
Initial Study/Negative Declaration

NRRWF Transloading Facility

SEPTEMBER 2023

Prepared for:

BUTTE COUNTY DEPARTMENT OF PUBLIC WORKS

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Table of Contents

SECTION	PAGE
Acronyms and Abbreviations.....	iii
1 Introduction	1
1.1 Project Overview	1
1.2 California Environmental Quality Act Compliance	1
1.3 Public Review Process	1
2 Project Description.....	3
2.1 Project Location.....	3
2.2 Environmental Setting.....	3
2.3 Project Characteristics	5
2.4 Project Construction and Phasing.....	6
2.5 Project Approvals.....	6
3 Initial Study Checklist.....	9
3.1 Aesthetics	11
3.2 Agriculture and Forestry Resources	13
3.3 Air Quality.....	15
3.4 Biological Resources	23
3.5 Cultural Resources	26
3.6 Energy	27
3.7 Geology and Soils	30
3.8 Greenhouse Gas Emissions.....	33
3.9 Hazards and Hazardous Materials	39
3.10 Hydrology and Water Quality.....	41
3.11 Land Use and Planning.....	44
3.12 Mineral Resources	44
3.13 Noise	45
3.14 Population and Housing.....	46
3.15 Public Services	47
3.16 Recreation.....	48
3.17 Transportation	49
3.18 Tribal Cultural Resources.....	50
3.19 Utilities and Service Systems.....	52
3.20 Wildfire	53
3.21 Mandatory Findings of Significance	55

4 References and Preparers..... 57

 4.1 References Cited 57

 4.2 List of Preparers 59

APPENDIX

A Air Quality Modeling Data

FIGURE

1 Project Location 7

TABLES

2-1 Surrounding Land Uses 5

3.3-1 Butte County Air Quality Management District Air Quality Significance Thresholds 17

3.3-2 Construction Scenario Assumptions 18

3.3-3 Daily Construction-Related Criteria Air Pollutant Emissions..... 19

3.3-4 Annual Construction-Related Criteria Air Pollutant Emissions 19

3.3-5 Daily Operation-Related Criteria Air Pollutant Emissions 20

3.6-1 Construction Equipment Diesel Demand 29

3.6-2 Construction Worker, Vendor, and Haul Truck Petroleum Demand 29

3.8-1 Estimated Annual Construction Greenhouse Gas Emissions..... 35

3.8-2 Estimated Annual Operational Greenhouse Gas Emissions 36

3.8-3 The Project’s Potential to Conflict with the 2021 Climate Action Plan 36

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ATCM	Airborne Toxic Control Measure
BRCP	Butte Regional Conservation Plan
BCAQMD	Butte County Air Quality Management District
BMP	Best management practice
CAAQS	California ambient air quality standards
CAP	Climate Action Plan
CARB	California Air Resources Board
CASP	Covered aerated static pile
CEQA	California Environmental Quality Act
CFGF	California Fish and Game Code
cy	Cubic yard
EPA	Environmental Protection Agency
DPM	Diesel particulate matter
GHG	Greenhouse gas
GWP	Global warming potential
IS	Initial Study
JTD	Joint Technical Document
LEA	Local Enforcement Agency
MT	Metric ton
MTBA	Migratory Bird Treaty Act
NAAQS	National ambient air quality standards
ND	Negative Declaration
NPDES	National Pollutant Discharge Elimination System
NRRWF	Neal Road Recycling and Waste Facility
NSVAB	Northern Sacramento Valley Air Basin
SB	Senate Bill
SR	State Route
SVAB	Sacramento Valley Air Basin
SWRCB	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan

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1 Introduction

1.1 Project Overview

The Project is a proposed organic waste transloading operation (proposed Project) at the Neal Road Recycling and Waste Facility (NRRWF) located at 1023 Neal Road, Paradise, California (Town) in unincorporated Butte County (County). The proposed Project is in response to Senate Bill (SB) 1383, which requires a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent organic waste reduction by 2025.

The proposed Project will consist of the construction of an organic waste transloading facility that will assist with the loading of organic waste into transfer trucks at the NRRWF that will be subsequently transported to an off-site composting facility. The organic waste transloading area will be located on top of the lined waste Module 4 of NRRWF (see Figure 1). The transloading operation would occur on the compacted intermediate cover of Module 4. A three-sided area delineated by concrete barriers (i.e., K-rails) would be located nearby where organic waste would be temporarily stored until it is loaded into the transfer trailer using a grapple.

1.2 California Environmental Quality Act Compliance

Butte County Public Works is the lead agency for the Project. This Initial Study (IS) has been prepared per the requirements of the California Environmental Quality Act (CEQA) of 1970 (California Public Resources Code Section 21000, et seq.), and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.). As described in this IS, there is no substantial evidence in the record that the Project would result in a significant effect on the environment. Therefore, the County has prepared a Negative Declaration (ND).

1.3 Public Review Process

The proposed ND will be circulated for public review for a period of 30 days, pursuant to CEQA Guidelines Section 15073(a). The County will provide public notice at the beginning of the public review period.

Following the close of the 30-day review period, the County will consider the proposed ND and all comments regarding environmental issues. The County shall adopt the proposed ND if it finds that there is no substantial evidence that the Project will have a significant effect on the environment. The County shall consider approval of the Project once the ND is adopted.

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2 Project Description

2.1 Project Location

The proposed Project location is within the existing Neal Road Recycling and Waste Facility (NRRWF). The site address is 1023 Neal Road, Paradise, California, in unincorporated Butte County (County) (Assessor's Parcel Number 040-600-082). The Project is approximately 4 miles southeast of the City of Chico and east of the census-designated place of Durham off of State Route 99 (see Figure 1).

2.2 Environmental Setting

Neal Road Recycling and Waste Facility

The NRRWF is owned by Butte County and operated by the Butte County Public Works Department, as an Enterprise Fund¹. The NRRWF has a permitted capacity of approximately 25.3 million cubic yards and a remaining capacity of 20.8 million cubic yards (CalRecycle 2019). The facility is estimated to operate until approximately 2055, accommodating 2.5% to 3.5% annual increases in solid waste due to anticipated growth in the City and Butte County. The maximum amount accepted daily at the NRRWF is 1,500 tons, although the daily amount rarely exceeds 1,200 tons. However, due to the 2018 Camp Fire, Butte County Public Works submitted an Emergency Waiver of Standards to CalRecycle to facilitating the increase of maximum tonnage from 1,500 tons per day to 15,000 tons per day, as well as increased permitted traffic volume, transfer and processing capacity, and facility operating hours to expedite disposal of fire debris.

Background

Beginning in the 1980s, California has enacted policies for reduction of solid waste through recycling requirements and incentive programs. The state's objectives through these policies are maximizing remaining landfill space, increasing the use of recycled materials, and ultimately reducing greenhouse gas emissions. In 1989, AB 989 passed which included establishment of waste diversion mandates. These mandates required each city or county plan to include an implementation schedule showing diversion of 25% of all solid waste from landfill or transformation facilities by January 1, 1995 and diversion of 50% of all solid waste by January 1, 2020 through source reduction, recycling, and composting activities.

AB 32, the Global Warming Solutions Act, was passed in 2006 to reduce greenhouse gas emissions all across the state. The legislation mandated a commercial recycling measure to require a commercial waste recycling rate of 75 percent by 2020. AB 341 was then signed into law to lay out a program for achieving these goals. This bill mandated businesses or multifamily dwellings that produced four cubic yards of waste per week to have recycling services, with every jurisdiction in the state required to have a waste recycling program and to generate an annual report of progress.

Most recently, California has turned to the issue of recycling organic waste material. Methane emissions resulting from the decomposition of organic waste in landfills are a significant source of greenhouse gas emissions contributing to global climate change. Organic materials, including waste that can be readily prevented, recycled,

¹ An enterprise fund is a self-supporting government fund that sells goods and services to the public for a fee.

or composted, account for a significant portion of California's overall waste stream. According to the Environmental Protection Agency (EPA) municipal solid waste landfills are the third-largest source of human-related methane emissions in the United States, accounting for approximately 15.1 percent of these emissions in 2018 (EPA 2022). In 2014, Governor Brown signed AB 1826 into law which is focused on significantly reducing organic waste in landfills. In 2016, local jurisdictions were mandated to create organic waste recycling programs procedures to monitor their progress. Furthermore, in 2016 businesses and multi-family homes that generated more than eight cubic yards of organic waste were required to arrange for organic waste recycling services. By 2019 business and multi-family residential dwellings that consist of five or more units that generate four cubic yards of municipal solid waste were also required to have organic recycling services. By 2020, if the statewide disposal rate has not been reduced by up to 50 percent compared to 2014, the recycling requirements will expand to cover businesses that generate two cubic yards or more of commercial solid waste per week (CalRecycle 2019).

In September 2016, Governor Brown signed into law SB 1383 (Lara, Chapter 395, Statutes of 2016), establishing methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants in various sectors of California's economy. The new law codifies the California Air Resources Board's Short-Lived Climate Pollutant Reduction Strategy, established pursuant to SB 605 (Lara, Chapter 523, Statutes of 2014), to achieve reductions in the statewide emissions of short-lived climate pollutants. SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

Project Site

The Project site is approximately 0.5-acre, within a parcel spanning approximately 190 acres total, with 140 acres permitted for the disposal of solid waste. Organic waste is currently stored south of the Project site (and will be transferred off-site for composting). The transloading facility would be located on the compacted intermediate cover of Module 4.

The Butte County General Plan 2040 designates the Project site as Public with the Solid Waste Management Facility overlay (Butte County 2023). The site is zoned as Public with the Neal Road Recycling, Energy, and Waste Facility overlay (Butte County 2013a). Per the County Code, the purpose of the Public zoning district is to allow for public and quasi-public facilities that serve Butte County residents and visitors (Butte County Code of Ordinances, Section 24-28). Permitted uses in the Public zone include public and private schools; parks and playgrounds; community centers; interpretive facilities; public libraries; governmental offices; and police and fire stations. Uses permitted with the approval of a Conditional Use Permit include hospitals, cultural institutions, religious facilities, and large-scale facilities such as dams and reservoirs, landfills, cemeteries and mausoleums, correctional institutions, major utilities, and other similar public works Projects (Butte County 2013b).

The Neal Road Recycling, Energy, and Waste Facility overlay zone promotes compatible development around the NRRWF (Butte County Code of Ordinances, Section 24-44). The overlay zone also ensures adequate separation between the NRRWF and land uses that are potentially incompatible with landfill activities. This overlay is intended to promote the diversion of solid wastes into appropriate recycling facilities, energy generation, and other uses that add value and benefit to the local economy (Butte County 2013b).

Surrounding Land Uses

The NRRWF is adjacent to a parcel (APN 040-600-081) to the south at 999 Neal Road zoned as Heavy Industrial and designated in the Butte County General Plan 2040 as Industrial (0.5 Maximum Floor Area Ratio [FAR²]). Currently, this parcel is occupied by an asphalt and aggregate facility (Franklin Construction Inc, 2020). The NRRWF is surrounded by a stretch of land that extends 2,000 feet beyond the landfill perimeter zoned as Agriculture - 20 (20-acre minimum) and designated as Agriculture in the Butte County General Plan 2040. Most of this surrounding land is undeveloped. The parcel west of the NRRWF is owned by Butte County.

Table 2-1. Surrounding Land Uses

Direction	Existing Use	General Plan	Zoning Designation
North	Vacant Parcel	AG-20	Agriculture
East	Vacant Parcel	AG-20	Agriculture
South	Asphalt and Aggregate Facility	Industrial (I)	Heavy Industrial
West	Vacant Parcel	AG-20	Agriculture

Note: See Figure LU-2B, General Plan Land Use – Chico Area (Butte County 2023).

2.3 Project Characteristics

Project Components

In response to SB 1383, which requires 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025, the County is proposing to construct a transloading operation at the NRRWF. The proposed Project will consist of the construction of an organic waste transloading operation that will assist with the loading of organic waste into transfer trailers at the NRRWF that will be subsequently transported to an off-site composting facility.³ The organic waste transloading area will be located in the top pf the lined waste Module 4 of NRRWF. The transloading operation will be on the compacted intermediate cover of Module 4. In addition, a three-sided area delineated by concrete barriers (i.e., K-rails) would be located nearby where organic waste would be temporarily stored until it is loaded into the transfer trailer using a grapple.

Operational Characteristics

The Project would support the transfer of organic waste from collection trucks to the bins. Organic waste loading will include both end loading and side loading. For end loading, the organic waste will be dumped directly in the bins or on metal ramps leading to the bins with the assistance of the front-end loader or similar equipment. For side loading, the organic waste would be temporarily stored on the ground and contained by concrete block push walls on three sides. Front loaders would collect the organic waste with the assistance of the push walls and load it into the transfer trucks from the side.

² FAR is a measure of building intensity, and is defined as the ratio of a building's total floor area (gross floor area) to the size of the land parcel upon which it is built.

³ A transloading operation is defined in PRC Section 40200: (a) Transfer or procession station includes facilities utilized to receive solid wastes, temporality store, separate, convert, or otherwise process the materials in solid wastes, or to transfer the solid wastes directly from smaller to larger vehicles for transport, and those facilities utilized for transformation.

The proposed Facility will operate 7 days per week, although material would typically exported only on weekdays. Up to 2 NRRWF employees may be required for transloading operations.

Organic waste will enter the site in trucks. In-take is anticipated to be 140 tons per day. No substantial increase in incoming trucks is expected, as organic waste is currently collected, but not transferred to a composting facility. An additional 3 truck trips per weekday (780 truck trips per year) are expected to transfer the organic waste from the NRRWF to an external compost facility.

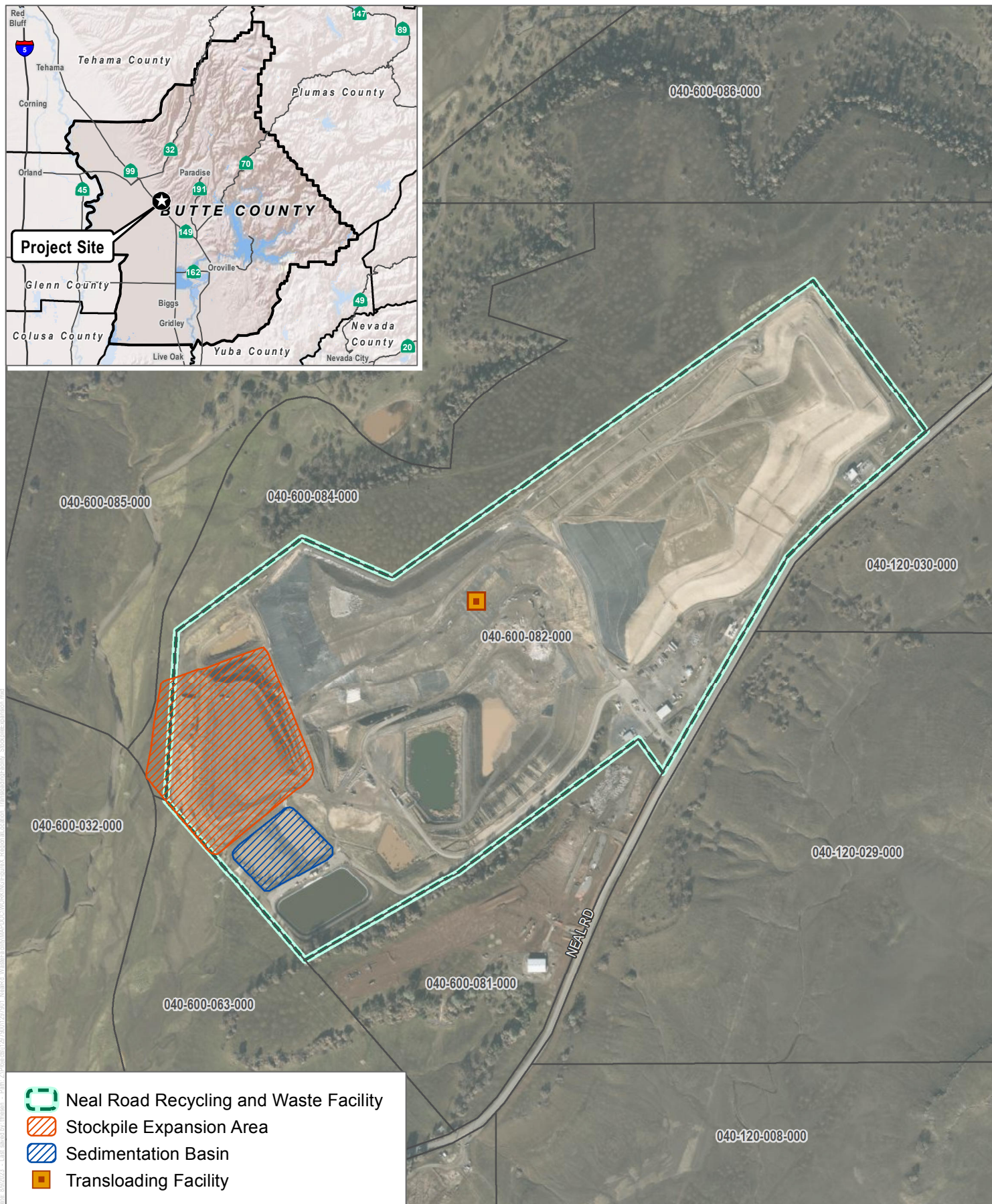
2.4 Project Construction and Phasing

Construction will take approximately two months. Site preparation will take approximately two weeks and construction will take approximately six weeks. Construction is scheduled to begin in late summer or fall of 2023.

2.5 Project Approvals

The proposed Project must be approved by the County after adopting the proposed negative declaration.

The proposed Project would be required to comply with CalRecycle regulations pertaining to transloading facilities and operation detailed in 14 CA ADC § 18221.6. A Transfer/Processing Report (TPR) is required for all Full Solid Waste Facility Permit as specified in 14 CCR 18221.



SOURCE: Bing Maps 2019, Butte County 2015

FIGURE 1

Project Location

Neal Road Recycling and Waste Facility Composting Project

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3 Initial Study Checklist

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact,” as indicated by the checklist on the following pages.

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

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☒ I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Signature

Date

3.1 Aesthetics

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

a) Would the Project have a substantial adverse effect on a scenic vista?

No Impact. Scenic vistas are defined as an expansive view of highly valued landscape features (e.g., mountain range, lake, or coastline) observable from a publicly accessible vantage point. In the Project vicinity, publicly accessible vantage points are limited to public roads (Neal Road and State Route 99). As described in the Butte County General Plan, scenic vistas include views of land-based geological features such as the Central Buttes and Butte Creek Canyon, wildflower blooming areas, and views of water-based scenic areas including Sacramento River, Lake Oroville and Philbrook Lake from highways that traverse its shores (Butte County 2023). The closest possible scenic vista is that of Bryce Creek Canyon, approximately 12 miles north from the Project.

The Project would be constructed in the existing NRRWF. The proposed facility would not substantially change the existing views of the NRRWF or obstruct any scenic viewpoints. Therefore, the Project would have no impact.

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

No Impact. There are no state scenic highways near the Project site, as identified by the California Scenic Highway Mapping System (Caltrans 2011). Route 70, an eligible highway, is located over 7 miles south of

the NRRWF. The County General Plan designates a portion of Skyway, near the Town of Paradise, and a portion of State Route 32 near Chico, as scenic corridors. The Project site is not visible from these roadways and does not contain any potential scenic resources. Therefore, there would be no impact.

- c) ***In non-urbanized areas, would the Project 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).***

No Impact. The Project site is located in a portion of unincorporated Butte County within an active solid waste and recycling facility. The Project site is located on Waste Module 4 in the central portion of the NRRWF. An existing organic waste pile south of the Project site would be removed. A three-sided area delineated by concrete barriers (i.e., K-rails) would be constructed to provide a temporary storage area for organic waste prior to being loaded into the transfer trailer using a grapple. The visual character would be consistent with existing development at the NRRWF. Removal of existing debris would improve the visual quality. The new facilities would not be readily visible from a public view (Neal Road), due to the topography of the landfill and the landscaping between the waste modules and Neal Road. Thus, the Project would have no impact on visual character or quality of public views.

- d) ***Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

No Impact. The Project would not include any new light sources and would thus not create a new source of substantial light which would adversely affect day or nighttime views. Glare occurs when light is reflected off surfaces and causes a nuisance to surrounding sensitive receptors, as defined by the CEQA Guidelines and the Butte County General Plan. Glare can result from sunlight or from artificial light reflecting off building exteriors, such as glass windows or other highly reflective surface materials. The Project does not include any such components and there would be no impact.

3.2 Agriculture and Forestry Resources

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

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

No Impact. The California Department of Conservation (DOC) has not identified the site as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Project site is designated as “Urban and Built-Up Land” by the DOC (CDOC 2022). Therefore, there would be no impact related to converting Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use.

- b) ***Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

No Impact. The Project site is zoned “Public” with the “Neal Road Recycling, Energy, and Waste Facility” overlay. The site is not planned for or used for any agricultural or forestry purposes and the proposed Project would not conflict with a Williamson Act contract. Therefore, there would be no impact related to conflict of zoning or a Williamson Act Contract.

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

No Impact. No portion of the Project site is considered forest land⁴ as defined in California Public Resources Code Section 12220(g). Timberland⁵ (as defined by California Public Resources Code Section 4526) or timberland-zoned timberland production⁶ (as defined by Section 51104(g) of the Government Code) is not present on site, nor are there any active or potential commercial timber operations present in the area. Therefore, the proposed Project would not conflict with lands zoned for forest land, timberland, or timberland production and there would be no impact.

- d) ***Would the Project result in the loss of forest land or conversion of forest land to non-forest use?***

Refer to answer provided in "c" above.

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

No Impact. No farmland or forest land would occur on the Project site. The parcel to the west of the NRRWF is zoned for agricultural use, but is not actively farmed. In addition, the proposed Project would not substantially alter the type or intensity of current landfill activities occurring at the NRRWF. Therefore, there would be no impact.

⁴ "Forest land" is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

⁵ "Timberland" means land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.

⁶ "Timberland production zone" or "TPZ" means an area, which is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses.

3.3 Air Quality

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

Environmental Setting

Butte County is located within the Sacramento Valley Air Basin (SVAB), comprising the northern half of California's 400-mile long Great Central Valley. The SVAB encompasses approximately 14,994 square miles with a largely flat valley floor (excepting the Sutter Buttes) about 200 miles long and up to 150 miles wide, bordered on its east, north and west by the Sierra Nevada, Cascade and Coast mountain ranges, respectively.

The SVAB, containing 11 counties and some two million people, is divided into two air quality planning areas based on the amount of pollutant transport from one area to the other and the level of emissions within each. Butte County is within the Northern Sacramento Valley Air Basin (NSVAB), which is composed of Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba Counties.

Emissions from the urbanized portion of the basin (Sacramento, Yolo, Solano, and Placer Counties) dominate the emission inventory for the SVAB, and on-road motor vehicles are the primary source of emissions in the Sacramento metropolitan area. While pollutant concentrations have generally declined over the years, additional emission reductions will be needed to attain the State and national ambient air quality standards in the SVAB.

Seasonal weather patterns have a significant effect upon regional and local air quality. The Sacramento Valley and Butte County have a Mediterranean climate, characterized by hot, dry summers and cool, wet winters. Winter weather is governed by cyclonic storms from the North Pacific, while summer weather is typically subject to a high-pressure cell that deflects storms from the region.

In the County, winters are generally mild with daytime average temperatures in the low 50s and nighttime temperatures in the upper 30s. Temperatures range from an average January low of approximately 36 degrees

Fahrenheit (°F) to an average July high of approximately 96°F, although periodic lower and higher temperatures are common. Rainfall between October and May averages about 26 inches but varies considerably year to year. Heavy snowfall often occurs in the northeastern mountainous portion of the county. Periodic rainstorms contrast with occasional stagnant weather and thick ground or “tule” fog in the moister, flatter parts of the valley. Winter winds generally come from the south, although north winds also occur.

Diminished air quality within Butte County largely results from local air pollution sources, transport of pollutants into the area from the south, wildfire smoke, the NSVAB topography, prevailing wind patterns, and certain inversion conditions that differ with the season. During the summer, sinking air forms a “lid” over the region, confining pollution within a shallow layer near the ground that leads to photochemical smog and visibility problems. During winter nights, air near the ground cools while the air above remains relatively warm, resulting in little air movement and localized pollution “hot spots” near emission sources. Carbon monoxide, nitrogen oxides, particulate matter and lead particulate concentrations tend to elevate during winter inversion conditions when little air movement may persist for weeks.

As a result, high levels of particulate matter (primarily fine particulates or PM_{2.5}) and ground-level ozone are the pollutants of most concern to the NSVAB Districts. Ground-level ozone, the principal component of smog, forms when reactive organic gases (ROG) and nitrogen oxides (NO_x) – together known as ozone precursor pollutants – react in strong sunlight. Ozone levels tend to be highest in Butte County during late spring through early fall, when sunlight is strong and constant, and emissions of the precursor pollutants are highest.

The Project is located in unincorporated Butte County (County), which is currently designated as a nonattainment area for state and national ozone (O₃) standards and state particulate matter equal to or less than 10 microns in aerodynamic diameter (PM₁₀) standards. The County is in attainment for all other criteria air pollutants.

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

Less than Significant. The applicable air quality plan for the Project area is the *Northern Sacramento Valley Planning Area 2015 Triennial Air Quality Attainment Plan*. In adopting this plan, Butte County Air Quality Management District (BCAQMD) assumes that growth within its jurisdiction will be in accordance with city and county general plans, for which air quality effects associated with build-out have been analyzed.

A project is deemed inconsistent with an air quality plan if it would result in population or employment growth that exceeds the growth estimates in the applicable air quality plan (i.e., generating emissions not accounted for in the applicable air quality plan emissions budget). Therefore, proposed projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth would exceed the growth rate included in the applicable air quality plan.

For purposes of air quality attainment planning, BCAQMD assumes growth within its jurisdiction will be in accordance with city and county general plans. The proposed Project would be within the footprint of the existing NRRWF. The Project site includes an approximate 11,000 square feet area proposed for a transloading operation consisting of loading organic wastes into transfer trucks at the NRRWF that will be subsequently transported to an off-site composting facility. The Butte County General Plan 2040 designates the Project site as Public with the Solid Waste Management Facility overlay (Butte County 2023). The site is zoned as Public with the Neal Road Recycling, Energy, and Waste Facility overlay (Butte County 2013a). The NRRWF is an approved permitted use in the County’s designated Public zone (Butte County Code of Ordinances, Section 24-28). According to the County Code, the purpose of the Public zone is to allow for

public and quasi-public facilities that serve Butte County residents and visitors. The proposed Project would not result in population or employment growth in the County. Furthermore, the proposed Project's emissions would not exceed the BCAQMD thresholds as shown in Tables 3.3-1 through 3.3-5, below. The Project is not anticipated to cause significant impacts to regional air quality or otherwise conflict with the basin's air quality management plan.

Based on the preceding considerations, the proposed Project would not conflict with the region's air quality plans and the air quality impact would be less than significant.

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

Less than Significant. The proposed Project would be located within the BCAQMD jurisdiction. The BCAQMD has adopted the CEQA Air Quality Handbook, which contains thresholds of significance used to access air quality related impacts from construction and operations of a project. The quantitative air quality analysis provided herein applies the BCAQMD thresholds identified below to determine the potential for the proposed Project to result in a significant air quality impact under CEQA (BCAQMD 2014). Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented in Table 3.3-1 are exceeded.

Table 3.3-1. Butte County Air Quality Management District Air Quality Significance Thresholds

Criteria Pollutants Thresholds	
Pollutant	Construction
ROG	137 lbs/day or 4.5 tons/year
NO _x	137 lbs/day or 4.5 tons/year
PM < 10 microns (PM ₁₀ or smaller)	80 lbs/day
Pollutant	Operational
ROG	25 lbs/day
NO _x	25 lbs/day
PM	80 lbs/day
Toxic Air Contaminants	
Pollutant	Threshold
TACs	Maximum incremental cancer risk ≥ 10 in 1 million Chronic and acute hazard index ≥ 1.0 Hazard Index Ambient Diesel PM _{2.5} ≥ 0.3 ug/m ³ annual average

Notes: BCAQMD = Butte County Air Quality Management District; ROG = reactive organic gases; NO_x = oxides of nitrogen; PM = particulate matter; TAC = toxic air contaminant; lbs/day = pounds per day; ug/m³ = micrograms per cubic meter.

Source: BCAQMD 2014.

Construction

Construction of the proposed Project would result in the temporary addition of pollutants to the local air shed caused by soil disturbance, fugitive dust emissions, and combustion pollutants from on-site construction equipment, as well as from off-site trucks hauling and from construction workers traveling to

and from the site. Construction emissions were quantified using the California Emissions Estimator (CalEEMod) Version 2022.1.1.13. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. Therefore, an increment of day-to-day variability exists.

Construction scenario assumptions, including trip distances, were based on Project specific information and CalEEMod default values where Project information was not available.

For purposes of estimating Project emissions, it was assumed that construction of the proposed Project would commence in July 2023⁷ and would last approximately 2 months, ending in September 2023. The analysis contained herein is based on the following schedule assumptions (duration of phases is approximate):

- Site Preparation (July 1, 2023 – July 14, 2023): 2 weeks
- Construction of Transloading Ramp (July 15, 2023 – September 1, 2023): 6 weeks

The estimated construction duration and construction equipment mix were provided by the facility operator. Detailed construction equipment modeling assumptions are provided in Appendix A. Site preparation activities would include onsite balanced cut and fill. It is anticipated that 100 cubic yards of soil would be imported during construction activities. Construction-worker, vendor truck, and haul truck trips by construction phase were based information provided by the facility operator. CalEEMod default trip length values were used for the distances for all construction-related trips.

The construction equipment mix and vehicle trips used for estimating the proposed Project-generated construction emissions are shown in Table 3.3-2. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site 5 days per week (22 days per month) during Project construction.

Table 3.3-2. Construction Scenario Assumptions

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Site Preparation	4	2	0	Tractors/Loaders/Backhoes	1	5
Construction of Transloading Ramp	4	2	0	Excavators	1	3
				Tractors/Loaders/Backhoes	1	5

Note: See Appendix A for details.

To account for compliance with BCAQMD dust control best practices, it was assumed that the active sites would be watered at least twice daily, or as necessary depending on weather conditions, resulting in a 55%

⁷ The analysis assumes a construction start date of July 2023, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

to 61% reduction in fugitive dust as implemented by CalEEMod. Predicted maximum daily and annual emissions for construction activities are presented in Tables 3.3-3 and 3.3-4 and compared to the BCAQMD significance thresholds.

Table 3.3-3. Daily Construction-Related Criteria Air Pollutant Emissions

Year	ROG (lbs/day)	NO _x (lbs/day)	CO (lbs/day)	SO ₂ (lbs/day)	PM ₁₀ Total (lbs/day)	PM _{2.5} Total (lbs/day)
2023	0.15	1.19	1.89	<0.005	0.11	0.06
BCAQMD threshold (lbs/day)	137	137	NA	NA	80	NA
Exceedance of threshold?	No	No	NA	NA	No	NA

Source: See Appendix A for detailed results.

Notes: lbs/day = pounds per day; CO = carbon monoxide; NO_x = nitrogen oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; ROG = reactive organic gases; SO₂ = sulfur dioxide; NA = not applicable.

- Values shown are the maximum summer or winter daily emissions results from CalEEMod. These estimates reflect implementation of BCAQMD fugitive dust best control practices. BCAQMD has adopted construction thresholds for ROG, NO_x, and PM₁₀

Table 3.3-4. Annual Construction-Related Criteria Air Pollutant Emissions

Year	ROG (tons/year)	NO _x (tons/year)	CO (tons/year)	SO ₂ (tons/year)	PM ₁₀ Total (tons/year)	PM _{2.5} Total (tons/year)
2023	<0.005	0.03	0.04	<0.005	<0.005	<0.005
BCAQMD threshold (tons/year)	4.5	4.5	NA	NA	NA	NA
Exceedance of threshold?	No	No	NA	NA	NA	NA

Source: See Appendix A for detailed results.

Notes: CO = carbon monoxide; NO_x = nitrogen oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; ROG = reactive organic gases; SO₂ = sulfur dioxide; NA = not applicable; <0.01 = reported value less than 0.01.

Values shown are the annual results from CalEEMod. These estimates reflect implementation of BCAQMD fugitive dust best control practices. BCAQMD has adopted annual construction thresholds for ROG and NO_x.

As shown in Tables 3.3-3 and 3.3-4, the daily and annual construction emissions of ROG, NO_x and PM₁₀ would not exceed the applicable BCAQMD significance thresholds. Therefore, construction-related emissions of criteria air pollutant would be less than significant.

Operation

Mobile Emissions Sources

The Project site includes an approximate 11,000 square feet area proposed for a transloading operation consisting of loading organic wastes into transfer trailers at the NRRWF that will be subsequently transported to an off-site composting facility. The proposed Project would require up to three round-trip truck trips per day (6 one-way truck trips per day), to export organic waste material from the Project site. The composted material delivery location is estimated at 50 miles, per the facility operator.

Material Handling

The proposed Project would also require material handling equipment, including the addition of a front-end loader. Thus, criteria air pollutant emissions associated with material handling equipment and operations are included in this analysis. CalEEMod Version 2022.1.1.13 was used to estimate potential Project-generated criteria air pollutant emissions from operation of the material handling equipment.

The proposed Project's transloading operation would divert organic wastes into transfer trucks at the NRRWF that will be subsequently transported to an off-site composting facility. The operational emissions from the proposed Project are summarized in Table 3.3-5.

Table 3.3-5. Daily Operation-Related Criteria Air Pollutant Emissions

Source	ROG (lbs/day)	NO _x (lbs/day)	CO (lbs/day)	SO ₂ (lbs/day)	PM ₁₀ Total (lbs/day)	PM _{2.5} Total (lbs/day)
Mobile	0.02	1.30	0.18	0.01	0.16	0.05
Off-road equipment (Front End Loader)	0.24	1.81	3.14	<0.005	0.10	0.09
Total	0.26	3.11	3.32	0.01	0.26	0.14
<i>BCAQMD threshold (lbs/day)</i>	25	25	NA	NA	80	NA
Exceedance of threshold?	No	No	NA	NA	No	NA

Source: See Appendix A for detailed results.

Notes: Negative values reported in parenthesis.

lbs/day = pounds per day; CO = carbon monoxide; NO_x = nitrogen oxides; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter; ROG = reactive organic gases; SO₂ = sulfur dioxide; NA = not applicable; <0.01 = value reported less than 0.01.

As shown in Table 3.3-5, daily operational emissions of all criteria air pollutants would not exceed the applicable BCAQMD significance thresholds. Therefore, operation-related emissions of criteria air pollutant would be less than significant.

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

Toxic Air Contaminants

Less than Significant. Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. During Project construction, diesel particulate matter (DPM) would be the primary TAC emitted from diesel-fueled equipment and trucks. The following measures are required by State law to reduce DPM emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use Off-Road Diesel Vehicles (Cal. Code Regs., tit. 13, chapter 9, § 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and

trucks during loading and unloading shall be limited to 5 minutes; electric auxiliary power units should be used whenever possible (Cal. Code Regs., tit. 13, chapter 10, § 2485).

The construction and operation of the transloading operation system would not be located within 1,000 feet from existing sensitive receptors. The nearest sensitive receptors (i.e., residences) are located approximately 5,500 feet southwest of the Project site. Thus, the proposed Project would not place a new TAC-producing land use activity adjacent to existing sensitive receptors. In addition, the proposed Project would not include siting of new sensitive receptors.

DPM emissions would be emitted from off-road equipment operations and heavy-duty trucks during Project construction activities. Off-road construction equipment and commercial trucks are subject to CARB airborne toxic control measures (ATCMs) to reduce DPM emissions. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should also be limited to the period/duration of activities associated with the Project. Total Project construction is anticipated to occur over a temporary period of 2 months, much less than the 30-year exposure period. Thus, it is anticipated the proposed Project would not result in exposure of sensitive receptors to substantial TAC concentrations during short-term construction and impacts would be less than significant.

The proposed Project would not result in a long-term operational increase in vehicular emissions. The Project would include operation of off-road equipment. The off-road equipment would be subject to CARB's Regulation for In-Use Off-Road Diesel Vehicles to reduce DPM and criteria pollutant emissions. Furthermore, the closest off-site sensitive receptors are located a substantial distance from the property at approximately 5,500 feet southwest of the Project site. Therefore, it is anticipated the proposed Project would not result in exposure of sensitive receptors to substantial TAC concentrations during long-term operations and impacts would be less than significant.

Health Effects of Carbon Monoxide

Less than Significant. Mobile source impacts occur on two scales of motion. Regionally, proposed Project-related travel would contribute to regional trip generation and increase the total VMT within the local airshed and the SVAB. Locally, Project-generated traffic would be added to the County's roadway system near the Project site. If such traffic occurs during periods of poor atmospheric ventilation, is composed of a large number of vehicles "cold-started" and operating at pollution-inefficient speeds, and is operating on roadways already crowded with non-Project traffic, there is a potential for the formation of microscale carbon monoxide (CO) hotspots in the area immediately around points of congested traffic. Because of continued improvement in vehicular emissions technology at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SVAB is steadily decreasing.

Projects contributing to adverse traffic impacts may result in the formation of CO hotspots. Construction activities associated with the proposed Project would be temporary and would not be considered a source of daily, long-term mobile-source emissions. The proposed Project would require transfer trucks at the NRRWF that would transport organic waste to an off-site composting facility. However, the proposed Project would include a nominal increase in truck trips (up to three round-trip truck trips per day, or 6 one-way truck trips per day) to export organic waste material from the Project site. The proposed Project's minimal increase in

daily truck trips would not substantially increase CO emissions. Therefore, the proposed Project would result in a less-than-significant impact to air quality with regard to potential CO hotspots.

Health Effects of Criteria Air Pollutants

Less than Significant. As demonstrated above, construction of the proposed Project and operational emissions would not result in emissions that exceed the BCAQMD significance thresholds for any criteria air pollutants, as shown in Tables 3.3-3 through 3.3-5.

ROG and NO_x are precursors to O₃, for which the County is designated as nonattainment with respect to the national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS). The health effects associated with O₃ are generally associated with reduced lung function. The contribution of ROG and NO_x to regional ambient O₃ concentrations is the result of complex photochemistry. The increases in O₃ concentrations in the SVAB due to O₃ precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O₃ concentrations would also depend on the time of year that the precursor emissions would occur because exceedances of the O₃ AAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O₃ precursors is speculative due to the lack of quantitative methods to assess this impact. As discussed previously, ROG and NO_x emissions associated with construction and operation would be less than significant.

Health impacts that result from NO₂ and NO_x include respiratory irritation. The proposed Project's construction and operation would generate NO_x emissions that would not exceed the operational BCAQMD mass daily thresholds; therefore, construction and operation of the proposed Project would not contribute to exceedances of the NAAQS and CAAQS for NO₂ although the SVAB is designated as in attainment of the NAAQS and CAAQS for NO₂ and the existing NO₂ concentrations in the area. Therefore, potential health impacts associated with NO₂ and NO_x are considered less than significant.

The associated potential for CO hotspots were discussed previously and are determined to be a less-than-significant impact. Thus, the proposed Project's CO emissions would not contribute to significant health effects associated with this pollutant.

Construction and operation of the proposed Project would not exceed the BCAQMD threshold for both PM₁₀ and PM_{2.5}. As such the proposed Project would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or obstruct the SVAB from coming into attainment for these pollutants. Thus, the associated health impacts are considered less than significant.

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

Less than Significant. The occurrence and severity of potential odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receiving location. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints. BCAQMD Rule 200, Nuisance, prohibits discharge of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public.

Odors would be potentially generated from vehicles and equipment exhaust emissions during proposed Project construction. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors would be short-term and cease upon completion of construction, disperse rapidly from the proposed Project site, and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, impacts associated with odors during construction would be less than significant.

Typical sources of substantial operational odors include landfills, rendering plants, chemical plants, agricultural uses, wastewater treatment plants, and refineries which are not applicable to this Project. The Project site includes an approximate 11,000 square feet area proposed for a transloading operation consisting of loading organic wastes into transfer trailers at the NRRWF that will be subsequently transported to an off-site composting facility. The proposed Project does not include any onsite composting and therefore would not generate associated odor. The proposed Project would be within the footprint of the existing NRRWF. The nearest sensitive receptors (i.e., residences) are located approximately 5,500 feet southwest of the Project site. Thus, the proposed Project would not place a new odor-producing land use activity adjacent to existing sensitive receptors. In addition, the proposed Project would not include siting of new sensitive receptors. Thus, operation of the proposed Project would not result in odors that would affect a substantial number of people and this impact would be less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the Project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Environmental Setting

The Project site is located within the existing NRRWF. The land surrounding the NRRWF is rural and largely undeveloped. Module 4, the proposed Project site consists of leveled, unvegetated dirt with portions of gravel and concrete debris.

A Dudek biologist previously conducted a review of available literature relating to the biological resources within the NRRWF as part of the review of a proposed covered aerated static pile (CASP) compost operation on Module 4. The literature review included a query of the nine USGS-quads surrounding the Project site in the California Natural Diversity Database (CNDDDB), which found a total of 22 special-status wildlife species and 28 special-status plant species that occur within that query area. During the site visit on October 6th, 2020 by a Dudek biologist, no special-status species were observed on the active WMUs and potential habitat for special-status wildlife and plant species was not found within the proposed Project. The Dudek biologist observed or inferred presence of raccoon (*Procyon lotor*), spotted towhee (*Pipilo maculatus*), mourning dove (*Zenaida macroura*), gull (*Larus* sp.), western meadowlark (*Sturnella neglecta*), turkey vulture (*Cathartes aura*), American crow (*Corvus brachyrhynchos*), and Brewer's blackbird (*Euphagus cyanocephalus*). Vegetation documented during the site visit included valley oak and cottonwood trees and common weedy species such as salt grass (*Distichlis spicata*), black mustard (*Brassica nigra*), wild oat (*Avena fatua*), annual rabbitsfoot grass (*Polypogon monspeliensis*), yellow star-thistle (*Centaurea solstitialis*), puncturevine (*Tribulus terrestris*), medusahead (*Elymus caput-medusae*), salt heliotrope (*Heliotropium curassavicum*), and asthmaweed (*Erigeron bonariensis*).

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

Less than Significant. No special-status species were observed during the site visit, and the active landfill area does not provide potential habitat for any special-status species. Valley oak and cottonwood trees are

located on the perimeter of the landfill, and may provide suitable nesting habitat for avian species protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF). Though these trees have the potential to be nesting habitat for avian species, disturbance from the construction of the transloading facility would likely be no greater than ambient ongoing landfill activities and would not occur near the trees. Baseline conditions from landfill activities include medium to high noise disruption during daytime work hours. Project activities would have a less-than-significant impact.

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

No Impact. Riparian and oak woodland habitat is not present on or adjacent to the Project site. There would be no impact from Project activities on these habitats.

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

No Impact. Wetlands and potential vernal pools are not present on the proposed Project site, and those that are present north of proposed Project have no hydrological connection to the proposed Project site. There would be no impact from construction or operation of the Project on these habitats.

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

No Impact. Wildlife corridors are routes for wildlife to use when traveling between undisturbed habitat areas. Wildlife corridors provide shelter and sufficient food for wildlife and generally consist of riparian, woodland, or forested habitat. The Project site is within an existing fenced area that prevents wildlife from utilizing the Project site as a wildlife corridor. The Project site may facilitate movement of resident wildlife species including birds, small mammals, and other wildlife. The creek on the southern portion of the NRRWF has been altered and does not provide suitable fish habitat. Therefore, Project activities would not impact resident or migratory fish.

The construction of the proposed Project would have no impact on the movement of resident or migratory fish or wildlife species.

- e) *Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

No Impact. The Butte County General Plan Policy COS-P7.7 requires fencing to be installed around sensitive resources on or adjacent to the construction (Butte County, 2023). There are no sensitive resources on or adjacent to the Project site. Therefore, fencing for sensitive resources is not required. Butte County General Plan Policy COS-P7.9 requires a biologist to conduct construction monitoring in and adjacent to habitat for special status species (Butte County, 2023). Based on the lack of protected species habitat and the existing level of disturbance at the NRRWF, the proposed Project would not require

monitoring. The construction and operation of the proposed Project would have no impact related to conflicts with local policies or ordinances protecting biological resources.

f) *Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

No Impact. The Project is located in the planning area of the Butte Regional Conservation Plan (BRCP). The BRCP has not yet been adopted and is unlikely to be adopted prior to Project implementation. Furthermore, the Project does not create a new land use, as it is consistent with existing landfill operations within an existing facility. Therefore, there is no potential for the Project to conflict with the plan. No other approved local, regional or state Habitat Conservation Plan (HCP) or Natural Community Conservation Plans (NCCP) exist or are planned in the Project vicinity. Therefore, there would be no impact associated with the conflict with the provisions of an adopted HCP, NCCP, or other approved, local, regional, or state habitat conservation plan.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the Project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Environmental Setting

The Project site is located in Township 21 North, Range 2 East, and Sections 14 and 15 within the Hamlin Canyon, CA U.S. Geological Survey 7.5-minute quadrangles. Dudek prepared a Cultural Resources Inventory Report for the previously discussed CASP project (Dudek 2020). The inventory included a records search of the NRRWF (and a half-mile buffer) at the Northeast Information Center, review of historic maps and aerial photographs, a Sacred Lands File search from the Native American Native Heritage Commission (NAHC). An intensive pedestrian survey of WMU 5 was conducted by a Dudek archaeologist.

The only archaeological site previously identified within the NRRWF consists of a small habitation site and rockshelter (P-04-001561). This resource consists of a small prehistoric occupation site with midden soils and lithics situated within and outside of a low overhanging volcanic lava cap escarpment. The resource site straddles the boundary of the NRRWF, over ¼-mile from the proposed Project site. The site was recorded and tested in 2000, at which time a 2-m-x-2-m test unit was excavated to a maximum depth of 60 cm below surface. The recovered assemblage included projectile points,

flaked and ground stone tools, debitage, other artifacts, and a small faunal assemblage, all of which are consistent with interpretation of P-04-001561 as a prehistoric occupation.

Historic aerial photographs, available from 1947 to 2016, and historic maps, available from 1912 to 2018, were inspected to observe previous development in the Project site (Dudek 2020). These maps and images display the Project area as undeveloped open land up to the late 1990s and early 2000s.

Results of the Sacred Lands File search were negative.

No archaeological artifacts or features were identified during the pedestrian survey, conducted on November 16, 2020. The previously recorded site, P-04-001561, was relocated and found to be in the same condition as described in the site record and previous reports although a wire fence, which serves to distinguish the boundary of the NRRWF, does intersect the site boundary. Given that WMU 4 and 5 have essentially the same composition – disturbed landfill units – it is not anticipated that artifacts or features would occur at the proposed Project site.

a) Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Impact. No historic resources were identified within the Project site.

b) Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less than Significant. An archaeological site (P-04-001561) is located partially within the NRRWF, however, the site is over ¼-mile from the proposed Project site.

c) Would the Project disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant. The Project site is located on highly disturbed ground. It is unlikely the proposed Project would disturb human remains.

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy – Would the Project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

- a) ***Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

Less than Significant. The short-term construction and long-term operation of the proposed Project would require the consumption of energy resources in several forms at the Project site and within the Project area. Construction and operational energy consumption are evaluated in detail below.

Electricity

Construction Use

If needed, temporary electric power for construction equipment would be provided by Pacific Gas & Electric Company (PG&E). The electricity used for such activities would be temporary and would have a negligible contribution to the Project's overall energy consumption.

Natural Gas

Construction and Operational Use

Natural gas is not anticipated to be required during construction or operation of the proposed Project. Fuels used for construction and operation would primarily consist of diesel and gasoline, which are discussed below under the "petroleum" subsection. Any minor amounts of natural gas that may be consumed during Project construction would have a negligible contribution to the Project's overall energy consumption.

Petroleum

Construction Use

Heavy-duty construction equipment associated with construction activities would rely on diesel fuel, as would haul and vendor trucks involved in delivery of materials to the Project site. Construction workers would travel to and from the Project site throughout the duration of construction. It is assumed in this analysis that construction workers would travel to and from the site in gasoline-powered light-duty vehicles.

Heavy-duty construction equipment of various types would be used during each phase of Project construction. The Project's construction equipment is estimated to operate a total combined 330 hours based on information from the applicant and the CalEEMod Version 2022.1.1.13 defaults assumptions where Project information was not available.

Fuel consumption from construction equipment was estimated by converting the total carbon dioxide (CO₂) emissions from each construction phase to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO₂ per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO₂ per gallon (The Climate Registry 2020). The estimated diesel fuel usage from construction equipment is shown in Table 3.6-1.

Table 3.6-1. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO ₂ (MT)	Kg CO ₂ /Gallon	Gallons
Site Preparation	1	0.83	10.21	80.91
Construction of Transloading Ramp	2	3.74	10.21	366.02
Total				446.93

Sources: Pieces of equipment and equipment CO₂ (Appendix C); kg CO₂/Gallon (The Climate Registry 2020).

Notes: CO₂ = carbon dioxide; MT = metric ton; kg = kilogram.

See Appendix C.

Fuel estimates for total worker vehicles, vendor trucks, and haul trucks fuel consumption are provided in Table 3.6-2.

Table 3.6-2. Construction Worker, Vendor, and Haul Truck Petroleum Demand

Phase	Trips	Vehicle MT CO ₂	Kg CO ₂ /Gallon	Gallons
Worker Vehicles (Gasoline)				
Site Preparation	40	0.14	8.78	16.47
Construction of Transloading Ramp	140	0.51	8.78	57.65
Total				74.12
Vendor Trucks (Diesel)				
Site Preparation	20	0.14	10.21	14.17
Construction of Transloading Ramp	70	0.51	10.21	49.67
Total				63.77
Haul Trucks (Diesel)				
Site Preparation	20	0.69	10.21	67.75
Total				67.75

Sources: Trips and vehicle CO₂ (Appendix A); kg CO₂/Gallon (The Climate Registry 2020).

Notes: MT = metric ton; CO₂ = carbon dioxide; kg = kilogram.

See Appendix C.

In summary, construction of the Project is conservatively anticipated to consume approximately 74 gallons of gasoline and 578 gallons of diesel (Tables 3.6-1 and 3.6-2), for a total of 652 gallons of petroleum over a period of approximately 2 months. For comparison, approximately 28.7 billion gallons of petroleum are consumed in California annually (EIA 2020). Also, for comparison, Countywide total petroleum use by vehicles was 7.1 million gallons per year in 2021. The Project would be required to comply with the California Air Resources Board's (CARB's) Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes, which would minimize fuel consumption. While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. Overall, because petroleum use during construction would be temporary, and would not be wasteful or inefficient, impacts would be less than significant.

Operational Use

The operational haul trucks are assumed to be diesel fueled; therefore, diesel fuel consumption associated with front-end loader operation and haul trucks traveling to and from the Project site would consume an estimated 23,747 gallons per year.

As discussed above, for disclosure, by comparison, approximately 28.7 billion gallons of petroleum are consumed in California annually (EIA 2020) and countywide total petroleum use by vehicles is expected to be 7.1 million gallons per year in 2021. The Project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes, which would minimize fuel consumption. Furthermore, diverting organic waste from the landfill would reduce greenhouse gas emissions and provide a soil-enhancing resource. Given these considerations, the petroleum consumption associated with the proposed Project would not be considered inefficient or wasteful, and impacts would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant. The proposed Project would directly support the County's progress to Climate Action Plan (CAP) targets of the percentage of organics recycled or composted to 70%, 75%, and 90% for years 2030, 2040, and 2050, respectively. Furthermore, the proposed Project would support CARB's 2022 *Climate Change Scoping Plan Update* Action to divert 75% of organic waste from landfills by 2025. (CARB 2022).

As such, the proposed Project would be consistent with and support the County's 2021 CAP, the County's General Plan goals, policies, and actions, and CARB's 2022 Climate Change Scoping Plan Update by diverting organic waste from the landfill and reducing GHG emissions and comply with Assembly Bill 32, which mandates the reduction of GHG emissions. Thus, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, impacts would be less than significant.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the Project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on 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?	☐	☐	☒	☐
d) 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?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

a) **Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

No Impact. The Project is not located within an Alquist-Priolo Earthquake Fault Zone. The closest Holocene-active fault to the facility is the Cleveland Hill Fault, located approximately 19 miles to the southeast, at the closest point (CDOC, 2015). As such, no active fault segments traverse the NRRWF and there is no evidence that fault rupture could occur on the site. Furthermore, construction and operation of the Project would not directly or indirectly cause fault rupture or exacerbate existing fault rupture risks. For these reasons, the Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving surface rupture of a known earthquake fault, and no impact would occur.

ii) **Strong seismic ground shaking?**

No Impact. Butte County is relatively free from significant seismic and geologic hazards. There are, however, faults within the region that have the potential to cause strong seismic ground shaking, including

the Holocene-active Cleveland Hill Fault, located approximately 19 miles southeast. However, the construction and operation of the Project would not exacerbate seismic ground shaking. Additionally, the Project does not include any habitable structures or components that would exacerbate the risk of loss, injury, or death involving seismic ground shaking events. Therefore, no impact would occur.

iii) Seismic-related ground failure, including liquefaction?

No Impact. As previously discussed, the Project site is in an area that may be subject to future seismic ground shaking events. However, the Project would not exacerbate the potential for seismic activity to occur and therefore would not directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Therefore, no impact would occur.

iv) Landslides?

Less than Significant. There are no known landslides on or near the Project site. Based on the gently sloping topography, the potential for slope instability and landslides are low. In addition, the Project would not exacerbate the potential for landslides to occur and therefore would not directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving landslides. Therefore, the potential impact would be less than significant.

b) Would the Project result in substantial soil erosion or the loss of topsoil?

Less than Significant. Butte County Public Works would be required to implement erosion control measures during construction, stipulated in a stormwater pollution prevention plan (SWPPP) pursuant to Order 2014-0057-DWQ, national pollutant discharge elimination system (NPDES) General Permit for Storm Water Discharges Associated with Industrial Activities, Order NPDES No. CAS000001 (industrial general permit). Landfills are covered by this industrial general permit and are thus required to develop a site-specific SWPPP demonstrating compliance with its requirements (SWRCB 2015). According to the 2020 Joint Technical Document for the NRRWF, a SWPPP and monitoring program is currently in effect at the facility. The SWPPP erosion control measures include berms to control stormwater, down drains to convey runoff down landfill slopes, usage of straw wattles and silt fencing, and temporary basins to provide additional sediment control for runoff from the facility. Compliance with the best management practices described in the SWPPP would ensure that soil erosion or the loss of topsoil would be less than significant.

c) Would the Project 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?

Less than Significant. As previously discussed, the Project site is on gently sloping topography and seismic related risks are low. The NRRWF does contain engineered slopes as part of the waste management units and soil storage. These slopes are engineered for the site conditions. The Project site is located on an existing flat area of the facility, and would not alter engineered slopes or contribute to any potential soil instability. Therefore, impacts related to unstable soils during construction and operation of the proposed Project would be less than significant.

- d) **Would the Project 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?**

Less than Significant. Linear extensibility is used to determine the shrink-swell, or expansion potential of soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent. The proposed Project site is underlain by Doemill-Jokerst and Clearhayes-Hamslough soils, and "Dumps, landfill" land as classified by the NRCS. Doemill-Jokerst soils are composed of gravelly and cobbly loam, while Clearhayes-Hamslough soils are composed of sandy clay loam, clay, and similar soils. Based on the weighted average of all soil layers, the Doemill-Jokerst soils have a rating of 1.9 percent and the Clearhayes-Hamslough soils have a rating of 2.1 percent. The landfill property does not have a linear extensibility rating, as this land includes the components of a municipal sanitary landfill including waste material, drainage, and liner system compacted with dense clay to prevent seeping liquids from the trash. Per the low linear extensibility ratings of on-site soils, the Project would not be located on expansive soil that would pose direct or indirect risks to life or property. Impacts would be less than significant.

- e) **Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

No Impact. The Project would not result in the development or use of any septic or wastewater treatment systems. Therefore, no impact would occur.

- f) **Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Less than Significant. The proposed Project would occur entirely on a previously disturbed landfill area. Excavation would be relatively shallow. Therefore, potential impacts associated with paleontological resources would be less than significant.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Environmental Setting

A greenhouse gas (GHG) is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g), for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃) (see also 14 CCR 15364.5).⁸ Some GHGs, such as CO₂, CH₄, and N₂O, are emitted into the atmosphere through natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Manufactured GHGs have a much greater heat-absorption potential than CO₂ and include fluorinated gases, such as HFCs, PFCs, and SF₆, which are associated with certain industrial products and processes.

Gases in the atmosphere can contribute to climate change both directly and indirectly. Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2017). The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014). The reference gas used is CO₂; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO₂ equivalent (CO₂e).

The current version of the California Emissions Estimator (CalEEMod) Version 2022.1.1.13 assumes that the GWP for CH₄ is 25 (so emissions of 1 MT of CH₄ are equivalent to emissions of 25 MT of CO₂), and the GWP for N₂O is 298. The GWP values identified in CalEEMod were applied to the Project.

Under CEQA, "the determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data."⁹ CEQA grants agencies with the general authority to adopt criteria for determining whether a given impact is "significant."¹⁰ When no guidance exists under CEQA, the agency may look to and assess general compliance with comparable regulatory schemes.

The County's 2021 Climate Action Plan (2021 CAP) was adopted on December 14, 2021. The 2021 CAP is an update to the 2014 CAP, providing updated information, an expanded set of GHG reduction strategies, and a planning horizon out to 2050. The 2021 CAP provides goals, policies, and programs to reduce GHG emissions, address climate change adaptation, and improve quality of life in the County. The 2021 CAP also supports statewide GHG emission-reduction goals identified in Assembly Bill (AB) 32 and Senate Bill (SB) 375. Programs and actions in the 2021 CAP are intended to help the County sustain its natural resources, grow efficiently, ensure long-term resiliency to a changing environmental and economic climate, and improve transportation. The 2021 CAP also serves as a Qualified GHG Reduction Strategy under CEQA, simplifying development review for new projects that are consistent with the CAP (Butte County 2021).

⁸ Climate-forcing substances include GHGs and other substances, such as black carbon and aerosols. This discussion focuses on the seven GHGs identified in California Health and Safety Code Section 38505.

⁹ CEQA Guidelines Section 15064(b).

¹⁰ See Cal. Pub. Resources Code Section 21082.

a) **Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less than Significant. Because new projects are evaluated to determine consistency with the 2021 CAP and to identify which GHG emission reduction measures would be implemented with project approval, GHG emission estimates presented herein are for informational purposes only. A project-specific environmental document that relies on the 2021 CAP for its cumulative impact analysis must identify specific GHG reduction strategies applicable to the project and demonstrate the project's incorporation of the strategies. Project applicants and County staff will identify specific strategies applicable to each project during project review. If applicable strategies are not otherwise binding and enforceable, they must be incorporated as mitigation strategies for the project. If substantial evidence indicates that the GHG emissions of a proposed project may be cumulatively considerable, notwithstanding the project's compliance with specific strategies in the 2021 CAP, an environmental impact report must be prepared for the project (Butte County 2021).

Construction

The analysis of GHG emissions uses the same methodology and assumptions as the analysis of air quality impacts in Section 3.3, Air Quality. Construction of the proposed Project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, vendor and haul trucks, and worker vehicles. CalEEMod was used to calculate the annual GHG emissions. A detailed depiction of the construction schedule—including information regarding phasing, equipment utilized during each phase, trucks, and worker vehicles—is included in Appendix A. The estimated Project-generated GHG emissions from construction activities are shown in Table 3.8-1.

Table 3.8-1. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO ₂	CH ₄	N ₂ O	R	CO ₂ e
	metric tons per year				
2023	6.47	<0.005	<0.005	<0.005	6.56

Notes: See Appendix A for detailed results.
 MT = metric tons; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent.

As shown in Table 3.8-1, the estimated total GHG emissions from the construction scenario would be approximately 7 MT CO₂e. Estimated Project-generated construction emissions amortized over 30 years would be approximately 0.23 MT CO₂e per year (BAAQMD 2009). Because there is no separate GHG threshold for construction, the evaluation of significance is discussed in the operational emissions analysis in the following text.

Operation

As discussed under Section 3.3., Air Quality, operation of the proposed Project would generate GHG emissions through material handling equipment and truck operations. The proposed Project would require up to three round-trip truck trips per day (six one-way truck trips per day) to export organic waste material from the Project site. The composted material delivery location is estimated at nearly 60 miles, per the facility operator. The estimated Project-generated GHG emissions from transloading operation are shown in Table 3.8-2.

Table 3.8-2. Estimated Annual Operational Greenhouse Gas Emissions

Source	CO ₂	CH ₄	N ₂ O	R	CO ₂ e
	metric tons per year				
Mobile	175	<0.005	0.03	0.17	183
Off-Road (Front End Loader)	59.1	<0.005	<0.005	-	58.3
30-year Amortized Construction Emissions					0.23
Total GHG Emissions					241.53

Notes: See Appendix A for detailed results.

<0.01 = value less than reported 0.01 metric tons per year.

MT = metric tons; CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO₂e = carbon dioxide equivalent; R = refrigerant

As shown in Table 3.8-2, estimated annual operational GHG emissions, including amortized Project construction emissions, would be approximately 242 MT CO₂e per year, and is provided for informational purposes only.

2021 CAP Consistency

The Project's consistency with the County's 2021 CAP is evaluated below in Section 3.8 (b). The proposed Project would support the County's CAP Measure W2 and County's General Plan goals, policies, and actions by supporting diversion of organic waste and reducing GHG emissions and thus comply with AB 32. Thus, the impact related to GHG emissions would be less than significant.

b) *Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

No Impact. As detailed above, the 2021 CAP is a long-term strategic document to reduce GHG emissions in the County. Reduction targets in the CAP call for a 15% reduction below baseline 2006 GHG emission levels by 2020 consistent with State guidelines, and a 42% reduction below baseline 2006 levels by 2030.

The County's 2021 CAP outlines a number of measures to reduce GHG emissions in the County, including Solid Waste Sector Strategy 10, to reduce the amount of solid waste sent to local landfills through innovative programs and partnerships and to adopt a Countywide solid waste diversion rate targets of 50%, 60%, and 75% for years 2030, 2040, and 2050, respectively.

CAP Solid Waste Sector Strategy 11 sets to reduce emissions from disposal and decomposition of organic waste, and targets the percentage of organics recycled or composted to 70%, 75%, and 90% for years 2030, 2040, and 2050, respectively.

Table 3.8-3 provides the CAP Strategy 10 and 11 Actions and the Project's consistency status:

Table 3.8-3. The Project's Potential to Conflict with the 2021 Climate Action Plan

Strategy	Project's Potential to Conflict
Strategy 10 Action	
10a.Require recycling as a condition of approval for public events at County facilities and/or events permitted by the County	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.

Table 3.8-3. The Project's Potential to Conflict with the 2021 Climate Action Plan

Strategy	Project's Potential to Conflict
10b. Work with regional partners to establish a source-reduction program that promotes options to rethink, refuse, reduce, reuse, regenerate, recycle, and recover materials, including fix-it clinics, swap events, second-hand markets, promotion of the life cycle emissions of various products, and shop local campaigns.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
10c. Develop and adopt an ordinance to prohibit specific types of single-use or disposable plastics, particularly for use by restaurants, caterers, and other commercial kitchens.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
10d. Work with regional partners and non-profit organizations to promote the recycling of construction debris by providing education and incentives to construction companies, and by determining how materials may be donated and reused to help those in need.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
10e. Improve educational efforts to community members concerning proper waste sorting, including direct outreach through mailers and electronic communication, or passive outreach such as flyers and billboards.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
10f. Support development of alternative technologies to derive fuel or energy from waste.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
10g. Update land use designations or zoning, as applicable, to allow community gardens, farmers' markets, community-supported agriculture (CSA), and local farm-to institution programs throughout the unincorporated county.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
10h. Require, as feasible, that new development use sustainable materials to prevent destruction from wildfires, thereby reducing waste sent to landfills from wildfire related destruction and demolition.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
10i. Adopt countywide policies for low-carbon concrete in new development.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
10j. Explore siting additional transfer stations for solid wastes and recyclables in rural areas without easy access to the Neal Road Landfill facility, include Magalia, Stirling City, and other locations as appropriate, to discourage illegal dumping.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
Strategy 11 Action	
11a. Coordinate the construction and maintenance of a countywide industrial-level composting facility by working with county jurisdictions, regional partners, and local organizations.	No Conflict. The transloading operation supports composting efforts offsite.

Table 3.8-3. The Project's Potential to Conflict with the 2021 Climate Action Plan

Strategy	Project's Potential to Conflict
11b. Provide composted mulch from the countywide composting facility to farmers and other interested parties to work back into the earth	No Conflict. The transloading operation supports composting efforts offsite.
11c. Implement and monitor existing methane capture techniques at the countywide composting facilities to reduce methane emissions from decomposing organic material.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
11d. Require composting facilities as a condition of approval for public events at County facilities and/or events permitted by the County.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
11e. Implement curbside organic waste collection services to comply with state laws and regulations requiring residents and businesses, including public entities and multifamily complexes of five units or more, to recycle their organic waste.	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
11f. Actively promote agricultural composting strategies outlined in the Sustainable Agricultural Lands Conservation Strategy, including grassland compost application, among others	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.
11g. Work with regional partners such as Butte County Fire Safe Council to explore reuse opportunities for cleared forest residue	No Conflict. This strategy is not applicable to the Project, and the Project would not prevent the County from pursuing this action.

Source: Butte County 2021.

The proposed Project would not conflict with the 2021 CAP Strategies 10 and 11 and through the diversion of organic waste would support the CAP Countywide solid waste diversion rate targets of 50%, 60%, and 75% for years 2030, 2040, and 2050, respectively. Additionally, the diversion of organic waste would directly support the County's progress to CAP targets of the percentage of organics recycled or composted to 70%, 75%, and 90% for years 2030, 2040, and 2050, respectively. Furthermore, the proposed Project would support CARB's 2022 *Climate Change Scoping Plan Update* Action to divert 75% of organic waste from landfills by 2025 (CARB 2022).

The proposed Project would be consistent with and support the County's 2021 CAP, the County's General Plan goals, policies, and actions, and CARB's 2022 *Climate Change Scoping Plan Update* by diverting organic waste from the landfill and reducing GHG emissions and comply with AB 32, which mandates the reduction of GHG emissions. There would be no impact to applicable plans.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS – Would the Project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

- a) ***Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

Less than Significant. The proposed transloading facility would not require the storage, use, or disposal of hazardous materials. The existing hazardous waste exclusion and load-checking program for the NRRWF would also be used for organic waste. Loads are inspected both at the fee booth and during unloading. If any hazardous materials are discovered in loads at the fee booth, the hauler would be turned away from

the landfill and provided with information regarding acceptable hazardous waste disposal facilities. Any hazardous wastes that are discovered after unloading, if safe to handle, would be stored at the temporary hazardous waste storage area at the landfill, before being transported off-site by a certified hazardous waste hauler for proper disposal.

The Project operations would require heavy equipment, including loaders and haul trucks. However, no maintenance activities for the equipment would occur at the transloading site. The NRRWF has a Spill Prevention, Control, and Countermeasures (SPCC) Plan for aboveground storage of petroleum. The NRRWF is not proposing any significant increases to hazardous material or petroleum storage that would require updates since they will be utilizing existing hazardous materials and petroleum at the facility. Thus, the Project's impact related to transport, use, or disposal of hazardous materials would be less than significant.

- b) *Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

Less than Significant. See the discussion in (a) above. Impacts would be less than significant.

- c) *Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

No Impact. The proposed Project would be located within the NRRWF site boundary. The NRRWF is located within a relatively remote location. The proposed Project would not be located within one-quarter mile of an existing or proposed school.

- d) *Would the Project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

No Impact. The proposed Project be located within the NRRWF site boundary. The NRRWF is not included on any hazardous waste site lists, including the California Department of Toxic Substances Control's EnviroStor database, the State Water Resources Control Board's GeoTracker site, the Cortese list, or other lists compiled pursuant to Section 65962.5 of the Government Code (CalEPA 2022; DTSC 2022; SWRCB 2022b). Therefore, no impact associated with hazardous materials sites would occur.

- e) *For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?***

No Impact. The NRRWF site is not located within an airport land use plan area or within two miles of an airport. The Project site is located approximately 8.0 miles from Ranchoero Airport and 6.5 miles from Paradise Airport.

- f) *Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

No Impact. The proposed Project would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed Project would be located at the existing NRRWF. Access to and from the NRRWF is via SR 99 and Neal Road. The Project would not increase the

service population at the site. The Project would result in additional weekly haul truck trips, but during an emergency, such as a regional fire, the proposed Project would not result in a significant increase in vehicles exiting the landfill that would interfere or impede nearby resident vehicles that may be attempting to leave the area.

g) Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. Per the General Plan, the NRRWF site is not located within an area designated as a high fire hazard area. It is noted that the Camp Fire in 2018 did reach a portion of the NRRWF. However, the Project site does include vegetation or structures that would increase the risk of wildfire. The proposed Project would therefore not expose people or structures, either directly or indirectly, to a significant risk or loss, injury or death involving wildland fires.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the Project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
iv) impede or redirect flood flows?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

a) *Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Less than Significant. As stated in the Project description and Section 3.7, Geology and Soils, Butte County Public Works would be required to implement erosion control measures during construction, stipulated in a SWPPP pursuant to Order 2014-0057-DWQ, National Pollutant Discharge Elimination System NPDES General Permit for Storm Water Discharges Associated with Industrial Activities, Order NPDES No. CAS000001 (industrial general permit). Landfills are covered by this industrial general permit and are thus required to develop a site-specific SWPPP demonstrating compliance with its requirements (SWRCB 2015). According to the 2020 Joint Technical Document for the NRRWF, a SWPPP and monitoring program is currently in effect at the facility. The SWPPP includes an evaluation of drainage controls for the facility and the management of stormwater run-on and run-off, and a plan to regrade site surface drainage to avoid polluted stormwater flow into nearby water bodies, among other drainage and erosion control measures. Specific erosion and sediment controls described in the SWPPP include berms to control stormwater, downdrains to convey runoff down landfill slopes, usage of straw wattles and silt fencing, and temporary basins to provide additional sediment control for runoff from the facility.

The proposed Project would provide for the separation and temporary storage of organic waste prior to transfer to an offsite compost facility. Composting would not occur on-site. Organic waste would be contained within the transloading facility. Thus, impacts would be less than significant.

b) *Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?*

No Impact. The Project does not require the use of groundwater, nor would it introduce substantial impervious surfaces or structures that would interfere with groundwater recharge. Therefore, no impact would occur to groundwater resources.

c) ***Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:***

- i) ***Result in substantial erosion or siltation on- or off-site?***
- ii) ***Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?***
- iii) ***Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***
- iv) ***Impede or redirect flood flows?***

No Impact. The Project would not result in a substantial increase in the rate or amount of surface water runoff. The Project would not result in substantial erosion or siltation on- or off-site. The Project would not result in the alteration of the course of a stream or river. The Project site is not located within a 100- or 500-year flood zone (Zone X) as designated by the Federal Emergency Management Agency. The proposed Project would not expose people or structures to flooding risks. In addition, the NRRWF site is not located within a dam inundation area.

d) ***In flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to project inundation?***

No Impact. The NRRWF site is not within any flood hazard, tsunami, or seiche zones. The proposed Project would not result in any impacts associated with seiche, tsunami or mudflow.

e) ***Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

No Impact. The proposed Project would not result in the obstruction of any water quality control plan or sustainable groundwater management plan. As described above, the facility incorporates existing measures to protect surface and groundwater quality, with which the proposed Project must comply. In addition, the facility has 14 groundwater monitoring wells in addition to a surface water monitoring program. Because the proposed facility consists of a concrete cement ramp and an organic waste storage area, alterations to the amount and quality of run off would be minor.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the Project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

a) Would the Project physically divide an established community?

No Impact. The proposed Project is located within the existing NRRWF would not physically divide an established community.

b) Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The Project site is designated and zoned as Public, with the Solid Waste Management Facility land use overlay and the Neal Road Recycling, Energy, and Waste Facility zoning overlay. The Public zoning and land use designation allows for major utilities and other public works facilities, and the overlays specifically promote compatible development around the NRRWF. The overlay zones ensure adequate separation between the NRRWF and land uses that are potentially incompatible with landfill activities. Thus, the proposed development of the site would be consistent with the underlying zoning and surrounding development. The Project would not conflict with any of the County's goals and policies contained in the County's General Plan or zoning code.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Would the Project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

- a) ***Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***

No Impact. The proposed Project would not result in any impacts to mineral resources. The NRRWF site does not contain mineral resources that are either designated as important to the State of California or are of local importance. In addition, the landfill site is not designated as a mineral resource recovery facility.

- b) ***Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?***

No Impact. The site is not designated in a local plan as containing locally important mineral resources.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the Project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒

- a) **Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Less than Significant. The Project would include the use of heavy equipment, specifically loaders and heavy trucks. However, this equipment is already in use within the NRRWF. The Project site is located fairly centrally to the existing facility. There are no sensitive receptors within one mile of the NRRWF. The increase in the use of loaders and additional truck trips transferring organic waste to an offsite compost facility would be relatively minor in the context of the NRRWF operations. Therefore, noise impacts would be less than significant.

- b) **Would the Project result in generation of excessive groundborne vibration or groundborne noise levels?**

Less than Significant. The Project would include the use of heavy equipment which may cause groundborne vibration, specifically loaders and heavy trucks. However, this equipment is already used on the Project site. As discussed above, the increase in equipment use would not be substantial. Furthermore, there are no sensitive receptors or structures within the Project vicinity. The impact would be less than significant.

- c) **For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?**

No Impact. The Project site is located approximately 8.0 miles from Ranchoero Airport and 6.5 miles from Paradise Airport. The Project site is not located within the vicinity of a private airstrip. Therefore, the proposed Project would not expose people residing or working in the Project area to excessive noise levels.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the Project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

- a) ***Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

No Impact. The proposed Project would not induce substantial unplanned population growth, neither directly nor indirectly. The proposed Project would not result in the development of any new homes or businesses. The Project may provide economic opportunities for existing independent compost facilities by increasing the amount of organic waste diversion. The Project would maximize landfill capacity to serve existing and future waste disposal demand but would not create new capacity that would promote unplanned growth.

- b) ***Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

No Impact. The proposed Project would be developed at an existing landfill site. The proposed Project would not result in the displacement of existing people, housing, or businesses as a result of the Project.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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XV. PUBLIC SERVICES – Would the Project:

- a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

- a) *Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:*

Fire protection?

Police protection?

Schools?

Parks?

Other public facilities?

No Impact. The proposed Project would be located at the existing NRRWF site. The proposed Project would not result in new residential, commercial, or industrial developments that would increase the need for fire protection and police protection services, the building of new schools or parks or the need for either expanded or enhanced public facilities and services. The facility would not increase substantially increase the number of employees at the site.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

- a) *Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

No Impact. The proposed Project would be located at the existing NRRWF site. The proposed Project would not result in new residential, commercial, or industrial developments that would increase the need for new recreational facilities or increase the use of existing recreational facilities.

- b) **Does the Project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

No Impact. The Project would not include the construction of recreational facilities, nor generate additional demand for such facilities.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the Project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☐	☒
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

- a) **Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

No Impact. The proposed Project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, or pedestrian facilities. The proposed Project is located at the existing NRRWF, accessible via Neal Road and SR 99. The Project would result in some additional haul truck trips, an average of three round trips per weekday, but would not conflict with any policies addressing the circulation system. Therefore, there would be no impact.

- b) **Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?**

Less than Significant. CEQA Guidelines Section 15064.3(b) establishes vehicle miles traveled (VMT) as the preferred metric for identifying impacts to the transportation system. The California Governor's Office of Planning and Research (OPR) released the *Technical Advisory on Evaluating Transportation Impacts in CEQA* in December 2018 to assist lead agencies in implementing the VMT standard. In June 2021, the Butte County Association of Governments (BCAG) issued their SB 743 Implementation guidance (BCAG 2021). Neither of these documents provides guidance on landfill operations. The Project would introduce additional haul truck trips to transfer compost material to suitable offsite facilities, which could result in an increase in VMT. VMT is largely a function of land use and location. Recommended thresholds of significance for VMT are tied closely to the state's goals for reduction of GHG emissions in the transportation and land use sectors.

The NRRWF currently receives organic waste. Providing for composting of this material would achieve state goals for both reduction of landfill disposal (thus preserving valuable capacity) and reduction of GHG emissions (through proper composting in lieu of landfilling organic material). Therefore, while the Project may result in an increase in VMT, it achieves other state goals regarding the reduction of GHG. In addition, because the NRRWF currently receives organic waste, it is locationally efficient to locate the transloading facility at the NRRWF, rather than ask waste haulers, or individual businesses and residents, to find individual composting solutions. In addition, there are no recognized standards for VMT related to landfill operations. Therefore, the impact would be less than significant.

c) *Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

No Impact. The Project does not involve the design or redesign of surface transportation facilities. Access to the proposed Project would be provided at the existing landfill driveway via SR 99 and Neal Road. The proposed transloading operation is compatible with the current landfill operations on site. The Project would result in three additional round trips at the NRRWF, which would not substantially increase hazards for vehicles due to a geometric design feature or incompatible uses.

d) *Would the Project result in inadequate emergency access?*

No Impact. The Project site is located near the Paradise/Upper Ridge Evacuation Area (Butte County OEM 2020). Neal Road may be utilized as an evacuation route, depending on the nature and location of the emergency. The Project would not add a substantial amount of traffic to Neal Road (up to six one-way trips per weekday). In addition, normal landfill operations would not be expected to continue during a declared emergency. Therefore, there would be no impact to emergency access.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

No Impact. A prior cultural resources investigation found no previous records of cultural or tribal cultural resources on the Project site. The Project site is located on an existing landfill site and would not impact previously undisturbed soils.

- b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

No Impact. No California Native American tribe has requested notification of Projects, pursuant to Public Resources Code Section 21080.3.1(d), located in or near the NRRWF site. As noted above, the Project site consists entirely of a previously disturbed landfill module.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the Project:				
a) Require or result in the relocation or construction of new or expanded water, waste water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the waste water treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

- a) ***Would the Project require or result in the relocation or construction of new or expanded water, waste water treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

No Impact. The proposed Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. The proposed Project would be located at the existing NRRWF which is already served by utilities providers and the addition of the transloading facility would not require additional utilities resources that would necessitate expansion or relocation.

- b) **Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?**

No Impact. The Project would not require additional water usage. Dust control already occurs on the Project site, which would continue as needed.

- c) **Would the Project result in a determination by the waste water treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?**

No Impact. The proposed Project would not result in the construction of any new sewers, nor would the Project generate sewerage wastewater.

- d) **Would the Project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

No Impact. The Project would help Butte County cities achieve their State-mandated solid waste reduction goals by diverting organic solid waste from landfill disposal. The NRRWF operates in compliance with federal, state, regional and local governmental statutes and regulations.

- e) **Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

No Impact. The Project would help Butte County achieve State-mandated solid waste reduction goals by diverting organic solid waste from landfill disposal, via composting. The NRRWF operates in compliance with federal, state, regional and local governmental statutes and regulations.

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

a) Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. See Section 3.17 Section (d). The Project would not interfere with an adopted emergency response or evacuation plan.

b) Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. The proposed Project would be constructed within the existing NRRWF and would not alter the terrain or result in new occupied structures.

c) Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. The Project is located on an existing WMU and would not require additional infrastructure

d) Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The proposed Project would not result in the development of new housing or other occupied structures. In addition, the proposed transloading operation is not located in close proximity to any downslope or downstream housing or structures. Therefore, the proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability or drainage changes.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the Project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☒	☐
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

- a) ***Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?***

No Impact. As described in this Initial Study, the Project site does not contain special status wildlife or plant species, and does not have the potential for cultural resources. The proposed use is consistent with the existing landfill activities on the Project site. The proposed Project would divert organic material from the landfill, which would provide environmental benefits.

- b) ***Does the Project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)***

Less Than Significant. The County has proposed expanding the soil stockpile at the west end of the NRRWF. This future project may affect natural resources outside of the existing NRRWF boundary, such as biological and cultural resources, and result in temporary emissions (including GHG). No operational changes at the NRRWF would result from the Project. As discussed in this Initial Study, the proposed Project would not affect biological or cultural resources. Construction is not anticipated to overlap, but based on the low level of Project emissions described in this Initial Study, the Project would not contribute to a cumulative air quality or GHG impact.

- c) ***Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?***

No Impact. As described in this Initial Study, the Project does not have the potential to adversely affect human beings, either directly or indirectly.

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Appendix A

Air Quality Modeling Data

Butte Transloading Detailed Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
- 3. Construction Emissions Details
 - 3.1. Site Preparation (2023) - Unmitigated
 - 3.3. Building Construction (2023) - Unmitigated
- 4. Operations Emissions Details
 - 4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.2. Unmitigated

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Butte Transloading
Construction Start Date	7/1/2023
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	30.0
Location	39.67308977787573, -121.73707282576791
County	Butte
City	Unincorporated
Air District	Butte County AQMD
Air Basin	Sacramento Valley
TAZ	286
EDFZ	3
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.13

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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General Light Industry	10.7	1000sqft	0.24	10,660	0.00	0.00	—	Transloading Ramp Area
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.17	0.15	1.19	1.89	< 0.005	0.05	0.07	0.11	0.05	0.02	0.06	—	392	392	0.01	0.03	0.54	402
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02	0.02	0.14	0.22	< 0.005	0.01	0.01	0.01	0.01	< 0.005	0.01	—	39.1	39.1	< 0.005	< 0.005	0.02	39.6
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	< 0.005	6.56

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.17	0.15	1.19	1.89	< 0.005	0.05	0.07	0.11	0.05	0.02	0.06	—	392	392	0.01	0.03	0.54	402

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.02	0.02	0.14	0.22	< 0.005	0.01	0.01	0.01	0.01	< 0.005	0.01	—	39.1	39.1	< 0.005	< 0.005	0.02	39.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	< 0.005	6.56

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.31	0.25	3.01	3.31	0.01	0.12	0.14	0.26	0.11	0.03	0.14	0.00	1,556	1,556	0.03	0.17	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.31	0.25	3.11	3.31	0.01	0.12	0.14	0.26	0.11	0.03	0.14	0.00	1,557	1,557	0.03	0.17	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.23	0.18	2.56	2.41	0.01	0.09	0.14	0.23	0.08	0.03	0.12	0.00	1,412	1,412	0.02	0.17	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	0.03	0.47	0.44	< 0.005	0.02	0.03	0.04	0.02	0.01	0.02	0.00	234	234	< 0.005	0.03	—	—

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.02	1.20	0.17	0.01	0.02	0.14	0.16	0.02	0.03	0.05	—	1,055	1,055	0.01	0.17	2.36	1,107
Area	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NaN	NaN
Off-Road	0.28	0.24	1.81	3.14	< 0.005	0.10	—	0.10	0.09	—	0.09	—	501	501	0.02	< 0.005	—	503
Total	0.31	0.25	3.01	3.31	0.01	0.12	0.14	0.26	0.11	0.03	0.14	0.00	1,556	1,556	0.03	0.17	NaN	NaN
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.01	1.30	0.18	0.01	0.02	0.14	0.16	0.02	0.03	0.05	—	1,055	1,055	0.01	0.17	0.06	1,105
Area	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NaN	NaN
Off-Road	0.28	0.24	1.81	3.14	< 0.005	0.10	—	0.10	0.09	—	0.09	—	501	501	0.02	< 0.005	—	503
Total	0.31	0.25	3.11	3.31	0.01	0.12	0.14	0.26	0.11	0.03	0.14	0.00	1,557	1,557	0.03	0.17	NaN	NaN
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.02	1.27	0.18	0.01	0.02	0.14	0.16	0.02	0.03	0.05	—	1,055	1,055	0.01	0.17	1.02	1,106
Area	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NaN	NaN
Off-Road	0.20	0.17	1.29	2.23	< 0.005	0.07	—	0.07	0.06	—	0.06	—	357	357	0.01	< 0.005	—	358
Total	0.23	0.18	2.56	2.41	0.01	0.09	0.14	0.23	0.08	0.03	0.12	0.00	1,412	1,412	0.02	0.17	NaN	NaN
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.23	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	175	175	< 0.005	0.03	0.17	183
Area	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NaN	NaN
Off-Road	0.04	0.03	0.24	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.1	59.1	< 0.005	< 0.005	—	59.3
Total	0.04	0.03	0.47	0.44	< 0.005	0.02	0.03	0.04	0.02	0.01	0.02	0.00	234	234	< 0.005	0.03	NaN	NaN

3. Construction Emissions Details

3.1. Site Preparation (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.79	1.19	< 0.005	0.04	—	0.04	0.03	—	0.03	—	181	181	0.01	< 0.005	—	182
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.97	4.97	< 0.005	< 0.005	—	4.99
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.82	0.82	< 0.005	< 0.005	—	0.83
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	34.6	34.6	< 0.005	< 0.005	0.15	35.2
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.5	30.5	< 0.005	< 0.005	0.08	31.9
Hauling	< 0.005	< 0.005	0.19	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	146	146	< 0.005	0.02	0.32	153
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.86	0.86	< 0.005	< 0.005	< 0.005	0.87
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.87
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.99	3.99	< 0.005	< 0.005	< 0.005	4.18
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.14
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.66	0.66	< 0.005	< 0.005	< 0.005	0.69

3.3. Building Construction (2023) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.12	1.58	< 0.005	0.05	—	0.05	0.05	—	0.05	—	235	235	0.01	< 0.005	—	235
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	22.5	22.5	< 0.005	< 0.005	—	22.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.72	3.72	< 0.005	< 0.005	—	3.74
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	34.6	34.6	< 0.005	< 0.005	0.15	35.2
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.5	30.5	< 0.005	< 0.005	0.08	31.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.01	3.01	< 0.005	< 0.005	0.01	3.06
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.92	2.92	< 0.005	< 0.005	< 0.005	3.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.51
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.51
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.03	0.02	1.20	0.17	0.01	0.02	0.14	0.16	0.02	0.03	0.05	—	1,055	1,055	0.01	0.17	2.36	1,107
Total	0.03	0.02	1.20	0.17	0.01	0.02	0.14	0.16	0.02	0.03	0.05	—	1,055	1,055	0.01	0.17	2.36	1,107
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.03	0.01	1.30	0.18	0.01	0.02	0.14	0.16	0.02	0.03	0.05	—	1,055	1,055	0.01	0.17	0.06	1,105
Total	0.03	0.01	1.30	0.18	0.01	0.02	0.14	0.16	0.02	0.03	0.05	—	1,055	1,055	0.01	0.17	0.06	1,105
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	< 0.005	< 0.005	0.23	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	175	175	< 0.005	0.03	0.17	183
Total	< 0.005	< 0.005	0.23	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	175	175	< 0.005	0.03	0.17	183

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architect ural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NaN	NaN
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NaN	NaN
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NaN	NaN
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NaN	NaN
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NaN	NaN
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NaN	NaN

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rubber Tired Loaders	0.28	0.24	1.81	3.14	< 0.005	0.10	—	0.10	0.09	—	0.09	—	501	501	0.02	< 0.005	—	503

Total	0.28	0.24	1.81	3.14	< 0.005	0.10	—	0.10	0.09	—	0.09	—	501	501	0.02	< 0.005	—	503
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rubber Tired Loaders	0.28	0.24	1.81	3.14	< 0.005	0.10	—	0.10	0.09	—	0.09	—	501	501	0.02	< 0.005	—	503
Total	0.28	0.24	1.81	3.14	< 0.005	0.10	—	0.10	0.09	—	0.09	—	501	501	0.02	< 0.005	—	503
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rubber Tired Loaders	0.04	0.03	0.24	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.1	59.1	< 0.005	< 0.005	—	59.3
Total	0.04	0.03	0.24	0.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.1	59.1	< 0.005	< 0.005	—	59.3

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	7/1/2023	7/14/2023	5.00	10.0	—
Transloading Construction	Building Construction	7/15/2023	9/1/2023	5.00	35.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	5.00	84.0	0.37
Transloading Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	5.00	84.0	0.37
Transloading Construction	Excavators	Diesel	Average	1.00	3.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	4.00	10.3	LDA,LDT1,LDT2
Site Preparation	Vendor	2.00	4.50	HHDT,MHDT
Site Preparation	Hauling	2.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Transloading Construction	—	—	—	—
Transloading Construction	Worker	4.00	10.3	LDA,LDT1,LDT2
Transloading Construction	Vendor	2.00	4.50	HHDT,MHDT
Transloading Construction	Hauling	0.00	20.0	HHDT

Transloading Construction	Onsite truck	0.00	—	HHDT
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5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
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5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	100	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Light Industry	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMt/Weekday	VMt/Saturday	VMt/Sunday	VMt/Year
General Light Industry	6.00	6.00	6.00	2,190	300	300	300	109,500

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	0.00

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Light Industry	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Light Industry	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.00	0.00	0.00	0.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.5	annual days of extreme heat
Extreme Precipitation	6.95	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	7.74	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
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Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	67.0
AQ-PM	11.7
AQ-DPM	5.86
Drinking Water	25.0
Lead Risk Housing	35.4
Pesticides	62.3
Toxic Releases	5.61
Traffic	31.4
Effect Indicators	—
CleanUp Sites	61.4
Groundwater	3.30
Haz Waste Facilities/Generators	55.4
Impaired Water Bodies	23.9
Solid Waste	93.8
Sensitive Population	—
Asthma	51.9
Cardio-vascular	74.8
Low Birth Weights	76.4
Socioeconomic Factor Indicators	—

Education	35.9
Housing	55.1
Linguistic	0.00
Poverty	66.1
Unemployment	82.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	44.71962017
Employed	14.74400103
Median HI	30.73270884
Education	—
Bachelor's or higher	52.22635699
High school enrollment	100
Preschool enrollment	1.873476197
Transportation	—
Auto Access	22.25073784
Active commuting	49.13383806
Social	—
2-parent households	56.55075067
Voting	82.49711279
Neighborhood	—
Alcohol availability	73.77133325
Park access	12.06210702
Retail density	10.5350956

Supermarket access	2.399589375
Tree canopy	98.19068395
Housing	—
Homeownership	56.53791864
Housing habitability	47.6324907
Low-inc homeowner severe housing cost burden	35.42923136
Low-inc renter severe housing cost burden	48.26126011
Uncrowded housing	66.9190299
Health Outcomes	—
Insured adults	59.36096497
Arthritis	0.0
Asthma ER Admissions	47.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	8.9
Cognitively Disabled	0.6
Physically Disabled	2.1
Heart Attack ER Admissions	24.5
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	82.4
Physical Health Not Good	0.0

Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	77.5
SLR Inundation Area	0.0
Children	94.0
Elderly	3.3
English Speaking	78.7
Foreign-born	2.0
Outdoor Workers	25.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	95.6
Traffic Density	15.2
Traffic Access	0.0
Other Indices	—
Hardship	51.4
Other Decision Support	—
2016 Voting	73.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	52.0
Healthy Places Index Score for Project Location (b)	37.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Applicant provided construction schedule.
Construction: Off-Road Equipment	Applicant provided equipment schedule.
Construction: Trips and VMT	Applicant provided information.
Operations: Vehicle Data	Based on applicant provided information, 3 trucks per day = 6 round truck trips per day with 50 miles truck trip distance.
Operations: Fleet Mix	HHD trucks only.
Operations: Energy Use	No electric or natural gas consumed with the operation of the project. Only vehicle operations.
Operations: Water and Waste Water	No water consumed with the transloading operation.
Operations: Solid Waste	No solid waste as a result of the operation of the project.
Operations: Refrigerants	Outdoor project no commercial A/C or heat with the operation of the project.
Operations: Consumer Products	No consumer products with operation of the project.
Operations: Landscape Equipment	No landscape equipment with the operation of the project.
Operations: Architectural Coatings	No buildings or painting with operation of the project.