

Food Waste Conversion Project

Draft Initial Study

Lead Agency:



City of Oceanside

Development Services Department
300 N. Coast Hwy
Oceanside, CA 92054

Prepared by:

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February 2023 | 00135.00006.000

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Acronyms and Abbreviations

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ADT	average daily trips
AIA	Airport Influence Area
ALUCP	Airport Land Use Compatibility Plan
amsl	above mean sea level
APNs	Assessor's Parcel Numbers
APE	Area of Potential Effect
ASTM	American Society for Testing and Materials
BMPs	best management practices
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
CHP	combined heat and power
CI	Civic Institution
City	City of Oceanside
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CRHR	California Register of Historic Resources
dB	decibel
dBA	A-weighted decibel
DHS	Department of Health Services
DOC	California Department of Conservation
DOT	U.S. Department of Transportation
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EBS	Engineered Bioslurry
EI	expansion index
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FMMP	Farmland Mapping and Monitoring Program
ft	feet

Acronyms and Abbreviations (continued)

GHG	greenhouse gas
GPD	gallons per day
GSP	Groundwater Sustainability Plan
HELIX	HELIX Environmental Planning Inc.
HRT	hydraulic retention time
IRAs	Identified Resource Areas
kWh/year	kilowatts per year
L _{EQ}	time-averaged noise level
LOS	Level of Service
LRA	Local Responsibility Area
LUST	leaking underground storage tank
MBAS	methylene blue-activated substances
MBGPF	Mission Basin Groundwater Purification Facility
MCB	Marine Corps Base
MGD	million gallons per day
MM	mitigation measure
MRZ	Mineral Resource Zones
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NO _x	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
NSLU	noise-sensitive land use
OFD	Oceanside Fire Department
OMC	Oceanside Municipal Code
OOO	Oceanside Ocean Outfall
OPD	Oceanside Police Department
OPR	Office of Planning and Research
PM ₁₀	particulates matter 10 microns or less in diameter
PM _{2.5}	particulates matter 2.5 microns or less in diameter
PPV	peak particle velocity
PS	Civic/Public
RCNM	Roadway Construction Noise Model
Rincon	Rincon Consultants, Inc.
ROG	reactive organic gas
SANDAG	San Diego Association of Governments
SB	Senate Bill
SCFy	standard cubic feet per year
SDAB	San Diego Air Basin

Acronyms and Abbreviations (continued)

SDAPCD	San Diego Air Pollution Control District
SDCWA	San Diego County Water Authority
SDRWQCB	San Diego Regional Water Quality Control Board
SIP	State Implementation Plan
SLRWRF	San Luis Rey Water Reclamation Facility
SMARA	Surface Mining and Reclamation Act of 1975
SOP	Standard Operating Procedure
SR	State Route
SRT	solids retention time
SWQMP	Stormwater Quality Management Plan
SWRCB	State Water Resources Control Board
SZ	Scientific Resource Zone
1,2,3 TCP	1,2,3 –Trichloropropane
TAC	toxic air contaminant
TDS	total dissolved solids
TFIC	Transportation Forecast Information Center
TMDL	Total Daily Maximum Load
UWMP	Urban Water Management Plan
U.S. Census Bureau	U.S. Department of Commerce, Bureau of the Census
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
WTE	Waste to Energy

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INITIAL STUDY
City of Oceanside, California

1. PROJECT

Food Waste Conversion Project

2. LEAD AGENCY

City of Oceanside, Water Utilities Department, 300 N. Coast Hwy, Oceanside, CA 92054

3. CONTACT PERSON & PHONE

Mabel Uyeda, Principal Water Engineer, Water Utilities Department, City of Oceanside, (760) 681-4780

4. PROJECT LOCATION

3950 North River Road, Oceanside, CA 92058; Accessible via Douglas Drive

5. APPLICANT

City of Oceanside, 300 N. Coast Hwy, Oceanside, CA 92054

6. GENERAL PLAN DESIGNATION

Existing: Civic Institution (CI)
Proposed: Civic Institution (CI)

7. ZONING

Existing: Civic/Public (PS)
Proposed: Civic/Public (PS)

8. PROJECT SETTING AND SURROUNDING LAND USES

The proposed City of Oceanside's Food Waste Conversion Project (proposed Project or Project) is located north of Mission Road (State Route [SR] 76) and the San Luis Rey River and east of Marine Corps Base (MCB) Camp Pendleton in the north central portion of the City of Oceanside (City) in northern San Diego County (see Figure 1, *Regional Location*). The Project site is within a portion of the City's San Luis Rey Water Reclamation Facility (SLRWRF). The Project site is defined as the area surrounding Digester 5 in the northwest corner of the SLRWRF, totaling approximately 0.39 acres. The SLRWRF is located on three parcels (Assessor Parcel Numbers [APNS] 1620307731, 1570210400, 1570210400) at 3950 North River Road (see Figure 2, *Aerial*). The SLRWRF is zoned as Civic/Public (PS) and has a General Plan Land Use Designation of Civic Institution (CI).

The SLRWRF is a wastewater treatment facility in the City that treats wastewater to the secondary level by conventional biological treatment followed by clarification, as well as treating to the tertiary and advanced level at the recycled water treatment facility and the advanced water purification facility within the SLRWRF. SLRWRF treats wastewater from the areas east of Interstate 5, the Rainbow Municipal Water District, and a portion of the City of Vista. The plant discharges treated effluent through the Oceanside Ocean Outfall (OOO) (City 2023a). The areas surrounding the SLRWRF include Whelan Lake to the southwest; a solar farm,

residential neighborhoods, and Foussat Elementary School to the south; residential neighborhoods, and small amounts of commercial space to the east; and Windmill Lake and open space associated with MCB Camp Pendleton to the north. Directly to the east of the Project site is the Oceanside Police Department shooting range. Access to SLRWRF is provided regionally by I-5 and SR 76 and locally by Douglas Drive and North River Road. The Project site within the SLRWRF can be accessed through a series of internal roads within the facility. The proposed truck route within the facility would be entering through the southwest entrance of North River Road and then traveling through the facility on the westernmost road to the Project site and exiting on the easternmost road and out through the same entrance. Please see Figure 3, *Site Plan*, for more details on the proposed truck route.

The SLRWRF is relatively flat with elevations ranging from approximately 50 feet (ft) to 60 ft above mean sea level (amsl), generally sloping from the east to the west. The Project site itself has an approximate average elevation of 60 ft amsl. The Project would occur on entirely disturbed or urban developed land, with adjacent vegetation communities consisting of tamarisk scrub, mule fat scrub, southern willow scrub, disturbed habitat, non-native vegetation, diegan coastal sage scrub, freshwater marsh, and open water (HELIX 2020). Please refer to Figure 4, *Adjacent Vegetation Communities*.

9. PROJECT BACKGROUND AND DESCRIPTION

In October 2014, Governor Brown signed Assembly Bill (AB) 1826 Chesbro (Chapter 727, Statutes of 2014), which builds on the success of the mandatory commercial recycling program established by AB 341 by mandating a phased recycling program based on the amount of organic waste businesses generate per week. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law requires that on and after January 1, 2016, local jurisdictions across the State implement an organic waste recycling program to divert organic waste generated by businesses, including multi-family residential dwellings that consist of five or more units. This law phases in the mandatory recycling of commercial organics over time, while also offering an exemption process for rural counties. In September 2016, Senate Bill (SB) 1383 (Chapter 395, Statutes of 2016) was approved, requiring a statewide reduction of organic waste disposal. Specifically, SB 1383 requires a 50 percent reduction of the statewide disposal of organic waste from the 2014 level by 2020, and a 75 percent reduction of the 2014 level by 2025. SB 1383 requires cities and counties to adopt regulations to achieve the specified targets for reducing organic waste in landfills. Further, the California Department of Resources Recycling and Recovery (CalRecycle) adopted regulations in November 2020 that took effect in January 2022.

The City has implemented the Excess Edible Food Recovery Program and Food Recycled Program for Commercial Businesses, Restaurants, Grocer's and Retail Stores, to comply with SB 1383 (City 2023b). As a result of this program, the City anticipates growing its organics collection program to meet its landfill diversion goals, therefore the additional digester capacity provided by the Project would give the City flexibility to respond to an expanding collection program. The Project is the first of a larger multi-phased effort to construct improvements at the City's SLRWRF to enable the production of renewable energy (from biogas¹) and the beneficial reuse of food-derived digestate to compost. The Project may also provide additional diversion capacity for neighboring communities in Northern San Diego County and Southern Orange County, an area significantly lacking organic waste processing capacity. Additionally, the Project proposes a new form of renewable energy production for the City, lessening the City's reliance on fossil fuels for energy generation. Electric production for the Project would amount to 1,439,660 kWh/year, enough to power 221 households or 355 electric vehicles for one full year.

¹ Biogas is a mixture of methane and carbon dioxide produced by the bacterial decomposition of organic wastes and used as a fuel (Webster n.d.).

The Project includes the installation of organic material receiving infrastructure and anaerobic digester² equipment at the City's SLRWRF in order to accept food derived digestate which would facilitate diversion of food waste from the landfill. Project construction would occur fully within the disturbed/urban land on the SLRWRF. The proposed Project involves updates made to the existing Digester 5 on 0.39 acres in the northwest corner of the SLRWRF (see Figure 2). The SLRWRF has five digesters, four of which are currently dedicated to anaerobic digestion (2,441,000-gallon total capacity). The fifth digester (Digester 5) is a concrete shell that is ready for enhancements to be used as a dedicated digester for food waste. The Project would install equipment and supporting infrastructure to bring Digester 5 into operational status. The Project would include the installation of two main structures: the hydrolysis tank and the dewatering facility. Both pieces of equipment would be freestanding and not housed within a new or existing structure. The equipment associated with these improvements include a boiler, which in combination with the combined heat and power (CHP) system will provide the heat necessary to maintain digestion temperatures, a heat exchanger to convey heat from the CHP or boiler to ensure the new digester maintains appropriate temperatures, and a mixing system to facilitate volatile solids destruction (see Figure 3). The additional digester will result in the addition of 634,000 gallons of permanent digester capacity. This provides a sludge flow capacity of 31,700 gallons per day (GPD), assuming an annual average of 20-day solids retention time³ (SRT), per discussion with existing food waste operators to maximize biogas production. The Project would install a food derived Engineered Bioslurry (EBS) freestanding receiving tank (hydrolysis tank) with a capacity of 125,000 gallons, which would provide for a hydraulic retention time (HRT)⁴ of four days at max capacity of Digester 5. The Project would involve limited ground disturbance associated with foundations for the hydrolysis tank and dewatering facility as well as minor excavation for pipes. A minimal amount of export is expected.

Construction would begin in June of 2024 and be completed by April 2025. The new digester would be operational by the second quarter of 2025. Construction staging would occur entirely within the facility. Construction equipment is assumed as normal equipment needed for a project of this nature. A list of the anticipated construction equipment needed is provided below:

- truck-mounted drill rigs
- track-mounted excavators
- backhoes
- crane
- compactors
- end and bottom dump trucks
- front-end loaders
- paver and roller
- flat-bed delivery trucks
- forklifts
- concrete trucks
- compressors/jack hammers

It is anticipated that an organics diversion rate of 1,733 wet tons per year would be achieved by April of 2025. By April 1, 2025, the organics collection program would be fully mature at which point the annual diversion rate of organic material would reach approximately 5,200 wet tons per year. The rapid increase in diversion in

² Anaerobic digestion is a series of processes in which different species of bacteria break down organic matter, such as food scraps, manure, and sewage sludge in the absence of oxygen (CEC 2015).

³ SRT is the time the solid fraction of the wastewater spends in a treatment unit. It is the quantity of solids maintained in the reactor divided by the quantity of solids coming out of the reactor each day (Metcalf & Eddy 2013)

⁴ HRT is defined as the average time interval over which the substrate is kept inside the digester (Show et. al. 2019).

2025 is due to the anticipated ramp up schedule for the new digester to receive the food derived EBS and to incubate the necessary biology to process the EBS derived from food waste. The 634,000-gallon anaerobic digester would be operating at approximately 30 percent capacity when digesting at the rate of 5,200 wet tons of food waste annually.

The City would derive its organic feedstock from the collection of food waste and food soiled paper collected from commercial and multi-family customers. Material feed stock proposed for the Project would be source-separated food waste and food soiled paper generated within the City. Food waste is defined as discarded materials that would decompose and/or putrefy including: (i) all kitchen and table food waste; (ii) animal or vegetable waste that is generated during or results from the storage, preparation, cooking or handling of food stuffs; (iii) fruit waste, grain waste, dairy waste, meat, and fish waste; and, (iv) vegetable trimmings, houseplant trimmings and other organic waste. Food-soiled paper includes paper material that has come into contact with food scraps or liquid, such as, but not limited to, paper plates, paper liners, paper coffee cups, napkins, and pizza boxes.

A waste management company would collect and deliver the City's organics to a facility where pretreatment processes would be used to create a high-quality, food derived EBS from the collected organics. Proprietary technology would be utilized to separate the City's organic food stock material from interlaced contaminants and then convert the organic fraction into a ready-to-use food-derived EBS. The food derived EBS would be transported via a sealed and watertight truck from the chosen facility to the SLRWRF, where it would be directly injected into a receiving tank (hydrolysis tank) associated with the newly equipped anaerobic digester. The hydrolysis tank is anticipated to have an HRT of approximately four days to allow for formation of volatile fatty acids, to accommodate fluctuations in the food derived EBS delivery schedule, and to facilitate hydrolysis of the delivered material. The hydrolysis tank would be a receiving tank and provide a means for storing digestate prior to injection into the anaerobic digesters. Additionally, the hydrolysis tank would utilize mechanical mixers to hydrolyze the material to make more organic content which would then be available for conversion into biogas.

It is estimated that the number of round trips in and out of the SLRWRF as a result of the operation of the Project would be two to three per day, including:

- 10,000 gallons per day of food derived EBS would be delivered five days per week to SLRWRF, totaling approximately 2,600,000 gallons per year. The delivery truck capacity is 5,000 gallons which would therefore require approximately two truck deliveries of EBS per day to SLRWRF.
- Approximately two truck trips per week would occur from SLRWRF to the composting facility to deliver dewatered digestate, or 0.39 trucks per day.
- Approximately one additional truck trip per day to SLRWRF for chemical or supply delivery is anticipated.

The maximum amount of additional truck trips possible would be four round trips per day, or eight maximum total average daily trips (ADT). The Project operations would not require additional employees to travel to and from the SLRWRF.

The receiving material for the proposed Project is food derived EBS and not biosolids. The annual amount of dewatered digestate or biosolids (from food-derived organic feedstock) to be hauled off is 3,559 wet tons. The digestate would be trucked to a designated compost facility where it would be converted to compost. The food waste dewatering centrate⁵ would be sent to SLRWRF's wastewater treatment stream. None of the byproducts

⁵ Centrate is the liquid fraction produced from dewatering of anaerobic digester sludge (Herrera 2009)

of the 5,200 annual tons of organic food waste that would be anaerobically digested as a result of the Project would be sent to the landfill for application.

This renewable energy Project would offset the City's use of electricity from the grid by producing 1,439,660 kilowatts per year (kWh/year) of electricity, enough to power 221 households or 355 electric vehicles for one full year. Electricity and heat would be generated via the combustion of biogas (from the anaerobic digesters) in an upsized CHP facility onsite. The CHP facility would be connected to the SLRWRF's power distribution grid in order to capture and utilize the additional power produced through the organics collection. This is anticipated to require a new 480-volt distribution gear in the CHP facility, new transformers located outside of the CHP facility, new medium voltage distribution switchgear located outside of CHP, and new conductors from the medium voltage switchgear. Prior to combustion, the biogas would be cleaned via scrubbers to effectively remove hydrogen sulfide, moisture, and siloxanes. The CHP system is comprised of an internal combustion engine to combust the biogas, an alternator that produces electricity, and a radiator to capture and reuse the heat for the anaerobic digestion process. The CHP facility would be expanded to fully utilize the increased amount of biogas produced as a result of this Project, thus avoiding the need for any biogas flaring⁶. Biogas storage would be evaluated to buffer the fluctuating gas production levels in the digesters and to optimize gas use. The projected biogas production at Project maturity in calendar year 2025, is estimated to be 25,113,088 standard cubic feet per year (SCFy). The renewable electricity produced because of this Project would be utilized to power the City's wastewater, potable reuse, and recycled water treatment facilities which are co-located at SLRWRF. Additionally, heat produced by the CHP would be utilized in the anaerobic digestion processes and would avoid the need to purchase and burn additional natural gas, which is currently used to fire boilers for heating of the digesters.

10. OTHER REQUIRED AGENCY APPROVALS

- City of Oceanside – Conditional Use Permit (CUP)
- San Diego Regional Water Quality Control Board (SDRWQCB) – National Pollution Discharge Elimination System (NPDES) Construction General Permit modification approval and a Revised Waste Discharge Permit.
- San Diego Air Pollution Control District (SDAPCD) – Permit to Operate modification approval

11. CONSULTATION

Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Twenty-five tribal contacts were provided by the Native American Heritage Commission (NAHC) for the City of Oceanside Pure Water Project, which includes the SLRWRF. The Project is located within the SLRWRF and would therefore have similar tribal influence. The City sent letters to these contacts on January 19, 2023, and, to date, received no responses. The City sent letters to these contacts in order to initiate consultation pursuant to AB 52. If responses are received during the public review process, results of consultation would be included in the Final IS/MND.

⁶ Gas flaring allows operators to de-pressurize their equipment and manage unpredictable and large pressure variations by burning any excess gas (GGFR 2023).

13. SUMMARY OF 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 Unless Mitigated” as indicated by the checklist on the following pages.

- | | | |
|--|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agricultural & Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards/Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Land Use & Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

14. ENVIRONMENTAL CHECKLIST

This section analyzes the potential environmental impacts which may result from the project. For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and answers are provided according to the analysis undertaken as part of the Initial Study. The analysis considers the project’s short-term impacts (construction-related), and its operational or day-to-day impacts. For each question, there are four possible responses. They include:

1. No Impact. Future development arising from the project’s implementation would not have any measurable environmental impact on the environment and no additional analysis is required.
2. Less Than Significant Impact. The development associated with project implementation would have the potential to impact the environment; these impacts, however, would be less than the levels or thresholds that are considered significant and no additional analysis is required.
3. Potentially Significant Unless Mitigated. The development would have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the project’s physical or operational characteristics can reduce these impacts to levels that are less than significant.
4. Potentially Significant Impact. Future implementation would have impacts that are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.1 Aesthetics				
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic building within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Have a substantial adverse effect on a scenic vista? **Less than Significant Impact.**

Scenic vistas are defined as views or vistas generally expansive or panoramic in nature, usually from an elevated point or open area, which possess visual and aesthetic qualities of high value to the community. For the purposes of this analysis, a substantial adverse effect on a scenic vista or view would occur where the majority of an existing view would be blocked or substantially interrupted. Scenic vistas can be designated officially in a City's General Plan or be views that are valued by the local community. Oceanside does not have an official inventory of scenic vistas in its General Plan, but the City's Local Coastal Plan Background Study recognizes resources such as the Pacific Ocean, San Luis Rey River, Buena Vista Lagoon, Oceanside Harbor, and Oceanside Pier as valuable aesthetic resources (City 2018). The San Luis Rey River is located to the south of the Project site. Public views of the river occurring from North River Road, looking south towards the river are obstructed by single family homes and vegetation.

Although not officially recognized, Whelan Lake and Windmill Lake are located in the areas surrounding the SLRWRF. Whelan Lake is located southwest of the SLRWRF, and public views of Whelan Lake would continue to be unobstructed with implementation of the proposed Project. Public views of Windmill Lake from North River Road, located just north of the Project site, are obstructed by the existing SLRWRF, and would not be affected with implementation of the Project.

The proposed Project consists of improvements within the SLRWRF which would not include the creation of new buildings. The Project would involve the installation of new equipment; however, such equipment would be consistent with the equipment already onsite and would not obstruct or affect public views of the area. During construction, views to Windmill Lake may be further obstructed with construction equipment, however, visual impacts would be temporary. These impacts would be limited to the area immediately surrounding the Project site and would not substantially block or otherwise affect scenic views.

More specifically, looking south from North River Road towards the river, there is a slight downward slope, with the river situated at a lower elevation beyond the existing residential development south of the facility. Mature trees and vegetation along the roadway, along with houses impede direct views of the river. As a viewer

along North River Road, panoramic views to the northwest are dominated by open space and the SLRWRF with a backdrop of the hills located west of Whelan Lake. The Project would not include the creation of substantial new structures and the Project site is located in the northwest corner of the SLRWRF, furthest away from public views. Therefore, there would not be a change to these views as a result of this Project. Given the existing features that obstruct views, the introduction of the Project would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant.

- b. 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 designated scenic highways within the City of Oceanside. The nearest designated scenic highway, according to the California Department of Transportation (Caltrans), is a portion of SR 52, nearly 30 miles south of the Project site (Caltrans 2022). It is noted that SR 76 (Mission Road), which is located approximately 1.6 miles south of the Project site, is designated as an eligible scenic highway (Caltrans 2022). As discussed in response to Item 14.1 a., the Project would not include the creation of substantial new structures and the Project site is located in the northwest corner of the SLRWRF, furthest away from public views. Additionally, there are no rock outcroppings or other such topographic features within the Project Area. Thus, given that the Project would not obstruct views across the site and that there are no designated scenic highways, the Project would not substantially damage scenic resources, including, trees, rock outcroppings, and historic buildings within a state scenic highway. No impact would occur.

- c. 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? **No Impact.**

Public Resources Code 21071 defines the term “urbanized area” for the purpose of the California Environmental Quality Act (CEQA) to mean an incorporated city that has a population of at least 100,000 persons, or has a population of less than 100,000 persons if the population of that city and up to two contiguous incorporated cities combined equals at least 100,000 persons. U.S. Department of Commerce, Bureau of the Census (U.S. Census Bureau) data from 2020 indicates that the City has a population of 174,068 (U.S. Census Bureau 2020). The Project site is within an urbanized area and therefore is evaluated relative to applicable zoning and other regulations governing scenic quality.

The Project site is currently disturbed and developed with the existing SLRWRF. Implementation of the Project would result in the installation of equipment to bring the existing Digester 5 to working capacity and other associated infrastructure improvements. The Project site is zoned as Civic/Public (PS), which is consistent with the existing and proposed use of the Project site. According to the City of Oceanside Zoning Ordinance, Article 16, major utilities are conditionally permitted. A use permit is required for generating plants, electrical substations, lone switching buildings, refuse collection, transfer, recycling or disposal facilities, water reservoirs, water or wastewater treatment plants or transportation and similar facilities of public agencies or public utilities. Some minor uses are permitted, and some require a CUP. The proposed Project involves improvement to a pre-existing facility and Digester 5, and therefore the City would provide approval through a CUP.

As discussed in response to Item 14.1 a., the Project site and its surroundings are not a protected scenic resource (as defined by adopted plans and regulations) and scenic views of the San Luis Rey River are limited due to a combination of existing vegetation and residential houses obstructing the views. The Project would not conflict with applicable zoning or other regulations governing scenic quality. No impact would occur.

- d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? **Less than Significant Impact.**

There are two primary sources of light: light emanating from building interiors that passes through windows and light from exterior sources (e.g., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). The introduction of light can be a nuisance by affecting adjacent areas and diminishing the view of the clear sky depending on the location of the light source and its proximity to nearby light-sensitive areas.

The Project site is located in an area that is developed within the existing SLRWRF and the surrounding land uses are primarily residential and open space. The existing light sources in the SLRWRF include building lights, inner facility lights, streetlights, and security lights. The Project would not introduce additional lighting as it is within already developed areas of the SLRWRF. If additional lighting is required, lighting would comply with Oceanside Municipal Code (OMC) Chapter 39, Light Pollution Regulations, which requires that lighting be appropriately shielded and restricts the use of certain outdoor light fixtures to protect the environment from the effects of light pollution. The proposed Project would not create a new source of light that would affect day or nighttime views in the area.

Glare impacts can occur because of artificial light or sunlight reflecting off a surface. Glare can create discomfort or present safety concerns. The Project involves the installation of equipment to bring the existing Digester 5 to working capacity and other associated infrastructure improvements. Substantial new structures would not be included as part of the Project and therefore new sources of glare would not be produced. Impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.2 Agricultural Resources In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance as depicted on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? **No Impact.**

According to the Farmland Mapping and Monitoring Program (FMMP), the Project site is comprised primarily of Urban and Built-up Land (California Department of Conservation [DOC] 2018). Urban and Built-up Land is defined as land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel and does not contain agricultural uses or areas designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (DOC 2018). As such, the proposed Project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. No impact would occur.

- b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract? **No Impact.**

The Williamson Act applies to parcels within an established agricultural preserve consisting of at least 20 acres of Prime Farmland or at least 40 acres of land not designated as Prime Farmland. The purpose of the act is to preserve agriculture and open space lands by discouraging premature and unnecessary conversion to urban uses. The Project site is not under a Williamson Act Contract and does not consist of sufficient area to be eligible for a Williamson Act Contract. Additionally, the Project site is zoned PS, and the proposed Project is consistent with this zoning. No impact would occur.

- 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))? **No Impact.**

Forest land is land that can support ten-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. Riparian habitat can be considered forest land if it meets these criteria. Timberland is land, other than land owned by the Federal government and designated by the California Department of Forestry and Fire (CAL FIRE) Board of Forestry 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. The Project site is not zoned or used for forest land, timberland, or timberland production. No impact would occur.

- d. Result in the loss of forest land or conversion of forest land to non-forest use? **No Impact.**

As stated above in response to Item 14.2.c, the Project site does not contain forest land. No Impact would occur.

- 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? **No Impact.**

The DOC FMMP categorizes the Project site primarily as Urban and Built-up Land, with no agricultural value. Farmland would not be converted to non-agricultural use by the Project and no forest land is present at the Project site. No impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.3 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Information in this section is based on the air quality calculations prepared by HELIX Environmental Planning Inc. (HELIX: 2023) for the Project. The calculations are attached to this Initial Study as Appendix A.

- a. Conflict with or obstruct implementation of the applicable air quality plan? **No Impact.**

The Project site is located within the San Diego Air Basin (SDAB), which is governed by the San Diego Air Pollution Control District (SDAPCD). The SDAPCD develops and administers local regulations for stationary air pollutant sources within the SDAB, and develops plans and programs to meet attainment requirements for both federal and state ambient air quality standards (National Ambient Air Quality Standards [NAAQS] and California Ambient Air Quality Standards [CAAQS], respectively). The SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the Ambient Air Quality Standards (AAQS) in the SDAB. The current regional air quality plan for San Diego County is SDAPCD's 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County (Attainment Plan; SDAPCD 2020). The Attainment Plan, which would be a revision to the state implementation plan (SIP), outlines SDAPCD's plans and control measures designed to attain the NAAQS for ozone. These plans accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain the standards. Mobile sources are regulated by the US Environmental Protection Agency (EPA) and California Air Resources Board (CARB), and the emissions and reduction strategies related to mobile sources are considered in the Attainment Plan and SIP.

The Attainment Plan and SIP rely on SANDAG growth projections, which are based in part on city and County general plans. As such, projects that propose development consistent with the growth anticipated by the applicable general plan(s) are consistent with the Attainment Plan and applicable portions of the SIP. As described in Item 14.11.b, the Project is located entirely within the SLRWRF, a wastewater treatment facility in the City of Oceanside that treats wastewater to the secondary level by conventional biological treatment followed by clarification as well as treating to the tertiary and advanced level at the recycled water treatment facility and the advanced water purification facility within the SLRWRF. The Project site is zoned as PS and has a general plan land use designation of CI. The Project would not change the current land use and is consistent with existing zoning. Based on the described conformance with applicable land use and zoning criteria, the proposed Project would be in conformance with the City's General Plan and would therefore be consistent with the Attainment Plan and applicable portion of the SIP.

Furthermore, as discussed under Item 14.3.b below, the Project would not generate criteria pollutants emissions that would exceed SDAPCD thresholds during construction or operation. Therefore, the Project would not conflict with the Attainment Plan or SIP. The Project would not conflict with or obstruct implementation of an air quality plan. Impacts would not occur.

- 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? **Less than Significant Impact.**

Construction Emissions

The Project would generate criteria pollutants in the short-term during construction. To determine whether a project would result in emissions that would violate an air quality standard or contribute substantially to an existing or projected air quality violation, a project's emissions are evaluated based on the quantitative emission thresholds established by the SDAPCD.

The Project's criteria pollutant emissions were calculated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.4. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs.

Construction of the Project would result in temporary increases in air pollutant emissions. These emissions would be generated in the form of fugitive dust emissions (particulates matter less than 10 microns in diameter [PM₁₀] and particulates matter less than 2.5 microns in diameter [PM_{2.5}]) and ozone precursor emissions (nitrogen oxides [NO_x] and reactive organic gas [ROG]). Construction is expected to begin June 2024 and extend through April 2025.

Construction emissions calculated using CalEEMod Version 2022.1.1.4 are provided in Appendix A to this Initial Study. The results of the calculations for Project construction are shown in Table 1, *Construction Emissions*. The analysis assessed maximum daily emissions based on the equipment inventory provided in Section 9, Project Background and Description.

Table 1: Construction Emissions

Year	Maximum Daily Pollutant Emissions (pounds per day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2023	1.7	14.1	17.7	<0.1	0.9	0.6
2024	1.7	13.4	17.5	<0.1	0.8	0.6
Threshold	75	250	550	250	100	55
Significant Impact?	No	No	No	No	No	No

Source: CalEEMod (output data is provided in Appendix A)

ROG = reactive organic gas; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides;

PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

As shown in Table 1, emissions of criteria pollutants and precursors related to Project construction would be below the significance thresholds. Therefore, impacts from criteria pollutants and precursors generated during construction would be less than significant.

Operational Emissions

The Project would help the City grow its organics collection program to meet its landfill diversion goals. According to CARB, decomposition of organic matter in landfills results in the off gassing emissions of GHGs, CO, and ROG (CARB 2020). The Project would result in a reduction in landfill emissions by increasing the City's diversion of organic waste. Additionally, the Project proposes a new form of renewable energy production for the City, lessening the City's reliance on fossil fuels for energy generation, thereby resulting in a reduction of emissions from the burning of fossil fuels. Overall, the operations of the Project would result in a net benefit to criteria pollution emissions. Therefore, impacts from criteria pollutants generated during Project operation would be less than significant.

c. Expose sensitive receptors to substantial pollutant concentrations? **Less than Significant Impact.**

Sensitive populations (i.e., children, senior citizens, and acutely or chronically ill people) are more susceptible to the effects of air pollution than are the general population. Land uses that are considered sensitive receptors typically include residences, schools, playgrounds, childcare centers, hospitals, convalescent homes, and retirement homes. The closest existing sensitive receptors to the Project site are the single-family residences to the east and south of the SLRWRF. An analysis of the Project's potential to expose sensitive receptors to pollutants during construction and operation is provided below.

Toxic Air Contaminants

The greatest potential for Toxic Air Contaminant (TAC) emissions would be related to diesel particulate matter (DPM) associated with heavy equipment operations during construction activities. Construction activities associated with the proposed Project would be sporadic, transitory, and short term in nature, lasting approximately 12 months. The closest sensitive receptors to the Project site are the residential units located adjacent to the Project site to the east. The assessment of cancer risk is typically based on a 30-year exposure period. Because exposure to diesel exhaust would be well below the 30-year exposure period, construction of the proposed Project is not anticipated to result in an elevated cancer risk to exposed persons. As such, Project-emission impacts during construction would be less than significant.

As relates to long-term operations, the Project would not notably increase the number or frequency of truck trips or associated emission in the immediate area compared to existing conditions. Therefore, the Project would not result in a notable increase in the concentration of TACs that could adversely affect sensitive populations, including residents living adjacent to the Project site. As such, operational impacts would also be less than significant.

Carbon Monoxide Hotspots

A CO hotspot is an area of localized CO pollution caused by severe vehicle congestion on major roadways, typically near intersections. If a Project increases average delay at signalized intersections operating at Level of Service (LOS) E or F or causes an intersection that would operate at LOS D or better without the Project to operate at LOS E or F with the Project, a quantitative screening is required. The Project would result in minimal traffic during construction and operation. On-road construction traffic would primarily consist of worker commute trips, which would be temporary. Additionally, the operation of the Project is anticipated to result in a maximum of four round trips per day. The increase in daily trips associated with the Project components would be nominal compared to existing traffic conditions on the roadways surrounding the Project. The Project would neither cause new severe congestion nor significantly worsen existing congestion. There would be no potential for a CO hotspot or exposure of sensitive receptors to substantial, Project generated, local CO emissions. The impact would be less than significant.

- d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)? **Less than Significant Impact.**

Minor amounts of odor compounds associated with diesel heavy equipment exhaust and ROG's would be emitted during construction of the Project. The odors of these emissions may be considered objectionable; however, construction emissions would be minor and temporary. Odorous hydrocarbons emissions would dissipate beyond the emissions sources and would only affect receptors in the immediate vicinity of the construction site. Construction-related operations would also be temporary in nature and would cease at the completion of construction. Therefore, construction activities would not result in nuisance odors. Odor impacts associated with construction would be less than significant.

Land uses that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. The Project site's existing land use is a water reclamation plant. Implementation of the proposed Project would not change the land use designation or significantly alter the existing on-site operations such that impacts to sensitive receptors would occur. In addition, the SLRWRF employs a Standard Operating Procedure (SOP) in the form of an odor complaint program to manage odors that have not been captured by the robust odor control existing within the SLRWRF. The SOP includes a phone number for the public to call and a standard procedure that the SLRWRF employees must follow in order to survey and address odor complaints of nearby residents. The SOP procedure additionally requires the employees to monitor the existing odor scrubbers on site to ensure peak operation of the scrubbers. As a result, operational activities would not expose sensitive receptors to substantial odors and impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.4 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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy/ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 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 Game or U.S. Fish and Wildlife Service? **Potentially Significant Unless Mitigated.**

The Project site is located entirely within the existing SLRWRF property, which has been disturbed by construction and operations activities. The site consists of areas completely disturbed and devoid of natural vegetation or extensive animal populations, including any listed, rare, threatened, or endangered species. Plant life on-site is limited to ornamental landscaped areas. Directly east of the Project site are two water storage reservoirs associated with the wastewater treatment usages on the facility. According to vegetation mapping completed by HELIX Environmental Planning Inc. (HELIX) in 2022, adjacent vegetation communities consist of tamarisk scrub, mule fat scrub, southern willow scrub, disturbed habitat, non-native vegetation, Diegan coastal sage scrub, freshwater marsh, and open water (HELIX 2022). The construction of the proposed Project would occur entirely within urban/developed areas surrounding the existing Digester 5 in the northwest corner of the SLRWRF.

There are several special status species that have the potential to occur in the areas surrounding the Project site. The coastal California gnatcatcher is federally listed as threatened and has the potential to occur in the vicinity given that Diegan Coastal Sage Scrub occurs within 300 feet of the Project site. Indirect impacts due to construction noise would occur if the Project's construction were to happen during the coastal California gnatcatcher breeding season (February 15 through August 31). The least Bell's vireo is federally and state listed as endangered and has the potential to occur in the tamarisk scrub, mule fat scrub, and/or southern willow scrub adjacent to the Project site. Indirect impacts due to construction noise could occur if Project construction were to happen during the least Bell's vireo breeding season (March 15 through September 15). Light-footed Ridgeway's rail is federally listed as endangered and has the potential to occur in the vicinity of the Project site within freshwater marsh habitat. Indirect impacts due to construction noise could occur if Project construction were to happen during the light-footed Ridgeway's rail breeding season (February 15 through September 30).

Construction noise and its impact on nesting birds is dependent on the equipment used and the type of work being completed. In addition, topography, line-of-sight, and proximity can influence noise levels from construction equipment. In addition to noise, construction dust, and human presence could disturb nesting birds. Any significant impacts to the coastal California gnatcatcher, light-footed Ridgeway's rail, and least Bell's vireo (either direct impacts to habitat or indirect impacts such as noise) would require conformance with the Federal Endangered Species Act (FESA). Significant impacts to the least Bell's vireo and light-footed Ridgeway's rail would also require compliance with the California Endangered Species Act (CESA). Prior to construction the presence or absence of these species must be determined by protocol level surveys (mitigation measure [MM] BIO-1 through BIO-3). If the results of these survey indicate the species is absent no further action is required. If any of these species is determined to be present, work should be avoided during the breeding season of that species. Should work be required during the breeding season noise attenuation measures may be required during the breeding season of any special status species determined to be present. If the species are found during protocol level surveys, noise attenuation measures would be implemented to bring construction noise levels to either 60 A-weighting decibels (dB(A)) or existing ambient levels (whichever is louder) during the breeding season (MM BIO-4).

Migratory bird species that are native to the United States or its territories are protected under the federal Migratory Bird Treaty Act (MBTA), as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is used to place restrictions on the disturbance of active bird nests during the nesting season. The implementation of MM BIO-5 will reduce impacts to nesting birds and raptors below a level of significance.

Water quality within the riparian habitat to the north of the study area or the potential jurisdictional area to the east could be adversely affected by potential surface runoff and sedimentation during construction, if not controlled. Decreased water quality from these sources would adversely affect vegetation, aquatic animals, and terrestrial wildlife that depend upon these riparian resources. Degraded surface water quality has the potential to be a significant impact during construction. Additionally, the use of petroleum products during construction (i.e., fuels, oils, lubricants) could potentially contaminate surface water and adversely affect biological resources on the Project site. Human activity related to construction could result in the degradation or removal of adjacent vegetation. In addition, littering could occur during the construction process. Construction lighting could also be disruptive if aimed at sensitive habitat areas. These impacts would be significant. With implementation of MMs BIO-6 through BIO-8, impacts would be less than significant.

The proposed Project would not result in the destruction of any natural habitat or displacement of animals and would affect only developed areas. There is potential for the Project's construction to indirectly impact sensitive bird species. Therefore, with the incorporation of MMs BIO-1 through BIO-8, there would be less than significant impact to such species or their respective habitats.

BIO-1: Prior to construction, protocol level surveys must be completed for least Bell's vireo within appropriate habitat on and within 300 feet of the Project site. The surveys will follow the most current U.S. Fish and Wildlife Service (USFWS) protocol, which requires eight surveys at least ten days apart, between April 10 and July 31. Should the species be determined to be absent no restrictions will be placed on the project. Should the species be determined to be present work activities resulting in noise louder than 60 dBA or ambient noise level (whichever is higher) will be avoided during the breeding season, March 15 through September 15. Should such activities need to occur during the breeding season noise attenuation measures outlined in BIO-4 will be required.

BIO-2: Prior to construction, protocol level surveys must be completed for coastal California gnatcatcher within suitable habitat within 300 feet of the Project area. Protocol requires that the three surveys be conducted between February 15 and August 31 at least seven days apart. Surveys must be conducted by a permitted biologist. Should the species be determined to be absent no restrictions will be placed on the project. Should

the species be determined to be present work activities resulting in noise louder than 60 dBA or ambient noise level (whichever is higher) will be avoided during the breeding season February 15 through August 31. Should such activities need to occur during the breeding season noise attenuation measures outlined in BIO-4 will be required.

BIO-3: Prior to construction protocol level surveys must be completed for light-footed Ridgeway's rail in suitable habitat within 300 feet of the Project site. Surveys should be initiated between January 15 and February 1. Four surveys are to be conducted including two (2) passive surveys, followed by two (2) active surveys. Surveys should be spaced at least two (2) weeks apart and should cover the time period from the date of the first survey through the end of March or mid-April. Should the species be determined to be present work activities resulting in noise louder than 60 dBA or ambient noise level (whichever is higher) will be avoided during the breeding season February 15 through September 30. Should such activities need to occur during the breeding season noise attenuation measures outlined in BIO-4 will be required.

BIO-4: If pre-construction protocol surveys determine the presence of sensitive species within 300 feet of construction including coastal California gnatcatcher, least Bell's vireo, or light-footed Ridgeway's rail, then construction shall: (1) occur outside of the respective breeding season; or (2) shall be required to result in noise levels less than 60 dBA or ambient; or (3) not occur until a temporary noise barrier or berm is constructed at the edge of the development footprint and/or around the piece of equipment creating excessive noise to ensure that noise levels are reduced to below 60 dBA or ambient, whichever is greater, in adjacent occupied habitat. The type(s) and location(s) of noise barrier(s) shall be provided to the City along with the associated noise measurements demonstrating compliance with required noise level reductions. The City may also choose to preemptively install noise barrier(s) prior to the start of the breeding season if adjacent habitat is anticipated to be used by nesting sensitive species. Decibel output will be confirmed by a City-approved noise specialist, and weekly monitoring will be conducted by a qualified biologist to ensure that conditions have not changed for the duration of the breeding season of the sensitive species present.

BIO-5: In order to avoid violation of the federal Migratory Bird Treaty Act and California Fish and Game Code, Construction activities shall occur outside of the breeding bird season (September 16 through January 31) to avoid impacts to native nesting birds. If construction must occur during the nesting season, a nesting bird survey shall be completed by a qualified biologist no earlier than one week prior to construction activity during the nesting season (February 1 through September 15) to determine if native birds are nesting on or near the Project area and/or staging area (including a 100-foot buffer). If the surveys conclude no active nesting, work shall resume as planned. If Project activities are delayed or suspended for more than seven days during the breeding season, surveys shall be repeated prior to re-initiating work. If active nests are observed during pre-construction surveys, a suitable avoidance buffer from the nests shall be determined by the qualified biologist based on species, location, and extent and type of planned construction activity. These nests would be avoided until the chicks have fledged and the nests are no longer active, as determined by the qualified biologist. Should removal of suitable nesting habitat (i.e., trees and vegetation) be required, it shall be conducted outside of the breeding bird season to avoid impacts to nesting birds.

BIO-6: Potential impacts from degraded surface water quality shall be minimized to the maximum extent practicable by using Best Management Practices (BMPs) for erosion/sedimentation control during construction. These BMPs may include the use of a bonded fiber matrix, straw mulch, or erosion control blankets/mats to prevent erosion, and/or the installation of such items as silt fences or fiber rolls to catch any eroded material before it can reach the adjacent riparian area.

Potential impacts from equipment maintenance, staging, and dispensing of petroleum products and/or coolant during construction shall be minimized by adding or changing such products, if necessary, only within a designated construction staging area, within the fenced limits of impact, and greater than 100 feet from jurisdictional waters. These designated areas shall be located in previously compacted and disturbed areas to the maximum extent practicable, in such a manner as to prevent any runoff from entering jurisdictional waters

and shall be shown on the Project construction plans. “No fueling” zones shall be designated on construction plans. The addition or change of such products shall occur over plastic tarps, which if contaminated, shall be disposed of in a safe and legal manner. Contractor equipment shall be checked for leaks prior to operation and repaired, as necessary, greater than 100 feet from jurisdictional waters. Furthermore, BMPs such as those listed above for erosion/sedimentation control also shall be used at the staging areas. Disposal or temporary placement of fill, brush, or other debris shall not be allowed in jurisdictional waters or on their banks.

BIO-7: The construction and construction staging area limits shall be clearly delineated with orange construction fencing and silt fencing to help ensure that construction activity remains within the defined limits of work. The limits will be verified by a biologist to help insure there are no impacts to adjacent habitats. Employees shall be required to strictly limit their activities, vehicles, equipment, and construction materials to the fenced Project footprint. The Project site shall be kept as clean of debris as possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the Project site. Pets of Project personnel shall not be allowed on the Project site.

BIO-8: Any night lighting required for the Project shall be selectively placed, shielded, and directed away from conserved biological preserve habitat to the satisfaction of the City.

- 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 Game or U.S. Fish and Wildlife Service? **Potentially Significant Unless Mitigated.**

As stated above, adjacent vegetation communities consist of tamarisk scrub, mule fat scrub, southern willow scrub, disturbed habitat, non-native vegetation, diegan coastal sage scrub, freshwater marsh, and open water (HELIX 2022). Directly east of the Project site are two water storage reservoirs associated with the wastewater treatment usages on the facility that contain riparian habitat. However, the construction and operations of the proposed Project would occur entirely within the urban/developed areas surrounding the exiting Digester 5 in the northwest corner of the SLRWRF. Additionally, MM BIO-7 requires that the construction and construction staging area limits be clearly delineated with orange construction fencing and silt fencing to help ensure that construction activity remains within the defined limits of work. With the incorporation of MM BIO-6 and BIO-7, impacts to riparian habitat or other sensitive natural communities would be less than significant.

- 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? **No Impact.**

No potentially jurisdictional resources would be affected by the construction or operations of the proposed Project. The construction and operations of the proposed Project would occur entirely within urban/developed areas surrounding the exiting Digester 5 in the northwest corner of the SLRWRF. The Project would not have a substantial adverse effect on jurisdictional wetlands or waters. No impact would occur.

- 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? **Potentially Significant Unless Mitigated.**

The construction and operations of the proposed Project would occur entirely within urban/developed areas surrounding the exiting Digester 5 in the northwest corner of the SLRWRF. The Project site has been disturbed and supports no migratory, resident species, nor does the site include wildlife corridors or native wildlife nurseries. However, as discussed in item 14.4.a, there is potential for the Project to indirectly impact sensitive species and native bird species, during breeding season due to construction noise, which could impede the use of nursery sites. Mitigation measures BIO-1 through BIO-5 would address these impacts. Therefore, with the

incorporation of MMs BIO-1 through BIO-5, impacts to wildlife movement or migratory fish or wildlife species would be less than significant.

- e. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy/ordinance? **Potentially Significant Unless Mitigated.**

The City does not have a tree preservation policy pertaining to private property. Additionally, there are no existing trees on the Project site. As discussed in Items 14.4a through 14.4d above, the potentially significant impacts that would result from the Project would be minimized through mitigation measures BIO-1 through BIO-8 in compliance with local, state, and federal policy. With implementation of mitigation measures BIO-1 through BIO-8, the Project would comply with policies related to biological resources. Therefore, with the incorporation of MMs BIO-1 through BIO-8, impacts to local policies or ordinances would be less than significant.

- 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? **Potentially Significant Unless Mitigated.**

The proposed Project is located in the City Subarea Habitat Conservation Plan/Natural Community Conservation Plan area. This Plan addresses how the City of Oceanside will conserve natural biotic communities and sensitive plant and wildlife species under the North County Multiple Habitat Conservation Plan (MHCP) framework. However, the Project site is not located within any pre-approved mitigation areas, wildlife corridor planning zones, off-site mitigation zones, softline preserve areas, or hardline preserve areas. To the northwest, the Project site is adjacent to a wildlife corridor planning zone, a softline preserve, and pre-approved mitigation area. As previously described, the proposed Project would be required to mitigate potential noise impacts to the special-status species identified in the Multiple Habitat Conservation Plan and Oceanside Subarea Plan, (MM-BIO-1 through MM-BIO-4). Compliance with the mitigation requirements set forth in MM-BIO-1 through MM-BIO-8 would ensure that the proposed Project would not conflict with the Multiple Habitat Conservation Plan or Oceanside Subarea Plan. The Project would not conflict with the buffers or habitats established by the MHCP. Therefore, with the incorporation of MMs BIO-1 through BIO-8, impacts to approved local, regional, or state habitat conservation plans would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.5 Cultural Resources				
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5? **Potentially Significant Unless Mitigated.**

Rincon Consultants, Inc. (Rincon) was retained by Woodard & Curran to conduct a Phase I cultural resources study for the Pure Water Oceanside Project, in the City of Oceanside, in August of 2018. The Project site is

within the Area of Potential Effect (APE) analyzed within that report. Although this report was prepared for a separate project, this report is utilized for cultural context of the proposed Project (Rincon 2018).

The entire Project site is located within the disturbed and developed SLRWRF. There are no known historical or cultural resources within the Project site. The Project involves limited ground disturbance associated with foundations for the hydrolysis tank and dewatering facility as well as excavation for pipes. Ground disturbance would occur entirely within the areas that have been previously disturbed during the construction of the SLRWRF.

Twenty-five tribal contacts were provided by the NAHC for the City of Oceanside Pure Water Project, which includes the SLRWRF. The City sent letters to these contacts on January 19, 2023, and, to date, received no responses. The City sent letters to these contacts in order to initiate consultation pursuant to AB 52. If responses are received during the public review process, results of consultation would be included in the Final IS/MND. Given the location nearby of the San Luis Rey River, a feature that would have been attractive for prehistoric habitation, the Project vicinity is considered highly sensitive for cultural resources. However, the Project site has been previously disturbed by the construction and maintenance of existing infrastructure and the possibility of encountering intact subsurface cultural resources is considered low for the proposed Project.

In the unlikely event that archaeological resources are unearthed during Project construction, all earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find in consultation with the City and Consulting Tribe(s). Evaluation of significance for the find may include the determination of whether or not the find qualifies as an archaeological site. Additionally, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. MMs CUL-1 through CUL-8 would require that the City and/or its contractors enter into an agreement with a traditionally and culturally affiliated tribe to formalize protocols and procedures for the protection and treatment of any cultural resources or human remains discovered, retain a Qualified Archaeologist and Luiseño Native American Monitor to oversee earth-disturbing activities, and temporarily suspend all earth disturbing work if cultural resources are discovered during construction. With implementation of MMs CUL-1 through CUL-8, potential impacts resulting in a substantial adverse change to the significance of historical and/or archeological resources would be less than significant.

- b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? **Potentially Significant Unless Mitigated.**

According to the 2018 cultural resources study for the Pure Water Oceanside Project, three cultural resources were recorded within the APE, which the Project site is within. The Rancho Francisco Pico/Whelan Ranch (P-37-011470) site was not relocated within the APE, and no evidence of the site was observed within the Study Area. Prehistoric site P-37-011468 was also not relocated during the May 2018 survey and the mapped location of the site is graded and highly disturbed. The SLRWRF (P-37-037110) was determined not eligible for the National Register of Historic Places (NRHP) or California Register of Historic Resources (CRHR), and therefore no cultural or archeological resources were found within the Project site.

While no archaeological resources have been identified within the Project site, the presence of alluvial deposits and imported fill sediments, along with the presence of cultural resources within close proximity to the Project area, indicate that there may be the potential for buried cultural resources within the Project area. Due to this potential, an archaeological and Native American monitoring program would be implemented during ground-disturbing activities, including excavation, trenching, etc. With implementation of MMs CUL-1 through CUL-8, impacts would be less than significant.

CUL-1: Tribal Cultural Resources Treatment and Tribal Monitoring Agreement. Prior to the issuance of a CUP,], the City's Water Utilities Division shall enter into a pre-excavation agreement with a representative of the traditionally and culturally affiliated tribe, otherwise known as a Tribal Cultural Resources Treatment and Tribal Monitoring Agreement. The City shall submit a copy of the executed agreement with the CUP. The purpose of this agreement shall be to formalize protocols and procedures between the City and the traditionally and culturally affiliated tribe for the protection and treatment of, including but not limited to, Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, traditional gathering areas and cultural items, located and/or discovered through a monitoring program in conjunction with the construction of the proposed Project, including additional archaeological surveys and/or studies, excavations, geotechnical investigations, and all other ground disturbing activities.

CUL-2: Retention of Qualified Archaeologist and Luiseño Native American Monitor. Prior to the issuance of a CUP, the City's Water Utilities Division shall provide a copy of an executed contract to the City's Planning Division providing that a Qualified Archaeologist and Luiseño Native American Monitor have been retained at the City's expense to implement the monitoring program, as described in the pre-excavation agreement.

CUL-3: Monitoring/Evaluation Report. Prior to the issuance of a CUP], the Qualified Archaeologist will have submitted a monitoring report and/or evaluation report, if appropriate, which describes the results, analysis, and conclusions of the archaeological monitoring program (e.g., data recovery plan), along with the Luiseño Native American Monitor's notes and comments, to the City's Planning Division for review and acceptance.

CUL-4: Ongoing Consultation with the Luiseño Native American Monitor. The Qualified Archaeologist shall maintain ongoing collaborative consultation with the Luiseño Native American Monitor during all ground disturbing activities (i.e., grubbing, clearing, grading, cutting, filling, trenching and/or boring). The requirement for the monitoring program shall be noted on all applicable construction documents, including demolition plans [], etc. The City's Water Utilities Division shall not begin any ground disturbing activities until they have provided the City's Planning Division with a schedule of ground disturbing activities and until the Qualified Archaeologist and Luiseño Native American Monitor are on-site to conduct monitoring of all ground disturbing activities.

CUL-5: Pre-Construction Meetings with Qualified Archaeologist and Luiseño Native American Monitor. The City will invite the Qualified Archaeologist and Luiseño Native American Monitor to attend all applicable pre-construction meetings with the General Contractor and/or associated Subcontractors to present the archaeological monitoring program. The Qualified Archaeologist and Luiseño Native American Monitor shall be present on-site full-time during any ground disturbing activities, to identify any evidence of potential archaeological or tribal cultural resources. All fill materials shall be subject to appropriate and reasonable testing or sampling by the Qualified Archaeologist and Luiseño Native American Monitor to assure the recovery of tribal cultural resources.

CUL-6: Unanticipated Discovery of Cultural Resources. The Qualified Archaeologist or the Luiseño Native American Monitor may halt ground disturbing activities if unknown archaeological artifact deposits or cultural features are discovered. Ground disturbing activities shall be directed away from these deposits to allow a determination of potential importance. Isolates and clearly non-significant deposits will be minimally documented in the field, and before ground disturbance proceeds these items shall be given to the Monitoring Tribe so that they may be repatriated at the site on a later date. If the Qualified Archaeologist or Luiseño Native American Monitor determine that the unearthed artifact deposits or cultural features are considered potentially significant, they shall notify and consult with the Consulting Tribe(s) to determine the respectful and dignified treatment of those resources. The avoidance and protection of significant cultural resources and/or unique archaeological resources is the preferable treatment.

If the Qualified Archaeologist recommends and the City requires a data recovery plan, the Consulting Tribe(s) shall be notified and consulted regarding the preparation and scope of any such recovery plan. If the Qualified Archaeologist collects any artifact deposit samples as part of the data recovery plan, the Luiseño Native American monitor shall be present during any testing or cataloging of those resources. Moreover, if the Qualified Archaeologist does not collect any artifact deposit samples that are unearthed during the ground disturbing activities, the Luiseño Native American monitor, may at their discretion, collect said resources and provide them to the San Luis Rey Band for respectful and dignified treatment in accordance with the Tribe's cultural and spiritual traditions.

CUL-7: Return of Uncovered Cultural Resources. Any and all uncovered tribal cultural resources of Native American importance shall be returned to the Consulting Tribe(s), and/or the Most Likely Descendant, if such is identified.

CUL-8: Unanticipated Discovery of Human Remains. As mandated by California Health and Safety Code Section 7050.5, if human remains are found on the Project site during construction or during archaeological work, the person responsible for the excavation, or his or her authorized representative, or the Qualified Archaeologist shall immediately notify the San Diego County Coroner's office by telephone. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. If such a discovery occurs, a temporary construction exclusion zone shall be established surrounding the area of the discovery so that the area would be protected, and consultation and treatment could occur as prescribed by law. By law, the Coroner will determine within two working days of being notified if the remains are subject to his or her authority. If the Coroner determines that the remains are Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will then make a determination as to the Most Likely Descendant. Any Native American remains discovered on the Project site shall be kept in-situ, or in a secure location in close proximity to where they were found, and any analysis of the remains shall only occur on-site in the presence of a Luiseño Native American monitor. At the conclusion of any analysis, any Native American remains shall be repatriated to the Most Likely Descendant for re-burial, in accordance with Public Resources Code 5097.98.

- c. Disturb any human remains, including those interred outside of formal cemeteries? **Potentially Significant Unless Mitigated.**

The Project site is not located within a formal cemetery and is not known to have been a burial ground. In the event that human remains are discovered, the County Coroner shall be contacted. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. All requirements of Health & Safety Code Section 7050.5 and Public Resources Code Section 5097.98 shall be followed. As discussed above, with the incorporation of MM CUL-8, impacts to human remains would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.6 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
b. Conflict with or obstruct a state or local plan for renewable energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? **Less than Significant Impact.**

Energy used for construction would primarily consist of fuels in the form of diesel and gasoline. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction and would include the transportation of construction materials and construction worker commutes. Heavy-duty construction equipment associated with construction activities, haul trucks involved in the removal of construction and demolition materials, and smaller support equipment (such as lighting, air compressors, and pumps) would consume petroleum-based fuel. Construction workers would travel to and from the Project site throughout the duration of construction, presumably in gasoline-powered vehicles.

While construction activities would consume petroleum-based fuels, consumption of such resources would be temporary and would cease upon the completion of construction. The petroleum consumed during Project construction would be typical of similar projects and would not require the use of new petroleum resources beyond those typically consumed in California annually for construction activities. Based on these considerations, construction of the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and the impact would be less than significant.

The operation of the proposed facilitates would utilize comparable amounts of energy as is currently being used. Additionally, the Project proposes a new form of renewable energy production for the City, lessening the City's reliance on fossil fuels for energy generation. Electric production for the Project would amount to 1,439,660 kWh/year, enough to power 221 households or 355 electric vehicles for one full year. Electricity and heat would be generated via the combustion of biogas (from the anaerobic digesters) in an upsized combined heat and power (CHP) facility onsite. The CHP facility would be connected to the SLRWRF's power distribution grid in order to capture and utilize the additional power produced through the organics collection. Prior to combustion, the biogas would be cleaned via scrubbers to effectively remove hydrogen sulfide, moisture, and siloxanes. The CHP facility would be expanded to fully utilize the increased amount of biogas produced as a result of this Project, thus avoiding the need for any biogas flaring. Biogas storage would be evaluated to buffer the fluctuating gas production levels in the digesters and to optimize gas use. The projected biogas production at Project maturity in calendar year 2025, is estimated to be 25,113,088 standard cubic feet per year (SCFy). The renewable electricity produced because of this Project would be utilized to power the City's wastewater, potable reuse, and recycled water treatment facilities which are co-located at SLRWRF. Additionally, heat produced by the CHP would be utilized in the anaerobic digestion processes and would avoid the need to purchase and burn additional natural gas, which is currently used to fire boilers for heating of the digesters. Due to the beneficial nature and size of this Project, there would be a less than significant impact to wasteful, inefficient, or unnecessary consumption of energy resources.

- b. Conflict with or obstruct a state or local plan for renewable energy efficiency? **Less than Significant Impact.**

Several levels of government have implemented regulatory programs in response to reducing GHG emissions, which consequently serve to increase energy efficiency. State agencies, including CARB, California Energy Commission, California Public Utilities Commission, CalRecycle, Caltrans, and the Department of Water

Resources have developed regulatory and incentive programs that promote energy efficiency. Many of the measures are beyond the ability of any future development to implement and are implemented at the utility provider or the manufacturer level.

The City adopted a Climate Action Plan (CAP) in 2019 that includes measures to reduce energy use (City 2019). The proposed Project would be consistent with the City's CAP. Specifically, CAP measures SW1, Implementation of Zero Waste Strategic Resource Plan, and SW2, Beyond 2020-Enhanced Waste Diversion and Organics Waste to Energy/Biosolids Master Plan. The Project would help the City grow its organics collection program and increase the overall solid waste diversion rate consistent with these CAP measures. Therefore, impacts to a state or local plan for renewable energy efficiency would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.7 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 DM&G Pub. 42)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18- 1-B of the 1994 Uniform Building Code, creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 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 DM&G Pub. 42)? **Less than Significant Impact.**

In 1972, the California legislature passed the Alquist-Priolo Earthquake Zoning Act (Act) to help identify areas subject to severe ground shaking. The purpose of this Act is to prohibit the placement of most structures for human occupancy across the traces of active faults; thereby mitigating the hazard of fault ruptures. A fault is classified as active and categorized as within an Alquist-Priolo Earthquake Fault Hazard Zone if movement has occurred within the past 11,000 years. Where such zones are designated, no buildings or structures may be constructed on the trace of the fault. The Project site is not located within a mapped Alquist-Priolo Earthquake Fault Zone (DOC 2021). As such, the probability of fault rupture is low. In addition, the Project would involve limited ground disturbance associated with foundations for the hydrolysis tank and dewatering facility as well as minor excavation for pipes. The proposed facility improvements would be designed in accordance with the minimum seismic design parameters of the California Building Code (CBC; latest edition) and applicable American Society for Testing and Materials (ASTM) International specifications upon which the CBC standards are based. Accordingly, the potential for ground rupture is very low. Impacts would be less than significant.

ii) Strong seismic ground shaking? **Less than Significant Impact.**

The City, like the rest of southern California, is located within a seismically active region as a result of being located near the active margin between the North American and Pacific tectonic plates. While no faults are present at the Project site, Southern California is geologically active and more distant faults have the potential to cause shaking within the Project area. The Newport-Inglewood Rose Canyon Fault Zone is located approximately seven miles west of the Project site, approximately two miles off of the coastline in the Pacific Ocean. Other nearby, active fault zones include Coronado Bank, San Diego Trough, and San Clemente Fault Zones to the southwest; the Palos Verdes Fault Zone to the northwest; and Elsinore, Earthquake Valley, San Jacinto, and San Andreas Fault Zones to the northeast. While ground shaking could occur, compliance with CBC seismic design parameters would ensure earthquake safety and reduce potential impacts. Compliance with the applicable codes would reduce the potential for adverse effects during events of strong seismic ground shaking. Impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction? **Less than Significant Impact.**

Liquefaction is a phenomenon where earthquake-induced ground vibrations increase the pore pressure in saturated, granular soils until it is equal to the confining, overburden pressure. When this occurs, the soil can completely lose its shear strength and enter a liquefied state. The possibility of liquefaction is dependent upon grain size, relative density, confining pressure, saturation of the soils, and intensity and duration of ground shaking. For liquefaction to occur, three criteria must be met: underlying loose coarse-grained (sandy) soils, a groundwater depth of less than approximately 50 feet, and a potential for seismic shaking from nearby large-magnitude earthquake. Ground failure associated with liquefaction can result in severe damage to structures. The Project site is underlain by undocumented fill and alluvium with groundwater found at depths of approximately 8.5 to 17 feet below the existing ground surface. According to the City of Oceanside General Plan Public Safety Element, the Project is within an area where liquefaction has a possibility to occur (City 2002a). The alluvium underlying the site contains clay zones that are compressible, and therefore prone to consolidation settlement under foundation or surcharge loading. The hydrolysis tank and dewatering facility would, however, apply net positive foundation loads that would induce consolidation settlement unless remedial measures are employed. The Project would implement remedial measures such as preloading with vertical drains, deep foundations, vibro-compaction, or vibro-replacement (stone columns). Additionally, deep foundations and soil improvement methods would be employed to reduce the risk of consolidation and settlement due to groundwater fluctuations (Ninyo & Moore 1999).

However, the Project is located upon the existing SLRWRF and is located entirely on the existing asphalt pavement. The Project involves limited ground disturbance associated with foundations for the hydrolysis tank and dewatering facility as well as excavation for pipes. The foundations for the hydrolysis tank and dewatering facility would include measures to avoid consolidation from subterranean, highly compressible soils, as

discussed above. Additionally, mandatory compliance with applicable seismic-safety development requirements would minimize potential effects related to liquefaction. Impacts would be less than significant.

iv) Landslides? **Less than Significant Impact.**

Landslides occur when combinations of steep slopes, water presence, seismic activity, or other geologic conditions lead to slope instability. According to the Landslide Hazards Identification Map No. 35 produced by the DOC, the site is situated within Relative Landslide Susceptibility Area 2. Area 2 is considered to be “marginally susceptible” to slope failures. Area 2 includes gentle to moderately sloping terrain, where slope failure and landslide occurrences are rare. Based on the relatively flat topography on and surrounding the Project site, the potential for slope instability or landslides would be very low.

The Project would involve limited ground disturbance associated with foundations for the hydrolysis tank and dewatering facility as well as minor excavation for pipes. The proposed facility improvements would be designed in accordance with the CBC and City regulations, and applicable regulations related to ground disturbance would be adhered to. The Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Impacts would be less than significant.

b. Result in substantial soil erosion or the loss of topsoil? **Less than Significant Impact.**

The Project includes the installation of equipment to bring the existing Digester 5 to working capacity and other associated infrastructure improvements. The Project would involve limited ground disturbance associated with foundations for the hydrolysis tank and dewatering facility as well as minor excavation for pipes. Topsoil would be minimally impacted underneath the concrete slab in the small areas where foundations would be poured or pipes would be installed. Construction-related impacts would be addressed through conformance with applicable elements of the NPDES Construction General Permit and related City requirements including OMC Chapter 40, Urban Runoff and Discharge Control Ordinance and the City’s Grading Regulation Manual.

The City would be required to prepare a Stormwater Quality Management Plan (SWQMP) as part of the requirements for the CUP. Generally, a SWQMP demonstrates how water quality during and post construction would be maintained in accordance with mandated objectives. Often this is achieved by employing BMPs (see Section 14.10, Hydrology and Water Quality). Many BMPs designed to protect water quality also serve to reduce soil erosion and loss of topsoil. While specific BMPs would be determined during the SWQMP process based on site-specific characteristics (soils, slopes, etc.), typical erosion and sediment control measures that may be required in the Project SWQMP include: (1) grading restrictions for applicable areas during wet weather; (2) preparation and implementation of Construction Site Monitoring Program and Rain Event Action Plan to provide enhanced erosion and sediment control measures prior to predicted storm events; (3) use of erosion control/stabilizing measures such as geotextiles, mats, fiber rolls, hydroseeding, or soil binders; (4) use of sediment controls to protect the site perimeter and prevent off-site sediment transport, including measures such as silt fencing, fiber rolls, gravel bags, temporary sediment basins, street sweeping, stabilized construction access points and sediment stockpiles, and use of properly fitted covers for sediment transport vehicles; (5) compliance with local dust control measures; and (6) implementation of additional BMPs as necessary to provide adequate erosion/sediment control and regulatory conformance.

Implementation of appropriate erosion and sediment control BMPs as part of, and in conformance with the Project SWQMP and related City and NPDES revised waste discharge Permit requirements, associated potential erosion impacts from implementation of the proposed Project would not result in substantial loss of topsoil or erosion. Impacts would be less than significant.

- 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-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? **Less than Significant Impact.**

The Project site is underlain by artificial fill, and alluvium. As described in Items 14.7.a.iii and 14.7.a.iv, landslides and lateral spreading are not likely to occur at the Project site. Due to the potential for liquefaction at the site, specific site preparation and construction recommendations would be adhered to according to compliance with the CBC. Findings would be submitted by the geotechnical engineer to the City. However, the Project would involve limited ground disturbance associated with foundations for the hydrolysis tank and dewatering facility as well as minor excavation for pipes. Liquefaction is determined to be unlikely at the Project site due to the disturbed and built-up nature of the site. The foundations for the hydrolysis tank and dewatering facility would include measures to avoid consolidation from subterranean, highly compressible soils, as discussed above. Mandatory compliance with applicable seismic-safety development requirements, such as CBC, would minimize potential effects related to landslides, lateral spreading, effects from unstable soils, liquefaction, or collapse. Impacts would be less than significant.

- d. Be located on expansive soil, as defined in Table 18- 1-B of the 1994 Uniform Building Code, creating substantial direct or indirect risks to life or property? **Less than Significant Impact.**

Expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, perched groundwater, drought, or other factors and may result in unacceptable settlement or heave of structures or pavements supported on grade. High clay content typically contributes to more expansive soils. Detrimentially expansive soil is defined as clayey soil with an expansion index (EI) of 50 or greater. The Project is underlain by Visalia sandy loam, 0 to 2 percent slopes and artificial fill. Sandy loam soils typically contain between 15 and 20 percent clay content, making it unlikely that expansive soils occur underlying the Project site. The Project site is also underlain by artificial fill (EI between 0 and 90). The use of fill with a low EI and compliance with the CBC would reduce the potential risks associated with expansive soils. Impacts would be less than significant.

- e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water? **No Impact.**

No septic tanks or alternative wastewater disposal systems would be installed as part of this Project. The Project is located within the existing wastewater treatment plant and would not require sewer services. No impact would occur.

- f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? **Potentially Significant Unless Mitigated.**

No known unique geologic features are located at the Project site. Due to the young age of alluvial soils underlying the Project site, there are not likely to be paleontological resources discovered during implementation of the Project. Areas underlain by artificial fill consist of disturbed soils that would not contain paleontological resources. However, the Project would involve limited ground disturbance associated with foundations for the hydrolysis tank and dewatering facility as well as minor excavation for pipes. Although the ground disturbance is minor and the geological significance of the area does not indicate that unique paleontological resources would be found on site, there is a possibility for the Project to come into contact with a unique paleontological feature.

In the unlikely event of unanticipated discovery of paleontological resources, ground-disturbing activities would cease within 100 feet of the find until a qualified archaeologist or paleontologist is able to evaluate the significance of the finding and appropriate course of action, consistent with the guidelines as identified in

mitigation measures GEO-1 and GEO-2 below. With implementation of MMs GEO-1 and GEO-2, impacts to paleontological resources would be less than significant.

GEO-1: Prior to the start of ground disturbing activities, a qualified paleontologist shall conduct pre-construction worker paleontological resources sensitivity training. The qualified paleontologist shall contribute to any construction worker paleontological resources sensitivity training either in person or via a training module. The training shall include information on what types of paleontological resources could be encountered during excavations, what to do in case an unanticipated discovery is made by a worker, and laws protecting paleontological resources. All construction personnel shall be informed of the possibility of encountering fossils and instructed to immediately inform the construction foreman or supervisor if any bones or other potential fossils are unexpectedly unearthed in an area where a paleontological monitor is not present. The City shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

GEO-2: If paleontological resources (i.e., fossils) are discovered during ground-disturbing activities, the implementing agency will immediately be notified, and will ensure that their contractors shall stop work in that area and within 100 feet of the find until a qualified paleontologist can assess the significance of the find and develop appropriate treatment measures. Treatment measures will be made in consultation with the implementing agency.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.8 Greenhouse Gas Emissions				
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? **Less than Significant Impact.**

The Project would help the City grow its organics collection program to meet its landfill diversion goals consistent with AB 341, AB 1826, and SB 1383. According to CARB, decomposition of organic matter in landfills results in the off-gassing emissions of the GHGs methane, nitrous oxide, and carbon dioxide (CARB 2020). The Project would result in a reduction in landfill emissions by increasing the City's diversion of organic waste. Additionally, the Project proposes a new form of renewable energy production for the City, lessening the City's reliance on fossil fuels for energy generation, thereby resulting in a reduction of emissions from the burning of fossil fuels. Overall, the operations of the Project would result in a net benefit to GHG emissions. Therefore, impacts from emissions generated by the Project would be less than significant.

- b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? **Less than Significant Impact.**

There are numerous State plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall State plan and policy is AB 32 and SB 32, the California Global Warming Solutions Act of 2006. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. SB 32 would require further reductions of 40 percent below 1990 levels by 2030. The CAP adopted by the City in 2019

provides a path for the City to achieve these targets. The proposed Project would be consistent with the City's CAP (City 2019). Specifically, CAP measures SW1, Implementation of Zero Waste Strategic Resource Plan, and SW2, Beyond 2020-Enhanced Waste Diversion and Organics Waste to Energy/Biosolids Master Plan. The Project would help the City grow its organics collection program and increase the overall solid waste diversion rate consistent with these CAP measures. Additionally, the Project proposes a new form of renewable energy production for the City, lessening the City's reliance on fossil fuels for energy generation, consistent with measure SW1. Therefore, the Project would not generate GHG emissions that would conflict with the City's CAP or an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.9 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? **Potentially Significant Unless Mitigated.**

Materials and waste are generally considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode, or generate vapors when mixed with water (reactivity). The term "hazardous material" is defined in the State Health and Safety Code (Chapter 6.95, Section 25501[o]) as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment. Hazardous waste is defined as any hazardous material that is abandoned, discarded, or recycled, as defined in the State Health and Safety Code (Chapter 6.95, Section 25125). The transportation, use, and disposal of

hazardous materials, as well as the potential releases of hazardous materials to the environment, are closely regulated through many state and federal laws.

Construction that would be reasonably foreseeable with implementation of the proposed Project would require the transport, use, and disposal of materials that are typically associated with construction activities, such as diesel fuels, hydraulic liquids, oils, solvents, and paints. The transport, use, and disposal of hazardous materials and/or wastes would be conducted in accordance with applicable federal and state laws. Additionally, during Project construction and operation, implementation of established safety practices, procedures, and reporting requirements for hazardous materials would be followed to further reduce any risks.

In addition, implementation of the proposed Project would require implementation of a SWQMP to address the use of hazardous materials and the potential discharge of contaminants including construction-related hazardous wastes through the installation of appropriate BMPs. While specific BMPs would be determined during the SWQMP process, the suite of BMPs would include standard industry measures and guidelines contained in Stormwater Best Management Practices Construction Handbook (California Stormwater Quality Association 2019). Based on implementation of appropriate BMPs, hazardous material impacts related to construction activities would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Operation of the proposed Project would include the storage and use of hazardous materials and wastes that could include limited use and limited quantities of cleaning and degreasing solvents, sodium hypochlorite, lime, antiscalant, and other materials used in the anaerobic digestion process. Storage, transport, use, or disposal of any hazardous material during operation of the Project would occur in compliance with the applicable regulations. However, because of the expanded chemical use and storage on the SLRWRF site, MM HAZ-1 should be implemented to reduce potential impacts associated with chemical handling and spills. Based on the generally small quantities of hazardous materials to be used on site, and the proper storage, use, and disposal of all hazardous materials, no reasonably foreseeable upset or accident conditions involving release of hazardous materials to the environment are expected. With the incorporation of the MM HAZ-1, impacts to the public or the environment through the routine transport, use, or disposal of hazardous materials would be less than significant.

HAZ-1: Hazardous Materials Business Plan and Control Plan. The City shall update its Hazardous Materials Business Plan for the SLRWRF to address use of hazardous materials and chemicals during the anaerobic digestion process, as well as for buildings that store hazardous materials and chemicals. Any necessary updates to standard operating procedures that the SLRWRF shall be incorporated into operations manuals.

The City shall also require its construction contractor to develop and implement a Hazardous Materials Control Plan that addresses control measures for transport, storage, and use of hazardous materials during construction, as well as a project-specific contingency plan for hazardous materials spills and waste operations. The Hazardous Materials Control Plan shall also address response actions should contaminated soil be encountered during Project construction, as well as a project-specific contingency plan for treatment and/or disposal of contaminated soils.

- 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? **Potentially Significant Unless Mitigated.**

As discussed above in response to Item 14.9.a, limited quantities of hazardous materials such as gasoline, diesel, oils, and lubricants may be required to operate the construction equipment. Construction activities would be short-term, and the use of these materials would cease once construction is complete. The hazardous substances used during construction would be required to comply with existing federal, state, and local regulations

regarding the use and disposal of these materials. In the event of an accidental release during construction, containment and clean up would be conducted in accordance with existing applicable regulatory requirements.

Operation of the proposed Project would include the storage and use of hazardous materials and wastes that could include limited use and limited quantities of cleaning and degreasing solvents, sodium hypochlorite, lime, antiscalant, and other materials used in the anaerobic digestion process. Storage, transport, use, or disposal of any hazardous material during operation of the Project would occur in compliance with the applicable regulations. However, because of the expanded chemical use and storage on the SLRWRF site, MM HAZ-1 should be implemented to reduce potential impacts associated with chemical handling and spills. With the incorporation of the MM HAZ-1, impacts to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.

- c. 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 nearest school is Foussat Elementary School, approximately 0.8 miles south of the Project site. No existing or proposed schools are within a quarter mile of the Project site. No impact would occur.

- d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? **Less than Significant Impact.**

Government Code 65962.5 requires that the Department of Toxic Substances Control (DTSC), the Department of Health Services (DHS), the State Water Resources Control Board (SWRCB), and any local enforcement agency, as designated by Section 18051, Title 14 of the California Code of Regulations, identify and update annually a list of sites that have been reported to have certain types of contamination. The DTSC EnviroStor database and the SWRCB Geo Tracker databases were consulted to identify if the Project site or surrounding nearby properties are on a list compiled pursuant to Government Code 65962.5 (DTSC 2022; SWRCB 2022).

No sites were recorded in EnviroStor at the Project site or within a 1,000-foot radius. One nearby site was recorded in GeoTracker, the Shell Station, at 660 Douglas Drive, located approximately 2,700 ft west of the SLRWRF. The site is a leaking underground storage tank (LUST) cleanup site, where the media of concern was soil. The site has been closed as of June 2009. As such, the LUST site would not create a significant hazard to the Project. Impacts would be less than significant.

- 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 safety hazard or excessive noise for people residing or working in the project area? **Less than Significant Impact.**

The site is located approximately 2.47 miles northeast of the Oceanside Municipal Airport but is not within the planning area for the Oceanside Municipal Airport Land Use Compatibility Plan (ALUCP; Airport Land Use Commission 2010). The Project site is located outside of the northeastern edge of the Airport Influence Area (AIA), as mapped in the ALUCP. Additionally, the site is outside of the Noise Exposure Range and Safety Zone. There would not be a safety hazard or excessive noise exposure due to the airport for people working at the Project site. Impacts would be less than significant.

- f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? **Less than Significant Impact.**

The Project could impact emergency access during construction of the Project, due to heavy construction vehicles that could interfere with emergency response to the site or emergency evacuation procedures in the event of an emergency (e.g., vehicles traveling behind the slow-moving truck). However, such trips would be brief and infrequent.

Once operational, Project access would be via North River Road. Traffic would be limited to 8 ADT, as there would be no additional employees required at the site as a result of the Project, so the trips would consist of the necessary deliveries to the facility. Other trips would be related to the existing facility workers, deliveries, and occasional visitors. The traffic generated by the Project would not interfere with emergency response or evacuation plans.

In relation to an adopted emergency response plan, the City has an Emergency Operations Plan, which provides a system of coordination for agencies during a disaster (City 2016). The City is also a participating agency within the San Diego County Operational Area Emergency Plan, which sets forth the framework for the County of San Diego and participating agencies to use in performing emergency functions. These plans are programmatic and administered at a City and regional level, there are no components of the proposed Project that would disrupt the effective implementation of these plans. At a Project level, the Project would adhere to the required municipal codes, including those that have been adopted to enact the CBC and the California Fire Code (CFC) to maintain adequate emergency access and response. Neither operation or construction of the Project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

- g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? **Less than Significant Impact.**

Further discussion of wildfire impacts is included in Section 14.20.

CAL FIRE classifies lands according to whether a very high fire hazard is present so that public officials can identify measures that will slow the rate of fire spread and reduce the intensity of uncontrolled fire through vegetation management and building standards. A very high or high fire hazard severity zone is designated based upon a combination of fuels, terrain, weather, and other relevant factors. The Project site is in a Local Responsibility Area (LRA) for which CAL FIRE has prepared recommended zones. According to the Very High Fire Hazard Severity Zones in LRA Map for Oceanside, the Project site is not located within a Very High Fire Hazard Severity Zone (VHFHSZ; CAL FIRE 2009). In addition, the proposed Project would adhere to the CFC, which further reduces the risk of fire. Therefore, the proposed Project is not anticipated to expose people or structures to wildland fires. Impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.10 Hydrology and Water Quality				
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;				
iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;				
or				
iv) Impede or redirect flood flows?				
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? **Less than Significant Impact.**

The Project is located within the San Luis Rey River watershed. The San Luis Rey River has its headwaters in the Palomar Mountains and the Hot Springs Mountains and flows in a westerly direction where it drains to Lake Henshaw. Major tributaries of the river include Agua Caliente Creek, Buena Vista Creek, West Fork San Luis Rey River, Pauma Creek, Keys Canyon Creek, Moosa Creek and Pilgrim Creek. The San Luis Rey River is an ephemeral river characterized by peak flows during the months of December through March and low to no flows from April to November. Pilgrim Creek, a tributary to San Luis Rey River, is the local receiving water adjacent to the Project site.

Other surface water bodies identified in the area include Guajome Lake, a small manmade lake located in Guajome Regional Park, primarily used for recreational purposes; Foss Lake, an inland salt water wetland; Whelan Lake, bordered by Camp Pendleton and adjacent to the SLRWRF, a manmade body of water that is currently used as a sanctuary for migratory and resident waterfowl; and Talone Lake, a habitat refuge for migrating wildlife.

Modifications to the Project site would not alter the hydrological patterns of the site. There is the potential for water pollutants to be generated in the short-term during construction activities and in the long term due to the permanent changes to the site. Construction related pollutants may include loose soils, liquid and solid construction materials and wastes, and accidental spills of concrete, fuels, and other materials.

As part of the Clean Water Act Section 402, the EPA established regulations under the NPDES program to control direct storm water discharges from construction activities disturbing one acre or more of land. In California, the SWRCB administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The Project construction would not require a NPDES Permit as the ground disturbance proposed would be under one acre of land. However, the City also maintains an NPDES Permit (Order No. R9-2011-0016) issued by the San Diego RWQCB for waste and brine discharges from the SLRWRF to the OOO. Therefore, the Project would be required to update the Outfall NPDES Permit through a revised waste discharge permit. As part of the requirements under the CUP, the Project would be required to prepare

a SWQMP. The SWQMP would list the required permanent, post-construction, source control, site design, and structural stormwater BMPs that would be implemented by the City to minimize water quality impacts. Such BMPs would include but not be limited to general housekeeping practices such as sweeping up of site debris, proper waste disposal procedures, use of tarps on any stockpiles, containment of building materials, and inspection for leaks and spills from construction vehicles. With implementation of the SWQMP, potential water quality impacts and associated compliance with the region's MS4 permit would be less than significant.

As discussed above, the Project would result in less than one acre of ground disturbance and would therefore not be required to obtain a NPDES General Permit for Discharges of Storm Water Associated with Construction Activity - Construction General Permit (Order 2009-0009-DWQ). The Project would divert all stormwater to the existing secondary effluent ponds located on the SLRWRF. As a result, there would be no discharge of stormwater from the site. Less than significant impacts to the water quality of surface waters would be expected.

The proposed Project would not utilize, nor would it affect groundwater. The SLRWRF currently injects advanced purified effluent into the groundwater basin for recharge, under an NPDES permit from the San Diego RWQCB and the Department of Drinking Water in accordance with all Title 22 treatment and monitoring requirements. The Project would update the Outfall NPDES Permit through a revised waste discharge permit, and existing conditions for groundwater quality and recharge would remain the same with the implementation of the proposed Project. Impacts would be less than significant.

- b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? **No Impact.**

Please refer to Section 14.10.a. The proposed Project would not utilize, nor would it affect groundwater. There would be no impact.

- 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; **Less than Significant Impact.**

Construction of the proposed Project would not alter the existing drainage patterns on the Project site and the SLRWRF facility. The improvements associated with bringing Digester 5 to operational status would not increase impervious surfaces on the site. Additionally, in compliance with the region's MS4 Permit (see discussion above), all stormwater generated on site will be managed in accordance with a SWQMP that contains BMPs to control pollutants in storm water discharges from the Project site. Implementation of BMPs will help minimize any potential water quality impacts such as erosion and sedimentation to downstream surface waters. Impacts would be less than significant.

- ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; **Less than Significant Impact.**

The Project would not alter the amount of runoff due to the addition of impervious surfaces and would maintain the general drainage pattern existing on the SLRWRF. Continuous use and operation of the SLRWRF including the proposed Project would not create or contribute runoff water that would exceed the capacity of existing storm water drains on the plant site nor alter the drainage pattern of the SLRWRF. Construction of the proposed Project is not expected to generate substantial increases in new storm water runoff at the SLRWRF given the lack of increases in impervious surface area expected. Impacts would be less than significant.

- iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or **Less than Significant Impact.**

As discussed above in Item 14.10.c.ii, continuous use and operation of the SLRWRF including the proposed Project would not create or contribute runoff water that would exceed the capacity of existing storm water drains on the plant site nor alter the drainage pattern of the SLRWRF. Additionally, the Project would implement BMPs in accordance with a SWQMP. Therefore, the Project would not contribute runoff that would exceed capacity of storm water systems or increase the amount of polluted runoff. Impacts would be less than significant.

- iv) Impede or redirect flood flows? **Less than Significant Impact.**

The Project site is not located within a 100-year floodplain according to the Federal Emergency Management Agency (FEMA; FEMA 2018). The Project would not alter drainage patterns, nor would it impede or redirect flood flows. Impacts would be less than significant.

- d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? **Less than Significant Impact.**

The Project site is located over 4.8 miles inland and is not at risk of inundation during a tsunami event. Seiches result from a mostly enclosed body of water being impacted by a strong geologic event, which would be a lagoon in the case of the City of Oceanside. The risk of a seiche in the City is minimal and would not impact the Project site due to its distance from the lagoons. As discussed above, the Project is not within a floodplain. According to the National Flood Hazard Map prepared by the FEMA, the Project site is located within Zone X, which is defined as an area of minimal flood hazard (FEMA 2018). As discussed in Section 14.9, the proposed Project would not store substantial hazardous materials onsite and would comply with regulations for the proper storage and use of such materials. The Project would not be expected to be inundated or release pollutants if inundated. Impacts would be less than significant.

- e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? **Less than Significant Impact.**

The San Diego Basin Plan is the Water Quality Control Plan for the Project site. The San Diego Basin Plan allows discharges to be disclosed within the NPDES permit application submitted to the SDRWQCB, which the City would submit. The permit would include limitation on the quantity and quality of discharges, compliance requirements with state and federal laws, and a monitoring program. Compliance with permit conditions would reduce impacts to water quality below a significant level.

The Project site is located in the Lower San Luis Rey Valley Groundwater Subbasin, which is not a medium or high priority basin and does not require a Groundwater Sustainability Plan (GSP) per the Sustainable Groundwater Management Act. As there is no GSP for the Project site, no impacts would occur related to sustainable groundwater management plans. Impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.11 Land Use and Planning				
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Physically divide an established community? **No Impact.**

The physical division of an established community typically refers to the construction of a linear feature, such as an interstate highway or railroad tracks, or removal of a means of access, such as a local road or bridge that would impact mobility within an existing community or between a community and outlying area. The proposed Project would provide associated improvements to the existing facilities on the SLRWRF to bring Digester 5 to operational capacity. The Project would be entirely within the existing facility and would be consistent with the existing uses on the facility. Access to the Project site would be provided by the existing driveway off of North River Road. Construction of the Project would not divide surrounding communities or disrupt their existing mobility. No impact would occur.

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? **Less than Significant Impact.**

The Project is located entirely within the SLRWRF, a wastewater treatment facility in the City that treats wastewater to the secondary level by conventional biological treatment followed by clarification, as well as treating to the tertiary and advanced level at the recycled water treatment facility and the advanced water purification facility within the SLRWRF. The Project site is zoned as Civic/Public (PS) and has a general plan land use designation of Civic Institution (CI) (City 2002b). The Project would not change the current land use and is consistent with existing zoning. The Project would implement BMPs during construction to minimize noise impacts to surrounding residences and would comply with local codes for operational noise, as noted in Section 14.13. As described in Section 14.4, the Project would not conflict with local policies pertaining to biological resources. Impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.12 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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? **No Impact.**

Mineral resources are commonly defined as a concentration or occurrence of natural, solid, inorganic, or fossilized organic material in or on the earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. Mineral resources can be categorized into three classes: fuel, metallic, and non-metallic. Fuel resources comprise coal, oil, and natural gas. Metals include such resources as gold, silver, iron, and copper. Lastly, non-metal resources include industrial minerals and construction aggregate. Industrial minerals include boron compounds, rare-earth elements, clays, limestone, gypsum, salt, and dimension stone. Construction aggregate includes sand and gravel, and crushed stone.

The Surface Mining and Reclamation Act of 1975 (SMARA) is the primary regulator surface mining in the state. The act requires the state geologist (California Geological Survey) to identify mineral deposits in the state and to classify them based on their significance. SMARA defines a mineral deposit as a naturally occurring concentration of minerals in amounts or arrangement that under certain conditions may constitute a mineral resource. The concentration may be of value for its chemical or physical characteristics. The classification of these mineral resources is a joint effort of the State and local governments. It is based on geologic factors and requires that the State Geologist classify the mineral resources area as one of the four Mineral Resource Zones (MRZs), Scientific Resource Zones (SZs), or Identified Resource Areas (IRAs), described below:

- MRZ-1: A Mineral Resource Zone where adequate information indicates that no significant mineral deposits are present or likely to be present.
- MRZ-2: A Mineral Resource Zone where adequate information indicates that significant mineral deposits are present, or a likelihood of their presence and development should be controlled.
- MRZ-3: A Mineral Resource Zone where mineral resource significance is undetermined.
- MRZ-4: A Mineral Resource Zone where there is insufficient data to assign any other MRZ designation.
- SZ Areas: Containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance shall be classified in this zone.
- IRA Areas: County or State Division of Mines and Geology Identified Areas where adequate production and information indicate that significant minerals are present.

The Project site is located entirely within the existing SLRWRF and would not impact areas outside of the facility. The Project site is mapped as MRZ-4 and is not located in the mapped mineral resource areas of the Land Use Element (DOC 1996; City 2002b). Therefore, the significance of mineral deposits is undetermined however, according to the Land Use Element of the City's General Plan, mining operations are restricted to the San Luis Rey River Basin, South Coast Asphalt Rock Quarry, and Crystal Silica Company, which are areas known to contain mineral deposits. Therefore, the Project would not 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 would occur.

- 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? **No Impact.**

As discussed above in Item 14.12.a, no mineral resources are known to be at the Project site. The proposed Project would not 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 would occur.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.13 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

All noise level or sound level values presented herein are expressed in terms of decibels (dB), with A-weighting (dBA) to approximate the hearing sensitivity of humans. Time-averaged noise levels are expressed by the symbol L_{EQ} , with a specified duration. Noise-sensitive land uses (NSLUs) are land uses that may be subject to stress and/or interference from excessive noise and generally include residences, hospitals, schools, hotels, resorts, libraries, sensitive wildlife habitat, or similar facilities where quiet is an important attribute of the environment. Land uses in which groundborne vibration could potentially interfere with operations or equipment, such as research, manufacturing, hospitals, and university research operations are considered “vibration sensitive.”

- 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? **Potentially Significant Unless Mitigated.**

Construction Noise

Pursuant to the City’s Noise Control Ordinance (OMC Chapter 38) and the City’s General Plan Noise Element, construction activities would be limited to daytime hours (7:00 a.m. to 6:00 p.m. Monday through Friday, and from 7:00 a.m. 6:00 p.m. on Saturday) for work that is inherently noise producing, (such as concrete and grout pours and activities of similar noise-producing nature) for the duration of construction. No work is permitted on Sundays and Federal holidays. Moreover, the General Plan Noise Element states that it shall be unlawful for any person to operate construction equipment at a level in excess of 85 dBA at 100 feet from the source.

Construction-noise impacts from the Project could result from noise generated by equipment involved with the installation of the infrastructure improvements, including the hydrolysis tank, boiler, heat exchanger, mixing system, and improvements to the CHP. Construction equipment is assumed as normal equipment needed for a project of this nature. The loudest pieces of equipment from this type of construction would include excavators and jackhammers. According to the Roadway Construction Noise Model (RCNM; U.S. Department of Transportation [DOT] 2008), at 100 feet, an excavator would create an average noise level of 70.7 dBA L_{EQ} and a jackhammer would generate an average noise level of 75.9 dBA L_{EQ} . Given that the loudest equipment would be below 85 dBA at 100 feet, construction noise would not exceed standards set forth in the General Plan Noise Element or Noise Control Ordinance. Furthermore, the nearest noise-sensitive land uses would be

the single-family residences off of Malibu Point Way, located approximately 1,160 feet southeast of the Project site. At this distance, noise levels would not exceed existing conditions.

The distance to the nearest potential habitat for sensitive bird species is located approximately 170 feet away from the noise source. Based on this distance, the Project may create noise levels that exceed the 60 dBA L_{EQ} threshold for sensitive avian species or ambient levels (whichever is louder) at the nearest sensitive habitat. To avoid construction noise impacts to sensitive species, MMs BIO-1 through BIO-4, and NOI-1 would be implemented.

During construction, truck traffic would generate noise along haul routes that could subject noise-sensitive land uses located along the haul routes to increased noise levels. Construction would involve concrete delivery and/or soil export truck trips, as well as materials delivery trips. Truck noise depends upon vehicle speed, load, terrain, and other factors. The effects of construction-related truck traffic would depend on the level of background noise already occurring at a particular receptor site. In quiet environments, truck noise would be more noticeable than where the existing ambient noise level is high. Because the number of daily truck trips during construction is currently unknown, impacts associated with construction truck traffic, specifically to residential land uses along North River Road, are considered potentially significant. MM NOI-1 would reduce the potential impacts to a less-than-significant level because it requires use of best available noise control techniques on all construction trucks. Therefore, with the implementation of MMs BIO-1 through BIO-4, and NOI-1 construction noise impacts would be less than significant.

Operational Noise

Chapter 38 (Noise Control) of the City of Oceanside Municipal Code is intended to prohibit unnecessary, excessive, and annoying noise. The Noise Control Ordinance sets forth the exterior property line sound level limits for different land uses during the day (7:00 am to 9:59 pm) and night (10:00 pm to 6:59 am). The limits are generally as shown in Table 2, *City of Oceanside Municipal Code Sound Limits by Land Use*. In the event where property lines form the joint boundary between two base district zones, the sound level limit is the mean of the limit applicable to each of the two zones.

Table 2: City of Oceanside Municipal Code Sound Limits by Land Use

Land Use	Noise Limit 7:00 am to 9:59 pm dBA 1-hour L_{EQ}	Noise Limit 10 pm to 6:59 am dBA 1-hour L_{EQ}
Residential	50 to 55	45 to 50
Commercial	65	60
Industrial	70	65
Agricultural and Open Space	50	45
Downtown	65	55

Source: City of Oceanside Noise Control Ordinance, 1990

Section 38.15 of the Noise Control Ordinance provides exemptions for construction, maintenance or other public improvement activities by government agencies or public utilities. Specifically, this section permits the authorization of construction that exceeds the noise, duration, or hour of work limits upon determination that the authorization furthers the public interest.

The Project's proposed below-ground facilities such as the conveyance pipelines are not expected to result in a permanent increase in noise. The operation of the proposed above-ground facilities, including the Digester 5, dewatering facility, hydrolysis tank, and CHP facility, would permanently generate noise. Based on the current stage of facility planning, specific noise levels cannot be calculated. Therefore, it is conservatively assumed that

noise levels from Project operations could exceed the applicable property line noise limit(s) and/or the applicable noise limit for avian species (60 dBA L_{EQ} or ambient, whichever is greater) at nearby habitat. As such, impacts are considered potentially significant and MM NOI-2 would be required.

As discussed in Item 14.17.a, the Project is estimated to generate up to 8 ADT that would access the site via North River Road. According to SANDAG's Transportation Forecast Information Center (TFIC), the section of North River Road west of Playa Del Ray Avenue carries approximately 200 ADT and the section of North River Road east of Playa Del Ray Avenue carries approximately 2,900 ADT (SANDAG 2021). In general, in order to generate a 3-dBA increase in traffic noise (which is considered the human threshold for perception of a noise increase), traffic volumes on a roadway would have to double. The Project's addition of 8 ADT would not double traffic volumes on North River Road. Therefore, operational noise impacts would be less than significant.

NOI-1: Noise and Vibration Control During Construction. The City shall incorporate into contract specifications the following noise and vibration control measures:

- Prior to construction, written notification to residents within 500 feet of the proposed facilities undergoing construction shall be provided, identifying the type, duration, and frequency of construction activities. Notification materials shall also identify a mechanism for residents to register complaints with the City if construction-related noise impacts should occur.
- Impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction will be hydraulically or electrically powered whenever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust would be used. This muffler can lower noise levels from the exhaust by up to 10 dBA. External jackets on the tools themselves would be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures will be used such as drilling rather than impact equipment whenever feasible.
- Comply with compaction standards for backfill. Vibration generated during soil compaction may be minimized by using a small compactor.
- During sheetpile driving for trench excavation, use the following measures: pushing the sheetpile in as far as possible with the excavator CAT before using the vibrator; using a small, hand-operated vibratory hammer or one with a different operational frequency to further reduce the vibration potential; flooding the soils before tamping with the vibrator; and/or operating the vibratory CAT with "throttling" when a vibrator must be used.
- All equipment and trucks used for Project construction shall use the best available noise control techniques (including mufflers, use of intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) and be maintained in good operating condition to minimize construction noise impacts. All internal combustion engine-drive equipment shall be fitted with intake and exhaust mufflers which are in good condition.
- Unnecessary idling of internal combustion engines shall be prohibited. In practice, this would mean turning off equipment if it would not be used for five or more minutes.
- Stationary noise-generating construction equipment, such as air compressors and generators, shall be located as far as possible from homes and businesses.
- Staging areas shall be located as far as feasibly possible from sensitive receptors.

- For construction activities anticipated to generate noise above local standards even with the noise attenuation measures listed above, timing and length of construction activities generating excessive noise shall be adjusted to maintain average or impulsive noise levels within acceptable limits, as set forth in applicable local regulations.

NOI-2: Noise and Vibration Minimization during Operation. The City shall design the proposed equipment at the Project site to ensure that operational noise levels at (1) the property line do not exceed the City's Noise Control Ordinance standards and (2) sensitive habitat do not exceed 60 dBA L_{EQ} or ambient noise levels, whichever is greater. Once specific Project plan information is available, an additional noise analysis shall be conducted to assess noise generation at property lines and habitats. The analysis shall be prepared by a qualified acoustician and shall disclose noise-generating equipment, noise levels, and on-site features. If it is determined that noise levels would exceed the applicable standards, noise reduction for the proposed Project components shall be demonstrated on the design plans prior to construction. Designs shall be reviewed by a qualified acoustician to ensure compatibility with the aforementioned noise standards. Measures to reduce noise levels to below a level of significance may include, but are not limited to, the following:

- Noise-generating facilities shall be located as far away from sensitive receptors as possible.
- Shielding and other specified measures as deemed appropriate and effective by the design engineer would be incorporated into the design to comply with performance standards.
- Project equipment shall be outfitted and maintained with noise-reduction devices such as equipment closures, fan silencers, mufflers, acoustical louvers, vents, noise barriers, and acoustical panels to minimize operational noise.
- The orientation of any necessary acoustical exits shall always be facing away from nearby sensitive receptors.
- Berms or noise walls shall be incorporated, where appropriate, to absorb and/or redirect noise away from nearby sensitive receptors.
- Contractors shall test mechanical devices that generate vibration after installation to confirm that the equipment has been properly installed, aligned and connected, is free of defects and excessive noise and vibration. If the testing indicates noncompliance with the City's noise ordinance, additional measures (e.g., installation of sound proofing material inside the wall; installation of sound dampening material around the valves) shall be taken until compliance can be demonstrated.

b. Generation of excessive groundborne vibration or groundborne noise levels? **Less than Significant Impact.**

The proposed facilities are not expected to generate ground borne vibrations or noise levels during Project operations. During construction, the primary potential on-site sources of vibration would be a vibratory pile driver (for soil improvements) and a vibratory roller (for soil compaction as part of the foundation and paving construction), both of which are expected to be used approximately 1,160 feet away from the nearest off-site occupied residence. The City does not state specific standards in the General Plan or Municipal Code for vibration. Caltrans specifies standards for construction vibration of the "strongly perceptible" 0.1 inch per second peak particle velocity (PPV) for human annoyance potential and 0.5 inch per second PPV for damage to residential structures (Caltrans 2020).

A vibratory pile driver creates approximately 0.650 inch per second PPV at a distance of 25 feet (Caltrans 2020). A 0.650 inch per second PPV vibration level would equal 0.01 inch per second PPV at a distance of 1,160 feet.⁷ A vibratory roller creates approximately 0.210 inch per second PPV at a distance of 25 feet (Caltrans 2020). A 0.210 inch per second PPV vibration level would equal 0.003 inch per second PPV at a distance of 1,160 feet.⁸ Vibration levels from both the vibratory pile driver and vibratory roller would be lower than the structural damage impact to residential structures of 0.5 inch per second PPV and the “strongly perceptible” impact for humans of 0.1 inch per second PPV. Therefore, impacts associated with the construction vibration 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 would be subject to some distant aircraft noise. The nearest airport is Oceanside Municipal Airport, located approximately 2.38 miles to the southwest and the airfield associated with MCB Camp Pendleton, located approximately 4 miles to the northwest. According to the Oceanside Municipal ALUCP, the Project site is not within the airport’s 60 Community Noise Equivalent Level (CNEL) noise impact zone (Airport Land Use Commission 2010). Similarly, the Project site is not located within a noise impact zone for MCB Camp Pendleton (Airport Land Use Commission 2008). Therefore, at these distances, no effects related to airport noise would occur at the Project site, and no impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.14 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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)? **No Impact.**

Growth inducing impacts are caused by those characteristics of a project that foster or encourage population and/or economic growth, such as new housing (direct) or creation of a new job center or the expansion of infrastructure to increase capacity (indirect). Implementation of the proposed Project would not directly induce population growth due to the fact that no new housing or businesses are proposed, nor would the

⁷ Equipment PPV = Reference PPV * (25/D)ⁿ (inches per second), where Reference PPV is PPV at 25 feet, D is distance from equipment to the receiver in feet, and n = 1.1 (the value related to the attenuation rate through the ground); formula from Caltrans 2020.

⁸ Equipment PPV = Reference PPV * (25/D)ⁿ (inches per second), where Reference PPV is PPV at 25 feet, D is distance from equipment to the receiver in feet, and n = 1.1 (the value related to the attenuation rate through the ground); formula from Caltrans 2020.

implementation of the Project require additional employees at the SLRWRF. The Project consists of the installation of equipment to bring the existing Digester 5 to working capacity and other associated infrastructure improvements. The proposed Project would not induce unplanned growth. No impact would occur.

- b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? **No Impact.**

The Project consists of the installation of equipment to bring the existing Digester 5 to working capacity and other associated infrastructure improvements. The Project would not displace homes or people. No impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.15 Public Services				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Fire Protection? **Less than Significant Impact.**

The Oceanside Fire Department (OFD) provides fire protection services to the Project site. Station 5 is the closest station to the Project site, located approximately 1.8 miles west of the site at 4841 N River Rd. OFD achieved a class 2 rating (the second-best rating) from the Insurance Service Office in 2020, which indicates that they are well-equipped to manage fires in the community (City 2021a). In addition to OFD service, the City is a participant in the San Diego County Automatic Aid Agreement, which allows the closest available service to be provided to the emergency regardless of City boundaries. The construction and operation of the proposed Project would not result in increases in the need for fire protection services. During construction, fire protection may be required, but these would be short-term demands consistent with the existing uses and would not require permanent increases in the level of public service offered or affect response times associated with fire protection services. Because of the short-term nature of potential fire protection needs during construction, implementation of the proposed Project would not exceed the capacity of the OFD to serve the site with existing fire protection services and resources. Impacts would be less than significant.

Police Protection? **Less than Significant Impact.**

The Oceanside Police Department (OPD) would provide police protection services to the Project site. The OPD is headquartered at 3855 Mission Avenue, which is approximately 1.64 miles south of the Project site. In general, crime rates in Oceanside have been declining over time (City 2021a). Impacts to police protection would be similar to those described above for fire protection services. During construction, there may be a need for increased police protection at the site associated with potential theft or vandalism at the Project site. However, the long-term operation of the Project would not result in increases in the need for police protection services. Impacts would be less than significant.

Schools? **No Impact.**

The Project site is within Unified Oceanside School District (SANDAG 2022). The proposed Project would place no demand on school services because it would not involve the construction of facilities that require such services (i.e., residences) and would not result in increases in population to the Project area. No impact would occur.

Parks? **No Impact.**

The City maintains 642 acres of park facilities including 15 community and 17 neighborhood parks, one regional park, three recreation centers, two senior centers, five skateparks, and two pools. Additionally, through a Memorandum of Understanding between the City and the Oceanside Unified School District, residents have access to approximately 156 acres of school play areas. Other facilities include Oceanside's 3.5 miles of beach, the harbor, and the pier (City 2021a).

The proposed Project would not result in increases in population in the Project area, and thus, would not result in increased usage or demand on parks. No impact would occur.

Other public facilities? **No Impact.**

The Project does not propose new housing, nor would it induce population growth such that there would be an increase in demand for new or expanded public services. Accordingly, the proposed Project would not result in increased usage or demand on other public facilities. No impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.16 Recreation				
Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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.**

Please see response to Item 14.15, Parks. The proposed Project would not result in population increases, and thus, would not result in an increased usage of parks or other recreational facilities. No impact would occur.

- 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.**

As discussed above in Item 14.16.a, the proposed Project would not include recreational facilities or require the construction or expansion of recreational facilities. No impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.17 Transportation				
Would the project:				
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? **Less than Significant Impact**

LOS is the term used to denote the different operating conditions that occur under various traffic volume loads. Roadway segment capacity and LOS standards are generally used as long-range planning guidelines to determine the functional classification of roadways. The actual capacity of a roadway facility varies according to its physical attributes. Typically, however, the performance and LOS of a roadway segment is heavily influenced by the ability of an intersection to accommodate peak hour volumes. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. LOS D is considered the minimum acceptable LOS for roadways in the City. The City's Circulation Element measures both intersection operations and roadway segments. LOS for nearby intersections and roadways, as of the Circulation Element updated in 2012, is shown in Table 3, *Level of Service*.

Table 3: Level of Service

Roadway/Intersection	Level of Service
Douglas Drive north of El Camino Real	D
Douglas Drive north of North River Road	A/B/C
North River Road east of Douglas Drive	A/B/C
North River Road at Douglas Drive	A/B/C

Source: City 2012

As noted in Table 3, nearby roadways and intersections surrounding the Project site are operating at acceptable levels (D or higher).

The Project does not propose changes to existing public circulation elements. Construction would not occur within the public right of way. The Project would result in a short-term increase in traffic during construction. Project-related construction traffic would include deliveries of equipment and materials, construction employee travel to and from the work site, and other travel associated with the installation of required improvements. Local access would be provided via Douglas Drive to North River Road, and site access would be provided by the existing driveway for the SLRWRF off North River Road. Existing internal streets would provide access within the facility to the Project site itself. Temporary Project-generated traffic would primarily include construction workers commuting to and from the site. Based on the relatively small size of the Project work area and associated limited intensity of construction activities, the Project is not expected to generate worker commute trips that would change the LOS of nearby street intersections and segments. Similarly, the Project would not require high levels of import or export of materials and would not generate truck traffic that would change the LOS of nearby street intersections and segments. Project construction would therefore not conflict with the City's Circulation Element.

Based on information provided by the City, the Project operations would require a maximum of 8 ADT. It is estimated that the average number of round trips in and out of the SLRWRF as a result of the operation of the Project would be two to three per day, including:

- Approximately two truck trips per day five days per week would occur to SLRWRF for the delivery of food derived EBS.
- Approximately two truck trips per week would occur from SLRWRF to the composting facility to deliver dewatered digestate, or 0.39 trucks per day.
- Approximately one additional truck trip per day to SLRWRF for chemical or supply delivery is anticipated.

The maximum amount of additional truck trips possible would be four round trips per day, or eight maximum total ADT. The Project operations would not require additional employees to travel to and from the Project site.

The Circulation Element includes further policies to allow safe bicycle and pedestrian travel through the City. Bicycle and pedestrian facilities are not proposed by the Project and would not be required to be constructed, as the Project would not construct new public or private roads. The section of Douglas Drive for access to the Project is defined as a four lane Major Arterial and contains Class II bicycle lanes. Class II Bike Lanes are marked bicycle lanes within roadways adjacent to the curb lane, delineated by appropriate striping and signage. North River Road is also defined as a four lane Major Arterial and contains Class II bicycle lanes. Pedestrian access would be provided to the Project by sidewalks on both sides of Douglas Drive, both sides of North River Road until Plumosa Street, and the south side of North River Road past Plumosa Street. Substantial necessary public access to the site is not anticipated.

Public transit is provided to the Project site by North County Transit District Bus Routes 303, 309, and 311. Bus stops for Routes 303, 309 and 311 are located near the intersection of Douglas Drive and North River Road, approximately 0.5 miles east of the Project site, or for 309 and 311 at Douglas Drive and Westport Drive, 0.5 miles northeast of the Project site. Bus headway along this nearest route is approximately 15 minutes on weekdays and 30 minutes on weekends. The San Luis Rey Transit Center is located on North River Road, approximately 2.07 miles northwest of the Project site, and provides a central station for transit to additional bus routes. The Project would not result in changes to public transit facilities and would not conflict with future plans for expansion of public transit systems.

As the Project would generate minimal transportation changes and would be confined to the SLRWRF, the Project would not conflict with any program, plan, ordinance, or policy addressing the circulation system. Impacts would be less than significant.

b. Conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)? **Less than Significant Impact.**

CEQA Guidelines Section 15064.3, subdivision (b) provides criteria to evaluate a project's potential impact on transportation and traffic depending on the type of project. Section 15064.3(b) establishes vehicle miles traveled (VMT) as the appropriate measure for transportation impacts and eliminates automobile delay as appropriate for the determination of potentially significant transportation and traffic impacts. VMT is defined as a measurement of miles traveled by vehicles within a specified region and for a specified time period. For projects that reduce or have no impact on VMT (meaning there is no increase in demand for additional trips to be generated), CEQA Guidelines Section 15064.3 suggests that these projects be concluded to cause a less than significant impact. The City's Traffic Impact Analysis Guidelines were created to reconcile local policy and new CEQA guidelines (City 2020). These guidelines establish the City's VMT thresholds of significance and the use of a Project Information Form to screen projects' preliminary transportation impacts and determine if further studies are required. Additionally, the Office of Planning and Research (OPR) technical advisory regarding transportation impacts indicates that small projects generating fewer than 110 trips per day can be assumed to cause a less than significant transportation impact (OPR 2018). Traffic impacts associated with the Project would be mainly limited to the construction period of the Project. As stated above, the Project would contribute to an increase in operational ADT by 8 ADT compared to existing conditions, since operation of the Project would only include minor associated truck trips and would not require additional employees. Therefore, the Project would not exceed the 110-trip threshold and no conflicts with CEQA Guidelines Section 15064.3 subdivision (b) would occur. Impacts would be less than significant.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? **Less than Significant Impact.**

As discussed above, local access would be provided via Douglas Drive to North River Road, and site access would be provided by the exiting driveway for the SLRWRF off North River Road. Existing internal streets would provide access within the facility to the Project site itself. The proposed truck route within the facility would be entrance through the southwest entrance off North River Road and then traveling through the facility on the westernmost road to the Project site and exiting on the easternmost road and out through the southwest entrance off North River Road (refer to Figure 3 for more details on the proposed truck route). Construction vehicles travelling to the site may have reduced performance characteristics compared to passenger cars. However, these slower trips would be temporary and would not prevent circulation along public roads. The proposed Project does not propose site modifications that would result in hazards due to design features such as driveways, intersection improvements, etc., that would affect traffic safety, nor would it cause incompatible uses (such as tractors) on local roads. Impacts would be less than significant.

d. Result in inadequate emergency access? **Less than Significant Impact.**

See Item 14.9.f. The Project could impact emergency access during construction of the Project, due to heavy construction vehicles that could interfere with emergency response to the site or emergency evacuation procedures in the event of an emergency (e.g., vehicles traveling behind the slow moving truck). However, such trips would be brief and infrequent. Once operational, Project access would be via North River Road. Traffic would be limited to 8 ADT, as there would be no additional employees required at the site as a result of the Project, so the trips would consist of the necessary deliveries to the facility. Other trips would be related to the existing facility workers, deliveries, and occasional visitors. The internal street network within the facility has been designed with emergency access in mind and is accessible according to the existing regulations in the OMC. The traffic generated by the Project would not interfere with emergency response or access. Impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.18 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 5025.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 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). **Potentially Significant Unless Mitigated.**
- 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 5025.1, the lead agency shall consider the significance of the resource to a California Native American tribe. **Potentially Significant Unless Mitigated.**

Given the presence of tribal cultural resources within or adjacent to the Study Area, the Study Area is considered highly sensitive for cultural resources. However, much of the Study Area has been previously disturbed and the possibility of encountering intact subsurface cultural resources is considered low for the Project site.

Twenty-five tribal contacts were provided by the NAHC for the City of Oceanside Pure Water Project, which includes the SLRWRF. The City sent letters to these contacts on January 19, 2023, and, to date, received no responses. The City sent letters to these contacts in order to initiate consultation pursuant to AB 52. If responses are received during the public review process, results of consultation would be included in the Final IS/MND.

MMs CUL-1 through CUL-8 would require that the City and/or its contractors enter into an agreement with a traditionally and culturally affiliated tribe to formalize protocols and procedures for the protection and treatment of any cultural resources or human remains discovered, retain a Qualified Archaeologist and Luiseño Native American Monitor to oversee earth-disturbing activities, and temporarily suspend all earth disturbing work if cultural resources are discovered during construction. With implementation of MMs CUL-1 through CUL-8, potential impacts to tribal cultural resources with cultural value to a California Native American tribe would be reduced to less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.19 Utilities and Service Systems				
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? **Less than Significant Impact.**

The Project intends to provide new sources of power from the anerobic digestion of food derived EBS. Power would be provided with existing utilities and facilities and therefore it would not require or result in the relocation or construction of new utility facilities or the expansion of existing facilities. No associated impact would occur. This renewable energy Project would offset the City's use of electricity from the grid by producing 1,439,660 kWh/year of electricity, enough to power 221 households or 355 electric vehicles for one full year. Electricity and heat would be generated via the combustion of biogas (from the anaerobic digesters) in an upsized CHP facility onsite. The electricity produced would tie into exiting power transmission lines to disseminate to the City, although the majority of the energy produced would be used within the SLRWRF.

Infrastructure improvements are included as part of this Project, and therefore the extent of impacts has been examined in the context of the Project as a whole throughout this Initial Study. The Project would not result in the need for new or expanded water, wastewater treatment or storm drainage, electric power, natural gas, or telecommunication facilities. Impacts would be less than significant.

- b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? **Less than Significant Impact.**

The Urban Water Management Planning Act (Act), adopted in 1983, requires water suppliers in California to conduct long-term water resources planning and specifically, Section 10620 (a) of the Act, identifies that urban water suppliers shall prepare and adopt an Urban Water Management Plan (UWMP) and that these plans are to be updated every five years. The City most recently prepared the 2020 UWMP (finalized June 2021) and indicated that water in the City is purchased from San Diego County Water Authority (SDCWA), groundwater, and recycled water.

The UWMP includes future predictions and supply reliability analysis, which indicates that SDCWA would be able to cover the City's increased demands during dry and multiple dry years. The City also has plans to increase local supply with increased groundwater production, expanding recycled water distribution, and implementing a potable reuse system. In a scenario where SDCWA begins to project supply deficits, the City would implement extraordinary conservation measures or convert more customers to recycled water (City 2021b). According to the UWMP, the City could supply sufficient water to the Project during normal, dry, and multiple dry years through 2040. The Project would not require large amounts of water and is housed within a wastewater treatment facility that has capacity to provide water services to this Project as needed. Impacts would be less than significant.

- c. Result in a determination by the wastewater 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? **Less than Significant Impact.**

Wastewater from the Project would be processed at the SLRWRF, which, as of 2015, had a planned capacity for 1.5 million gallons per day (MGD) for tertiary treatment and 13.5 MGD for secondary treatment beginning in 2017. More increases in capacity are planned through the City's Pure Water program. The UWMP determined that the SLRWRF was operating below capacity would have sufficient capacity for increases in recycled water processing during dry years. The Project's wastewater would not be of a substantial quantity such that the wastewater treatment provider would have inadequate capacity to continue service to its existing commitments. Impacts would be less than significant.

- 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? **No Impact.**

The Project includes the installation of organic material receiving infrastructure and anaerobic digester equipment at the City's SLRWRF in order to accept food derived digestate which would facilitate diversion of food waste from the landfill. The City would derive its organic feedstock from the collection of food waste and food soiled paper collected from commercial and multi-family customers. A waste management company would collect and deliver the City's organics to a facility where pretreatment processes would be used to create a high-quality, food derived EBS from the collected organics.

The receiving material for the proposed Project is food derived EBS and not biosolids. The annual amount of dewatered digestate or biosolids (from food-derived organic feedstock) to be hauled off is 3,559 wet tons. The digestate would be trucked to a designated compost facility where it would be converted to compost. The food waste dewatering centrate would be sent to SLRWRF's wastewater treatment stream. None of the byproducts

of the 5,200 annual tons of organic food waste that would be anaerobically digested as a result of the Project would be sent to the landfill for application. No impact would occur.

- e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? **No Impact.**

The City has implemented a Zero Waste Plan and is in the process of updating it further, such that it encompasses federal and state regulations related to solid waste. Municipal Code Chapter 13 details solid waste and recycling policies for the City. The Project's goal is to assist the City in meeting its Zero Waste goals and compliance with SB 1383. As stated above, the digestate would be trucked to a designated compost facility where it would be converted to compost. The food waste dewatering centrate would be sent to SLRWRF's wastewater treatment stream. Therefore, none of the byproducts of the 5,200 annual tons of organic food waste that would be anaerobically digested as a result of the Project would be sent to the landfill for application. No impact would occur.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.20 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan? **Less than Significant Impact.**

See also Items 14.9.f and 14.17.d. According to the Very High Fire Hazard Severity Zones in LRA Map for Oceanside, the Project site is not located within a VHFHSZ (CAL FIRE 2009). During construction of the Project, heavy construction vehicles could interfere with emergency response or emergency evacuation procedures in the event of an emergency (e.g., vehicles traveling behind the slow-moving truck). However, such trips would be brief and infrequent.

During Project operation, roadways and intersections in the area surrounding the site would continue to operate at existing levels with the small addition of Project-related traffic as discussed in Section 14.17. At a Project level, the Project would adhere to the required municipal codes, including those that have been adopted to enact the CBC and the CFC to maintain adequate emergency access and response. The internal street network

within the facility has been designed with emergency access in mind and is accessible according to the existing regulations. Neither construction or operation of the Project would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

- 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? **Less than Significant Impact.**

The Project site does not have significant slopes, prevailing winds, or other factors that would exacerbate wildfire risk. The Project is located entirely within the existing SLRWRF. Surrounding uses (mainly residential) are developed or maintained, such that there is not an excessive risk for uncontrolled wildfire spread. State Responsibility Areas east of the Project site have moderate to very high fire hazard severity, which may result in exposure of Project employees to the effects of wildfires such as pollutants resulting from smoke exposure, however there are no characteristics of the proposed Project that would exacerbate risks associated with wildfires, such as difficult terrain, inadequate access, or unmaintained vegetation. Impacts would be less than significant.

- 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. **Less than Significant Impact.**

The Project would not require the installation of power lines and other utility infrastructure. Infrastructure improvements are included as part of this Project, and therefore the extent of impacts has been examined in the context of the Project as a whole throughout this Initial Study. The internal street network within the facility has been designed with emergency access in mind and is accessible according to the existing regulations. The Project improvements would not exacerbate fire risk or create temporary or ongoing impacts to the environment. Impacts would be less than significant.

- 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? **Less than Significant Impact.**

Please refer to response to Items 14.18.a through 14.18.d and 14.20.b. The site is generally flat and unlikely to experience flooding or landslides due to runoff, post-fire slope instability, or drainage changes. The Project would not result in people or structures experiencing significant risks related to fire impacts. Impacts would be less than significant.

	Potentially Significant Impact	Potentially Significant Unless Mit.	Less than Significant Impact	No Impact
14.21 Mandatory Findings of Significance				
Would the project:				
a. Does the project have the potential substantially to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to decrease 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 major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have impacts which are individually limited, but cumulatively considerable ("Cumulatively considerable" means the project's 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will have substantial adverse effects on human beings, directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. Does the project have the potential substantially to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to decrease 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 major periods of California history or prehistory? **Potentially Significant Unless Mitigated.**

With implementation of the mitigation measures identified in this Initial Study/Mitigated Negative Declaration, the proposed Project would not have the potential to degrade the quality of the environment, reduce the habitat of any sensitive plant or animal species, or eliminate important examples of California history or prehistory.

As discussed in Items 14.4.a through 14.4.f, the Project has the potential to impact sensitive species indirectly through construction noise. However, implementation of MMs BIO-1 through BIO-8 would reduce these potentially significant impacts to biological resources to less than significant levels.

As discussed in Items 14.5.a through 14.5.c, 14.7.f, and 14.18.a through 14.18.b, there is potential for unknown cultural, paleontological, or tribal cultural resources to be present at the Project site. Implementation of a monitoring program as described in MMs CUL-1 through CUL-8, GEO-1, and GEO-2 would reduce impacts related to these unknown resources. Additionally, no responses were received as a part of the AB 52 Tribal consultation. The Project would therefore implement MMs CUL-1 through CUL-8 to mitigate potential impacts to tribal cultural resources. The Project does not have the potential substantially to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to decrease 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 major periods of California history or prehistory. Therefore, with the implementation of MMs BIO-1 through BIO-8, CUL-1 through CUL-8, and GEO-1 and GEO-2, impacts would be less than significant.

- b. Does the project have impacts which are individually limited, but cumulatively considerable (“Cumulatively considerable” means the project’s 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 Impact.**

State CEQA Guidelines Section 15130 requires a discussion of the cumulative impacts of a project when the project’s incremental effect is “cumulatively considerable,” meaning that the project’s incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects.

The City of Oceanside maintains a map of projects that are under review, approved, or under construction. Review of the projects within a roughly one-mile radius resulted in two projects being considered in the cumulative analysis. The Riverview Springs project would add 47 dwelling units in 3 buildings to an existing 358 dwelling unit apartment complex along North River Road, west of Douglas Drive. The Cypress Point project would construct 54 single-family homes ranging from 1,200 to 1,700 SF in size and located around a private loop road off of Aspen Street within the 7.3-acre project site. Eight of the homes would be allocated to low income as part of the request for a density bonus within the framework of the General Plan (City 2023c).

Implementation of the proposed Project would not result in individually limited, but cumulatively considerable significant impacts. As discussed under Item 14.3.b, the Project’s emissions of criteria pollutants would not exceed the SDAPCD screening thresholds. Therefore, the Project’s operational activities would not result in a cumulatively considerable net increase of criteria pollutants that would violate any air quality standard or contribute substantially to an existing or projected air quality violation. Similarly, the Project would have a less than significant impact in relation to GHG, which is inherently discussed in terms of cumulative impacts.

All resource topics associated with the Project have been analyzed in accordance with State CEQA Guidelines and found to pose no impact, less than significant impact, or less than significant impact with mitigation incorporated. Potential cumulative projects that could be constructed in the vicinity of the Project would be required to comply with existing applicable federal, state, and local regulations. Impacts would be less than significant.

- c. Does the project have environmental effects which will have substantial adverse effects on human beings, directly or indirectly? **Potentially Significant Unless Mitigated.**

The Project would not consist of any uses or activities that would negatively affect any persons in the vicinity. In addition, resource topics associated with the Project have been analyzed in accordance with CEQA and the State CEQA Guidelines and found to pose no impact, less than significant impact, or less than significant impact with mitigation. As discussed in section 4.9 of this Initial Study, there are no substantial concerns from past activities at the site and MM HAZ-1 would reduce potential impacts regarding hazardous materials to a less than significant impact. No potential for land use consistency conflicts in relation to noise impacts that would impact human beings have been identified. Consequently, the Project would not result in any environmental effects that would cause substantial adverse effects on human beings directly or indirectly. Impacts would be less than significant.

16. DETERMINATION

(To be completed by lead agency) Based on 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 the mitigation measures described herein have been included in this project. 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.

15. PREPARATION

The initial study for the subject project was prepared by HELIX Environmental Planning, Inc.

17. DE MINIMIS FEE DETERMINATION

(Chapter 1706, Statutes of 1990-AB 3158)

☐ It is hereby found that this project involves no potential for any adverse effect, either individually or cumulatively, on wildlife resources and that a "Certificate of Fee Exemption" shall be prepared for this project.

☐ It is hereby found that this project could potentially impact wildlife, individually or cumulatively, and therefore fees shall be paid to the County Clerk in accordance with Section 711.4(d) of the Fish and Game Code.

18. ENVIRONMENTAL DETERMINATION

The initial study for this project has been reviewed and the environmental determination, contained in Section V. preceding, is hereby approved:

Shannon Vitale, Senior Planner
City of Oceanside, Development Services Department

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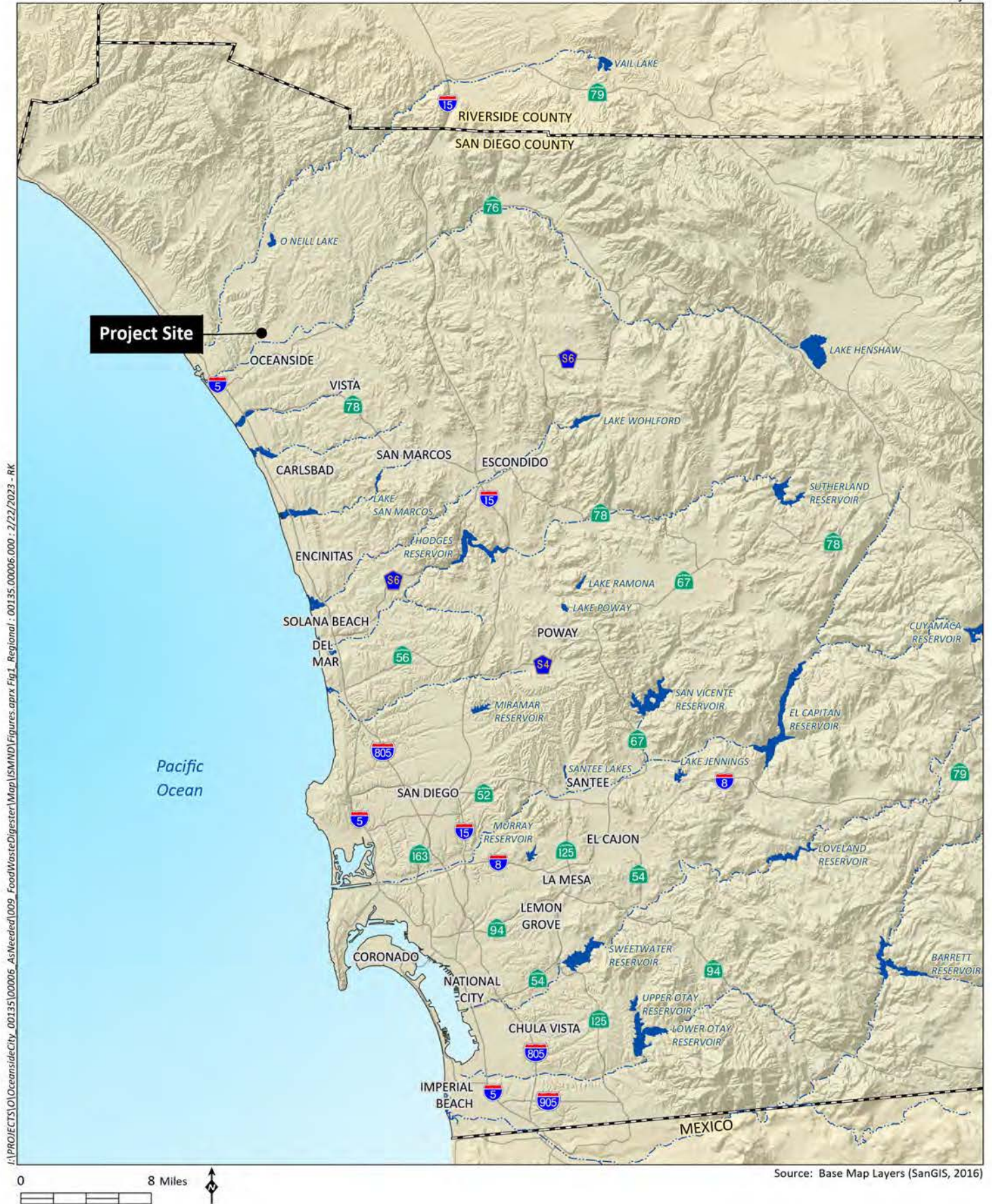
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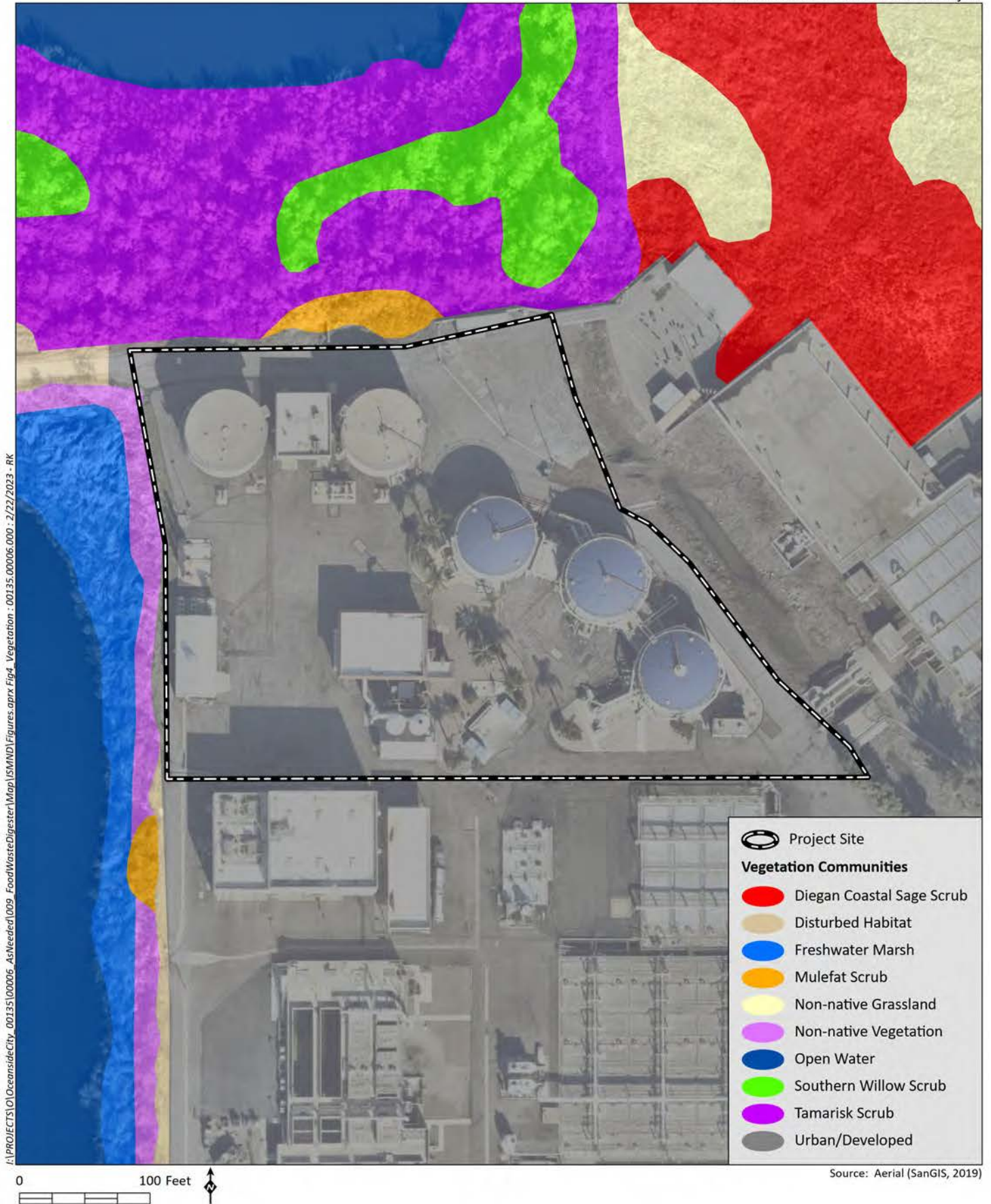
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Appendix A

Air Quality Calculations

Food Waste Digester Capacity Development Project Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Food Waste Digester Capacity Development Project
Lead Agency	City of Oceanside, Development Services Department
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.90
Precipitation (days)	12.0
Location	3950 N River Rd, Oceanside, CA 92058, USA
County	San Diego
City	Oceanside
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6242
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric

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
User Defined Industrial	1.00	User Defined Unit	0.39	0.00	0.00	0.00	—	—

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.	2.06	1.74	14.1	17.7	0.03	0.61	0.27	0.88	0.56	0.06	0.63	—	3,830	3,830	0.16	0.04	1.34	3,847
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.06	1.73	14.1	17.5	0.03	0.61	0.27	0.88	0.56	0.06	0.63	—	3,812	3,812	0.16	0.04	0.03	3,828
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.00	0.85	6.76	8.77	0.02	0.28	0.14	0.42	0.26	0.03	0.29	—	1,922	1,922	0.08	0.02	0.27	1,930
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.18	0.15	1.23	1.60	< 0.005	0.05	0.02	0.08	0.05	0.01	0.05	—	318	318	0.01	< 0.005	0.04	320
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	54.0	—	—	—	—	—	—	—
Unmit.	Yes	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	54.0	—	—	—	—	—	—	—
Unmit.	Yes	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

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	2.06	1.74	14.1	17.7	0.03	0.61	0.27	0.88	0.56	0.06	0.63	—	3,830	3,830	0.16	0.04	1.34	3,847
2024	1.98	1.68	13.4	17.5	0.03	0.56	0.27	0.83	0.52	0.06	0.58	—	3,822	3,822	0.16	0.04	1.24	3,839
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	2.06	1.73	14.1	17.5	0.03	0.61	0.27	0.88	0.56	0.06	0.63	—	3,812	3,812	0.16	0.04	0.03	3,828
2024	1.98	1.68	13.4	17.4	0.03	0.56	0.27	0.83	0.52	0.06	0.58	—	3,804	3,804	0.16	0.04	0.03	3,820
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.43	0.37	2.97	3.71	0.01	0.13	0.06	0.19	0.12	0.01	0.13	—	806	806	0.03	0.01	0.12	810
2024	1.00	0.85	6.76	8.77	0.02	0.28	0.14	0.42	0.26	0.03	0.29	—	1,922	1,922	0.08	0.02	0.27	1,930
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.08	0.07	0.54	0.68	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	133	133	0.01	< 0.005	0.02	134
2024	0.18	0.15	1.23	1.60	< 0.005	0.05	0.02	0.08	0.05	0.01	0.05	—	318	318	0.01	< 0.005	0.04	320

3. Construction Emissions Details

3.1. 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	1.90	1.60	13.9	16.0	0.03	0.61	—	0.61	0.56	—	0.56	—	3,514	3,514	0.14	0.03	—	3,527
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	1.60	13.9	16.0	0.03	0.61	—	0.61	0.56	—	0.56	—	3,514	3,514	0.14	0.03	—	3,527
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.34	2.95	3.39	0.01	0.13	—	0.13	0.12	—	0.12	—	743	743	0.03	0.01	—	745
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	0.07	0.06	0.54	0.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	123	123	< 0.005	< 0.005	—	123
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	0.16	0.14	0.12	1.69	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	315	315	0.01	0.01	1.34	321
Vendor	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
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.13	1.48	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	298	298	0.02	0.01	0.03	302
Vendor	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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.32	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	63.5	63.5	< 0.005	< 0.005	0.12	64.4
Vendor	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
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	0.01	0.01	< 0.005	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	10.5	10.5	< 0.005	< 0.005	0.02	10.7
Vendor	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
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

3.3. Building Construction (2024) - 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	1.84	1.54	13.3	16.0	0.03	0.56	—	0.56	0.52	—	0.52	—	3,512	3,512	0.14	0.03	—	3,524
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.84	1.54	13.3	16.0	0.03	0.56	—	0.56	0.52	—	0.52	—	3,512	3,512	0.14	0.03	—	3,524
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.70	8.06	0.02	0.28	—	0.28	0.26	—	0.26	—	1,773	1,773	0.07	0.01	—	1,779
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	0.17	0.14	1.22	1.47	< 0.005	0.05	—	0.05	0.05	—	0.05	—	294	294	0.01	< 0.005	—	295
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	0.15	0.13	0.11	1.58	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	310	310	0.01	0.01	1.24	315
Vendor	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
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.12	1.39	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	292	292	0.02	0.01	0.03	296
Vendor	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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	0.71	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	149	149	0.01	0.01	0.27	151
Vendor	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

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	0.01	0.01	0.01	0.13	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	24.7	24.7	< 0.005	< 0.005	0.04	25.0
Vendor	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
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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Building Construction	Building Construction	9/15/2023	9/14/2024	5.00	261	—

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
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Bore/Drill Rigs	Diesel	Average	1.00	6.00	83.0	0.50
Building Construction	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Plate Compactors	Diesel	Average	1.00	4.00	8.00	0.43
Building Construction	Off-Highway Trucks	Diesel	Average	2.00	4.00	376	0.38
Building Construction	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Building Construction	Rollers	Diesel	Average	1.00	6.00	36.0	0.38
Building Construction	Air Compressors	Diesel	Average	1.00	4.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Building Construction	—	—	—	—
Building Construction	Worker	32.0	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	0.00	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT

8. User Changes to Default Data

Screen	Justification
Land Use	The proposed Project involves updates made to the existing Digester 5 on 0.39 acres in the northwest corner of the SLRWRF.
Construction: Construction Phases	Construction would begin in September of 2023 and be completed by September 2024.
Construction: Off-Road Equipment	Equipment listed in Project Description
Construction: Trips and VMT	Worker trips based on 1.25 workers per equipment.