest point to the nearest industrial property line. Because construction occurring on-site would vary throughout the Southern Annexation Parcel and noise from construction would depend on what stage of construction is occurring, the noise levels at nearby industrial uses would be much lower than 77.8 dB, Lmax for most of the construction period. Furthermore, construction would be required to comply with the construction hours in the City of Napa Municipal Code (between 7 a.m. to 7

p.m. on weekdays and 8 a.m. to 4 p.m. on weekends). Therefore, noise impacts from construction would be less than significant.

Mitigation Measures

None required.

Impact 3.10.2: Operation of the Project could increase noise levels. (Less than Significant)

Operational Noise Impacts

As shown in **Table 3.10-2**, traffic noise on Devlin Road is the primary source of noise in and around the Project vicinity and was observed as high as 85 dB, Lmax at the intersection of Tower Road and Devlin Road and as high as 87 dB, Lmax near the entrance scale of the NMDF. The 24-hour noise levels at the northeastern boundary of the NMDF were 73-74 dB, CNEL, indicating a loud noise environment that is typical of an industrial area.

Once operational, the new Project facilities would be very similar to the existing industrial facilities operating at the NMDF site. The introduction of the new Project facilities would not be expected to generate a substantial permanent increase in ambient noise levels in the vicinity of surrounding industrial uses because of the high existing noise levels nearby the Project site. Any minor increase in noise from the operation of new Project facilities would be typical of an industrial use in an existing industrial area and would very likely be masked by existing traffic noise on Devlin Road and Tower Road at off-site surrounding industrial uses.

A doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a road) would result in a barely perceptible change in sound level. Because the surrounding off-site surrounding industrial uses already experience high traffic noise levels, operation of new Project facilities would not be perceptible at off-site surrounding industrial uses. As discussed above, the nearest residence is located approximately 2,340 feet to the east of the Project site, across Highway 29 on Café Court. At this distance, the increase in traffic would not result in a doubling of the volume of traffic on nearby roadways (i.e., Highway 29). Thus, any minor increase in truck trips arriving to and leaving the Project site would not be perceptible at the nearest residence. Therefore, operational noise impacts from new Project facilities would be less than significant.

Mitigation Measures

None required.

3.10.3 REFERENCES

Caltrans. 1998. Technical Noise Supplement.

Caltrans. 2002. Transportation Related Earthborne Vibrations.

City of Napa. 2022. City of Napa 2040 General Plan.

FHWA. 2006. Roadway Construction Noise Model User's Guide.

Napa County. 2008. Napa County General Plan.

3.11 TRANSPORTATION

This section provides background information on the transportation system in the vicinity of the Project site and outlines potential impacts to transportation that may result from the Project. A discussion of federal, state, and local laws, policies, and regulations that influence transportation systems are also presented in this section. Background traffic volumes, the environmental setting, and impact analysis information presented in this section were obtained from the Traffic Generation Analysis prepared for the Project by PHA Transportation Consultants (PHA, 2025; see **Appendix G**).

3.11.1 SETTING

Project Site Access, Daily Vehicle Limit, and Existing Traffic

Napa Materials Diversion Facility (NMDF) is currently accessed via Levitin Way off Tower Road which connects to Highway 29. Devlin Road runs parallel to the NMDF site and the Southern Annexation Parcel and connects to Airport Boulevard to the north and South Kelly Road to the south. Most site-related traffic uses Highway 29, Tower Road, South Kelly Road, and Devlin Road (PHA, 2025).

NMDF operates under Solid Waste Facility Permit (SWFP) 28-AA-0030, which limits the facility to a maximum tonnage of 760 tons per day (tpd) and 386 waste hauling vehicles per day. Employee and other maintenance or visitor vehicles are not included in this vehicle count limit. Existing vehicle counts in 2023 provided by the City's authorized operator Napa Recycling & Waste Services (NRWS) indicate that October is the month with the highest vehicle count at 6,317 total waste hauling vehicles or 12,634 trips, representing inbound and outbound trips. The average daily waste hauling vehicle count during October 2023 was 204 (6,317 vehicles/31 days). Vehicle mix varies day-to-day at the Project site. Existing vehicle count data from October 2023 indicates that self-haul (pickup trucks) account for 41% of all waste hauling vehicles, collection route trucks account for 44% and transport trucks account for 15%. NMDF currently has between 40 and 50 employees and maintenance workers traveling to the facility every day.

Future Traffic and Proposed Access Along Devlin Road

The Project proposes to increase the NMDF's overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd. The additional waste received with the Project would be transported by route collection trucks or transport trucks; the added tonnage would not be expected to increase self-haul vehicles (PHA, 2025). Future incoming waste associated with the tonnage increase would arrive at the Project site via 10-ton garbage collection trucks or 20-ton transfer trucks. The vehicle mix would vary daily and was assumed to be the same as the existing condition (roughly three garbage collection trucks to one transfer truck).

Future Operation with 1,000 TPD (Weekly Average)

Assuming the same ratio of garbage collection trucks to transport trucks as the existing condition (three garbage collection trucks to one transfer truck), the estimated average daily increase

associated with the 240 tpd increase would result in an increase of 19 waste hauling vehicles (heavy trucks) per day. However, the future biomass conversion facility (BCF) would eliminate 4 average daily truckloads (20-ton transfer trucks) of processed wood waste and compost that is currently sent to Woodland Biomass Power Plant and Potrero Hills Landfill. The Project would also require one additional light heavy duty diesel truck (miscellaneous business) and one diesel fuel truck for transporting fuels to the site. Therefore, the Project would result in a net increase of approximately 17 average daily heavy trucks (PHA, 2025).

Future Operation with 1,500 TPD (Peak Daily)

The existing NMDF is limited to a permitted peak daily tonnage limit of 760 tpd. Although the Project would only increase the incoming tonnage limit by an average of 240 tpd, waste approximately double the current permitted limit could be received on any given day under the proposed peak daily limit of 1,500 tpd. If the amount of waste received approached the proposed 1,500 tpd peak daily limit on a given day, lower tonnage days would also occur during the given week because the facility would also be restricted to the proposed 1,000 tpd weekly average (PHA, 2025).

Assuming the same ratio of garbage collection trucks to transport trucks as the existing condition (three garbage collection trucks to one transfer truck), the estimated peak daily tonnage increase would result in an increase of 58 waste hauling vehicles (heavy trucks) on a peak day. As previously stated, the future BCF would eliminate 4 average daily truckloads (20-ton transfer trucks) of processed wood waste and compost that is currently sent to Woodland Biomass Power Plant and Potrero Hills Landfill, and the Project would also require one additional light heavy duty diesel truck (miscellaneous business) and one diesel fuel truck for transporting fuels to the site. Therefore, the Project would result in a net increase of approximately 56 peak daily heavy trucks (PHA, 2025).

Future Access to Southern Annexation Parcel

The proposed BCF on the Southern Annexation Parcel to be annexed into the City would be accessed via a new driveway off of Devlin Road (see **Figure 2-3**) and existing NMDF access at Levitin Way.

Regulatory Setting

Transportation policies, laws, and regulations that would apply to the Project are summarized below. This information provides a context for the impact discussion related to the Project's consistency with applicable regulatory conditions. There are no federal environmental laws or policies applicable to the Project's transportation analysis.

State

Senate Bill 743

Senate Bill 743 (SB 743; Steinberg, 2013) governs the application of new State CEQA *Guidelines* for addressing transportation impacts based on Vehicle Miles Traveled (VMT). It was codified in Public Resources Code §21099, and required changes to the guidelines implementing the analysis

of transportation impacts in CEQA (State CEQA *Guidelines*) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 15000 et seq.). The Governor's Office of Planning and Research (OPR) has proposed, and the California Natural Resources Agency (Agency) has certified and adopted, changes to the State CEQA *Guidelines* that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. With the Agency's certification and adoption of the changes to the State CEQA *Guidelines*, automobile delay (traffic congestion), as measured by "level of service" and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3).)"

The major concern with "level of service" analyses is that fixing traffic congestion results in better traffic flows, higher speeds, reduced times for trips, and decision making that favors more driving (induced trip generation). Wider freeways and collector roads with less congestion induce more traffic at higher speeds with resulting increases in greenhouse gases and traffic accidents (OPR, 2020a).

The OPR document *Technical Advisory On Evaluating Transportation Impacts in CEQA* (Technical Advisory) (OPR, 2018) provides general direction regarding the methods to be employed and significance criteria to evaluate VMT impacts, absent polices adopted by local agencies. To achieve the State's long-term climate goals, California needs to reduce per capita VMT. The Technical Advisory is focused on the major contributors to VMT including residential, office, and retail projects. The Technical Advisory does not mention solid waste projects.

Caltrans LOS Criteria

With the implementation of SB 743, the California Department of Transportation (Caltrans) has indicated that for CEQA purposes LOS on State highways is no longer a significance criterion. Instead, Caltrans recommends that a project's impact on safety be evaluated. Caltrans recommends that peak period queue lengths in comparison to available storage be the primary evaluation criterion.

Local Regulations

Napa Valley Countywide Transportation Plan

The countywide transportation plan outlines priorities for the Napa Valley Transportation Authority (NVTA) and Napa County's transportation system to relieve congestion, improve traffic safety, create more active transportation infrastructure, provide more reliable and frequent bus service, and maintain and repair the existing transportation system (NVTA, 2021). The plan sets the following six goals for Napa County's transportation system.

Goal 1: Serve the transportation needs of the entire community regardless of age, income or ability

Goal 2: Improve system safety in order to support all modes and serve all users.

Goal 3: Use taxpayer dollars efficiently.

Goal 4: Promote Napa County's economic suitability.

Goal 5: Minimize the energy and other resources required to move people and goods.

Goal 6: Prioritize the maintenance and rehabilitation of the existing system.

State Route 29 Comprehensive Multimodal Corridor Plan

The State Route (SR) 29 Comprehensive Multimodal Corridor Plan (CMCP) evaluates the most constrained portion of SR 29 – an 11.5-mile portion that stretches from Imola Avenue (designated SR 121 east of SR 29) in the City of Napa to SR 37 in the City of Vallejo. The objective of the SR 29 CMCP is to develop a comprehensive multimodal package of prioritized improvements that address the corridor's pre-eminent issues, including:

- Traffic congestion and delay;
- Increased crash risks for all users;
- Lack of low-stress multimodal connectivity;
- Reduced travel time and transit reliability;

The SR 29 CMCP builds on a solid foundation of plans, policy documents, and community outreach efforts already completed along the SR 29 corridor. In particular, the SR 29 CMCP is a continuation of the outreach, analysis, and findings from the SR 29 Gateway Corridor Improvement Plan (NVTA, 2020).

City of Napa Local Roadway Safety Plan

The City of Napa's Local Roadway Safety Plan (LRSP) is a comprehensive plan that creates a framework to systematically identify and analyze traffic safety related issues and recommend projects and countermeasures. It aims to reduce fatal and severe injury collisions through a prioritized list of improvements that can enhance safety on local roadways.

The LRSP takes a proactive approach to addressing safety needs. It is viewed as a guidance document that can be a source of information and ideas. It is also a living document, one that is routinely reviewed and updated by City staff and their safety partners to reflect evolving collision trends and community needs and priorities (City of Napa, 2022). The emphasis areas of the LRSP are identified through the various types of collision and factors resulting in fatal and severe injury collisions within the City of Napa. These seven emphasis areas of the LRSP are:

1. Improve Intersection Safety (Collisions within 250 feet of an intersection)
2. Address Rear End Collisions & Unsafe Speed Violations
3. Address Broadside Collisions
4. Improve Pedestrian Safety

5. Address Nighttime Collisions
6. Address Driving Under the Influence (DUI) Collisions
7. Address Young Adult Party-at-Fault Collisions

The LRSP is a guidance document that is recommended to be updated every two to five years in coordination with the safety partners. The LRSP document provides engineering, education, enforcement, and emergency medical service-related countermeasures that can be implemented throughout the City to reduce fatal and severe injury collisions. After implementing countermeasures, the performance measures for each emphasis area should be evaluated annually. The most important measure of success of the LRSP should be reducing fatal and severe injury collisions throughout the City. If the number of fatal and severe injury collisions does not decrease over time, then the emphasis areas and countermeasures should be re-evaluated (City of Napa, 2022).

Napa County General Plan

The Circulation Element of the Napa County General Plan presents a summary of transportation issues and presents goals, objectives, policies and action items intended to help Napa County meet these and other challenges (Napa County, 2008). The following goals and policies specific to transportation and circulation, and applicable to the Project.

> Goal CIR-2: The County's transportation system shall provide for safe and efficient movement on well-maintained roads throughout the County, meeting the needs of Napa County residents, businesses, employees, visitors, special needs populations, and the elderly.

City of Napa 2040 General Plan

The Transportation Element of the City of Napa 2040 General Plan establishes goals and policies to enhance transportation options for Napa residents, workers, and visitors, and improve mobility through increased connectivity and efficient management of existing infrastructure (City of Napa, 2022). The following goals and policies specific to transportation and circulation, and applicable to the Project.

> Policy TE 5-6: Evaluate new development and redevelopment projects for compliance with adopted Vehicle Miles Traveled (VMT) significance thresholds.

3.11.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the CEQA *Guidelines* states that a project would result in a significant impact to Transportation if it would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b);

- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

- Result in inadequate emergency access.

Topics with No Impact

The Project site would not impair or physically interfere with an adopted emergency access plan. The new private access driveway along Devlin Road would be designed to provide adequate circulation for emergency vehicles, especially fire engines, and would improve emergency vehicle access to the existing NMDF by adding a second entry/exit into the facility (see **Figure 2-3**). These issues are not further discussed in this analysis.

Impact Analysis

Impact 3.11.1: The Project could conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. (Less than Significant).

Construction

Project construction would require worker automobile and heavy truck trips for the duration of construction activities. Up to 25 construction workers would be onsite daily, earthwork would require 608 heavy truck trips, and paving would require 704 truck trips. This short-term increase in vehicle trips would not conflict with any applicable program, plan, ordinance, or policy addressing the circulation system. The Project site is an industrial area and there are no bike lanes or paved pedestrian sidewalks near the Project site along Devlin Road and Tower Road. The Project site and vicinity is not part of a County or City transit, bike, or pedestrian plan. There are no public transit services in the Project vicinity. Therefore, the impact to applicable programs, plans, ordinances, or policies addressing the circulation system would be less than significant.

Operation

As discussed above, the increase of the NMDF site's overall permitted tonnage for all waste types to a weekly average of 1,000 tpd with a daily peak of 1,500 tpd would result in approximately 17 new heavy trucks on an average day or 56 new heavy trucks on a peak day (an increase of approximately 2 to 6 new heavy trucks during the peak hour). This increase in heavy trucks would not require an increase in the NMDF's existing permitted waste hauling vehicles per day. This increase in new daily truck trips would not conflict with any applicable program, plan, ordinance, or policy addressing the circulation system. The Project site is an industrial area and there are no bike lanes or paved pedestrian sidewalks near the Project site along Devlin Road and Tower Road. The Project site and vicinity is not part of a County or City transit, bike, or pedestrian plan. There are no public transit services in the Project vicinity. Therefore, the impact to applicable programs, plans, ordinances, or policies addressing the circulation system would be less than significant.

Mitigation Measures

None required.

Impact 3.11.2: The Project could conflict with or be inconsistent with State CEQA *Guidelines* §15064.3, subdivision (b). (Less than Significant)

VMT refers to the amount and distance of vehicle travel attributable to a project. VMT generally represents the number of vehicle trips generated by a project multiplied by the average trip length for those trips. CEQA Guidelines §15064.3 provides guidance on determining the significance of transportation impacts.

The full text of §15064.3 is provided below:

> **SECTION 15064.3. DETERMINING THE SIGNIFICANCE OF TRANSPORTATION IMPACTS**
>
> (a) Purpose.
>
> This section describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.
>
> (b) Criteria for Analyzing Transportation Impacts.
>
> (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
>
> (2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
>
> (3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

(c) Applicability.

The provisions of this section shall apply prospectively as described in section 15007. A lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide.

The California Governor's OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* provides general direction regarding the methods to be employed and significance criteria to evaluate VMT impacts, absent polices adopted by local agencies. The directive addresses several aspects of VMT impact analysis, and is organized as follows:

- *Screening Criteria*: Screening criteria are intended to quickly identify when a project should be expected to cause a less-than-significant VMT impact without conducting a detailed study.
- *Significance Thresholds*: Significance thresholds define what constitutes an acceptable level of VMT and what could be considered a significant level of VMT requiring mitigation.
- *Analysis Methodology*: These are the potential procedures and tools for producing VMT forecasts to use in the VMT impact assessment.
- *Mitigation*: Projects that are found to have a significant VMT impact based on the County's significance thresholds are required to implement mitigation measures to reduce impacts to a less-than-significant level (or to the extent feasible).

Screening Criteria

Screening criteria can be used to identify whether sufficient evidence exists to presume a project would have a less-than-significant VMT impact without conducting a detailed study. However, each project should be evaluated against the evidence supporting that screening criteria to determine if it applies. Projects meeting at least one of the criteria below can be presumed to have a less than significant VMT impact, absent substantial evidence that the project will lead to a significant impact.

The extent to which the Project qualifies under each criterion is noted below.

- *Regional Truck Traffic*: The OPR directive specially focuses on the need to evaluate residential and employment-based travel, either from the standpoint of home-based trips or through evaluation of commute trips associated with employment centers. Consistent with Section 1564.3 of the State CEQA *Guidelines*, impacts from regional truck traffic are not included in the VMT estimates.

- *Small Projects*: Defined as a project that generates 110 or fewer average daily vehicle trips.
- *Affordable Housing*: Defined as a project consisting of deed-restricted affordable. housing.
- *Local-Serving Non-Residential Development*: The directive notes that local serving retail uses can reduce travel by offering customers more choices in closer proximity. Local serving retail uses of 50,000 square feet or less can be presumed to have a less-than-significant impact.
- *Projects in Low VMT-Generating Area*: Defined as a residential or office project that is in a VMT efficient area based on an available VMT Estimation Tool. The project must be consistent in size and land use type (i.e., density, mix of uses, transit accessibility) as the surrounding built environment.
- *Proximity to High Quality Transit*: The directive notes that employment and residential development located within a half mile of a high-quality transit corridor can be presumed to have a less-than-significant impact.

Project Trip Generation Estimates

The added traffic associated with the increased daily tonnage is all trucks, which is exempted from VMT analysis according to the OPR. The OPR directive specially focuses on the need to evaluate residential and employment-based travel, either from the standpoint of home-based trips or through evaluation of commute trips associated with employment centers. Consistent with Section 15604.3 of the State *CEQA Guidelines*, impacts from regional truck traffic are not included in the VMT estimates, but are considered from an operational standpoint as they relate to safety. The Project would add approximately 6 new employees or 12 new daily automobile trips. The Project's VMT impacts can be presumed to be less than significant based on review of the OPR directive's screening criteria and general guidance. The OPR Small Project criteria is applicable to the Project.[1] The Project is projected to generate approximately 12 new average daily automobile trips. As the 110 average daily automobile trips threshold would not be exceeded, the Project's VMT impacts can be presumed to be less than significant.

Mitigation Measures

None required.

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[1] Due to the very minimal increase in average daily automobile trips from an additional 6 new employees, the OPR Small Project criteria was used as the most appropriate VMT threshold for the Project. There is no additional evidence that suggests the Project would result in any other potentially significant VMT impacts from the addition of 6 new employees. The OPR's Small Project threshold is also consistent with Napa County's Traffic Impact Study (TIS) Guidelines (2022) Small Project thresholds. These guidelines state that projects that generate 110 or fewer daily trips could be presumed to have a less than significant VMT impact. https://www.napacounty.gov/DocumentCenter/View/31273/Napa-County-Traffic-Impact-Study-TIS-Guidelines-February-2022-PDF

Impact 3.11.3: The Project could substantially increase hazards due to a geometric design feature or incompatible uses. (Less than Significant)

Construction

Project construction activities would not substantially increase hazards due to a geometric design feature or incompatible use. Construction vehicles would use the existing NMDF access at Levitin Way and when necessary, a portion of the Devlin Road right of way would be used (traffic access would be maintained with at least one lane with flagger controls) until the new private access driveway along Devlin Road to access the Southern Annexation Parcel is developed (see **Figure 2-3**). The Project site is an industrial area and there are no bike lanes or paved pedestrian sidewalks near the Project site along Devlin Road and Tower Road. Therefore, impacts related to a new hazardous design feature or incompatible uses would be less than significant.

Operation

The Project would add a new private access driveway along Devlin Road to access the Southern Annexation Parcel (see **Figure 2-3**). The new access driveway along Devlin Road would be for employees and maintenance workers but could also accommodate commercial vehicles. Most commercial vehicles are expected to continue to use the current access at Levitin Way. The new access driveway along Devlin Road would provide an excess of 200 feet of stopping sight distance in both directions. The posted speed limit on Devlin Road is 35 miles per hour (mph) and sight distance requirement is 150 feet (PHA, 2025). Therefore, impacts related to a new hazardous design or feature, or permanent changes to roadways that would substantially increase hazards or create incompatible uses would be less than significant.

Mitigation Measures

None required.

3.11.3 REFERENCES

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3.12 PUBLIC SERVICES, UTILITIES, AND SERVICE SYSTEMS

This section evaluates potential impacts on public services, utilities, and service systems that could result from the Project, including impacts to fire protection, water, wastewater, energy suppliers, and solid waste. Stormwater drainage at the Project site is addressed in Section 3.8, Hydrology and Water Quality.

3.12.1 SETTING

Regulatory Context

State

California Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act (enacted in 1969) gave the State's Water Resources Control Board (SWRCB) regulatory authority over State waters and water quality policy. This act divided the State into nine regional basins, each under the jurisdiction of a Regional Water Quality Control Board (RWQCB) to oversee water quality at the local and regional level. Alameda County is overseen by the San Francisco Bay RWQCB.

California Energy Commission

The Warren-Alquist Act (enacted in 1974) established the California Energy Commission (CEC) as the state's primary energy policy and planning agency. The CEC regulates the provision of natural gas and electricity within the State of California and is committed to reducing energy costs, curtailing greenhouse gas (GHG) emissions, and ensuring a safe, resilient, and reliable supply of energy (CEC, 2024).

California Department of Resources and Recycling and Recovery

California Department of Resources Recycling and Recovery (CalRecycle) is the state agency designated to oversee, manage, and track California's 76 million tons of waste generated each year. It is one of the six agencies under the umbrella of the California Environmental Protection Agency. CalRecycle administers and provides oversight for all of California' State-managed non-hazardous waste handling and recycling program. CalRecycle provides training and ongoing support for local enforcement agencies that regulate and inspect California's active and closed solid waste landfills (CalRecycle, 2019). The Integrated Waste Management Act of 1989 (PRC 40050 et seq. or AB 939, codified in PRC 40000), administered by CalRecycle, requires all local and county governments to adopt a Source Reduction and Recycling Element to identify means of reducing the amount of solid waste sent to landfills. This law set reduction targets at 25 percent by the year 1995 and 50 percent by the year 2000. To assist local jurisdictions in achieving these targets, the California Solid Waste Reuse Recycling Access Act of 1991 requires all new developments to include adequate, accessible, and convenient areas for collecting and loading recyclable and green waste materials.

State Water Resources Control Board and Regional Water Quality Control Board

The primary responsibility for the protection of water quality in California rests with the SWRCB and nine RWQCBs. The SWRCB sets statewide policy for the implementation of state and federal laws and regulations. The RWQCBs adopt and implement Water Quality Control Plans (Basin Plans), which recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities.

California Department of Water Resources

The California Department of Water Resources (DWR) is responsible for protecting, conserving, developing, and managing much of California's water supply. These duties include preventing and responding to floods, droughts, and catastrophic events; informing and educating the public on water issues; developing scientific solutions; restoring habitats; planning for future water needs, climate change impacts, and flood protection; constructing and maintaining facilities; generating power; ensuring public safety; and providing recreational opportunities. California Water Code Section 13260 California Water Code Section 13260 requires any person who discharges waste, other than into a community sewer system, or proposes to discharge waste that could affect the quality of waters of the State to submit a report of waste discharge to the applicable RWQCB.

California Integrated Solid Waste Management Act of 1989 or Assembly Bill 939

Pursuant to the California Integrated Solid Waste Management Act of 1989 (Public Resources Code [PRC] Section 40050, et seq.) or Assembly Bill (AB) 939, all cities in California are required to reduce the amount of solid waste disposed in landfills. AB 939 required a reduction of 25 percent by 1995 and 50 percent by 2000. Contracts that include work that will generate solid waste, including construction and demolition debris, have been targeted for participation in source- reduction, reuse, and recycling programs.

Assembly Bill 341

Since the passage of AB 939, diversion rates in California have been reduced to approximately 65 percent, the statewide recycling rate is approximately 50 percent, and the beverage container recycling rate is approximately 80 percent. In 2011, the State passed AB 341, which established a policy goal that a minimum of 75 percent of solid waste must be reduced, recycled, or composted by the year 2020. The State provided the following strategies to achieve that 75 percent goal:

1. Moving organics out of the landfill;
2. Expanding the recycling/manufacturing infrastructure;
3. Exploring new approaches for state and local funding of sustainable waste management programs;
4. Promoting state procurement of post-consumer recycled content products; and
5. Promoting extended producer responsibility.

To achieve these strategies, the State recommended legislative and regulatory changes including mandatory organics recycling, solid waste facility inspections, and revising packaging. With regard to construction and demolition, the State recommended an expansion of California Green Building Code standards that incentivize green building practices and increase diversion of recoverable construction and demolition materials. Current standards require 50 percent waste diversion on construction and some renovation projects, although this may be raised to 65 percent for nonresidential construction in upcoming changes to the standards. The State also recommends promotion of the recovery of construction and demolition materials suitable for reuse, compost or anaerobic digestion before residual wastes are considered for energy recovery.

California Solid Waste Reuse and Recycling Access Act of 1991 or Senate Bill 1327

The California Solid Waste Reuse and Recycling Access Act of 1991 (PRC Chapter 18) identified a lack of adequate areas for collecting and loading recyclable materials, resulting in a significant impediment to diverting solid waste. This act requires state and local agencies to address access to solid waste for source reduction, recycling, and composting activities. Each local agency must adopt an ordinance related to adequate areas for collecting and loading recyclable materials for development projects.

Senate Bill 1383

SB 1383 established targets to achieve a 50 percent reduction in the level of statewide disposal of organic material from the 2014 level by 2020 and a 75 percent reduction by 2025. SB 1383 is part of the State's broader 2030 Climate Change Strategy to reduce GHG emissions by 40 percent below 1990 levels by 2030.

Local

California Fire Code

Chapter 15.32 of the Napa County Municipal Code (NCMC) adopts the California Fire Code in its entirety. The California Fire Code is updated every three years, and provides standards for emergency planning and preparedness, fire service features, fire protection services, hazardous materials, fire flow requirements, and fire hydrant location and distribution. In addition, the Fire Code authorizes the Fire Chief to specify water supply and road design standards.

City of Napa 2040 General Plan

The policies, goals, and implementation measures in the City of Napa 2040 General Plan for public services, utilities, and service systems applicable to the Project are provided below.

> Goal CSPR-7: Provide for solid waste and recycling services to meet the needs of current and future residents and businesses.
>
> Policy CSPR 7-1: Safely manage solid waste management services in a manner that provides for future growth of the City of Napa.
>
> Goal CSPR-8: Improve programs to reduce waste accumulation in landfills.

Policy CSPR 8-1: Promote sustainability measures for businesses and residents to reduce waste, such as municipal composting, recycling, and expanded education on the benefits of the green waste recycling program.

Policy CSPR 8-4: Promote safe, attractive, and environmentally-sensitive new technologies that help further sustainable practices.

Policy CSPR 8-5: Implement all aspects of SB 1383 (Mandatory Organics) including collection and capture of compostable and recyclable materials from residential, commercial and industrial generators within the City. SB 1383 is broad-reaching in scope with requirements for auditing, enforcement, edible food recovery and local use of organic products like compost and mulch.

Policy CSPR 8-6: Incorporate BioEnergy and dry Anerobic Digestion technology at City's Materials Diversion Facility. Use of these technologies would capture and create renewable and sustainable energy from compostable organic materials. It would also provide a significant local contribution towards progress on climate action.

Policy CSPR 8-7: Support programs to reach the statewide goal of ensuring that 75 percent of solid waste generated is either reduced at source, recycled, or composted from the year 2020 forward, per AB 341, SB 1383, and the City's own Disposal Reduction Policy (R2012-100).

Public Service Providers

Fire Protection

The Napa County Fire Department (NCFD) provides fire protection services to the Napa Materials Diversion Facility (NMDF) site in the event of a fire emergency and would provide services to the expanded areas under the Project. The nearest NCFD Station is Greenwood Ranch Station, approximately ½ mile north of the Project site.

Police Protection

The Napa County Sheriff's Department provides police protection services to the NMDF site in the event of an emergency and would provide services to the expanded areas under the Project. The Napa County Sherrif's Department is located approximately ½ mile north of the Project site.

Schools

There are no existing schools that are within one-quarter mile of the Project site. The nearest school is Napa Junction Magnet Elementary School approximately 1.8 miles south of the Project site.

Water

The NMDF is served by the City of American Canyon's Department of Public Works for domestic and fire water. The Southern Annexation Parcel would connect to these existing utilities on the NMDF site. The Southern Annexation Parcel would also include a new connection to the City of American Canyon's Department of Public Works for reclaimed water. The reclaimed water connection point is in the right-of-way of Devlin Road adjacent to the Southern Annexation

Parcel. Stormwater can also be drawn from the on-site retention basins for use as process water at NMDF.

Sewer

The NMDF is served by the City of American Canyon's Department of Public Works for wastewater. The Southern Annexation Parcel would connect to the existing sanitary sewer forced main on the NMDF site.

Electric Power

Electric power on-site is provided to NMDF by PG&E. The Southern Annexation Parcel would connect to the existing electrical line on the NMDF site.

Natural Gas

Natural gas is provided to NMDF by PG&E. The Anaerobic Digestion Facility (ADF) would connect to the existing natural gas line on the NMDF site for the boiler, pilot flare, and emergency generator. The Biomass Conversion Facility (BCF) would use propane for the pilot flare and the natural gas line would not be extended to the Southern Annexation Parcel.

Telecommunications

Telecommunications at the Project site would be provided by wireless technology providers for internet and telephone services.

Solid Waste

The NMDF currently receives and processes all solid waste, compostable and recyclable materials generated within the City that are collected by the City's authorized operator Napa Recycling & Waste Services (NRWS). The NMDF site also receives, and processes materials delivered by haulers servicing surrounding jurisdictions (such as unincorporated Napa County) and by private (self-haul) customers. Current operations at the NMDF site include receiving, storing, processing, recycling, and composting waste materials from residential, commercial, and industrial sectors. The NMDF site operates under Solid Waste Facility Permit (SWFP) 28-AA-0030.

3.12.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the *CEQA Guidelines* states that a project would result in a significant impact to Public Services, Utilities, and Service Systems if it would:

- 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 fire protection, police protection, schools, parks or other public facilities;

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;

- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;

- 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;

- 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; or

- Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Topics with No Impact

The Project would expand NMDF operations to the Southern Annexation Parcel for the development of the BCF. The Project area is highly industrial and developed with existing solid waste facilities (NMDF and Devlin Road Transfer Station). Future operations at NMDF would be within the scope of activities that currently occur onsite and there is no expectation that development of the Project would result in increased calls for fire and police protection services or result in any changes to maintain acceptable service ratios, response times or other performance objectives. The Project would only require six additional employees and would result in negligible population growth and associated use of schools, parks or other public facilities. Therefore, the Project would not result in substantial adverse physical impacts associated with new or physically altered governmental facilities. These issues are not further discussed in this section.

Impact Analysis

Impact 3.12.1: The Project could require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, which could cause significant environmental effects. (Less than Significant)

The Project would require expanded utilities to the Southern Annexation Parcel for operation of the BCF. These utilities include domestic water, reclaimed water, electricity, wastewater, and telecommunication. Construction and operation of these expanded utilities have been analyzed throughout this EIR, in sections including but not limited to Section 3.2, Air Quality; Section 3.3, Biological Resources; Section 3.4, Cultural Resources and Tribal Cultural Resources; Section 3.5, Geology, Soils, and Seismicity; Section 3.6, Greenhouse Gas Emissions; Section 3.7; Hazards and Hazardous Materials; Section 3.8, Hydrology and Water Quality; Section 3.10, Noise; and Section 3.13, Energy. These expanded utilities would only be developed on the Project site and are currently available on the existing NMDF site to the north for all utilities except for reclaimed

water, which is available in the right-of-way of Devlin Road adjacent to the Southern Annexation Parcel.

Utility extensions within the Southern Annexation Parcel would result in trenching and utility placement at shallow depths (likely 1 to 3 feet), which would limit the potential for significant effects. As detailed in Section 3.2, Air Quality, with the implementation of Bay Area Air Quality Management District (BAAQMD) basic dust control measures, fugitive dust impacts from soil disturbance during construction activities would be less than significant. As detailed in Section 3.8, Hydrology and Water Quality, compliance with the requirements of the Construction General Permit (CGP), including the implementation of associated Best management Practices (BMPs) as part of the Stormwater Pollution Prevention Plan (SWPPP), as well as incorporation of erosion and sediment controls required under the City's Standard Specifications and implemented via a City Grading Permit, would prevent the discharge of pollutants to surface waters or groundwater and minimize or eliminate potential degradation of surface water or groundwater quality during construction of the Project, and water quality impacts during construction would be less than significant. Therefore, the Project would not result in new or expanded facilities that could cause significant environmental effects and impacts would be less than significant.

Mitigation Measures

None required.

Impact 3.12.2: The Project could have water demands greater than water supplies. (Less than Significant)

Current NMDF operations use water for dust control, equipment cleaning, composting, and landscaping irrigation. Based on 2024 data, existing NMDF operations use an average of approximately 15,800 gallons per day of domestic water supplied by City of American Canyon. The ADF and BCF would not significantly increase water demand as the BCF would use approximately 2,400 gallons per day and the water demand of the ADF would be negligible as water is recirculated and not consumed in the process. The BCF would also connect to the City of American Canyon's reclaimed water infrastructure, reducing domestic water demand. The BCF uses a closed-loop system for process water, which minimizes additional water demand. This system recirculates water within the facility, reducing the need for fresh water and mitigating potential increases in consumption. Additionally, the NMDF has an existing stormwater management system, including filtration, storage, and retention ponds, to capture and reuse stormwater, further reducing reliance on external water supplies. Based on all of the above, the Project would result in a negligible increase on water supply compared to existing conditions and would not the impair the City of American Canyon from accommodating future water needs during normal years, single dry years, and multiple dry years. Therefore, impacts related to water demand would be less than significant.

Mitigation Measures

None required.

Impact 3.12.3: The Project could have an impact on a wastewater treatment provider. (Less than Significant)

NMDF's primary wastewater sources stem from operational processes such as equipment cleaning, composting, and the use of water for dust control. With the increase in permitted daily tonnage and the addition of new facilities like the BCF and ADF, wastewater generation could slightly increase. However, these increases are expected to be minor due to the design and operation of the new facilities. The BCF employs a closed-loop system for its process water, reducing the need for fresh water and minimizing wastewater discharge. This system recirculates water within the facility, effectively reducing the impact on external wastewater treatment providers. The ADF recirculates water and produces digestate that is separated into liquid and solid fractions using screw presses that are valuable as agricultural fertilizers and would not be disposed through wastewater utilities onsite. Therefore, the Project would not result in a determination by the wastewater treatment provider (City of American Canyon) that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments. Therefore, the Project would have a less-than-significant impact.

Mitigation Measures

None required.

Impact 3.12.4: The Project could generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure and would comply with federal, state and local management statutes and regulations related to solid waste. (Less than Significant)

Construction

The Project would generate solid waste during construction, typical of any other construction project, which would likely consist of construction debris and construction worker common waste. The solid waste would be removed and transferred for disposal to a permitted solid waste facility within the region and would have a negligible impact on the capacity of the solid waste facilities and infrastructure that eventually receive the Project construction waste. Furthermore, the California Green Building Standards Code (CALGreen) includes a waste diversion mandate, which requires that at least 65 percent of construction materials generated during new construction or demolition projects are diverted from landfills (in response to AB 341). No other federal, state or local regulations related to solid waste would apply to the Project. Therefore, construction of the Project would have a less-than-significant impact.

Operation

The Project would also generate solid waste during operation. Solid waste generated from operations would consist of common waste from the additional six employees generated by the Project. The operational waste generated by the Project, such as general building waste (e.g., paper, cardboard, plastic) and operational waste from equipment maintenance would be removed

and transferred for disposal to a permitted solid waste facility within the region, ensuring proper disposal and recycling as per regulatory requirements. The solid waste generated during Project operation would have a negligible impact on the capacity of the solid waste facilities and infrastructure that eventually receive the waste.

The Project would comply with AB 939 solid waste diversion requirements by sourcing materials from local and regional waste disposal facilities for processing. The Project would assist with the waste diversion goals of SB 1383 and would accommodate other jurisdictions, particularly as the amount of organic materials captured increases as a result of SB 1383. The Project would assist with the goals of AB 341 and SB 1327 by assisiting in diverting waste (including organics) from landfills and by developing organics processing technologies for beneficial re-use that generates renewable electricity and vehicles fuels. Furthermore, the Project is consistent with the City's General Plan policies adopted for solid waste as the Project increases capacity ensuring the needs of future residents and businesses, reduces waste accumulation in landfills, incorporates bioenergy and anaerobic digestion technologies at NMDF, and supports the statewide recycling goal of 75 percent.

The amount of solid waste generated during Project operation would not cause the maximum permitted use capacity of local and regional landfills to be exceeded or significantly diminished, and operation of the Project would reduce landfill disposal of waste and assist with landfill diversion of waste. The Project would be required to comply with all applicable local and state solid waste diversion, minimization and recycling regulations. Therefore, operation of the Project would have a less-than-significant impact.

Mitigation Measures

None required.

3.12.3 REFERENCES

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3.13 ENERGY

This section describes the energy setting and evaluates potential impacts to energy resources. This section was prepared pursuant State CEQA *Guidelines* Section §15126 and State CEQA *Guidelines* Appendix F, which require that EIR include a discussion of the potential energy impacts of projects. The analyses within this section consider whether the Project would result in inefficient, wasteful, and unnecessary consumption of energy. Energy resources required for the Project would include electricity, natural gas, and petroleum fuels. These energy resources would be required for construction and operation of the Project.

3.13.1 SETTING

Regulatory Setting

Federal

Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Pursuant to this Act, the National Highway Traffic and Safety Administration, part of the U.S. Department of Transportation (DOT), is responsible for revising existing fuel economy standards and establishing new vehicle economy standards.

The Corporate Average Fuel Economy (CAFE) program was established to determine vehicle manufacturer compliance with the government's fuel economy standards. Compliance with the CAFE standards is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the country. USEPA calculates a CAFE value for each manufacturer based on the city and highway fuel economy test results and vehicle sales. The CAFE values are a weighted harmonic average of the USEPA city and highway fuel economy test results. Based on information generated under the CAFE program, DOT is authorized to assess penalties for the Energy Independence and Security Act of 2007.

Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. The EPAct includes several parts intended to build an inventory of alternative fuel vehicles in large, centrally-fueled fleets in metropolitan areas. The EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty alternative fuel vehicles. In addition, financial incentives are also included in The EPAct. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of alternative fuel vehicles. States are also required by The EPAct to consider a variety of incentive programs to help promote alternative fuel vehicles. The Energy Policy Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 is designed to improve vehicle fuel economy and help reduce U.S. dependence on oil. It represents a major step forward in expanding the production of renewable fuels, reducing dependence on oil, and confronting global climate change. The Energy Independence and Security Act of 2007 increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.

By addressing renewable fuels and the CAFE standards, the Energy Independence and Security Act of 2007 builds on progress made by the Energy Policy Act of 2005 in setting out a comprehensive national energy strategy for the 21st century.

State

Integrated Energy Policy Report

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) required the CEC to: "conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety" (Public Resources Code Section 25301(a)). This work culminated in the Integrated Energy Policy Report (IEPR).

The CEC adopts an IEPR every two years and an update every other year. The 2022 IEPR Update is the most recent IEPR, which was adopted February 28, 2023. The 2024 IEPR Update remains in draft form, with adoption delayed beyond the initially scheduled March 17, 2025 Business Meeting. The 2022 IEPR Update provides a summary of priority energy issues currently facing the State, outlining strategies and recommendations to further the State's goal of ensuring reliable, affordable, and environmentally-responsible energy sources. The 2022 IEPR Update provides an analysis of electricity sector trends, building decarbonization and energy efficiency, zero-emission vehicles, energy equity, climate change adaptation, electricity reliability in Southern California, natural gas assessment, and electricity, natural gas, and transportation energy demand forecasts (CEC, 2023).

Senate Bill 1078, 350 and 100: California Renewables Portfolio Standard Program

SB 1078 (Chapter 516, Statutes of 2002) establishes a renewable portfolio standard (RPS) for electricity supply. The RPS required that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide 20 percent of their supply from renewable sources by 2017. The program was accelerated in 2015 with SB 350, which mandated a 50 percent RPS by 2030. SB 350 includes interim annual RPS targets with three-year compliance periods and requires 65% of RPS procurement to be derived from long-term contracts of 10 or more years. In 2018, SB 100 was signed into law, which again increases the RPS to 60% by 2030 and requires all the state's electricity to come from carbon-free resources by 2045.

Senate Bill X1-2: California Renewable Energy Resources Act

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently-owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011-2013 compliance period, at least 65 percent for the 2014-2016 compliance period, and at least 75 percent for 2016 and beyond.

Energy Action Plan

The first Energy Action Plan (EAP) emerged in 2003 from a crisis atmosphere in California's energy markets. The State's three major energy policy agencies (CEC, CPUC, and the Consumer Power and Conservation Financing Authority [established under deregulation and now defunct]) came together to develop one high-level, coherent approach to meeting California's electricity and natural gas needs. It was the first time that energy policy agencies formally collaborated to define a common vision and set of strategies to address California's future energy needs and emphasize the importance of the impacts of energy policy on the California environment.

In the October 2005 Energy Action Plan II, CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues and research and development activities. CEC recently adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the State's ongoing actions in the context of global climate change.

Assembly Bill 1007: State Alternatives Fuel Plan

AB 1007 (Chapter 371, Statues of 2005) required the CEC to prepare a state plan to increase the use of alternative fuels in California. The CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with the California Air Resources Board (CARB) and in consultation with other State, federal, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Assembly Bill 32, Senate Bill 32, and Climate Change Scoping Plan and Update

Reducing GHG emissions in California has been the focus of the state government for approximately two decades. GHG emission targets established by the state legislature include reducing statewide GHG emissions to 1990 levels by 2020 (AB 32 of 2006) and reducing them to

40 percent below 1990 levels by 2030 (SB 32 of 2016). Executive Order S-3-05 calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050.

California's 2017 Climate Change Scoping Plan (2017 Scoping Plan), prepared by CARB, outlines the main strategies California will implement to achieve the legislated GHG emission target for 2030 and "substantially advance toward our 2050 climate goals" (CARB, 2017). It identifies the reductions needed by each GHG emission sector (e.g., transportation, industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste). In 2018, electricity generation accounted for 15 percent of the State's GHG emissions (CARB, 2020). California plans to significantly reduce GHG emissions from the energy sector through the development of renewable electricity generation in the form of solar, wind, geothermal, hydraulic, and biomass generation. The State is on target meet the SB X1-2-33 percent renewable energy target by 2020 and will continue to increase statewide renewable energy to 60 percent by 2030, as directed by SB 100. Additionally, the State will further its climate goals through improving the energy efficiency of residential and non-residential buildings by continual updates (i.e., every three years) to the Energy Code, which contains mandatory and prescriptive energy efficiency standards for all new construction.

Low Carbon Fuel Standard

Under the Climate Change Scoping Plan, the CARB identified the low carbon fuel standard (LCFS) as one of the nine discrete early action measures to reduce California's GHG emissions. The LCFS is designed to decrease the carbon intensity of California's transportation fuel pool and provide an increasing range of low-carbon and renewable alternatives, which reduce petroleum dependency and achieve air quality benefits.

In 2018, the CARB approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California's 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.

The LCFS standards are expressed in terms of the "carbon intensity" (CI) of gasoline and diesel fuel and their respective substitutes. The program is based on the principle that each fuel has "life cycle" GHG emissions and the life cycle assessment examines the GHG emissions associated with the production, transportation, and use of a given fuel. The life cycle assessment includes direct emissions associated with producing, transporting, and using the fuels, as well as significant indirect effects on GHG emissions, such as changes in land use for some biofuels. The carbon intensity scores assessed for each fuel are compared to a declining CI benchmark for each year. Low carbon fuels below the benchmark generate credits, while fuels above the CI benchmark generate deficits. Credits and deficits are denominated in metric tons of GHG emissions. Providers of transportation fuels must demonstrate that the mix of fuels they supply for use in California meets the LCFS carbon intensity standards, or benchmarks, for each annual compliance period. A deficit generator meets its compliance obligation by ensuring that the amount of credits it earns or otherwise acquires from another party is equal to, or greater than, the deficits it has incurred.

Executive Order B-48-18 and Assembly Bill 2127

The California Governor issued Executive Order B-48-18 on January 26, 2018 that orders all state entities to work with the private sector to put at least five million zero-emission vehicles on California roads by 2030 and to install 200 hydrogen fueling stations and 250,000 EV chargers by 2025. Currently there are approximately 350,000 electric vehicles operating in California, which represents approximately 1.5 percent of the 24 million vehicles total currently operating in California. Implementation of Executive Order B-48-18 would result in approximately 20 percent of all vehicles in California to be zero emission electric vehicles. Assembly Bill 2127 (AB 2127) was codified into statute on September 13, 2018 and requires that the California Energy Commission working with the State Air Resources Board prepare biannual assessments of the statewide EV charging infrastructure needed to support the levels of zero emission vehicle adoption required for the State to meet its goals of putting at least 5 million zero emission vehicles on California roads by 2030.

Executive Order N-79-20

The California Governor issued Executive Order N-79-20 on September 23, 2020, that requires all new passenger cars and trucks and commercial drayage trucks sold in California to be zero-emissions by the year 2035 and all medium- heavy-duty vehicles (commercial trucks) sold in the state to be zero-emission by 2045 for all operations where feasible. Executive Order N-79-20 also requires all off-road vehicles and equipment to transition to 100 percent zero-emission equipment, where feasible by 2035.

Senate Bill 1020

Senate Bill 1020 (SB 1020) was adopted September 16, 2022 and would speed up the timeline retail electricity is supplied by renewable energy sources over the prior adoption timelines provided in SB 100, SB 350, SB 1078, SB 107, and SB X1-2. SB 1020 requires that retail sales of electricity are from renewable energy resources and zero-carbon resources supply 90 percent by December 31, 2035, 95 percent by December 31, 2040, and 100 percent by December 31, 2045.

California Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the state's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). The California Energy Code was established by CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and nonresidential buildings. CEC updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions.

The 2025 California Energy Code was adopted by the CEC on September 11, 2025, and applies to projects constructed after January 1, 2026. The building efficiency standards are enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary in response to local

climatologic, geologic, or topographic conditions, provided that these standards exceed those in the California Energy Code.

California Green Building Standards Code (Title 24, Part 11)

The California Green Building Standards Code (CALGreen) is part 11 of Title 24, California Code of Regulations. CALGreen is the first-in-the-nation mandatory green building standards code, developed in an effort to meet the goals of California's landmark initiative AB 32, which established a comprehensive program of cost-effective reductions of GHG emissions to 1990 levels by 2020. CALGreen includes a waste diversion mandate, which requires that at least 65 percent of construction materials generated during new construction or demolition projects are diverted from landfills.

Environmental Setting

Electricity and Natural Gas

Electricity and natural gas services are provided to the Project site by Pacific Gas & Electric (PG&E). In 2023, statewide electricity generation was 215,625 gigawatt hours (GWh) of electric power (CEC, 2024). In 2023, California statewide natural gas consumption was approximately 2,087,461 million cubic feet (USEIA, 2025).

Petroleum Fuels

The Project would consume petroleum-based fuels during construction for onsite heavy equipment and vehicles (worker automobiles and haul trucks). In 2024, statewide gasoline sales were approximately 36,712,000 gallons per day, and diesel fuel sales were approximately 9,589,000 gallons per day (CA Dept of Tax and Fee Administration, 2025).

3.13.2 IMPACTS AND MITIGATION MEASURES

Significance Criteria

Appendix G of the CEQA *Guidelines* states that a project would result in a significant impact to Energy if it would:

- Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Impact Analysis

Impact 3.13.1: Project construction or operation could result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. (Less than Significant)

The Project would consume energy resources during temporary construction activities and long-term operations.

Construction

Construction activities are a temporary and one-time direct source of energy consumption. Construction activities would consume petroleum fuels (primarily diesel and gasoline) through the operation of heavy off-road equipment, trucks, and worker automobiles. Electricity could be used for lighting and other equipment such as air compressors, however the amount consumed would be minimal. Natural gas would not be consumed during construction activities.

Construction of the Project would utilize fuel efficient equipment and trucks consistent with state regulations and would be consistent with state regulations intended to reduce the inefficient, wasteful, or unnecessary consumption of energy, such as anti-idling and emissions regulations. Construction activities would comply with the California's Green Building Standards Code (CALGreen) waste diversion mandate, which requires that at least 65 percent of construction materials generated during new construction or demolition projects are diverted from landfills.

Project construction fuel usage estimates were developed for the Project using standard fuel conversion factors (USEIA, 2024) and the California Emissions Estimator Model (CalEEMod) results for the air quality and GHG emissions analyses (see **Appendix C**). Construction was estimated to consume a total of approximately 61,598 gallons of diesel fuel and 7,719 gallons of gasoline. Therefore, total fuel usage for construction of the Project would represent approximately 0.005 percent of statewide annual diesel consumption and approximately 0.0004 percent of statewide annual gasoline consumption.

Construction would result in the temporary consumption of energy resources in order to develop the Project that would include many energy efficient features and generate renewable energy. The consumption of energy resources during Project construction would not result in a wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, Project construction would result in a less-than-significant impact.

Baseline Operation

Energy consumption associated with the baseline conditions include electricity, natural gas, and petroleum fuel consumption for operation of buildings, vehicles, and equipment. Baseline operations consume approximately 22,447 gallons of gasoline per year from motor vehicles. Baseline operations consume approximately 1,107,586 gallons of diesel per year from heavy trucks and offroad equipment and approximately 284,037 diesel gallon equivalents (dge) of natural gas from the collection vehicles.

Project Operation

Long-term energy consumption associated with the Project would include electricity, natural gas, and petroleum fuel consumption for operation of buildings, vehicles, and equipment. The biomass conversion facility (BCF) would generate renewable electricity, and the anaerobic digestion facility (ADF) would generate renewable natural gas (RNG).

The BCF is estimated to generate up to 13,140 megawatt-hours (MWh) of electricity annually. The BCF is designed to generate renewable electricity to be used onsite to power the Napa

Materials Diversion Facility (NMDF) operations, with excess electricity exported to the local electrical grid. Therefore, the Project would eliminate the need to import electricity to the Project site. The ADF would generate 440,000 dge of RNG annually, which would be used to fuel collection vehicles at NMDF.

Full Project buildout (baseline plus future project) is estimated to consume approximately 25,140 gallons of gasoline per year from motor vehicles and approximately 1,265,616 gallons of diesel per year from heavy trucks and offroad equipment and approximately 421,563 dge of natural gas from the collection vehicles.

Therefore, the Project would increase fuel consumption (compared to the baseline) by approximately 2,694 gallons of gasoline per year from motor vehicles, approximately 158,030 gallons of diesel per year from heavy trucks and offroad equipment, and approximately 137,526 dge of natural gas from the collection vehicles. However, the increase in natural gas consumption for new collection vehicles under the Project would be completely offset by RNG produced by the ADF. Furthermore, the ADF would allow existing collection vehicles (under the baseline) currently fueled by non-renewable natural gas to transition to RNG, reducing the demand for fossil fuels.

While the Project would consume energy resources during construction and operation, the consumption of such resources would not result in a wasteful, inefficient, or unnecessary consumption of energy resources, and the Project would generate energy resources as part of its operations. Therefore, the Project would result in a less-than-significant impact.

Mitigation Measures

None required.

Impact 3.13.2: The Project could conflict with or obstruct a state or local plan for renewable energy or energy efficiency. (Less than Significant)

As stated previously, through the generation of renewable electricity and RNG, the Project would support several state plans, programs and regulations such as SB 100, which increased the RPS to 60 percent by 2030 and requires all the state's electricity to come from carbon-free resources by 2045. The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the Project would result in a less-than-significant impact.

Mitigation Measures

None required.

3.13.3 REFERENCES

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CHAPTER 4
OTHER CEQA TOPICS AND IMPACT OVERVIEW

4.1 GROWTH-INDUCING EFFECTS OF THE PROPOSED PROJECT

4.1.1 INTRODUCTION

Section 15126.2(e) of the California Environmental Quality Act (CEQA) *Guidelines* requires that an EIR discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. This discussion should include an analysis of how a proposed project might remove barriers to population growth and characteristics of the project that might encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. In discussing a project's potential for population growth, it should not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A project can have direct and/or indirect growth inducement potential. Direct growth inducement would result if a project, for example, involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises) or if it involved a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a public service that otherwise limits growth.

The CEQA *Guidelines* further explains that the environmental effects of induced growth may be indirect impacts of the proposed action. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with or accommodated by the land use plans and growth management plans and policies for the area affected, would exceed available services, or otherwise result in an identifiable secondary impact as discussed above. Local land use plans provide for land use development patterns and growth

policies that allow for the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service and solid waste service.

Components of Growth

The timing, magnitude, and location of land development and population growth in a community or region are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since the general plan of a community, including an unincorporated area of a county, defines the location, type, and intensity of growth, it is the primary means of regulating development and growth in California.

4.1.2 GROWTH EFFECTS OF THE PROJECT

The Project is expected to create approximately six permanent professional positions to support the operation of the proposed biomass conversion facility (BCF) on the Southern Annexation Parcel and an anaerobic digestion facility (ADF) on the existing Napa Material Diversion Facility (NMDF) site. Given the industrial nature, it is unlikely that the Project would attract housing or commercial development to the Project vicinity.

The Project would not directly or indirectly remove barriers to population growth and/or encourage and facilitate other activities that could significantly affect the environment. The NMDF currently receives and processes all solid waste, compostable and recyclable materials generated within the City that are collected by the City's authorized operator Napa Recycling & Waste Services (NRWS). The Project would increase the processing and diversion of organics at NMDF in accordance with state mandates, which is not a constraint to the development of new housing or commercial areas, thus the Project is not anticipated to induce additional growth in the region. Further, the Project would not involve expansion or extension of infrastructure outside of the Project site or the expansion or extension of roadways that could induce unplanned growth adjacent to the Project site.

4.2 CUMULATIVE IMPACTS

4.2.1 INTRODUCTION

The CEQA *Guidelines* (Section 15355) define cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." This section of the CEQA *Guidelines* further notes that:

a) *The individual effects may be changes resulting from a single project or a number of separate projects.*

b) *The cumulative impact from several projects is the change in the environment, which results in the incremental impacts of the project when added to other closely related past, present,*

and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Projects Potentially Having Related or Cumulative Effects

There are several public works (i.e., road improvements) and residential and commercial developments in the City of Napa that are currently under construction or proposed for a future date[1]. However, these current and proposed projects are not in close vicinity to the Project site. The closest project to the Project site is the proposed Imola Avenue Rehabilitation project which is located approximately 5 miles to the north of the Project site (estimated to begin construction 2025-2026). All other current and proposed projects greater than 5 miles away. It is very unlikely that the Project would combine with current and proposed future projects to create cumulative effects due to the distance between the Project site and other project locations.

In addition to projects in the City's jurisdiction, there are several public works projects under construction or proposed for a future date in Napa County. None of these projects are in close vicinity to the Project site except for the Napa County Airport – Taxiway L and Runway 19R Runup Apron Reconstruction project. This project would occur at the County Airport that is situated to the west/northwest of the Project site. The County's Public Works Department indicates that this project is currently under construction[2]. It is unlikely that the Project would combine with this project to create cumulative effects since the abovementioned project would consist of runway improvements, lighting and signage improvements, drainage improvements, and access road improvements that would not be expected to create new significant impacts or cumulative effects when combined with the effects of the Project. In addition, since these improvements are currently under construction at the Napa County Airport, it is likely that they would be completed prior to the start of construction of the Project site.

4.2.2 CUMULATIVE IMPACT DISCUSSION

Aesthetics

Cumulative aesthetics impacts are limited to the immediate project vicinity. The Project would not result in significant and unavoidable impacts to aesthetics. Impacts related to scenic resources, scenic vistas, light, and glare, and altering the existing visual character of the Project site would be less than significant. Therefore, the Project would not result in significant cumulative aesthetics impacts.

Air Quality

Cumulative air quality impacts are limited to the region (for regional pollutants) and the immediate project vicinity (for localized pollutants). The Project would not result in any significant and unavoidable impacts on air quality. For regional pollutants, the Bay Area Air Quality Management District (BAAQMD) considers cumulative impacts to be less than significant if a project is below BAAQMD's project-level thresholds of significance. As detailed

[1]https://cityofnapa.maps.arcgis.com/apps/Shortlist/index.html?appid=c6f7aa8472ae42efa094cb2438134038
[2] https://www.countyofnapa.org/3634/Napa-County-Airport---Taxiway-K-and-Runw

in Section 3.2, construction and operation of the Project would not exceed BAAQMD's thresholds of significance for criteria pollutants (regional pollutants) with the implementation of mitigation. Furthermore, there are no sensitive receptors within 2,340 feet of the Project site and all stationary sources and associated equipment associated with the ADF and BCF would require an Authority to Construct/Permit to Operate through the BAAQMD, which would prevent a cumulative significant impact regarding localized pollutants (i.e., toxic air contaminants). Therefore, the Project would not result in significant cumulative air quality impacts.

Biological Resources

Cumulative biological resources impacts are limited to the region. The Project would not result in significant and unavoidable impacts on biological resources. The implementation of mitigation measures identified in Section 3.3 would ensure that the Project does not have a considerable contribution to regional cumulative impacts on biological resources. Those mitigation measures would mitigate potentially significant impacts to wetlands, or special status animals. Therefore, the Project would not result in significant cumulative biological resources impacts.

Cultural and Tribal Cultural Resources

Cumulative cultural and tribal cultural resources (TCRs) impacts are limited to the region. The Project would not result in significant and unavoidable impacts to cultural and TCRs. The implementation of mitigation measures identified in Section 3.4 would ensure that the Project would not have a considerable contribution to regional impacts on cultural and TCRs. Therefore, the Project would not result in significant cumulative cultural and TCRs impacts.

Geology, Soils, and Seismicity

Geology, soils, and seismic impacts tend to be site-specific and depend on the local geology and soil conditions. The Project would not result in significant and unavoidable impacts to geology, soils, and seismicity. With the implementation of mitigation identified in Section 3.5, impacts related to seismic-related ground failure (including liquefaction), unstable soils, and expansive soils impacts would be less than significant. Since geology, soils, and seismic impacts are limited to the Project site, the Project could not combine with other regional projects to create significant cumulative impacts. Therefore, the Project would not result in significant cumulative geology, soils, and seismicity impacts.

Paleontological Resources

Paleontological resources impacts are limited to the region. With the implementation of mitigation identified in Section 3.5, impacts related to paleontological resources would be less than significant. Therefore, the Project would not result in significant cumulative paleontological resources impacts.

Greenhouse Gas Emissions

The greenhouse gas (GHG) emissions impact analysis in Section 3.6 is inherently a cumulative impact analysis because GHG emissions are a global pollutant. The Project would not result in

significant and unavoidable impacts on GHG emissions. Therefore, the Project would not result in significant cumulative GHG emissions impacts.

Hazards and Hazardous Materials

The geographic scope for assessing potential cumulative impacts to hazards and hazardous materials includes the Napa County Airport, the Project site, and the industrial area defined by Devlin Road, Tower Road, Levitin Road and Highway 29. The Project would result in significant and unavoidable impacts involving airport safety hazards (see Impact 3.7.2 and Mitigation Measure 3.9.2). The Project would not contribute to a cumulative impact associated with airport safety as the Project-level impact is limited to the development of the BCF on the Southern Annexation Parcel. All other hazards and hazardous materials and the identified impacts were found to be less than significant. There were no impacts to schools, and impairment of emergency response and evacuation plans, and thus, the Project would not contribute to a cumulative impact in these topic areas. The Project would not accept, store, process, produce, or transport hazardous materials or waste and is not situated on a site with legacy contamination and thus, would not contribute to a cumulative impact associated with a regional increase in hazardous materials use. Hazardous materials that are used during Project construction would be temporary and would be managed in accordance with manufacturer's recommendation for use and disposal. During operations, the ADF and BCF could emit compounds that are considered hazardous to public health but because these emissions are regulated through BAAQMD, their contribution to a cumulative regional air quality would be less than significant (see Section 3.2, Air Quality). Overall, the Project would not contribute to a significant cumulative impact associated with hazards and hazardous materials.

Hydrology and Water Quality

The geographic scope for assessing potential cumulative hydrology and water quality impacts consists of the Project site, surrounding waterways (i.e., the Napa River and Fagan Creek), and surrounding lands within the Napa River watershed. The Project would not result in significant and unavoidable impacts to hydrology and water quality. As described below, the proposed Project would not result in or contribute to cumulative impacts; cumulative impacts to hydrology and water quality would be mitigated on a project-by-project level in accordance with applicable regulatory requirements, and through the established regulatory review process.

The analysis of cumulative impacts considers that all future development with the potential to impact hydrology and water quality would be required to demonstrate compliance with applicable federal, state, and local regulatory requirements, which are intended to reduce and/or avoid potential adverse environmental effects on surface and groundwater resources that could occur as a result of multiple actions, such as development projects within a watershed. Through implementing regulatory stormwater management requirements, surface and groundwater resources are protected from potential sources of degraded water quality, increased flow rates and runoff volumes, which can result in downstream erosion, sedimentation, and other water quality and quantity (such as flooding) impacts to a watershed system.

Construction of the proposed Project would include preparation of a SWPPP and implementation of BMPs required under the CGP. Once construction is completed, the Project would be required to adhere to the requirements of the NPDES Industrial Permit, including the implementation of associated BMPs as part of the associated SWPPP covering operations. Adherence to NPDES requirements, including Basin Plan WQOs, would protect surface and groundwater resources from impacts resulting from cumulative development in the watershed. With adherence to the described regulatory requirements, the effects of the Project, combined with those of cumulative projects, would not cause a cumulatively significant effect to surface water or groundwater resources and the Project would not result in a cumulatively considerable contribution to any significant cumulative effect.

Land Use and Land Use Planning

The Project would result in significant and unavoidable impacts involving airport safety hazards (see Impact 3.9.2 and Mitigation Measure 3.9.2). The Project would not contribute to a cumulative impact associated with airport safety as the Project-level impact is limited to the development of the BCF on the Southern Annexation Parcel. Other land use impacts are limited to the region. If the Project is approved, the annexation of the southern parcel would conform with all applicable laws and regulations including all applicable Napa County LAFCO policies and regulations. The Project would be consistent with the City of Napa 2040 General Plan. Therefore, the Project would not result in significant cumulative impacts to land use and land use planning.

Noise

Noise impacts are limited to immediate vicinity of the Project. The Project would not result in significant and unavoidable impacts to noise. Noise impacts related to construction and operation would be less than significant. Noise levels on-site are dominated by existing operations and traffic on Devlin Road and Tower Road. Noise from operation of the Project would not be expected to be substantially louder than activities that already occur at the Project site. Therefore, the Project would not result in significant cumulative noise impacts.

Transportation

Transportation impacts are limited to the region. The Project would not result in significant and unavoidable impacts to transportation. The Project is below the vehicle miles traveled (VMT) screening criteria provided in the California Governor's Office of Planning and Research (OPR) document Technical Advisory on Evaluating Transportation Impacts in CEQA and the Project's VMT impacts would be less than significant. Therefore, the Project would not result in significant cumulative transportation impacts.

Public Services, Utilities and Service Systems

Public services, utilities, and service systems impacts are limited to the region. The Project would not result in significant and unavoidable impacts to public services, utilities, and service systems. Impacts related to on-site utilities, water demand, wastewater, and solid waste would be less than

significant. Therefore, the Project would not result in significant cumulative impacts to public services, utilities, and service systems.

Energy

Cumulative energy impacts are limited to the region and the state. The Project would not result in significant and unavoidable impacts to energy resources. The Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Furthermore, the Project would not conflict with any state or local plans for renewable energy. Therefore, the Project would not result in a considerable contribution to regional or statewide cumulative impacts to energy and would not result in significant cumulative energy impacts.

4.3 UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

CEQA *Guidelines* Section 15126.2(b) requires that an EIR discuss "significant environmental effects which cannot be avoided if the proposed project is implemented." Unavoidable significant impacts are those that could not be reduced to less-than-significant levels by mitigation measures identified in the EIR.

This EIR has identified significant environmental impacts for the impacts related to airport safety hazards (see Impacts 3.7.2 and 3.9.2) that would be unavoidable with implementation of the Project. See Section 3.7, Hazards and Hazardous Materials, and Section 3.9, Land Use and Land Use Planning for more details. All other potential impacts would be reduced to levels of less than significant with implementation of mitigation measures (where necessary) as identified in this EIR.

4.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA *Guideline*s Section 15126(f) requires that an EIR must identify any significant irreversible environmental changes that could be caused by a project. These may include current or future uses of non-renewable resources, and secondary or growth-inducing impacts that commit future generations to similar uses. Development of the Project would irreversibly commit the Southern Annexation Parcel for the construction and operation of a BCF, and no portion of the parcel that would be developed is likely to revert to its natural state. Development of the Project would also result in the commitment of non-renewable resources (e.g., petroleum products and other construction materials). The Project's energy usage and resulting air quality and GHG emissions would cease when or soon after operations at the NMDF would cease, however, so would the environmental benefits related to air quality, GHG emissions, and energy. None of the other impacts of the Project are expected to result in irreversible environmental changes.

4.5 EFFECTS FOUND NOT TO BE SIGNIFICANT

4.5.1 AGRICULTURAL RESOURCES

There are no agricultural, forest land or timberland uses located in and around the Project site. The Project site does not contain any Prime Farmland, Unique Farmland or Farmland of

Statewide Importance (California Department of Conservation, 2022). The Project is in a built-out, industrial environment and, therefore, would not convert farmland or forest land/timberland to a non-agricultural or non-forest land/timberland use or conflict with any agricultural zoning use, forest land/timberland zoning use, or Williamson Act contract. Therefore, the Project would not affect agricultural or forest resources.

4.5.2 MINERAL RESOURCES

The Napa County General Plan states that the future mineral extraction in Napa County is not clearly known, despite some historic mining activities (Napa County, 2008). There are currently three mines in Napa County that are designated as active by the State Department of Conservation (Napa County, 2008), however, none of these mines are near the Project site. Implementation of the Project would not affect existing mine operations and it is very unlikely that the Project site would contain mineral resources that would be locally important or of value to the residents of the state or result in the loss of availability of a locally important mineral resources recovery site. Therefore, the Project would not affect mineral resources.

4.5.3 POPULATION AND HOUSING

The Project would not result in displacement of existing housing or induce population growth. As stated above, the Project would create employment opportunities, however, the Project is not anticipated to induce additional growth in the region. The Project is expected to create six new professional positions. The addition of six employees (and potentially their families) moving to the region would not substantially affect population and housing and most of the jobs would likely be filled by existing residents in the region. Furthermore, the Project (including the annexation of the southern parcel) would not hinder housing availability in the region as the Department of Housing and Community Development (HCD) determined the Southern Annexation Parcel qualifies as “exempt surplus land” that is not appropriate for housing purposes (HCD, 2023). Therefore, the Project would not affect population and housing.

4.5.4 RECREATION

The Project would not affect recreational facilities. There are no recreational facilities in the vicinity of the Project, and the Project would not increase population to a level that would warrant the need for new recreational facilities. Therefore, the Project would not affect recreation.

4.5.5 WILDFIRE

Due to the location of the Project site and the surrounding developed industrial land uses, wildland fire hazard risks would be minimal. Review of the Cal Fire *Fire Hazard Severity Zone Viewer* shows that the Project site is not located in a Local Responsibility area nor is it located in a Very High Fire Hazards Severity Zone (Cal Fire, 2025). Therefore, the Project would not affect Wildfire.

4.6 REFERENCES

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CHAPTER 5
ALTERNATIVES TO THE PROJECT

5.1 INTRODUCTION

The California Environmental Quality Act (CEQA) requires an evaluation of the comparative effects of a range of reasonable alternatives to the project that would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project (CEQA *Guidelines* §15126.6(a)). The range of alternatives is governed by the "rule of reason" that requires the Environmental Impact Report (EIR) to set forth only those alternatives necessary to permit a reasoned choice (§15126.6(f)). The significant effects of the alternatives shall be discussed, but in less detail than the significant effects of the project, and a matrix may be used to summarize the comparison of alternatives (§15126.6(d)).

The EIR must assess the identified alternatives and determine which among the alternatives (including the project as proposed) is the environmentally superior alternative. One of the alternatives to be assessed is the "No Project" alternative (see discussion below). If the No Project alternative is identified as the environmentally superior alternative, then another of the remaining alternatives must be identified as the environmentally superior alternative.

The CEQA *Guidelines* require that an EIR briefly describe the rationale for selecting the alternatives to be discussed (§15126.6(a)) and suggest that an EIR also identify any alternatives that were considered by the lead agency but were rejected as infeasible (§15126.6(c)). This chapter of the EIR also identifies alternatives considered but rejected.

5.2 FACTORS IN SELECTION OF ALTERNATIVES

The alternatives addressed in this EIR were selected in consideration of one or more of the following factors:

- the extent to which the alternative would accomplish most of the basic objectives of the Project (see Chapter 2, Project Description);
- the extent to which the alternative would avoid or lessen any of the identified significant adverse environmental effects of the Project;
- the feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure, consistency with regulatory limitations, and whether the City can reasonably acquire, control, or otherwise have access to the site or off-site locations that could potentially be a project alternative;

- the appropriateness of the alternative in contributing to a "reasonable range" of alternatives necessary to permit a reasoned choice; and

- the requirements of CEQA *Guidelines* to consider a "no project" alternative and to identify an "environmentally superior" alternative in addition to the no-project alternative (CEQA *Guidelines*, §15126.6).

As stated in Chapter 2, Project Description, the Project objectives are:

Objective 1. To expand Napa Material Diversion Facility (NMDF) operations and support regional recycling and waste management efforts through new operational methodologies.

Objective 2. To increase the City's ability to divert waste (including organics) from the landfill and continue to meet the state-mandated diversion goals provided in SB 1383, other state-mandates to reduce waste from landfill (AB 341) and reduce greenhouse gas (GHG) emissions (SB 32).

Objective 3. To increase NMDF efficiency, diversify operations, and operate more economically.

Objective 4. Implement renewable energy solutions at the NMDF to reduce reliance on non-renewable power sources and reduce GHG emissions.

In consideration of the above factors, this chapter of the EIR analyzes the following alternatives to the Project:

1. No Project Alternative
2. Reduced Tonnage Alternative
3. Larger Biomass Conversion Facility (BCF) Alternative

The components of these alternatives are described below, including a discussion of their impacts and how they would differ from the significant impacts of the Project. A discussion of the environmentally superior alternative is also included in this chapter.

5.3 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

Several other alternatives were considered in the process of identifying a reasonable range of alternatives to the Project.

5.3.1 OTHER WOOD WASTE TECHNOLOGY ALTERNATIVE

Napa Recycling and Waste Services (NRWS) has collaborated with the City of Napa for more than a decade to develop sustainable, long-term strategies for managing woody waste generated at the NMDF. NRWS has explored a wide range of biomass conversion technologies over several years, including pyrolysis, hydrogen production, and gasification. After in-depth evaluation,

gasification[1] emerged as the most suitable technology to meet both the throughput and energy needs of the NMDF. This approach not only generates renewable electricity but also produces biochar—a stable carbon-rich material that contributes to long-term carbon sequestration and soil health. Therefore, this alternative was eliminated from further consideration.

5.3.2 ALTERNATE PROJECT SITE LOCATION ALTERNATIVE

CEQA *Guidelines* §15126.6(f)(2) requires examination of an alternative location for a project if such locations would result in the avoidance of or lessening of significant impacts while feasibly attaining the most basic objectives of a project. An alternate location in the City of Napa or Napa County would likely be of comparable size and would pose similar potential environmental impacts, which may not be able to be mitigated to a less-than-significant level. Furthermore, an alternate site would be farther from the existing NMDF and would result in increased vehicle trips and associated air quality, GHG emissions, energy use, and noise generation compared to the proposed Project. The City has chosen the Project site because it meets the Project objectives and allows for the feasible development of an Anaerobic Digestion Facility (ADF) on the existing NMDF site and a BCF adjacent to the existing NMDF. This alternative was rejected from further analysis because an alternate location would not allow for the feasible development of the Project facilities that would meet the Project objectives. Therefore, this alternative was eliminated from further consideration.

5.3.3 SOLAR FACILITY ALTERNATIVE

An additional alternative that was considered for the Project involved excluding the construction of the BCF, and instead, constructing a solar facility on the current NMDF and/or the Southern Annexation Parcel. This alternative was not pursued further because it would not meet the Project objectives related to new operational methodologies, waste diversion, and increased efficiency. Furthermore, construction of a solar facility on the current NMDF would further constrain the existing footprint of the NMDF site and construction on the Southern Annexation Parcel would result in many of the same impacts of the proposed Project. Therefore, this alternative was eliminated from further consideration.

5.4 NO PROJECT ALTERNATIVE

5.4.1 NO PROJECT ALTERNATIVE DESCRIPTION

The Southern Annexation Parcel was purchased by the City in December 2024 to increase space necessary for operations as the NMDF has seen a 66 percent increase in throughput over the past 15 years[2]. If the Project is not approved, the Southern Annexation Parcel would be developed for parking, equipment and material storage, and other non-solid waste processing uses and NMDF would continue its existing operations, receiving and processing all solid waste, compostable and

[1] The Project does not meet the California definition (PRC Section 40106) for gasification and is thus referred to as a Biomass Conversion Facility (BCF). The word "gasification" is used in describing the technology in the context of the Federal EPA definition of gasification (40 CFR part 258).
[2] City of Napa, Staff Reports, Title: Property Purchase for Materials Diversion Facility, File #: 200-2023, Version 1.

recyclable materials generated within the City that are collected by NRWS, haulers servicing surrounding jurisdictions (such as unincorporated Napa County), and by private (self-haul) customers. The Southern Annexation Parcel compromises approximately 2.87 acres and is zoned as Industrial: Airport Compatibility Overlay District (I:AC), which is intended to provide an environment exclusively for and conducive to the development and protection of a variety of industrial uses and facilities that are industrial in character.

NMDF operations would be constrained to its existing site and expanded operations supporting regional recycling, waste management, and landfill diversion would not be implemented. The proposed construction of waste-to-energy facilities, including the BCF and ADF, would not come to fruition. As a result, the region would lack the enhanced capacity to process and convert woody materials into syngas for electricity generation and food and green waste into renewable natural gas (RNG) for fueling collection vehicles. Existing NMDF operations would continue to use fuel and electricity from regional sources rather than generate renewables onsite. The 600 Tower Road Parcel would continue to be used for container, equipment, and vehicle storage but would not be used for potential inert material storage and/or processing. Therefore, the No Project Alternative would not meet the Project objectives.

5.4.2 ENVIRONMENTAL IMPACTS

Aesthetics

Under the No Project Alternative, the Southern Annexation Parcel would be developed for parking, equipment and material storage, and other non-solid waste processing uses. These uses would be closer to ground level and less noticeable than the BCF. Therefore, the No Project Alternative would have less aesthetics impacts compared to the Project.

Air Quality

Under the No Project Alternative, the Southern Annexation Parcel would be developed for parking, equipment and material storage, and other non-solid waste processing uses. Less construction emissions would occur as no utilities or building construction would be required and no operational emissions would be generated through the ADF or BCF. Therefore, the No Project Alternative would have less air quality impacts compared to the Project.

Biological Resources

Under the No Project Alternative, the Southern Annexation Parcel would be developed for parking, equipment and material storage, and other non-solid waste processing uses. The No Project Alternative would result in the same construction footprint. Therefore, the No Project Alternative would have the same biological resources impacts compared to the Project.

Cultural Resources and Tribal Cultural Resources

Under the No Project Alternative, the Southern Annexation Parcel would be developed for parking, equipment and material storage, and other non-solid waste processing uses. The No Project Alternative would result in the same construction footprint. Therefore, the No Project

Alternative would have the same cultural resources and tribal cultural resources (TCRs) impacts compared to the Project.

Geology, Soils, and Seismicity

Under the No Project Alternative, the Southern Annexation Parcel would be developed for parking, equipment and material storage, and other non-solid waste processing uses. The No Project Alternative would result in the same construction footprint, but no structures would be developed. Since no new structures would be developed, the No Project Alternative would avoid potential impacts to geology, soils, and seismicity associated with the Project. Therefore, the No Project Alternative would have less geology, soils, and seismicity impacts compared to the Project.

GHG Emissions

Under the No Project Alternative, the Southern Annexation Parcel would be developed for parking, equipment and material storage, and other non-solid waste processing uses. Less construction emissions would occur and no operational GHG emissions would be generated through the ADF or BCF. However, the No Project Alternative would hinder the City's ability to divert waste (including organics) from the landfill and continue to meet the state-mandated diversion goals provided in SB 1383, other state-mandates to reduce waste from landfill (AB 341) and reduce GHG emissions (SB 32). Furthermore, the No Project Alternative would prevent NRWS from implementing renewable energy solutions at NMDF to reduce reliance on non-renewable power sources and reduce GHG emissions. Therefore, the No Project Alternative would have greater GHG emissions impacts compared to the Project.

Hazards and Hazardous Materials

Under the No Project Alternative, the Southern Annexation Parcel would not be developed with the BCF and would be developed for parking, equipment and material storage, and other non-solid waste processing uses. Because no structures would be developed on the Southern Annexation Parcel and less intense uses (storage) would occur, the No Project Alternative would avoid significant and unavoidable impacts related to airport safety hazards associated with the Project. Therefore, the No Project Alternative would have less hazards and hazardous materials impacts compared to the Project.

Hydrology and Water Quality

Under the No Project Alternative, the Southern Annexation Parcel would be developed for parking, equipment and material storage, and other non-solid waste processing uses. The No Project Alternative would result in the same construction footprint and paved surfaces. Therefore, the No Project Alternative would have the same hydrology and water quality impacts compared to the Project.

Land Use and Land Use Planning

Under the No Project Alternative, the Southern Annexation Parcel would still be annexed into the City but would be developed for parking, equipment and material storage, and other non-solid

waste processing uses. Because no structures would be developed on the Southern Annexation Parcel and less intense uses (storage) would occur, the No Project Alternative would avoid significant and unavoidable impacts related to airport safety hazards associated with the Project. Therefore, the No Project Alternative would have less land use and planning impacts compared to the Project.

Noise

Under the No Project Alternative, the Southern Annexation Parcel would be developed for parking, equipment and material storage, and other non-solid waste processing uses, and less construction activities and no operational activities would occur. Therefore, the No Project Alternative would have less noise impacts compared to the Project.

Transportation

Under the No Project Alternative, the Southern Annexation Parcel would be developed for parking, equipment and material storage, and other non-solid waste processing uses, and less construction and no operational vehicles trips would be generated. Therefore, the No Project Alternative would have less transportation impacts compared to the Project.

Public Services and Utilities

Under the No Project Alternative, no new utility connections would occur supporting the development of the BCF on the Southern Annexation Parcel. Therefore, the No Project Alternative would have less public services and utilities impacts than the Project.

Energy

Under the No Project Alternative, less construction and no operational energy would be consumed. However, the No Project Alternative would prevent NRWS from implementing renewable energy solutions at NMDF to reduce reliance on non-renewable power sources and reduce GHG emissions. Furthermore, the City would need to continue to export wood waste from the NMDF decreasing efficiency. Therefore, the No Project Alternative would have greater energy impacts compared to the Project.

5.5 REDUCED TONNAGE ALTERNATIVE

5.5.1 REDUCED TONNAGE ALTERNATIVE DESCRIPTION

The Reduced Tonnage Alternative would include all the elements of the Project, except there would be a reduction in the increased permitted tonnage compared to the Project. Under the Reduced Tonnage Increase Alternative, the City would increase the NMDF's overall tonnage for all waste types to a weekly average of 880 tons per day (tpd) with a daily peak of 1,250 tpd instead of a weekly average of 1,000 tpd with a daily peak of 1,500 tpd as proposed for the Project.

The Reduced Tonnage Alternative could meet each of the Project objectives because all the Project elements would still be developed, but the Reduced Tonnage Alternative would be limited

in increasing the City's ability to divert waste (including organics) from the landfill compared to the Project because the NMDF would have to reject loads that put daily totals above 1,250 tpd (or the weekly average of 880 tpd).

5.5.2 ENVIRONMENTAL IMPACTS

Aesthetics

The Reduced Tonnage Alternative would include all the elements of the Project, except there would be a reduction in the increased permitted tonnage compared to the Project. Therefore, the Reduced Tonnage Alternative would have the same aesthetics impacts compared to the Project.

Air Quality

Under the Reduced Tonnage Alternative, construction emissions would remain the same as the Project. Operational emissions would be slightly reduced compared to the Project due to less trip generation associated with the tonnage increase, however, the ADF and BCF would still be developed, and these new facilities generate the majority of air quality emissions associated with the Project. Therefore, the Reduced Tonnage Alternative would have slightly less air quality impacts compared to the Project.

Biological Resources

The Reduced Tonnage Alternative would include all the elements of the Project, except there would be a reduction in the increased permitted tonnage compared to the Project. Since the same amount of land would be developed on the Southern Annexation Parcel for the BCF, the Reduced Tonnage Alternative would have the same potential impacts to biological resources associated with the Project. Therefore, the Reduced Tonnage Alternative would have the same biological resources impacts compared to the Project.

Cultural Resources and Tribal Cultural Resources

The Reduced Tonnage Alternative would include all the elements of the Project, except there would be a reduction in the increased permitted tonnage compared to the Project. Since the same amount of land would be developed on the Southern Annexation Parcel for the BCF, the Reduced Tonnage Alternative would have the same potential impacts to cultural resources and TCRs associated with the Project. Therefore, the Reduced Tonnage Alternative would have the same cultural resources and TCRs impacts compared to the Project.

Geology, Soils, and Seismicity

The Reduced Tonnage Alternative would include all the elements of the Project, except there would be a reduction in the increased permitted tonnage compared to the Project. Since the same amount of land would be developed on the Southern Annexation Parcel for the BCF and the ADF would still be developed on the existing NMDF site, the Reduced Tonnage Alternative would have the same potential impacts to geology, soils, and seismicity associated with the Project. Therefore, the Reduced Tonnage Alternative would have the same geology, soils, and seismicity impacts compared to the Project.

GHG Emissions

Under the Reduced Tonnage Alternative, construction GHG emissions would remain the same as the Project. Operational GHG emissions would be slightly reduced compared to the Project due to less trip generation associated with the tonnage increase. However, the Reduced Tonnage Alternative would hinder the City's ability to divert waste (including organics) from the landfill and continue to meet the state-mandated diversion goals provided in SB 1383, other state-mandates to reduce waste from landfill (AB 341) and reduce GHG emissions (SB 32). Thus, less GHG emissions would be indirectly avoided by the Project as fewer organics would be diverted from landfills in the region. Therefore, the Reduced Tonnage Alternative would have greater GHG emissions impacts compared to the Project.

Hazards and Hazardous Materials

The Reduced Tonnage Alternative would include all the elements of the Project, except there would be a reduction in the increased permitted tonnage compared to the Project. Since the same amount of land would be developed on the Southern Annexation Parcel for the BCF and the ADF would still be developed on the existing NMDF site, the Reduced Tonnage Alternative would have the same hazards and hazardous materials impacts associated with the Project, including significant and unavoidable impacts related to airport safety hazards. Therefore, the Reduced Tonnage Alternative would have the same hazards and hazardous materials compared to the Project.

Hydrology and Water Quality

The Reduced Tonnage Alternative would include all the elements of the Project, except there would be a reduction in the increased permitted tonnage compared to the Project. Since the same amount of land would be developed on the Southern Annexation Parcel for the BCF and the ADF would still be developed on the existing NMDF site, the Reduced Tonnage Alternative would have the same hydrology and water quality impacts associated with the Project. Therefore, the Reduced Tonnage Alternative would have the same hydrology and water quality impacts compared to the Project.

Land Use and Planning

The Reduced Tonnage Alternative would include all the elements of the Project, except there would be a reduction in the increased permitted tonnage compared to the Project. Since the same amount of land would be developed on the Southern Annexation Parcel for the BCF and the ADF would still be developed on the existing NMDF site, the Reduced Tonnage Alternative would have the same land use and land use planning impacts associated with the Project, including significant and unavoidable impacts related to airport safety hazards. Therefore, the Reduced Tonnage Alternative would have the same land use and land use planning impacts compared to the Project.

Noise

Under the Reduced Tonnage Alternative, ADF and BCF would still be developed which would result in the same amount of construction noise. Operational noise would be slightly less at the NMDF site and along nearby roadways under the Reduced Tonnage Alternative due to reduced

trip generation compared to the Project. Therefore, the Reduced Tonnage Alternative would have less noise impacts compared to the Project.

Transportation

Under the Reduced Tonnage Alternative, the Project would generate the same employee vehicle trips but less waste hauling vehicle trips compared to the Project. Therefore, the Reduced Tonnage Alternative would have less transportation impacts compared to the Project.

Public Services and Utilities

The Reduced Tonnage Alternative would utilize the same public services and utilities compared to the Project. Therefore, the Reduced Tonnage Alternative would have the same public services and utilities impacts as the Project.

Energy

Under the Reduced Tonnage Alternative, the same amount of construction energy use would occur. Renewable energy generation under the Reduced Tonnage Alternative would be the same as compared to the Project as there would still be enough organic feedstock available to operate the ADF and BCF at the planned capacities under the Project. Operational energy use would be slightly less compared to the Project under the Reduced Tonnage Alternative due to less waste hauling vehicle trips. Therefore, the Reduced Project Footprint Alternative would have less energy impacts compared to the Project.

5.6 LARGER BIOMASS CONVERSION FACILITY ALTERNATIVE

5.6.1 LARGER BIOMASS CONVERSION FACILITY ALTERNATIVE DESCRIPTION

The Larger BCF Alternative would include all the elements of the Project, except a larger BCF would include three additional 500-kilowatt (kW) output syngas-fueled engines and associated equipment to generate twice as much electricity compared to the Project. The Larger BCF Alternative would generate approximately 3.0 megawatts (MW**)** of electricity compared to 1.5 MW under the Project. The Larger BCF would still be developed on the Southern Annexation Parcel within the same proposed footprint as the proposed Project's BCF. Under the Larger BCF Alternative, there would be an increased production of syngas and resulting electricity and biochar generation. Under the Larger BCF Alternative, all of the Project objectives would be met.

Aesthetics

Under the Larger BCF Alternative, the same amount of land would be developed on the Southern Annexation Parcel. Therefore, the Larger BCF Facility would have the same aesthetics impacts compared to the Project.

Air Quality

Under the Larger BCF Alternative, there would be more air quality emissions generated by additional engines needed to operate a larger BCF compared to the Project. ADF emissions would remain the same. Construction emissions would be approximately the same as the installation of additional engines would result in negligible emissions. Odor impacts would be approximately the same as wood waste does not pose odor concerns. Therefore, the Larger BCF Alternative would have greater air quality impacts compared to the Project.

Biological Resources

Under the Larger BCF Alternative, the same amount of land would be developed on the Southern Annexation Parcel. Since the same amount of land would be developed, the Larger BCF Alternative would have the same potential impacts to biological resources associated with the Project. Therefore, the Larger BCF Alternative would have the same biological resources impacts compared to the Project.

Cultural Resources and Tribal Cultural Resources

Under the Larger BCF Alternative, the same amount of land would be developed on the Southern Annexation Parcel. Since the same amount of land would be developed, the Larger BCF Alternative would have the same potential impacts to cultural resources and TCRs associated with the Project. Therefore, the Larger BCF Alternative would have the same cultural resources and TCRs impacts compared to the Project.

Geology, Soils, and Seismicity

Under the Larger BCF Alternative, the same amount of land would be developed on the Southern Annexation Parcel. Since the same amount of land would be developed, the Larger BCF Alternative would have the same potential impacts to geology, soils, and seismicity associated with the Project. Therefore, the Larger BCF Alternative would have the same geology, soils, and seismicity impacts compared to the Project.

GHG Emissions

Under the Larger BCF Alternative, the operation of a Larger BCF would generate more GHG emissions from engines compared to the Project. However, the Larger BCF Alternative would allow NRWS to further implement renewable energy solutions at NMDF to further reduce reliance on non-renewable power sources and reduce GHG emissions compared to the Project. Construction emissions would be approximately the same as the installation of additional engines would result in negligible emissions. Therefore, the Larger BCF Alternative would have the same GHG emissions impacts compared to the Project.

Hazards and Hazardous Materials

Under the Larger BCF Alternative, the same amount of land would be developed on the Southern Annexation Parcel. The Larger BCF Alternative would not create a more severe significant and unavoidable impact related to airport safety hazards. However, the Larger BCF Alternative would

generate twice as much syngas and would require twice as many engines and associated oils, lubricants, coolants, etc. Therefore, the Larger BCF Alternative would have greater hazards and hazardous materials impacts compared to the Project.

Hydrology and Water Quality

Under the Larger BCF Alternative, the same amount of land would be developed on the Southern Annexation Parcel. Since the same amount of land would be developed, the Larger BCF Alternative would have the same potential impacts to hydrology and water quality associated with the Project. Therefore, the Larger BCF Alternative would have the same hydrology and water quality impacts compared to the Project.

Land Use and Land Use Planning

Under the Larger BCF Alternative, the same amount of land would be developed on the Southern Annexation Parcel for the BCF and the ADF would still be developed on the existing NMDF site. The Larger BCF Alternative would not create a more severe significant and unavoidable impact related to airport safety hazards. Therefore, the Larger BCF Alternative would have the same land use and land use planning impacts compared to the Project.

Noise

Under the Larger BCF Alternative, the same amount of land would be developed on the Southern Annexation Parcel for the BCF and the ADF would still be developed on the existing NMDF site. Noise during operations would be increased from the three additional engines associated with the Larger BCF Alternative. Therefore, the Larger BCF Alternative would have slightly greater noise impacts compared to the Project.

Transportation

Under the Larger BCF Alternative, the Project would generate the same employee vehicle trips and waste hauling trips compared to the Project. Therefore, the Larger BCF Alternative would have the same transportation impacts as the Project.

Public Services and Utilities

The Larger BCF Alternative would utilize the same public services and utilities compared to the Project. Therefore, the Larger BCF Alternative would have the same public services and utilities impacts as the Project.

Energy

Under the Larger BCF Alternative, the operation of a Larger BCF would generate twice as much electricity compared to the Project. Therefore, the Larger BCF Alternative would have less energy impacts compared to the Project.

5.7 SUMMARY COMPARISON OF ALTERNATIVES

The relative impacts of the various Project alternatives (in comparison to the proposed Project) are shown in **Table 5-1**.

TABLE 5-1. PROJECT ALTERNATIVES COMPARISON

EIR Chapter/Project Impact	No Project Alternative	Reduced Tonnage Alternative	Larger BCF Alternative
Aesthetics	L	E	E
Air Quality	L	L	G
Biological Resources	E	E	E
Cultural Resources and TCRs	E	E	E
Geology, Soils, and Seismicity	L	E	E
GHG Emissions	G	G	E
Hazards and Hazardous Materials	L	E	G
Hydrology and Water Quality	E	E	E
Land Use and Planning	L	E	E
Noise	L	L	G
Transportation	L	L	E
Public Services and Utilities	L	E	E
Energy	G	L	L

KEY:
L = Less impact than the Project
E = Equal or similar impacts as the Project
G = Greater impact than the Project

SOURCE: RCH Group, 2025

Table 5-2 shows the ability of each alternative to achieve the Project objectives. As shown by the table, the No Project Alternative fails to meet the Project objectives. The Reduced Tonnage Alternative partially meets all the Project objectives. The Larger BCF Alternative would meet all the Project Objectives. As described in the Project Description (Chapter 2) and in Section 5.2 of this Chapter, the Project objectives are as follows:

Objective 1. To expand NMDF operations and support regional recycling and waste management efforts through new operational methodologies.

Objective 2. To increase the City's ability to divert waste (including organics) from the landfill and continue to meet the state-mandated diversion goals provided in SB 1383, other state-mandates to reduce waste from landfill (AB 341) and reduce greenhouse gas (GHG) emissions (SB 32).

Objective 3. To increase NMDF efficiency, diversify operations, and operate more economically.

Objective 4. Implement renewable energy solutions at the NMDF to reduce reliance on non-renewable power sources and reduce GHG emissions.

TABLE 5-2. ALTERNATIVES ABILITY TO MEET PROJECT OBJECTIVES COMPARISON

Objectives	No Project Alternative	Reduced Tonnage Alternative	Larger BCF Alternative
Objective 1	N	✓	✓
Objective 2	N	X	✓
Objective 3	N	✓	✓
Objective 4	N	✓	✓

KEY:
✓ = Alternative substantially achieves objective
X = Alternative partially achieves objective
N = Alternative does not achieve objective
NA = Alternative is not applicable to the objective, would not hinder objective

SOURCE: RCH Group, 2025

5.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project Alternative would not meet any of the Project objectives (as depicted in **Table 5-2**). While the No Project Alternative would have less impacts for many resources areas (as depicted in **Table 5-1**), it would have the same impacts for biological resources, cultural resources and TCRs, and hydrology and water quality, and greater impacts for GHG emissions and energy.

The Reduced Tonnage Alternative meets or partially meets all the Project objectives (as depicted in **Table 5-2**). The Reduced Tonnage Alternative meets Objective 1, 3 and 4. Under the Reduced Tonnage Alternative, there would be a reduction in the overall tonnage increase for all waste types received at NMDF compared to the proposed Project which would limit the City's ability to meet the state-mandated diversion goals listed in Objective 2.

The Larger BCF Alternative would meet all the Project objectives (as depicted in **Table 5-2**). Due to additional engines required to operate the Larger BCF Alternative, greater impacts to air quality, hazards and hazardous materials, and noise would occur compared to the Project (as shown in **Table 5-1**).

Since the Reduced Tonnage Alternative substantially meets Project Objectives 1, 3 and 4, and partially meets Objective 2, while reducing impacts to air quality, noise, transportation, and energy (as shown in **Table 5-1**), and having only one impact greater than the Project (GHG emissions), the Reduced Tonnage Alternative is the environmentally superior alternative.

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CHAPTER 6

EIR AUTHORS, PERSONS, AND ORGANIZATIONS CONTACTED

6.1 LEAD AGENCY EIR AUTHORS

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Deputy Project Manager	Dan Jones
Project Description & Introduction	Dan Jones Paul Miller, M.S.
Aesthetics	Luis Rosas
Air Quality, Energy, & Greenhouse Gas Emissions Sections	Mike Ratte
Land Use and Land Use Planning	Dan Jones Luis Rosas
Noise Section:	Luis Rosas
Public Services, Utilities and Service Systems:	Luis Rosas
Transportation Section	Dan Jones
Impact Overview (Other CEQA Topics)	Dan Jones Luis Rosas
Alternatives Analysis	Dan Jones Luis Rosas
Graphics (September People, LLC)	Linda Uehara

Yorke Engineering

Air Quality	Russell Kingsley

Swift Biological Consulting LLC

Biological Resources Report	Jennifer Michaud, M.A.

Jane Valerius Environmental Consulting LLC

Wetland Delineation Update and Special Status Plants Survey	Jane Valerius, M.S.

Alta Archaeological Consulting LLC

Cultural Resources Survey	Alex DeGeorgey, M.A., RPA Heather Warner, B.A.

Sutro Science LLC

Geology and Soils	Peter Hudson, P.G., CEG, QSP
Hazards and Hazardous Materials	Peter Hudson, P.G., CEG, QSP
Hydrology and Water Quality	Justin Taplin, M.S., FP-C

PHA Transportation Consultants

Traffic Generation Analysis	Pang Ho, AICP

6.3 PERSONS AND ORGANIZATIONS CONSULTED

List of other people and organizations consulted are provided in the references at the end of each section.

CHAPTER 7
ACRONYMS

7.1 ACRONYMS USED IN EIR

AAQS: Ambient Air Quality Standards

AB: Assembly Bill

ABAG: Associate of Bay Area Governments

ADC: Alternate Daily Cover

ADF: Anaerobic Digestion Facility

AECHS: Archaic-Emergent Culture History Scheme

ALUC: Airport Land Use Commission

ALUCP: Airport Land Use Compatibility Plan

APN: Assessor Parcel Number

ASCE: American Society of Civil Engineers

AST: Aboveground Storage Tank

ATC: Authority to Construct

BAAQMD: Bay Area Air Quality Management District

BAT: Best Available Technology

BCT: Best Control Technology

BERD: Built Environmental Resources Directory

BCF: Biomass Conversion Facility

BGF: Biomass Gasification Facility

bgs: below ground surface

BMPs: Best Management Practices

BRA: Biological Resources Assessment

BTU: British thermal unit

CAFE: Corporate Average Fuel Economy

CalEEMod: California Emissions Estimator Model

CalEPA: California Environmental Protection Agency

CALGreen: California Green Building Standards Code

CalOHP: California Office of Historic Preservation

CalOSHA: California Division of Occupational Safety and Health

CalRecycle: California Department of Resources Recycling and Recovery

CalTrans: California Department of Transportation

CalWater: California's Water Systems

CAA: Clean Air Act

CAAQS: California Ambient Air Quality Standards

CAP: Clean Air Plan

CAP: Climate Action Plan

CAPCOA: California Air Pollution Control Officers Association

CARB: California Air Resources Board

CASP: Covered Aerated Static Pile

CBC: California Building Code

CCAA: California Clean Air Act

CCR: California Code of Regulations

CCTS: Central California Taxonomic System

CDC: California Department of Conservation

CDI: construction, demolition, and inerts debris

CDFA: California Department of Food and Agriculture

CDFW: California Department of Fish and Wildlife

CDHCS: California Department of Health Care Services

CEC: California Energy Commission

CEQA: California Environmental Quality Act

CERCLA: Comprehensive Environmental Response, Compensation and Liability Act

CERS: California Environmental Reporting System

CESA: California Endangered Species Act

CESF: chemically-enhanced sand filtration

CFGC: California Fish and Game Code

CFR: Code of Federal Regulations

CFWC: California Fish and Wildlife Commission

CGP: Construction General Permit

CGS: California Geological Survey

CHP: combined heat and power

CH_4: methane

CHRIS: California Historical Resources Information System

CI: carbon intensity

CNDDB: California Natural Diversity Database

CMCP: Comprehensive Multimodal Corridor Plan

CNEL: Community Noise Equivalent Level

CNPS: California Native Plant Society

COVID-19: Corona Virus Disease

CO: carbon monoxide

CO_2: carbon dioxide

CO_{2e}: carbon dioxide equivalents

CPUC: California Public Utilities Commission

CRHR: California Register of Historical Resources

CUPA: Certified Unified Program Agency

CWA: Clean Water Act

dBA: A-weighted decibel

dB: decibel levels

DEIR: Draft EIR

dge: diesel gallon equivalents

DOT: United States Department of Transportation

DPM: diesel particulate matter

DPR: California Department of Pesticide Regulation

DTSC: California Department of Toxic Substances Control

DWR: Department of Water Resources

EAP: Energy Action Plan

ECM: Energy Control Measure

EIR: Environmental Impact Report

EPA: Environmental Protection Agency

EPAct: Energy Policy Act of 1992

EV: Electric Vehicle

FAA: Federal Aviation Administration

FCAA: Federal Clean Air Act

FESA: Federal Endangered Species Act

FEMA: Federal Emergency Management Agency

FHWA: Federal Highway Administration

FINDS: Facility Index System

FIRMs: Flood Insurance Rate Maps

FMCSA: Federal Motor Carrier Safety Administration

FTA: Federal Transit Administration

GHG: greenhouse gases

GLO: General Land Office

GO: General Order

gpm: gallons per minute

GWh: gigawatt hour

GWP: global warming potential

H_2S: hydrogen sulfide

HAP: hazardous air pollutant

HFCs: hydrofluorocarbons

HHW: Household Hazardous Waste

HHWCF: Household Hazardous Waste Collection Facilities

HI: hazard index

HMBP: Hazardous Materials Business Plan

HRA: health risk assessment

HSWA: Hazardous and Solid Waste Amendments

HWT: Hazardous Waste Transporter

I:AC: Industrial: Airport Compatibility Overlay District

IEPR: Integrated Energy Policy Report

IPCC: Intergovernmental Panel on Climate Change

kW: kilowatt

LAFCO: Local Agency Formation Commission

LCFS: low carbon fuel standard

LEA: Local Enforcement Agency

L_{dn}: Day-night Average Sound Level

$L_{eq:}$ Equivalent Sound Level

$L_{max:}$ Maximum Sound Level

LOS: Level of service

LRSP: Local Roadway Safety Plan

LUST: Leaking Underground Storage Tank

MBTA: Migratory Bird Treaty Act

MLD: most likely descendants

MND: Mitigated Negative Declaration

MM: mitigation measures

MMBtu: Million British Thermal Units

MRP: Monitoring and Reporting Program

MMRP: Mitigation Monitoring and Reporting Program

mph: miles per hour

MRF: Materials Recovery Facility

MTC: Metropolitan Transportation Commission

MW: megawatt

MWh: megawatt-hour

mya: million years ago

NAAQS: National Ambient Air Quality Standards

NAHC: Native American Heritage Commission

NCDEH: Napa County Division of Environmental Health

NCFD: Napa County Fire Department

NCMC: Napa County Municipal Code

NCMR: Napa City Material Recovery

NCRWS: Napa County Recycling and Waste Services

ND: Negative Declaration

NFHL: National Flood Hazard Layer

NHPA: National Historic Preservation Act

NHTSA: National Highway Traffic Safety Administration

NMFS: National Marine Fisheries Service

NMDF: Napa Materials Diversion Facility

NRWS: Napa Recycling & Waste Services

N_2O: nitrous oxide

NO_2: nitrogen dioxide

NO_x: nitrogen oxides

NO: nitric oxide

NOI: Notice of Intent

NOP: Notice of Preparation

NPDES: National Pollutant Discharge Elimination System

NRCS: National Resources Conservation Service

NRHP: National Register of Historic Places

NRRP: Napa Renewable Resources Project

NVTA: Napa Valley Transportation Authority

NWIC: Northwest Information Center

O_3: ozone

OE/AAA: Obstruction Evaluation/Airport Airspace Analysis

OEHHA: Office of Environmental Health Hazard Assessment

Odor Impact Minimization Plan (OIMP)

OPR: Governor's Office of Planning and Research

PFCs: perfluorocarbons

PG&E: Pacific Gas and Electric

psi: pounds per square inch

PM: particulate matter

PM2.5: fine particulate matter (less than 2.5 micrometers in diameter)

PM10: particulate matter (less than 10 micrometers in diameter)

PQ-P:AC: Public, Quasi-Public: Airport Compatibility Overlay District

PRC: California Public Resources Code

PROC: Certified Processors Database

PSD: Prevention of Significant Deterioration

PTO: Permit to Operate

PV: Photovoltaic

QSD: Qualified SWPPP Developer

QSP: Qualified SWPPP Practitioner

RCNM: Roadway Construction Noise Model

RCRA: Resource Conservation and Recovery Act

RCAAP: Regional Climate Action and Adaptation Plan

RFP: Request for Proposals

RNG: Renewable Natural Gas

ROG: reactive organic gases

RPS: renewable portfolio standard

RSH: residential and self-haul

RWQCB: Regional Water Quality Control Board

SAFE: Safer Affordable Fuel-Efficient

SAF Plan: State Alternative Fuels Plan

SARA: Superfund Amendments and Re-authorization Act of 1986

SB: senate bill

SCH: State Clearinghouse

SEI: Structural Engineering Institute

SF_6: sulfur hexafluoride

SFBAAB: San Francisco Bay Area Air Basin

SFBRWQCB: San Francisco Bay Regional Water Quality Control Board

SFHA: Special Flood Hazard Areas

SHPO: State Historic Preservation Office

SMAQMD: Sacramento Metropolitan Air Quality Management District

SMARTS: Stormwater Multi-Application Reporting Tracking System

SO_2: sulfur dioxide

SR: State Route

SSC: Species of Special Concern

SWFP: Solid Waste Facility Permit

SWHA: Swainson's Hawk

SWHATAC: Swainson's Hawk Technical Advisory Committee

SWIS: Solid Waste Information System

SWPPP: stormwater pollution prevention plan

SWRCB: State Water Resources Control Board

TAC: toxic air contaminant

TCRs: tribal cultural resources

TMDL: Total Maximum Daily Loads

tpd: tons per day

tpy: tons per year

ug/m3: micrograms per cubic meter

UCMP: California Museum of Paleontology

USACE: United States Army Corps of Engineers

USC: United States Code

USDA: United States Department of Agriculture

USEIA: United States Energy Information System

USEPA: United States Environmental Protection Agency

USFWS: United States Fish & Wildlife Service

USGS: United States Geological Survey

VMT: Vehicle Miles Traveled

VOC: volatile organic compounds

WDID: Waste Discharge ID

WDR: Waste Discharge Requirements

WQO: Water Quality Objectives

ZWE: Zero Waste Energy, LLC

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