FOOD WASTE RECEIVING AND DIGESTION PROGRAM AT THE JOINT WATER POLLUTION CONTROL PLANT

Addendum No. 2
SCH No. 2017121024

Prepared for
County Sanitation District No.2
of Los Angeles County

September 2023

ESA

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FOOD WASTE RECEIVING AND DIGESTION PROGRAM AT THE JOINT WATER POLLUTION CONTROL PLANT

Addendum No. 2

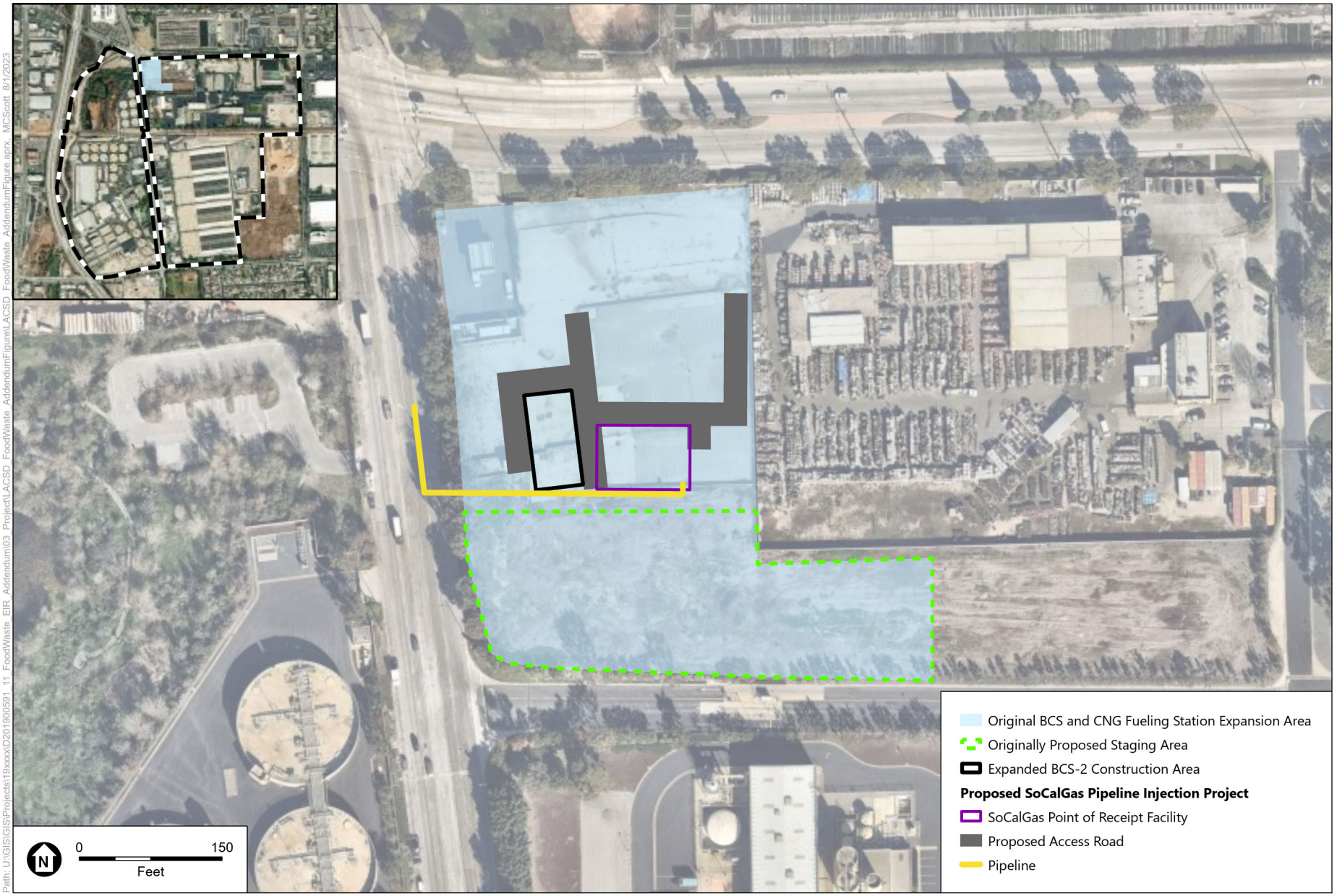
1.0 Introduction

1.1 Purpose of the Addendum

The purpose of this Addendum to the Final Initial Study/Mitigated Negative Declaration (IS/MND) for the Food Waste Receiving and Digestion Program at the Joint Water Pollution Control Plant ("JWPCP") ("proposed project") is to evaluate the potential environmental effects associated with proposed project modifications. The IS/MND was adopted by Board of Directors of County Sanitation District No. 2 of Los Angeles County ("District") in February 2018[1]. After adoption of the Final IS/MND, modifications to the project were identified and analyzed in the Food Waste Receiving and Digestion Program at the JWPCP, Addendum No. 1, which was finalized in May 2019.

Since adoption of Addendum No. 1, the District is proposing additional minor modifications to the project ("proposed modifications"). The proposed modifications would include expansion of the Biogas Conditioning System (BCS-2), which would be increased in size and capacity compared to the adopted IS/MND, and construction of a pipeline and injection system to connect to a nearby SoCalGas pipeline. The proposed modifications would involve designing the biogas pipeline to accommodate both the on-site vehicle dispensing facility as well as to allow for injection of biogas into the SoCalGas' pipeline near the intersection of Sepulveda Boulevard and Figueroa Street. The modification would require a minor location change, new construction, and minor process and operational changes (**Figure 1**). Other project components as described in the adopted IS/MND, including Addendum No. 1 modifications, would remain the same and would still be implemented as part of the proposed project. This Addendum No. 2 analyzes the environmental effects associated with the proposed modifications and compares potential impacts to those identified in the adopted IS/MND, specifically as they pertain to expansion of BCS-2 and SoCalGas pipeline injection facilities.

[1] The Notice of Determination filed for the adopted IS/MND is dated March 1, 2018. The action by the Board of Directors occurred on February 28, 2018.



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SOURCE: ESRI; LA County Sanitation District Food Waste

Food Waste Receiving and Digestion Facility at the JWPCP

Figure 1

Proposed Modifications

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1.2 Regulatory Background

Section 15164(b) of the CEQA Guidelines provides that an addendum to an adopted negative declaration for a project is permissible if: (1) only minor technical changes or additions are necessary; or (2) neither a Subsequent Environmental Impact Report ("EIR") or negative declaration is required pursuant to CEQA Guideline Section 15162. Subsequent environmental documents must be prepared if:

1. Substantial changes are proposed in the project requiring major revisions of the previous environmental document because of the changes will create new significant environmental effects or a substantial increase in the severity of previously-identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken that will require major revisions of the previous environmental document as a result of new significant environmental effects or a substantial increase in the severity of previously-identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time of the certification or adoption of the previous environmental document, has been discovered and shows that:
    a. The project will have one or more significant effects not discussed in the previous environmental document;
    b. Significant effects previously examined will be substantially more severe than shown in the previous environmental document;
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous environmental document would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The District has evaluated the environmental impacts of the proposed modifications and, as lead agency, has determined that none of these conditions apply. Therefore, an Addendum to the adopted IS/MND is the appropriate environmental document to analyze the proposed modifications.

2.0 Adopted Project Overview

The District seeks to implement the Food Waste Recycling and Digestion Program at the JWPCP located at 24501 South Figueroa Street in the City of Carson. The proposed project as described in the adopted IS/MND would allow for the diversion of up to 610 dry tons per day (tpd) of food waste from landfills to be delivered as food waste slurry. The adopted IS/MND evaluated the delivery of 400 tpd of food waste slurry (equivalent to approximately 300 tons of dry food waste) to the existing LWDS and the delivery of up to 420 tpd of food waste slurry (equivalent to approximately 310 tpd of dry food waste) to a new food waste receiving station.

The recommended project analyzed by the adopted IS/MND included the following components:

1. Demolition of an obsolete out-of-service anaerobic digester to create space for the new Food Waste Facility,
2. Construction of the Food Waste Facility, which includes food waste receiving and storage tanks and associated piping and connections to the existing digesters, and modifications to the south entrance off Figueroa Street,
3. Construction of biogas pipelines within JWPCP to convey additional digester gas to the flares and the Total Energy Facility, which is the existing on-site power generation facility,
4. Increase in food waste deliveries to the existing LWDS,
5. Construction of additional flares as backup for destruction of the additional biogas generated by the food waste,
6. Expansion of the Biogas Conditioning System for production of renewable natural gas ("RNG") for use as vehicle fuel at the compressed natural gas ("CNG") Fueling Station, and
7. Expansion of the CNG Fueling Station to increase fueling capacity.

The previous Addendum No. 1 modified the adopted IS/MND's description only for Item 4 above. The previous Addendum included minor process and operational changes to allow for delivery of food waste cake (15-30 percent solids) instead of food waste slurry (liquid) to the JWPCP. The District determined that the proposed modifications to food waste reception would require additional physical improvements, including construction of: 1) a new, fully enclosed Food Waste Facility (100-foot-long by 24-foot-wide by 30-foot-tall), 2) odor control facilities consisting of a bio-filter or bio-trickling filter system (or equivalent) within the new receiving facility, (3) a 7,500-gallon water tank and booster pump, and (4) a new sewer line to discharge the food waste slurry to the existing nearby manhole leading to the headworks of the JWPCP. Additionally, as part of Addendum No. 1 modifications, the new food waste receiving building was moved to a location just east of the LWDS, in an area that was not designated as part of the project location in the adopted IS/MND. This modification was selected to optimize the location of the new food waste receiving station to existing features within the JWPCP that are being used to support the project.

This Addendum No. 2 proposes to further modify the adopted IS/MND's description for Item 6, and includes a minor change to the project location related to the proposed BCS-2 expansion and construction of SoCalGas pipeline injection project.

The District prepared and circulated the Draft IS/MND for public review from December 8, 2017 through January 7, 2018. The District's Board of Directors adopted the Final IS/MND and approved the project on February 28, 2018, and a Notice of Determination (NOD) for the project was filed on March 1, 2018

3.0 Objectives of the Proposed Project

The proposed modifications maintain the same objectives as listed within the adopted IS/MND for the project, and are provided below:

- Increase the JWPCP's capacity to receive and digest food waste streams, including food-based slurry derived from pre-consumer and post-consumer food waste, waste from food and beverage manufacturing as well as fats, oils and grease originating from restaurants and commercial facilities.
- Increase the amount of biogas produced, partially resulting from food waste and co-digestion.
- Beneficially utilize the additional biogas for energy production and conversion to RNG for transportation fuel.

4.0 Description of Proposed Modifications

The proposed modifications to the project evaluated in this Addendum include:

Site Footprint Change and New Construction: The BCS-2 footprint would be approximately 6,500 square feet. A new pipeline and SoCalGas injection facilities would be constructed to utilize biogas not dispensed at the expanded CNG station and would include building a new point of receipt (POR) facility (80-foot-long by 60-foot-wide) just east of BCS-2, and installation of a high-pressure pipeline (approximately 435 feet in length and 6-inches in diameter) along Figueroa Street.

Process and Operational Changes: Increasing biogas utilization capacity at the JWPCP to accommodate biogas produced from full food waste processing capacity as previously analyzed in the adopted IS/MND. This increase in biogas utilization capacity would not lead to an increase in staffing needs. Periodic operations and maintenance activities would be required for the POR facility with one to two SoCalGas vehicles onsite. Additionally, gas quality tests would be performed quarterly, with up to four SoCalGas vehicles onsite (2 light duty truck, 1 passenger car, 1 company cargo van or box truck equipped with analyzer equipment).

4.1 Site Footprint Change and New Construction

BCS-2 Expansion

The proposed modifications to the biogas conditioning system component would require the expansion of BCS-2. The adopted IS/MND indicated the expansion of the biogas conditioning system would be installed within an approximately 20,000 square foot area adjacent to the original Biogas Conditioning System (BCS-1). Based on the estimated footprint, grading activities were expected to result in approximately 1,000 cubic yards of export consisting of dirt and existing paving.

The expanded BCS-2 would have a total footprint of 6,500 square feet and would result in less than 1,000 cubic yards of export of dirt and existing paving. Excavation would still occur up to a depth of approximately six feet below the existing grade as originally planned in the adopted IS/MND.

A maximum of 4 to 5 daily construction workers would be required for construction of BCS-2. Construction work would occur within the adopted IS/MND work hours of weekdays between 6:00 a.m. and 6:00 p.m.

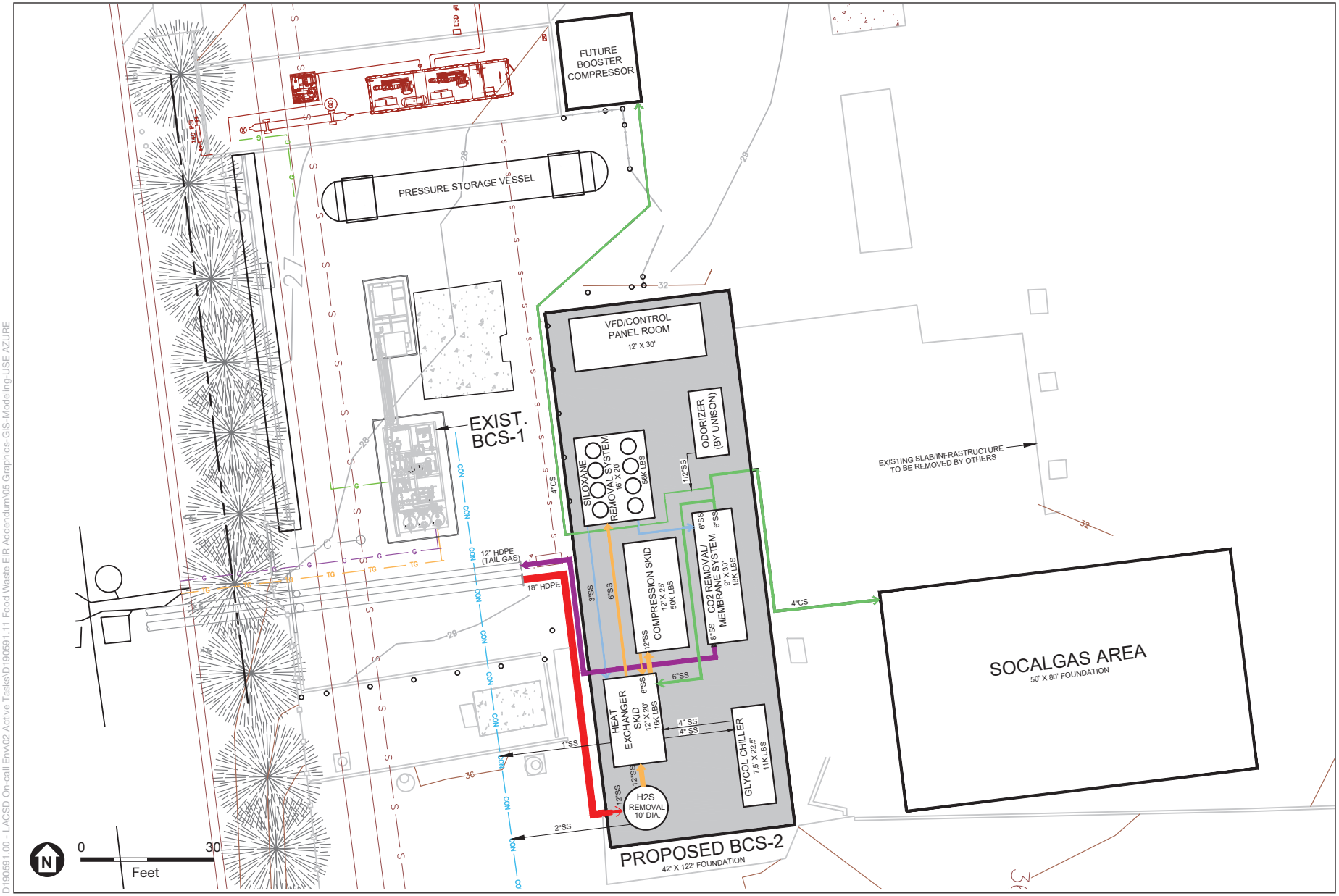
SoCalGas Pipeline Injection Project

The proposed modifications include the addition of the SoCalGas pipeline injection facilities. SoCalGas would install an approximately 80-foot-long by 60-foot-wide point of receipt (POR) facility on the District property in the area east of the proposed BCS-2 facility (**Figure 2**). It is anticipated that an odorant tank would be installed at BCS-2 and a separate odorant tank at the POR facility. The odorant tank for each component would be less than 250 gallons and would require registration with the South Coast Air Quality Management District (SCAQMD), pursuant to SCAQMD Rule 222. The facilities would require installation of a concrete foundation sized to accommodate gas deliveries ranging from a minimum and maximum of 266,000 and 936,000 standard cubic feet per day (cfpd). Ground-disturbing activities would be confined to an area of about 5,000 square feet for the proposed POR, resulting in 700 cubic yards of export of dirt and existing paving.

The modified project would also include installation of a 6-inch high pressure pipeline to interconnect the POR into SoCalGas' existing high pressure steel pipeline located underground near the intersection of Figueroa Street and Sepulveda Boulevard (refer to **Figure 3**). The project would include the installation of approximately 435 feet of 6-inch pipeline. There would be approximately 233 feet installed within the JWPCP property and approximately 202 feet within the City of Carson right of way. The total volume of excavation for the 435 feet of pipeline installation is approximately 800 cubic yards. The excavated material within the JWPCP boundary, approximately 660 cubic yards, would be reused for backfill material within JWPCP. The approximately 140 cubic yards of excavated material within City of Carson right of way would need to be inspected and approved prior to reuse. The backfill materials will be determined by the permit requirements.

The proposed pipeline would be installed using jack and bore and trenching methods. Jack and bore would be used to install a portion of the pipe that would cross several features such as a new retaining wall, buried utilities, trees, and a berm. The 45-foot by 15-foot bore pit would be located within the JWPCP property. The 10-foot by 10-foot receiving pit would be located on the North Bound lanes of Figueroa Street. The excavated material from the receiving pit within City of Carson right of way would need to be inspected and approved prior to reuse. The pit backfill materials will be determined by the permit requirements. An 8-inch sacrificial casing would be used during boring operations. Approximately 110 feet of 6-inch abrasion-resistant overlay coating over fusion bonded epoxy-coated pipe would be installed via jack and bore construction. Engineering shoring would be required for the bore pit and receiving pit due to the anticipated depth of up to 22 feet.

The trenching technique would include saw cutting of the pavement where applicable, trench excavation, pipe installation, backfill operations, and re-surfacing to the original condition.



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SOURCE: Tetrah Tech, 2023

Food Waste Receiving and Digestion Facility at the JWPCP

Figure 2
Proposed BCS-2 Expansion Plan

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D190591.00 - LACSD On-call Env\02 Active Tasks\D190591.11 Food Waste EIR Addendum\05 Graphics-GIS-Modeling-USE AZURE

SOURCE: SoCalGas, 2023

Food Waste Receiving and Digestion Facility at the JWPCP

Figure 3
Proposed SoCalGas POR Facility and Pipeline Plan

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Additionally, a drive aisle would be constructed to provide vehicle access between the eastern gate and the POR facility. The proposed POR equipment pad and drive aisle construction would require placing 520 cubic yards of concrete. Approximately 400 cubic yards of soil would need to be excavated below the concrete and replaced with suitable backfill.

A maximum of 4 to 5 daily construction workers would be required for construction of the proposed modifications. Construction of the receiving pit and pipeline connection within Figueroa Street may require lane closures for a temporary period. Construction of the POR facility and pipeline extension are planned for Monday through Friday from 7:00 a.m. to 3:30 p.m. and would not overlap with construction activities as analyzed in the adopted IS/MND.

4.2 Process and Operational Changes

The adopted IS/MND identified a total combined processing capacity of 5,000 GGE/day for BCS-1 and BCS-2. Under the modified project, BCS-2 would be sized to process 10,000 GGE/day of RNG and BCS-1 would be placed on standby. Power for the project would be supplied from the existing power lines. BCS-2 would require less than 1,300 kW of grid power while operating at 1,440 standard cubic feet per minute (scfm) of inlet flow. The POR facility is expected to utilize an additional 24 kW of power. The gas processed through BCS-2 would be supplied to either the CNG fueling station as proposed in the adopted IS/MND, or to SoCalGas' pipeline via the POR equipment and pipeline connection in Figueroa Street.

Ingress and egress to the POR facility would be provided by the proposed drive aisle between a gate along Sepulveda Boulevard and the POR. Access from Figueroa Street would remain available to provide alternative access to the facility. Maintenance for the POR facility would occur on a monthly basis and would include routine calibrations, inspections, monitoring, and gas sampling of the facility and equipment.

5.0 Environmental Setting and Analysis

This addendum provides an assessment of potential environmental impacts associated with the proposed modifications. The analysis includes an assessment of impacts to air quality, energy, greenhouse gas emissions, hazardous materials, noise, traffic and transportation, and utilities. All other environmental resources outlined in Appendix G of the CEQA Guidelines would not experience any new effects as a result of the proposed modifications.

5.1 Air Quality

The adopted IS/MND evaluated impacts to air quality from construction and operation and concluded that impacts associated with air quality would be less than significant. This section provides analysis of the potential air quality impacts associated with the proposed modifications.

Impact Discussion

Site Footprint Change and New Construction

Regional and Localized Construction Emissions

Construction of the proposed modifications to the expansion of BCS-2 and the addition of the SoCalGas pipeline injection project facilities would require the use of heavy-duty construction equipment in a larger area of the facility not analyzed in the adopted IS/MND. Maximum construction activity analyzed in the IS/MND would occur during the overlap of demolition, site preparation and foundation phases, and the building erection/mechanical equipment, electrical, utilities, and sewer phases. Based on information provided by the District, construction of the proposed modifications would not overlap with the construction activities analyzed in the adopted IS/MND. Therefore, only construction emissions associated with the proposed modifications are presented in this analysis. Estimated regional and localized construction emissions associated with the proposed modifications are presented in the tables below.

Table 1 represents the construction emissions associated with the proposed modifications. As shown, construction of the proposed modifications would result in regional construction emissions below the South Coast Air Quality Management District (SCAQMD) regional significance thresholds and impacts would be less than significant.

TABLE 1
ESTIMATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY) [A]

Construction Year[b]	VOC	NO_X	CO	SO_2	PM10	PM2.5
Building Construction - 2025	<1	11.0	13.1	<1	<1	<1
Overlapping Phases						
Grading & Trenching 2024	1.5	29.7	35.2	<1	3.8	2.3
Grading, Paving, Architectural Coating, & Trenching - 2024	4.9	35.3	41.9	<1	4.3	2.6
Grading, Building Construction, Paving, Architectural Coating, & Trenching - 2025	5.3	46.3	55.1	<1	4.8	3.0
Grading, Building Construction, & Trenching - 2025	1.9	40.7	48.3	<1	4.3	2.7
Building Construction & Trenching - 2025	1.1	25.3	30.5	<1	1.5	1.1
Addendum Maximum Daily Emissions	**5.3**	**46.3**	**55.1**	**<1**	**4.8**	**3.0**
SCAQMD Regional Significance Thresholds	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

NOTES:

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix A.

[b] Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA 2023

Table 2 represents the localized construction emissions associated with the proposed modifications. Construction of the proposed modifications would not overlap with construction

activities analyzed in the adopted IS/MND. Therefore, only localized construction emissions associated with the proposed modifications are presented in this analysis. As shown, construction of the proposed modifications would result in localized construction emissions below the SCAQMD localized significance thresholds and impacts would be less than significant.

TABLE 2
ESTIMATED LOCALIZED CONSTRUCTION EMISSIONS (POUNDS PER DAY) [A]

Construction Year[b]	NO_X	CO	PM10	PM2.5
–Building Construction - 2025	10.69	12.8	<1	<1
Overlapping Phases				
Grading & Trenching 2024	28.5	32.7	3.1	2.1
Grading, Paving, Architectural Coating, & Trenching - 2024	33.6	38.5	3.4	2.3
Grading, Building Construction, Paving, Architectural Coating, & Trenching - 2025	44.5	51.3	3.9	2.7
Grading, Building Construction, & Trenching - 2025	39.4	45.5	3.6	2.5
Building Construction & Trenching - 2025	24.9	29.0	1.1	1.0
Addendum Maximum Daily Emissions	**44.5**	**51.3**	**3.9**	**2.7**
SCAQMD Localized Significance Thresholds	90	2,296	61	26
Exceeds Threshold?	**No**	**No**	**No**	**No**

NOTES:

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix A.

[b] Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA 2023

CO "Hot Spot" Analysis

Proposed modifications would generate minimal vehicle traffic during construction and construction-related vehicle trips would occur over a short period of time (over the approximately four-month construction period) and would cease once construction is completed. Construction of the proposed modifications would not overlap with the construction activities analyzed in the adopted IS/MND and the proposed modifications would not generate a greater amount of construction vehicle traffic than analyzed in the IS/MND. Therefore, similar to and consistent with the analysis and conclusions in the adopted IS/MND, construction would not cause or contribute to CO hotspots.

Toxic Air Contaminants

Construction of the proposed modifications would result in short-term emissions of diesel particulate matter (DPM), which the state has identified as toxic air contaminant (TAC). As shown in Table 2, localized construction DPM emissions (listed as PM2.5) from the proposed modifications maximum daily emissions would contribute 1 pound per day or less. The minimal emissions of DPM from the proposed modifications coupled with the short-term duration of construction would contribute minimal DPM concentration in the ambient air. The nearest sensitive receptors are located approximately 700 feet from the project and thus exposure to DPM from the proposed modifications would be at very low levels if detectable at all. Therefore,

consistent with conclusions in the adopted IS/MND, sensitive receptors would not be exposed to emissions above thresholds and construction TAC impacts would be less than significant.

Odors

Potential sources that may emit odors during construction activities include construction equipment exhaust and application of asphalt. According to the SCAQMD CEQA Air Quality Handbook, construction equipment is not a typical source of odors. Therefore, similar to and consistent with the analysis and conclusion in the adopted IS/MND, the proposed modifications' construction activities would not result in objectionable odors.

Process and Operational Changes

Regional and Localized Operational Emissions

As evaluated in the adopted IS/MND's, regional and localized operational emissions would be generated primarily from flaring and mobile sources. The project operational-source emissions were found to be less than the applicable SCAQMD regional and localized thresholds of significance and operational regional and localized impacts would be less than significant. Emissions generated from operation of the proposed modification are as an increase from existing conditions of the facilities. Operational activities would consist of the inspections or maintenance activities of the BCS-2 expansion. However, no additional inspections or maintenance activities from what was analyzed in the adopted IS/MND would occur and no additional emissions would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes. There are no known or expected new sources of stationary emission sources (such as new emergency generators) associated with the proposed modification. BCS-2 is a fully sealed system and even with the increase in capacity with the proposed modification, no increase in operational emissions is expected to occur during normal operation. As a conservative assumption, the operational emissions analysis provided within the adopted IS/MND assumed one percent of the biogas produced from the food waste program would be emitted as fugitive emissions. Since the amount of food waste accepted by the program and consequently the amount of biogas produced is not changing with the proposed modification, fugitive emissions from BCS-2 have already been accounted for in the adopted IS/MND.

Although the new pipelines would transport biogas from the facility to the SoCalGas connection point at the intersection of Figueroa Street and Sepulveda Boulevard, no new operational emissions associated with the pipeline itself would occur. Therefore, operation of the proposed modification would not result in an increase in regional or localized operational emissions below the SCAQMD localized significance thresholds and impacts would be less than significant.

CO "Hot Spot" Analysis

The proposed modification would not result in additional food waste delivery truck trips during operations compared to the adopted IS/MND, and would reduce food waste delivery truck trips during operations compared to existing conditions where food waste would travel longer distances to be disposed of at landfills. Therefore, consistent with the analysis and conclusions in the adopted IS/MND, operations would not result in CO hot spots.

Toxic Air Contaminants

Operations of the proposed modification would not introduce any sources of TACs. Therefore, consistent with the conclusions in the adopted IS/MND, operational TAC impacts would be less than significant.

Odors

The proposed modifications would include a biogas processing facility which has the potential to release objectionable odors during operations. However, the facility would be a fully sealed system and would utilize an odor control system to minimize odor and air emissions. Best management practices and standard operating procedures would be implemented to limit the amount of odor emissions from the facility. Consistent with analysis and conclusions in the adopted IS/MND, impacts related to odors would be less than significant.

Conclusion

The proposed modifications would not create significant air quality impacts. Compared to the adopted IS/MND, changes to project air quality impacts that would occur as a result of the proposed modifications would not be substantial to the extent that they require any modification to impact conclusions in the adopted IS/MND. No mitigation is required beyond the existing commitments contained in the MMRP.

5.2 Energy

The adopted IS/MND evaluated energy consumption from construction and operation and concluded that impacts associated with energy consumption would be less than significant. This section provides analysis of the potential energy impacts associated with the proposed modifications.

Impact Discussion

Site Footprint Change and New Construction

Construction of the proposed modifications to the expansion of BCS-2 and the addition of the SoCalGas pipeline injection project facilities would require the use of heavy duty construction equipment in a larger area of the facility not analyzed in the adopted IS/MND. Energy would be consumed in the form of transportation fuels, specifically gasoline and diesel, used for heavy duty construction equipment and vehicles traveling to and from the site. This energy consumption would be additional to that analyzed in the adopted IS/MND. **Table 3** shows the annual average transportation fuels consumed during construction of the proposed modifications. As shown, the proposed modifications would consume approximately 29,537 gallons of diesel and approximately 2,217 gallons of gasoline compared to the 140,359 gallons of diesel and 7,787 gallons of gasoline analyzed in the adopted IS/MND. Therefore, potential construction impacts related to the proposed modifications would remain less than significant.

TABLE 3
CONSTRUCTION ENERGY CONSUMPTION

Addendum Sources	Gallons of Diesel	Gallons of Gasoline
Heavy Duty Construction Equipment	26,533	--
Haul & Vendor Trucks	3,004	
Worker Trips	--	2,217
Addendum Annual Average	**29,537**	**2,217**

NOTES:

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix A.

SOURCE: ESA 2023

Process and Operational Changes

Energy consumption from operation of the proposed modifications would be analyzed as an increase from existing conditions of the facilities. During operations of the proposed modifications, energy would be consumed in the form of fuel by mobile sources from inspections or maintenance activities of the BCS-2 expansion and POR equipment. However, minimal additional inspections or maintenance activities from what was analyzed in the adopted IS/MND are assumed and minimal additional fuel consumption would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes. There are no known or expected new sources of stationary emission sources (such as emergency generators) associated with the proposed modification. With the proposed modifications, BCS-2 would increase in biogas conditioning capacity and require less than 1,300 kW of grid power while operating at 1,440 standard cubic feet per minute (scfm) of inlet flow. The POR equipment energy consumption would be minimal at about 24 kW.

Although the new pipeline would transport biogas from the facility to the SoCalGas connection point in Figueroa Street, there would not be any operational emissions associated with the pipeline itself. However, an estimated 200 kW of electricity is assumed to be consumed as part of the proposed modifications. For the 2022 fiscal year, SCE had an annual electric sale to customers of approximately 84,218,000 megawatt hours (MWh) (SCE, 2023). The Project represents approximately 0.0000002 percent of the SCE network sales for 2022. Therefore, operational impacts associated with the proposed modifications would be less than significant.

Consistent with the goals of the adopted IS/MND, the ultimate purpose of the project is to divert food waste from landfills and to utilize it for biogas production, which is consistent with the state's goal to reduce the carbon intensity of transportation fuel and consistent with the City of Carson's applicable energy reduction strategies in the Energy Efficiency Climate Action Plan. Therefore, consistent with conclusions in the adopted IS/MND, energy impacts related to the proposed modifications would be less than significant.

Conclusion

The proposed modifications would not create additional impacts beyond those described in the adopted IS/MND prepared by the District. Changes to project impacts that would occur as a result of the proposed modifications would not be substantial to the extent that they would require any modifications to impact conclusions in the adopted IS/MND.

5.3 Greenhouse Gas Emissions

The adopted IS/MND evaluated impacts from construction and operation and concluded that impacts associated with greenhouse gas (GHG) emissions would be less than significant. This section provides analysis of the potential GHG impacts associated with the proposed modifications.

Impact Discussion

Site Footprint Change and New Construction

Construction of the proposed modifications to the expansion of BCS-2 and the addition of the SoCalGas pipeline injection project facilities would require the use of heavy-duty construction equipment in a larger area of the facility not analyzed in the adopted IS/MND. GHG emissions would be generated from heavy duty equipment and vehicle trips traveling to and from the construction site. In accordance with SCAQMD recommendations, GHG emissions from the construction of the proposed modifications were amortized over a 30-year period and included in the proposed modification's operational-phase GHG emissions (see analysis below). Consistent with the adopted IS/MND, the proposed modifications would result in less than significant impacts during construction.

TABLE 4
ESTIMATED ANNUAL CONSTRUCTION GHG EMISSIONS [A]

Emission Source	$MTCO_2e$/year
2024	835
2025	984
Addendum Total	1,819
Amortized	61
SCAQMD Significance Threshold	10,000
Exceeds Threshold?	**No**

NOTES:

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix A.

SOURCE: ESA 2023

Process and Operational Changes

GHG emissions from operation of the proposed modification would be analyzed as an increase from existing conditions of the facilities. Consistent with the adopted IS/MND, all of the food

waste delivery truck trips would be diverted from regional landfills to the LWDS site. Under existing conditions, trucks would travel the same distance or longer to dispose of the food waste at the landfills; therefore, similar to the adopted IS/MND, the proposed modifications would not increase food waste delivery truck travel distances and food waste delivery truck GHG emissions would result in net zero emissions. During operations of the proposed modifications, GHG emissions would be emitted in the form of fuel by mobile sources from inspections or maintenance activities of the BCS-2 expansion and POR equipment. However, minimal additional inspections or maintenance activities from what was analyzed in the adopted IS/MND are assumed and minimal additional fuel consumption would be generated from vehicle trips by worker staff for periodic inspections or maintenance purposes. There are no known or expected new sources of stationary emission sources (such as emergency generators) associated with the proposed modification. With the proposed modifications, BCS-2 would increase in biogas processing capacity. However, the maximum design rate, which was analyzed in the adopted IS/MND, would not change. Therefore, no additional energy consumption is assumed and GHG emissions were already accounted for in the adopted IS/MND.

Although the new pipelines would transport biogas from the facility to the SoCalGas connection point in Figueroa Street there would not be any operational emissions associated with the pipeline itself. Therefore, consistent with conclusions in the adopted IS/MND, GHG impacts related to the addition of the proposed modifications would be less than significant.

Consistent with the adopted IS/MND, operation of the proposed modifications would be subject to the same plans, policies, and regulations for reducing emissions of greenhouse gases. Operation of the proposed modifications would not conflict with any plan or policy for reducing greenhouse gases. Operations of the proposed modifications would contribute to GHG emission reductions by diverting food waste from regional landfills, therefore, consistent with the conclusions in the adopted IS/MND, GHG impacts related to the addition of the proposed modifications would be less than significant.

Conclusion

The proposed modifications would not create significant impacts beyond those described in the adopted IS/MND prepared by the District. Changes to project impacts that would occur as a result of the proposed modifications would not be substantial to the extent that they require any modification to impact conclusions in the adopted IS/MND.

5.4 Hazards and Hazardous Materials

The adopted IS/MND evaluated impacts from construction and operation and concluded that impacts related to physical interference with adopted emergency response and evacuation plans would be less than significant with implementation of mitigation measures as identified in the adopted IS/MND. Remaining impacts would be less than significant or resulted in a no impact determination. This section provides an analysis of the potential hazards and hazardous materials impacts associated with the proposed modifications.

Impact Discussion

Site Footprint Change and New Construction

Construction activities required for implementation of the proposed modifications would require equipment that uses hazardous materials such as petroleum fuels and oils. During construction activities, hazardous materials could accidentally be spilled or otherwise released into the environment exposing construction workers, the public and/or the environment to potentially hazardous conditions. As described for the adopted project in the adopted IS/MND, construction activities for the modified project that involve hazardous materials would be governed by several agencies including the U.S. Environmental Protection Agency (USEPA), Los Angeles Department of Transportation (LADOT), Division of Occupational Safety and Health (Cal/OSHA), and Department of Toxic Substances Control (DTSC). The District and its construction contractors would be required to implement BMPs for handling hazardous materials during construction activities, including following manufacturer's recommendations and regulatory requirements for use, storage, and disposal of chemical products and hazardous materials used in construction; avoiding overtopping construction equipment fuel tanks; routine maintenance of construction equipment; and proper disposal of discarded containers of fuels and other chemicals. Construction contractors would be required to implement safety measures in accordance with the General Industry Safety Orders of the CCR. In addition, the proposed project would be required to obtain a permit from the Los Angeles County Fire Department Petroleum Chemical Unit to ensure safe vehicular access, water availability, and chemical storage.

The adopted IS/MND concluded that the proposed project would not be located on an existing Leaking Underground Storage Tank (LUST) site or remediation site. However, the results of a geotechnical investigation recently conducted by Wood (2022) determined that soils at the project site may contain elevated concentrations of hydrocarbons, metals, and pesticides. As with the adopted project, during construction of the modified project, all construction-related materials including any contaminated soil would be transported and disposed of in accordance with applicable regulations. Therefore, consistent with the analysis and conclusions of the adopted IS/MND, hazardous materials impacts related to the addition of the proposed modifications would be less than significant.

The modified project would include construction of a high pressure pipeline within Figueroa Street that could potentially require partial road closures. Mitigation Measure TR-1 would be implemented as described in the adopted IS/MND to reduce potential impacts to traffic and ensure that all public roads remain passable to emergency service vehicles during construction of the modified project. Therefore, consistent with the analysis and conclusions of the adopted IS/MND, impacts regarding emergency response plans and emergency evacuation plans would remain less than significant with mitigation incorporated.

Process and Operational Changes

Compliance with applicable federal, state, and local laws would minimize the potential risks associated with the handling of hazardous materials and foreseeable accidents during operation of the modified project. Therefore, potential impacts to the public or environment through accidental release due to the routine transport, use, or disposal of hazardous materials would remain less

than significant. Once construction is complete, modified project facilities including BCS-2, the proposed pipeline, and POR facility would not include additional inspections or maintenance activities compared to those that were analyzed in the adopted IS/MND. Once installed, the new biogas pipeline interconnecting to SoCalGas' existing pipeline would be located underground and would not affect existing traffic flows. Because only a small number of new maintenance vehicle trips would occur for the POR facility and the modified project would not include construction of substantial aboveground structures outside of the JWPCP property, the modified project would not result in new hazardous conditions beyond those described in the adopted IS/MND. Therefore, consistent with the analysis and conclusions of the adopted IS/MND, impacts to emergency access vehicles, hazardous emissions within existing or proposed schools, airport hazards, or wildfire risk would be less than significant or result in no impact.

Conclusion

The proposed modifications would not create significant impacts beyond those described in the adopted IS/MND prepared by the District. Changes to project impacts that would occur as a result of the proposed modifications would not be substantial in that they do not require any changes to impact conclusions in the adopted IS/MND.

5.5 Noise

The adopted IS/MND assessed potential impacts related to construction and operational noise and vibration and the exposure of people to excessive noise levels related to airport and airstrip noise. The adopted IS/MND concluded that impacts related to nighttime construction would be less than significant with implementation of mitigation measures as identified in the adopted IS/MND. The remaining impacts would be less than significant. This section provides analysis of the potential noise and vibration impacts associated with the proposed modifications.

Impact Discussion

Site Footprint Change and New Construction

Construction Noise

Construction of the proposed modifications to the expansion of BCS-2 and the addition of the SoCalGas pipeline injection project facilities would require the use of heavy-duty construction equipment in a larger area of the facility not analyzed in the adopted IS/MND. Maximum construction activity analyzed in the IS/MND would occur during the overlap of demolition, site preparation and foundation phases, and the building erection/mechanical equipment, electrical, utilities, and sewer phases. Based on information provided by the District, construction of the proposed modifications would not overlap with the construction activities analyzed in the adopted IS/MND. Therefore, only construction noise associated with the proposed modifications are presented in this analysis.

The construction equipment used for the proposed modifications would be similar to that used in the adopted IS/MND. As with the adopted IS/MND, individual pieces of construction equipment anticipated to be used during project construction could produce maximum noise levels of 75 dBA to 90 dBA at a reference distance of 50 feet from the noise source. These maximum noise

levels would occur when equipment is operating under full power conditions. The usage factors are based on the Federal Highway Administration (FHWA) Roadway Construction Noise Model User's Guide (FHWA 2006).

The proposed modification's estimated construction noise levels were calculated for a scenario in which maximum noise-generating construction equipment were assumed to be operating simultaneously, given the physical size of the site and logistical limitations, and with the noisiest equipment located at the construction area nearest to the affected receptors to present a conservative impact analysis. This is considered a worst-case evaluation because the project would typically use fewer overall equipment simultaneously at any given time, and as such would likely generate lower noise levels than reported herein. Additionally, the closest sensitive receptors are located greater than 700 feet away. For the purposes of this analysis, a reference distance of 700 feet was used for the residential uses to the north and 850 feet for the residential uses to the southwest and southeast as conservative estimates. As the noise-sensitive receptors would be located further than these distances, the noise impact would be less than the numbers presented. **Table 5** presents the estimated total noise level for the combined project construction equipment, as all construction subphases could occur simultaneously. These noise levels do not account for noise attenuating features such as noise barriers. As shown in Table 5, estimated maximum short-term construction noise level would measure 63 dBA at 700 feet from the residential uses to the north. The City of Carson Municipal Code (CMC) Section 5502(c) allows construction noise in single-family residential area at a level up to 65 dBA between the hours of 7:00 a.m. and 8:00 pm, Monday through Saturday, and up to 55 dBA at any time on Sunday or observed holidays. Project construction is not expected to take place on weekends or any observed holidays. Therefore, construction noise from the proposed modifications would not result in construction noise levels above 65 dBA and impacts would be less than significant.

TABLE 5
ESTIMATED CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS

Location	Distance from Closest Edge of Construction Activity to Noise Receptor (ft.)[a]	Construction Phase	Estimated Maximum Construction Noise Levels (dBA L_{eq})
Single-family residential uses north of the project area across Sepulveda Boulevard.	700	Expansion of Biogas Conditioning System	59
Single-family residential uses north of the project area across Sepulveda Boulevard.	700	SoCalGas Pipeline	63

NOTES:

[a] The distance represents the nearest construction on the project area to the property line of the offsite receptor.

SOURCE: ESA 2023.

During all phases of construction of the proposed modifications, there would be up to a maximum of approximately 38 haul and vendor truck trips per day between the hours of 7:00 a.m. and 5:00 p.m. Monday to Friday compared to 70 haul and vendor trucks trips per day in the adopted IS/MND. The adopted IS/MND concluded the temporary addition of 70 haul truck trips per day

during construction activities would not contribute to an audible in noise levels above the existing noise levels. Therefore, since the proposed modifications would generate fewer truck trips than analyzed in the adopted IS/MND, the off-site construction noise impacts the proposed modifications would be less than significant.

Construction Vibration

As with the adopted IS/MND, the proposed modification would be constructed using typical construction techniques. As such, it is anticipated that the equipment to be used during construction would not expose persons to or generate excessive groundborne vibration. Post-construction on-site activities would be limited to industrial uses that would not generate excessive groundborne vibration.

The nearest off-site single-family residential buildings are located to the north of the project area, which are greater than 700 feet from the project area. At a distance of 700 feet, the maximum vibration level would be up to approximately 0.0006 inches per second PPV for a large bulldozer. All other structures are located farther away and vibration velocities would be substantially lower at these more distance structures. Referring to the Caltrans construction vibration structure damage criteria, the project would not generate vibration levels at nearby buildings that would exceed the 0.5 inches per second PPV structural damage threshold or the 0.035 inches per second PPV "distinctly perceptible" human response threshold. Therefore, construction vibration impacts associated with the proposed modifications would be less than significant.

Airport Land Use

The proposed modifications are within the project area studied in the adopted IS/MND. As with the adopted IS/MND the proposed modification are not located within an airport land use plan area or within two miles of a public airport or public use airport. Therefore, construction or operation of the proposed modifications would not expose people to excessive airport-related noise levels. No impact would occur.

Process and Operational Changes

The existing noise environment in the project vicinity is dominated by traffic noise from nearby roadways, as well as nearby industrial activities. As with the adopted IS/MND, the proposed modifications would have a minimal effect on the noise environment in proximity to the project area. Noise generated by the project would result primarily from off-site traffic. However, the proposed modifications would not increase food waste delivery trucks. During operations of the proposed modifications, noise would be generated from vehicles traveling to and from the project site to conduct inspections or maintenance of the BCS-2 expansion. However, minimal additional inspections or maintenance activities from what was analyzed in the adopted IS/MND are assumed with minimal additional vehicle trips by worker staff for periodic inspections or maintenance purposes. There are no known or expected new stationary noise sources (such as emergency generators) associated with the proposed modification. Although the new pipelines would transport biogas from the facility to the SoCalGas connection point in Figueroa Street there would not be any noise generated from the operation of the pipelines. Therefore, the proposed modifications would not include new additional noise sources compared to the adopted IS/MND.

Therefore, consistent with the analysis and conclusions in the adopted IS/MND, noise impacts related to the addition of the proposed modifications would be less than significant.

As with the adopted IS/MND, once construction activities have been completed, there would be no substantial sources of vibration activities from the project area. The proposed modification's operations would be similar to those analyzed in the adopted IS/MND, including pumps, compressor units, and exhaust fans, which would produce limited levels of vibration. Ground-borne vibration generated by each of the above-mentioned equipment and activities would generate approximately up to 0.0039 inches per second PPV at locations adjacent (within 50 feet) to the project (FTA 2006, Section 7.2.1).[2] The potential vibration levels from all project operational sources at the closest existing building and human annoyance receptor locations would be less than the significance criteria for building damage and human annoyance of 0.5 inches per second PPV and 0.035 inches per second PPV, respectively. As such, vibration impacts associated with operation of the proposed modifications would be less than significant, and no mitigation measures are required.

Conclusion

The proposed modifications would not create significant impacts beyond those described in the adopted IS/MND. Changes to project impacts that would occur as a result of the proposed modifications would not be substantial enough to require any modification to the impact conclusions contained in the adopted IS/MND. No mitigation is required beyond the existing commitments contained in the MMRP.

5.6 Transportation and Traffic

The adopted IS/MND assessed potential impacts to transportation and traffic and concluded that impacts related to the performance of the circulation system, impacts related to traffic hazards, and impacts related to inadequate emergency access would be less than significant with implementation of mitigation measures as identified in the adopted IS/MND. Remaining impacts would be less than significant. This section provides analysis of the potential transportation and traffic impacts associated with the proposed modifications.

Impact Discussion

Site Footprint Change and New Construction

Construction and operational traffic impacts of the adopted project were evaluated in the JWPCP Food Waste Receiving and Digestion Program Traffic Memorandum (TranspoGroup 2017). The memorandum, which is included as Appendix D of the adopted IS/MND, concluded that the construction trips generated by the project would represent a small fraction of those required during project operations, and thus would result in fewer impacts than the permanent operational traffic impacts. During all phases of construction of the proposed modifications, there would be up to a maximum of approximately 38 haul and vendor truck trips per day between the hours of 7:00 a.m. and 5:00 p.m. Monday to Friday compared to the peak construction period of 62 truck trips per day analyzed in the adopted IS/MND. Therefore, the number of trips generated during

[2] Federal Transit Authority, Transit Noise and Vibration Impact Assessment, Section 7.2.1, May. 2006.

construction of the proposed modifications would not result in construction traffic impacts that would be greater than those previously analyzed for the project.

The high-pressure biogas pipeline that is proposed along Figueroa Street as part of the modified project would require new construction work outside of the JWPCP; all other facilities would be constructed within the JWPCP. Installation of the pipeline would involve trenching using a traditional cut-and-cover technique in the Figueroa Street right-of-way. While full road closures are not anticipated, partial road closures may be required for a temporary period and would have the potential to impact the flow of traffic or expose vehicles, bicyclists, and/or pedestrians to traffic hazards. Mitigation Measure TR-1, as described in the adopted IS/MND, required implementation of a Traffic Control Plan with measures to reduce potential impacts to traffic, emergency access, and other hazards associated with construction. The modified project would similarly be required to implement Mitigation Measure TR-1 to reduce construction-related impacts to a less than significant level.

Minor Process and Operational Changes

Once construction is complete, the modified project would require a small number of SoCalGas vehicles traveling to the site to conduct period maintenance of the POR facility. However, these new trips would represent a minor increase to operations and maintenance activities compared to those that were analyzed in the adopted IS/MND. The proposed expanded capacity would not increase projected customers visiting the on-site station. Once installed, the new biogas pipeline interconnecting to SoCalGas' existing pipeline would be located underground and would not affect existing traffic flows. Therefore, consistent with the conclusions in the adopted IS/MND, operational traffic impacts of the proposed modifications would be less than significant.

Vehicle Miles Traveled (CEQA Guidelines Section 15064.3, Subdivision (b)

In accordance with Senate Bill (SB) 743, the new CEQA Guidelines Section 15064.3, Subdivision (b) was adopted in December 2018 by the California Natural Resources Agency. These revisions to the CEQA Guidelines criteria for determining the significance of transportation impacts are primarily focused on projects within transit priority areas and shift the focus from driver delay to reduction of GHG emissions, creation of multimodal networks, and promotion of a mix of land uses. The adopted IS/MND did not evaluate consistency with CEQA Guidelines Section 15064.3, Subdivision (b) as that criterion was introduced after the document was adopted. In October 2022, the City of Carson adopted new local vehicle miles traveled (VMT) thresholds that are compliant with State law (SB 743) and consistent with the *Technical Advisory on Evaluating Transportation Impacts in CEQA* published by the Governor's Office of Planning and Research (OPR) (2018). According to OPR guidance, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than significant transportation impact, and thus may be screened out from further analysis in a traffic study. As discussed previously, the proposed modifications would not result in the addition of vehicles to the local circulation network beyond the peak construction period and permanent operational vehicles originally analyzed in the adopted IS/MND. Therefore, no impact to VMT would occur.

Conclusion

The proposed modifications would not create significant impacts beyond those described in the adopted IS/MND prepared by the District. Changes to project impacts that would occur as a result of the proposed modifications would not be sufficient to require any modification of impact conclusions in the adopted IS/MND. No mitigation is required beyond the existing commitments contained in the MMRP.

5.7 Utility and Service Systems

The adopted IS/MND evaluated impacts to utilities and service systems for the project area and concluded that there would be no impact to water supplies. All other construction and operational impacts pertaining to new or expanded utilities, stormwater drainage, landfills, and solid waste regulations were concluded to be less than significant. This section provides analysis of the potential utility and service system impacts associated with the proposed modifications.

Impact Discussion

Site Footprint Change and New Construction

Construction of the proposed modifications could temporarily alter surface water flow within the project area due to ground-disturbing activities. However, with the implementation of the project specific best management practices for water quality and stormwater management, the proposed project would minimize the potential for flooding and would reduce water flow to stormwater drainage systems. The proposed modifications would be implemented mainly in an area of the JWPCP that is already paved. Any impervious surfaces that are increased to accommodate the expanded BCS-2 footprint and SoCalGas POR would not be substantial and would be located within the existing JWPCP property, in the area immediately south of the existing CNG Fueling Station. The proposed high-pressure pipeline would extend from the SoCalGas POR to interconnect with an existing pipe in Figueroa Street near the intersection of Sepulveda Boulevard. Following installation of the proposed pipeline, surface areas would be backfilled and repaved to existing conditions. Therefore, the proposed project would not increase surface runoff and would not require additional stormwater facilities. Impacts would be less than significant.

As described in the adopted IS/MND, minimal amounts of water would be required during the construction of the proposed project. This water would be used for dust control, concrete mixing, and sanitary purposes. Like the project described in the adopted IS/MND, minimal amounts of water would be required during construction of the proposed modifications. All wastewater generated in portable toilets would be collected by a permitted portable toilet waste hauler and appropriately disposed of at an identified liquid-disposal station. Therefore, no construction or expansion of water or wastewater facilities would be required for construction of the proposed project.

The adopted IS/MND stated that solid waste generated during the construction of the proposed project would mainly consist of general construction debris and worker personal waste, and that construction associated with the proposed project would comply with federal, state, and local requirements applicable to solid waste disposal and construction. Construction of the proposed

modifications would create negligible amounts of waste, and would comply with the federal, state, and local requirements described in the adopted IS/MND. Construction of the proposed POR facility and associated drive aisle would require additional import of approximately 520 CY of concrete to the JWPCP. Construction of the modified BCS-2 expansion would require less than 1,000 CY of export of dirt and existing paving, comparable to the approximately 1,000 CY of export proposed under the adopted IS/MND. Excess construction solid waste from construction activities would be hauled from the site to a local material recovery facility (MRF) or transfer station for proper disposal at a local landfill at the discretion of the District. There are several MRFs and transfer stations in the project area that accept construction and demolition waste and would be able to accommodate the waste disposal needs of the proposed project, such as the Waste Management Carson Transfer Station/MRF (321 West Francisco Street, Carson CA), Potential Industries, Inc. (922 East E. Street, Wilmington CA), and Falcon Refuse Center (3031 East I Street, Wilmington CA). Therefore, impacts associated with construction waste, disposal, landfill capacity, and compliance with federal, state, and local requirements related to the proposed modifications would remain less than significant.

Process and Operational Changes

As stated in the adopted IS/MND, the expanded BCS-2 would discharge condensate removed from biogas, which would be routed through an existing drainage pipeline extending south of the proposed facility to an existing sewer manhole. Under the modified project, condensate discharge and all wastewater generated from BCS-2 would be treated at the JWPCP facility as described for the adopted project. None of the proposed modifications would contribute to the generation of wastewater to the extent that the proposed project would exceed wastewater treatment requirements of the Regional Water Quality Control Board, and the proposed modifications would not result in the generation of wastewater that would cause an excess of the 400-million gallon-per-day dry weather design capacity of the JWPCP facility. Therefore, impacts related to wastewater treatment, wastewater treatment facility expansion, and the ability of the wastewater treatment provider to serve the proposed modifications would remain less than significant.

No additional water supplies would be required for the proposed modifications. Water required for operations would continue to be supplied entirely by the existing capacity of the JWPCP, and no new or expanded entitlements would be required. Therefore, impacts related to water supply availability would remain less than significant. Operation of the proposed modifications would not generate solid waste. Therefore, these modifications would not create insufficient landfill capacity or lead to noncompliance with solid waste statues and regulations. Impacts would remain less than significant.

As described under Section 5.2, *Energy*, operations of the proposed modifications would not result in a significant increase in energy consumption beyond what was already accounted for in the adopted IS/MND. Therefore, the modified project would not require construction of new or expanded electrical power or natural gas facilities other than those proposed within the JWPCP property. Impacts would be less than significant.

Conclusion

The proposed modifications would not create significant impacts beyond those described in the adopted IS/MND prepared by the District. The construction and operation of the newly proposed modifications would not substantially increase the severity of impacts previously analyzed in the adopted IS/MND. No mitigation is required beyond the existing commitments contained in the MMRP.

6.0 Summary of Effects

The proposed modifications would not change the impact conclusions of the adopted IS/MND. The proposed modifications would still meet the same project objectives identified in the adopted IS/MND. No new potentially significant impacts would occur, and the proposed modifications would not increase the severity of previously-identified impacts analyzed in the adopted IS/MND. The proposed modifications to the previously-approved project do not meet any of the conditions that would require the preparation of a subsequent EIR or negative declaration pursuant to Section 15162 of the CEQA Guidelines or any of the conditions set forth in Section 15163 of the CEQA Guidelines.

7.0 References

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Appendix A

Air Quality, Greenhouse Gas, Energy, and Noise Calculation Worksheets

ESA

A.1 Air Quality (AQ) Emission Calculations

A.1.1 AQ – CalEEMod Outputs

Food Waste Receiving and Digestion Program at JWPCP - Addendum 2 v2 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Food Waste Receiving and Digestion Program at JWPCP - Addendum 2 v2
Construction Start Date	11/1/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	16.0
Location	24501 S Figueroa St, Carson, CA 90745, USA
County	Los Angeles-South Coast
City	Carson
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4633
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
General Light Industry	10.0	1000sqft	0.23	10,000	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.95	8.97	11.2	0.02	0.36	0.07	0.42	0.33	0.02	0.34	—	2,239	2,239	0.09	0.03	0.38	2,250
Mit.	0.43	11.0	13.1	0.02	0.47	0.07	0.54	0.43	0.02	0.45	—	2,239	2,239	0.09	0.03	0.38	2,250
% Reduced	55%	-23%	-17%	—	-33%	—	-28%	-31%	—	-30%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.57	48.4	54.2	0.09	2.00	2.79	4.79	1.84	1.13	2.97	—	10,276	10,276	0.43	0.26	0.14	10,365
Mit.	5.27	46.1	54.8	0.09	2.04	2.79	4.83	1.85	1.13	2.98	—	10,276	10,276	0.43	0.26	0.14	10,365
% Reduced	39%	5%	-1%	—	-2%	—	-1%	-1%	—	> -0.5%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.72	4.87	5.29	0.01	0.21	0.31	0.52	0.19	0.13	0.32	—	1,022	1,022	0.04	0.02	0.23	1,029
Mit.	0.37	4.76	5.66	0.01	0.21	0.31	0.48	0.19	0.13	0.28	—	1,022	1,022	0.04	0.02	0.23	1,029
% Reduced	49%	2%	-7%	—	2%	—	8%	3%	—	12%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.13	0.89	0.97	< 0.005	0.04	0.06	0.10	0.04	0.02	0.06	—	169	169	0.01	< 0.005	0.04	170
Mit.	0.07	0.87	1.03	< 0.005	0.04	0.06	0.09	0.03	0.02	0.05	—	169	169	0.01	< 0.005	0.04	170
% Reduced	49%	2%	-7%	—	2%	—	8%	3%	—	12%	—	—	—	—	—	—	—

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.95	8.97	11.2	0.02	0.36	0.07	0.42	0.33	0.02	0.34	—	2,239	2,239	0.09	0.03	0.38	2,250
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	7.97	43.4	45.1	0.07	1.88	2.72	4.60	1.73	1.11	2.84	—	8,069	8,069	0.34	0.24	0.14	8,148
2025	8.57	48.4	54.2	0.09	2.00	2.79	4.79	1.84	1.13	2.97	—	10,276	10,276	0.43	0.26	0.14	10,365
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.72	4.87	4.99	0.01	0.21	0.31	0.52	0.19	0.13	0.32	—	884	884	0.04	0.02	0.23	892
2025	0.59	4.60	5.29	0.01	0.19	0.18	0.37	0.17	0.07	0.25	—	1,022	1,022	0.04	0.02	0.16	1,029
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.13	0.89	0.91	< 0.005	0.04	0.06	0.10	0.04	0.02	0.06	—	146	146	0.01	< 0.005	0.04	148
2025	0.11	0.84	0.97	< 0.005	0.03	0.03	0.07	0.03	0.01	0.04	—	169	169	0.01	< 0.005	0.03	170

2.3. Construction Emissions by Year, Mitigated

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

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.43	11.0	13.1	0.02	0.47	0.07	0.54	0.43	0.02	0.45	—	2,239	2,239	0.09	0.03	0.38	2,250
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.85	35.2	41.9	0.07	1.57	2.72	4.29	1.43	1.11	2.54	—	8,069	8,069	0.34	0.24	0.14	8,148
2025	5.27	46.1	54.8	0.09	2.04	2.79	4.83	1.85	1.13	2.98	—	10,276	10,276	0.43	0.26	0.14	10,365
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.37	3.86	4.60	0.01	0.17	0.31	0.48	0.16	0.13	0.28	—	884	884	0.04	0.02	0.23	892
2025	0.29	4.76	5.66	0.01	0.21	0.18	0.39	0.19	0.07	0.26	—	1,022	1,022	0.04	0.02	0.16	1,029
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.07	0.70	0.84	< 0.005	0.03	0.06	0.09	0.03	0.02	0.05	—	146	146	0.01	< 0.005	0.04	148
2025	0.05	0.87	1.03	< 0.005	0.04	0.03	0.07	0.03	0.01	0.05	—	169	169	0.01	< 0.005	0.03	170

3. Construction Emissions Details

3.1. Grading (2024) - Unmitigated

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

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

Off-Road Equipment	2.08	18.8	18.1	0.03	0.84	—	0.84	0.77	—	0.77	—	2,796	2,796	0.11	0.02	—	2,806
Dust From Material Movement	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	2.25	2.16	< 0.005	0.10	—	0.10	0.09	—	0.09	—	334	334	0.01	< 0.005	—	335
Dust From Material Movement	—	—	—	—	—	0.22	0.22	—	0.11	0.11	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.41	0.39	< 0.005	0.02	—	0.02	0.02	—	0.02	—	55.3	55.3	< 0.005	< 0.005	—	55.4
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	1.02	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	214	214	0.01	0.01	0.02	217

Vendor	0.01	0.24	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	194	194	0.01	0.03	0.01	202
Hauling	0.01	0.55	0.20	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	423	423	0.02	0.07	0.03	444
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	25.9	25.9	< 0.005	< 0.005	0.05	26.3
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.1	23.1	< 0.005	< 0.005	0.03	24.1
Hauling	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	50.5	50.5	< 0.005	0.01	0.05	53.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.35
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.83	3.83	< 0.005	< 0.005	< 0.005	3.99
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.36	8.36	< 0.005	< 0.005	0.01	8.78

3.2. Grading (2024) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	14.5	16.5	0.03	0.66	—	0.66	0.60	—	0.60	—	2,796	2,796	0.11	0.02	—	2,806
Dust From Material Movement	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	1.73	1.97	< 0.005	0.08	—	0.08	0.07	—	0.07	—	334	334	0.01	< 0.005	—	335
Dust From Material Movement	—	—	—	—	—	0.22	0.22	—	0.11	0.11	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.31	0.36	< 0.005	0.01	—	0.01	0.01	—	0.01	—	55.3	55.3	< 0.005	< 0.005	—	55.4
Dust From Material Movement	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.09	1.02	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	214	214	0.01	0.01	0.02	217
Vendor	0.01	0.24	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	194	194	0.01	0.03	0.01	202
Hauling	0.01	0.55	0.20	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	423	423	0.02	0.07	0.03	444
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	25.9	25.9	< 0.005	< 0.005	0.05	26.3
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.1	23.1	< 0.005	< 0.005	0.03	24.1

Hauling	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	50.5	50.5	< 0.005	0.01	0.05	53.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.35
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.83	3.83	< 0.005	< 0.005	< 0.005	3.99
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.36	8.36	< 0.005	< 0.005	0.01	8.78

3.3. Grading (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.93	17.0	17.2	0.03	0.73	—	0.73	0.67	—	0.67	—	2,797	2,797	0.11	0.02	—	2,807
Dust From Material Movement	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.10	1.11	< 0.005	0.05	—	0.05	0.04	—	0.04	—	181	181	0.01	< 0.005	—	181
Dust From Material Movement	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.20	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.9	29.9	< 0.005	< 0.005	—	30.0
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	0.94	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	210	210	0.01	0.01	0.02	212
Vendor	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.01	199
Hauling	0.01	0.53	0.20	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	416	416	0.02	0.07	0.03	436
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.02	13.9
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.01	12.8
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.8	26.8	< 0.005	< 0.005	0.03	28.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.28	2.28	< 0.005	< 0.005	< 0.005	2.31
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.04	2.04	< 0.005	< 0.005	< 0.005	2.13
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.44	4.44	< 0.005	< 0.005	< 0.005	4.66

3.4. Grading (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	14.4	16.5	0.03	0.66	—	0.66	0.60	—	0.60	—	2,797	2,797	0.11	0.02	—	2,807
Dust From Material Movement	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.93	1.07	< 0.005	0.04	—	0.04	0.04	—	0.04	—	181	181	0.01	< 0.005	—	181
Dust From Material Movement	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.17	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.9	29.9	< 0.005	< 0.005	—	30.0

Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	0.94	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	210	210	0.01	0.01	0.02	212
Vendor	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.01	199
Hauling	0.01	0.53	0.20	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	416	416	0.02	0.07	0.03	436
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.02	13.9
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.01	12.8
Hauling	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.8	26.8	< 0.005	< 0.005	0.03	28.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.28	2.28	< 0.005	< 0.005	< 0.005	2.31
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.04	2.04	< 0.005	< 0.005	< 0.005	2.13
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.44	4.44	< 0.005	< 0.005	< 0.005	4.66

3.5. Building Construction (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	8.88	10.9	0.02	0.35	—	0.35	0.33	—	0.33	—	2,120	2,120	0.09	0.02	—	2,128
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	8.88	10.9	0.02	0.35	—	0.35	0.33	—	0.33	—	2,120	2,120	0.09	0.02	—	2,128
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	2.12	2.59	< 0.005	0.08	—	0.08	0.08	—	0.08	—	505	505	0.02	< 0.005	—	507
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.39	0.47	< 0.005	0.02	—	0.02	0.01	—	0.01	—	83.7	83.7	< 0.005	< 0.005	—	84.0
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	55.3	55.3	< 0.005	< 0.005	0.20	56.1
Vendor	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.5	63.5	< 0.005	0.01	0.17	66.3
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.4	52.4	< 0.005	< 0.005	0.01	53.1
Vendor	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.5	63.5	< 0.005	0.01	< 0.005	66.2
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.7	12.7	< 0.005	< 0.005	0.02	12.9
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.1	15.1	< 0.005	< 0.005	0.02	15.8
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.10	2.10	< 0.005	< 0.005	< 0.005	2.13
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.50	2.50	< 0.005	< 0.005	< 0.005	2.61
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

3.6. Building Construction (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	10.9	12.8	0.02	0.47	—	0.47	0.43	—	0.43	—	2,120	2,120	0.09	0.02	—	2,128
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.41	10.9	12.8	0.02	0.47	—	0.47	0.43	—	0.43	—	2,120	2,120	0.09	0.02	—	2,128
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	2.60	3.06	< 0.005	0.11	—	0.11	0.10	—	0.10	—	505	505	0.02	< 0.005	—	507
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.47	0.56	< 0.005	0.02	—	0.02	0.02	—	0.02	—	83.7	83.7	< 0.005	< 0.005	—	84.0
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	55.3	55.3	< 0.005	< 0.005	0.20	56.1
Vendor	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.5	63.5	< 0.005	0.01	0.17	66.3
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	52.4	52.4	< 0.005	< 0.005	0.01	53.1
Vendor	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.5	63.5	< 0.005	0.01	< 0.005	66.2
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.7	12.7	< 0.005	< 0.005	0.02	12.9
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.1	15.1	< 0.005	< 0.005	0.02	15.8

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.10	2.10	< 0.005	< 0.005	< 0.005	2.13
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.50	2.50	< 0.005	< 0.005	< 0.005	2.61
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

3.7. Paving (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	3.59	4.60	0.01	0.18	—	0.18	0.16	—	0.16	—	697	697	0.03	0.01	—	699
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.20	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	39.5	39.5	< 0.005	< 0.005	—	39.7
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.55	6.55	< 0.005	< 0.005	—	6.57

Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.06	0.64	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	134	134	0.01	< 0.005	0.01	135
Vendor	0.01	0.24	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	194	194	0.01	0.03	0.01	202
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.71	7.71	< 0.005	< 0.005	0.01	7.81
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.5
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	< 0.005	1.90
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

3.8. Paving (2024) - Mitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	4.04	4.82	0.01	0.18	—	0.18	0.17	—	0.17	—	697	697	0.03	0.01	—	699
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.23	0.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	39.5	39.5	< 0.005	< 0.005	—	39.7
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.55	6.55	< 0.005	< 0.005	—	6.57
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.06	0.64	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	134	134	0.01	< 0.005	0.01	135
Vendor	0.01	0.24	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	194	194	0.01	0.03	0.01	202
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.71	7.71	< 0.005	< 0.005	0.01	7.81
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.5
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.82	1.82	< 0.005	< 0.005	< 0.005	1.90
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

3.9. Paving (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	3.44	4.59	0.01	0.16	—	0.16	0.14	—	0.14	—	697	697	0.03	0.01	—	699
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.7	17.7	< 0.005	< 0.005	—	17.8
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.93	2.93	< 0.005	< 0.005	—	2.94
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.59	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	131	131	0.01	< 0.005	0.01	133
Vendor	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.01	199
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.38	3.38	< 0.005	< 0.005	0.01	3.43
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.84	4.84	< 0.005	< 0.005	0.01	5.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.56	0.56	< 0.005	< 0.005	< 0.005	0.57
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.80	0.80	< 0.005	< 0.005	< 0.005	0.84
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

3.10. Paving (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	4.04	4.82	0.01	0.18	—	0.18	0.17	—	0.17	—	697	697	0.03	0.01	—	699
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.10	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.7	17.7	< 0.005	< 0.005	—	17.8
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.93	2.93	< 0.005	< 0.005	—	2.94
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.59	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	131	131	0.01	< 0.005	0.01	133
Vendor	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.01	199

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.38	3.38	< 0.005	< 0.005	0.01	3.43
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.84	4.84	< 0.005	< 0.005	0.01	5.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.56	0.56	< 0.005	< 0.005	< 0.005	0.57
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.80	0.80	< 0.005	< 0.005	< 0.005	0.84
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

3.11. Architectural Coating (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	3.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.58	7.58	< 0.005	< 0.005	—	7.60
Architectural Coatings	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.25	1.25	< 0.005	< 0.005	—	1.26
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.8	26.8	< 0.005	< 0.005	< 0.005	27.1
Vendor	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.8	96.8	< 0.005	0.01	0.01	101
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.56
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.73
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.26

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.91	0.91	< 0.005	< 0.005	< 0.005	0.95
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

3.12. Architectural Coating (2024) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	3.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.58	7.58	< 0.005	< 0.005	—	7.60
Architectural Coatings	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.25	1.25	< 0.005	< 0.005	—	1.26

Architectu Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.8	26.8	< 0.005	< 0.005	< 0.005	27.1
Vendor	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.8	96.8	< 0.005	0.01	0.01	101
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.56
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.73
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.91	0.91	< 0.005	< 0.005	< 0.005	0.95
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

3.13. Architectural Coating (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	3.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.40	3.40	< 0.005	< 0.005	—	3.41
Architectural Coatings	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.56	0.56	< 0.005	< 0.005	—	0.56
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.2	26.2	< 0.005	< 0.005	< 0.005	26.5
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	95.2	95.2	< 0.005	0.01	0.01	99.3
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.69
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.53
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.42
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

3.14. Architectural Coating (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	3.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.40	3.40	< 0.005	< 0.005	—	3.41
Architectural Coatings	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.56	0.56	< 0.005	< 0.005	—	0.56
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.2	26.2	< 0.005	< 0.005	< 0.005	26.5
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	95.2	95.2	< 0.005	0.01	0.01	99.3
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	< 0.005	0.69
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.53

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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.42
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

3.15. Trenching (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.03	18.4	17.8	0.03	0.82	—	0.82	0.76	—	0.76	—	2,740	2,740	0.11	0.02	—	2,749
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	2.20	2.13	< 0.005	0.10	—	0.10	0.09	—	0.09	—	327	327	0.01	< 0.005	—	328
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.40	0.39	< 0.005	0.02	—	0.02	0.02	—	0.02	—	54.1	54.1	< 0.005	< 0.005	—	54.3
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

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.08	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	227	227	0.01	0.01	0.02	230
Vendor	0.01	0.24	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	194	194	0.01	0.03	0.01	202
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.6	27.6	< 0.005	< 0.005	0.05	27.9
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.1	23.1	< 0.005	< 0.005	0.03	24.1
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.56	4.56	< 0.005	< 0.005	0.01	4.63
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.83	3.83	< 0.005	< 0.005	< 0.005	3.99
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

3.16. Trenching (2024) - Mitigated

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

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

Off-Road Equipment	0.62	14.0	16.2	0.03	0.64	—	0.64	0.59	—	0.59	—	2,740	2,740	0.11	0.02	—	2,749
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	1.68	1.93	< 0.005	0.08	—	0.08	0.07	—	0.07	—	327	327	0.01	< 0.005	—	328
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.31	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.1	54.1	< 0.005	< 0.005	—	54.3
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.10	1.08	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	227	227	0.01	0.01	0.02	230
Vendor	0.01	0.24	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	194	194	0.01	0.03	0.01	202
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.6	27.6	< 0.005	< 0.005	0.05	27.9
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.1	23.1	< 0.005	< 0.005	0.03	24.1
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.56	4.56	< 0.005	< 0.005	0.01	4.63

Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.83	3.83	< 0.005	< 0.005	< 0.005	3.99
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

3.17. Trenching (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.87	16.6	16.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,741	2,741	0.11	0.02	—	2,750
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.17	1.19	< 0.005	0.05	—	0.05	0.05	—	0.05	—	193	193	0.01	< 0.005	—	194
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.21	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.0	32.0	< 0.005	< 0.005	—	32.1
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	1.00	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	223	223	0.01	0.01	0.02	226
Vendor	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.01	199
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.9	15.9	< 0.005	< 0.005	0.03	16.1
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.02	14.0
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.64	2.64	< 0.005	< 0.005	< 0.005	2.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.22	2.22	< 0.005	< 0.005	< 0.005	2.32
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

3.18. Trenching (2025) - Mitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	14.0	16.2	0.03	0.64	—	0.64	0.58	—	0.58	—	2,741	2,741	0.11	0.02	—	2,750
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.99	1.14	< 0.005	0.05	—	0.05	0.04	—	0.04	—	193	193	0.01	< 0.005	—	194
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.18	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.0	32.0	< 0.005	< 0.005	—	32.1
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	1.00	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	223	223	0.01	0.01	0.02	226
Vendor	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	190	190	0.01	0.03	0.01	199
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.9	15.9	< 0.005	< 0.005	0.03	16.1
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.02	14.0
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.64	2.64	< 0.005	< 0.005	< 0.005	2.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.22	2.22	< 0.005	< 0.005	< 0.005	2.32
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

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Grading	Grading	11/1/2024	2/2/2025	5.00	66.0	—
Building Construction	Building Construction	1/1/2025	5/1/2025	5.00	87.0	—
Paving	Paving	12/3/2024	1/13/2025	5.00	30.0	—
Architectural Coating	Architectural Coating	12/3/2024	1/13/2025	5.00	30.0	—
Trenching	Trenching	11/1/2024	2/5/2025	5.00	69.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Grading	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Grading	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Trenching	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Trenching	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Trenching	Graders	Diesel	Average	1.00	8.00	148	0.41
Trenching	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Trenching	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Trenching	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Air Compressors	Diesel	Tier 3	1.00	8.00	37.0	0.48
Grading	Concrete/Industrial Saws	Diesel	Tier 3	1.00	8.00	33.0	0.73
Grading	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Grading	Graders	Diesel	Tier 3	1.00	8.00	148	0.41
Grading	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	8.00	84.0	0.37
Building Construction	Concrete/Industrial Saws	Diesel	Tier 3	1.00	8.00	33.0	0.73
Building Construction	Cranes	Diesel	Tier 3	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 3	2.00	8.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 3	2.00	8.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 3	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Tier 3	1.00	7.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 3	1.00	6.00	37.0	0.48
Trenching	Air Compressors	Diesel	Tier 3	1.00	8.00	37.0	0.48
Trenching	Concrete/Industrial Saws	Diesel	Tier 3	1.00	8.00	33.0	0.73
Trenching	Graders	Diesel	Tier 3	1.00	8.00	148	0.41
Trenching	Pumps	Diesel	Average	1.00	8.00	11.0	0.74

Trenching	Rubber Tired Dozers	Diesel	Tier 3	1.00	8.00	367	0.40
Trenching	Tractors/Loaders/Backhoes	Diesel	Tier 3	1.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	16.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	6.00	10.2	HHDT,MHDT
Grading	Hauling	6.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	4.00	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.00	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	6.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.00	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	3.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

Trenching	—	—	—	—
Trenching	Worker	17.0	18.5	LDA,LDT1,LDT2
Trenching	Vendor	6.00	10.2	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	16.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	6.00	10.2	HHDT,MHDT
Grading	Hauling	6.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	4.00	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.00	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	6.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.00	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	3.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT

Architectural Coating	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	17.0	18.5	LDA,LDT1,LDT2
Trenching	Vendor	6.00	10.2	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	15,000	5,000	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Grading	144	1,573	1.00	0.00	—
Paving	0.00	0.00	0.00	0.00	1.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
General Light Industry	1.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.07	annual days of extreme heat
Extreme Precipitation	4.20	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

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

Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	75.2
AQ-DPM	81.6
Drinking Water	29.4
Lead Risk Housing	54.2
Pesticides	73.9
Toxic Releases	99.5
Traffic	80.9
Effect Indicators	—
CleanUp Sites	19.9
Groundwater	32.9
Haz Waste Facilities/Generators	96.1
Impaired Water Bodies	0.00
Solid Waste	0.00

Sensitive Population	—
Asthma	76.6
Cardio-vascular	82.7
Low Birth Weights	91.9
Socioeconomic Factor Indicators	—
Education	54.6
Housing	6.10
Linguistic	43.3
Poverty	28.4
Unemployment	33.6

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	86.12857693
Employed	59.16848454
Median HI	79.85371487
Education	—
Bachelor's or higher	52.02104453
High school enrollment	100
Preschool enrollment	10.18863082
Transportation	—
Auto Access	92.6344155
Active commuting	24.57333504
Social	—
2-parent households	37.5465161

Voting	15.28294623
Neighborhood	—
Alcohol availability	70.10137303
Park access	36.21198511
Retail density	45.14307712
Supermarket access	67.61195945
Tree canopy	44.51430771
Housing	—
Homeownership	93.53265751
Housing habitability	91.83882972
Low-inc homeowner severe housing cost burden	69.28012319
Low-inc renter severe housing cost burden	96.97164122
Uncrowded housing	24.38085461
Health Outcomes	—
Insured adults	45.46387784
Arthritis	55.6
Asthma ER Admissions	30.5
High Blood Pressure	37.6
Cancer (excluding skin)	45.0
Asthma	95.7
Coronary Heart Disease	51.0
Chronic Obstructive Pulmonary Disease	76.7
Diagnosed Diabetes	24.2
Life Expectancy at Birth	68.8
Cognitively Disabled	22.1
Physically Disabled	45.1
Heart Attack ER Admissions	25.8

Mental Health Not Good	74.9
Chronic Kidney Disease	45.1
Obesity	84.8
Pedestrian Injuries	44.9
Physical Health Not Good	56.1
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	92.1
Current Smoker	74.7
No Leisure Time for Physical Activity	43.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	81.0
Elderly	34.5
English Speaking	79.2
Foreign-born	83.5
Outdoor Workers	60.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	12.9
Traffic Density	77.5
Traffic Access	67.6
Other Indices	—
Hardship	61.4
Other Decision Support	—
2016 Voting	17.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	74.0
Healthy Places Index Score for Project Location (b)	61.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	Wilmington Long Beach Carson

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Combined BCS-2 and Pipeline work since it's overlapping.
Construction: Off-Road Equipment	proposed equipment list
Construction: Trips and VMT	proposed vehicle trips
Construction: Paving	total footprint of disturbed area
Construction: Dust From Material Movement	email 9.12.2023

A.1.2 AQ – Construction Emission Calculations

Food Waste Receiving and Digestion Program at JWPCP- Addendum 2
Air Quality Construction Analysis

Regional Emissions Summary	ROG	NOX	CO	SO2	Total PM10	Total PM2.5
Source	lb/day					
Building Construction - 2025	<1	11.0	13.1	<1	<1	<1
Overlapping Phases						
Grading & Trenching	1.5	29.7	35.2	<1	3.8	2.3
Grading & Paving & Architectural Coating & Trenching	4.9	35.3	41.9	<1	4.3	2.6
Grading & Building Construction & Paving & Architectural Coating & Trenching	5.3	46.3	55.1	<1	4.8	3.0
Grading & Building Construction & Trenching	1.9	40.7	48.3	<1	4.3	2.7
Building Construction & Trenching	1.1	25.3	30.5	<1	1.5	1.1
Project Daily Maximum Emissions	5.3	46.3	55.1	<1	4.8	3.0
SDAPCD Regional Significance Threshold	75	100	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

Localized Emissions Summary	NOX	CO	Total PM10	Total PM2.5
Source	lb/day			
Building Construction - 2025	10.9	12.8	<1	<1
Overlapping Phases				
Grading & Trenching	28.5	32.7	3.1	2.1
Grading & Paving & Architectural Coating & Trenching	33.6	38.5	3.4	2.3
Grading & Building Construction & Paving & Architectural Coating & Trenching	44.5	51.3	3.9	2.7
Grading & Building Construction & Trenching	39.4	45.5	3.6	2.5
Building Construction & Trenching	24.9	29.0	1.1	1.0
Project Daily Maximum Emissions	44.5	51.3	3.9	2.7
Threshold	90.0	2296.0	61.0	26.0
Significant Impact?	No	No	No	No

Food Waste Receiving and Digestion Program at JWPCP- Addendum 2

Air Quality Construction Analysis

Regional Maximums	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM10	Fugitive PM10	Total PM2.5
Source					lb/day					
Grading - 2024	0.8	15.4	17.8	0.0	0.7	2.2	2.9	0.6	1.0	1.6
Grading - 2025	0.8	15.2	17.8	0.0	0.7	2.2	2.9	0.6	1.0	1.6
Building Construction - 2025	0.4	11.0	13.1	0.0	0.5	0.1	0.5	0.4	0.0	0.5
Paving - 2024	0.2	4.3	5.6	0.0	0.2	0.2	0.4	0.2	0.0	0.2
Paving - 2025	0.2	4.3	5.5	0.0	0.2	0.2	0.4	0.2	0.0	0.2
Architectural Coating - 2024	3.2	1.2	1.2	0.0	0.1	0.1	0.1	0.1	0.0	0.1
Architectural Coating - 2025	3.2	1.2	1.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1
Trenching - 2024	0.7	14.3	17.4	0.0	0.6	0.3	0.9	0.6	0.1	0.7
Trenching - 2025	0.7	14.3	17.3	0.0	0.6	0.3	0.9	0.6	0.1	0.7
Overlapping Phases										
	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM10	Fugitive PM10	Total PM2.5
Grading & Trenching	1.5	29.7	35.2	0.1	1.3	2.5	3.8	1.2	1.0	2.3
Grading & Paving & Architectural Coating & Trenching	4.9	35.3	41.9	0.1	1.6	2.7	4.3	1.4	1.1	2.6
Grading & Building Construction & Paving & Architectural Coating & Trenching	5.3	46.3	55.1	0.1	2.0	2.8	4.8	1.9	1.1	3.0
Grading & Building Construction & Trenching	1.9	40.7	48.3	0.1	1.8	2.6	4.3	1.6	1.1	2.7
Building Construction & Trenching	1.1	25.3	30.5	0.1	1.1	0.3	1.5	1.0	0.1	1.1
Project Daily Maximum Emissions	5.3	46.3	55.1	0.1	2.0	2.8	4.8	1.9	1.1	3.0

Localized Maximum	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM10	Fugitive PM10	Total PM2.5
Source					lb/day					
Grading - 2024	0.7	14.5	16.5	0.0	0.7	1.8	2.5	0.6	0.9	1.5
Grading - 2025	0.7	14.4	16.5	0.0	0.7	1.8	2.5	0.6	0.9	1.5
Building Construction - 2025	0.4	10.9	12.8	0.0	0.5	0.0	0.5	0.4	0.0	0.4
Paving - 2024	0.2	4.0	4.8	0.0	0.2	0.0	0.2	0.2	0.0	0.2
Paving - 2025	0.2	4.0	4.8	0.0	0.2	0.0	0.2	0.2	0.0	0.2
Architectural Coating - 2024	3.1	1.1	1.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1
Architectural Coating - 2025	3.1	1.1	1.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1
Trenching - 2024	0.6	14.0	16.2	0.0	0.6	0.0	0.6	0.6	0.0	0.6
Trenching - 2025	0.6	14.0	16.2	0.0	0.6	0.0	0.6	0.6	0.0	0.6
Overlapping Phases										
	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM10	Fugitive PM10	Total PM2.5
Grading & Trenching	1.3	28.5	32.7	0.1	1.3	1.8	3.1	1.2	0.9	2.1
Grading & Paving & Architectural Coating & Trenching	4.6	33.6	38.5	0.1	1.6	1.8	3.4	1.4	0.9	2.3
Grading & Building Construction & Paving & Architectural Coating & Trenching	5.0	44.5	51.3	0.1	2.0	1.8	3.9	1.9	0.9	2.7
Grading & Building Construction & Trenching	1.7	39.4	45.5	0.1	1.8	1.8	3.6	1.6	0.9	2.5
Building Construction & Trenching	1.0	24.9	29.0	0.1	1.1	0.0	1.1	1.0	0.0	1.0
Project Daily Maximum Emissions	5.0	44.5	51.3	0.1	2.0	1.8	3.9	1.9	0.9	2.7
Threshold		90.0	2296.0				61.0			26.0
Significant Impact?		No	No				No			No

Food Waste Receiving and Digestion Program at JWPCP- Addendum 2

Air Quality Construction Analysis

Summer	Onsite Emissions										Offsite Emissions									
	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM2.5	Fugitive PM2.5	Total PM2.5	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM2.5	Fugitive PM2.5	Total PM2.5
Source	lb/day										lb/day									
Grading - 2024	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	0.00	0.00	0.00
Grading - 2025	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	0.00	0.00	0.00
Building Construction - 2025	0.41	10.90	12.80	0.02	0.47	0.00	0.47	0.43	0.00	0.43	0.02	0.09	0.32	0.00	0.00	0.07	0.07	0.00	0.01	0.02
Paving - 2024	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	0.00	0.00	0.00
Paving - 2025	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	0.00	0.00	0.00
Architectural Coating - 2024	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	0.00	0.00	0.00
Architectural Coating - 2025	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	0.00	0.00	0.00
Trenching - 2024	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	0.00	0.00	0.00
Trenching - 2025	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	0.00	0.00	0.00

Regional Emissions	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM2.5	Fugitive PM2.5	Total PM2.5
Grading - 2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading - 2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction - 2025	0.43	10.99	13.12	0.02	0.47	0.07	0.54	0.43	0.01	0.45
Paving - 2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving - 2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating - 2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating - 2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching - 2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Trenching - 2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note: Offsite emissions pasted over from EMFAC2021 analysis

Overlapping Phases	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM2.5	Fugitive PM2.5	Total PM2.5
Grading & Trenching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading & Paving & Architectural Coating & Trenching	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading & Building Construction & Paving & Architectural Coating & Trenching	0.43	10.99	13.12	0.02	0.47	0.07	0.54	0.43	0.01	0.45
Grading & Building Construction & Trenching	0.43	10.99	13.12	0.02	0.47	0.07	0.54	0.43	0.01	0.45
Building Construction & Trenching	0.43	10.99	13.12	0.02	0.47	0.07	0.54	0.43	0.01	0.45
Project Daily Maximum Emissions	**0.43**	**10.99**	**13.12**	**0.02**	**0.47**	**0.07**	**0.54**	**0.43**	**0.01**	**0.45**

Food Waste Receiving and Digestion Program at JWPCP- Addendum 2
Air Quality Construction Analysis

Winter	Onsite Emissions										Offsite Emissions									
	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM2.5	Fugitive PM2.5	Total PM2.5	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM2.5	Fugitive PM2.5	Total PM2.5
Source	lb/day										lb/day									
Grading - 2024	0.68	14.50	16.50	0.03	0.66	1.84	2.50	0.60	0.89	1.49	0.09	0.88	1.33	0.00	0.01	0.37	0.38	0.01	0.09	0.11
Grading - 2025	0.68	14.40	16.50	0.03	0.66	1.84	2.50	0.60	0.89	1.49	0.09	0.84	1.25	0.00	0.01	0.37	0.38	0.01	0.09	0.11
Building Construction - 2025	0.41	10.90	12.80	0.02	0.47	0.00	0.47	0.43	0.00	0.43	0.02	0.10	0.28	0.00	0.00	0.07	0.07	0.00	0.01	0.02
Paving - 2024	0.18	4.04	4.82	0.01	0.18	0.00	0.18	0.17	0.00	0.17	0.05	0.30	0.75	0.00	0.00	0.18	0.18	0.00	0.04	0.05
Paving - 2025	0.18	4.04	4.82	0.01	0.18	0.00	0.18	0.17	0.00	0.17	0.05	0.28	0.70	0.00	0.00	0.18	0.18	0.00	0.04	0.05
Architectural Coating - 2024	3.14	1.09	0.96	0.00	0.07	0.00	0.07	0.06	0.00	0.06	0.01	0.13	0.19	0.00	0.00	0.06	0.06	0.00	0.02	0.02
Architectural Coating - 2025	3.14	1.09	0.96	0.00	0.07	0.00	0.07	0.06	0.00	0.06	0.01	0.12	0.17	0.00	0.00	0.06	0.06	0.00	0.02	0.02
Trenching - 2024	0.62	14.00	16.20	0.03	0.64	0.00	0.64	0.59	0.00	0.59	0.09	0.34	1.19	0.00	0.00	0.27	0.27	0.00	0.06	0.07
Trenching - 2025	0.62	14.00	16.20	0.03	0.64	0.00	0.64	0.58	0.00	0.58	0.08	0.31	1.11	0.00	0.00	0.27	0.27	0.00	0.06	0.07

Regional Emissions	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM2.5	Fugitive PM2.5	Total PM2.5
Grading - 2024	0.77	15.38	17.83	0.03	0.67	2.21	2.88	0.61	0.98	1.60
Grading - 2025	0.77	15.24	17.75	0.03	0.67	2.21	2.88	0.61	0.98	1.60
Building Construction - 2025	0.43	11.00	13.08	0.02	0.47	0.07	0.54	0.43	0.01	0.45
Paving - 2024	0.23	4.34	5.57	0.01	0.18	0.18	0.36	0.17	0.04	0.22
Paving - 2025	0.23	4.32	5.52	0.01	0.18	0.18	0.36	0.17	0.04	0.22
Architectural Coating - 2024	3.15	1.22	1.15	0.00	0.07	0.06	0.13	0.06	0.02	0.08
Architectural Coating - 2025	3.15	1.21	1.13	0.00	0.07	0.06	0.13	0.06	0.02	0.08
Trenching - 2024	0.71	14.34	17.39	0.03	0.64	0.27	0.91	0.59	0.06	0.66
Trenching - 2025	0.70	14.31	17.31	0.03	0.64	0.27	0.91	0.58	0.06	0.65

Note: Offsite emissions pasted over from EMFAC2021 analysis

Overlapping Phases	ROG	NOX	CO	SO2	Exhaust PM10	Fugitive PM10	Total PM10	Exhaust PM2.5	Fugitive PM2.5	Total PM2.5
Grading & Trenching	1.48	14.31	17.31	0.03	0.64	0.27	0.91	0.58	0.06	0.65
Grading & Paving & Architectural Coating & Trenching	4.86	35.28	41.94	0.07	1.56	2.72	4.28	1.43	1.10	2.56
Grading & Building Construction & Paving & Architectural Coating & Trenching	5.29	46.28	55.02	0.09	2.03	2.79	4.82	1.86	1.11	3.01
Grading & Building Construction & Trenching	1.91	40.72	48.30	0.08	1.78	2.55	4.33	1.63	1.05	2.71
Building Construction & Trenching	1.14	25.34	30.47	0.05	1.11	0.34	1.45	1.02	0.07	1.11
Project Daily Maximum Emissions	**5.29**	**46.28**	**55.02**	**0.09**	**2.03**	**2.79**	**4.82**	**1.86**	**1.11**	**3.01**

A.2 Energy Consumption Calculations

Food Waste Receiving and Digestion Program at JWPCP- Addendum 2
Construction Energy Analysis

Project Fuel Summary

	Heavy-Duty Construction Equipment
26,533	Total Project Consumption
26,533	Annual Consumption
	Haul Trucks
1,228	Total Project Consumption
1,228	Annual Consumption
	Vendor Trucks
1,775	Total Project Consumption
1,775	Annual Consumption
	Workers
2,217	Total Project Consumption
2,217	Annual Consumption
29,537	Total Gallons Diesel
2,217	Total Gallons Gasoline

11/1/2024	Construction Modeling Start (CalEEMod output)
5/1/2025	Construction Modeling Start (CalEEMod output)

29,537	**Annual Average Gallons Diesel**
2,217	**Annual Average Gallons Gasoline**

Los Angeles County (2022)			**Percent of Annual Project Compared to Los Angeles County**
Source	**Fuel Type**	**Gallons**	
Workers	Gasoline	3,070,000,000	0.0001%
Off-Road/Vendor/Haul Trucks	Diesel	625,000,000	0.0047%

Notes:

1 Gasoline and diesel amounts from CEC, 2022. Available: https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting

Annual Average Electricity Summary (over Construction Duration)		
Temporary Construction Trailer - Electricity and Off-Road Equipment	17,170	kWh/year
Water Conveyance for Dust Control	645	kWh/year
Total	**17,815**	**kWh/year**
Total SCE[2], 2022	84,218,000,000	kWh/year
Project percentage of Utility	0.00000002%	

Notes:

2 Edison International & Southern California Edison, 2022 *Annual Report, 2022*.
https://www.edison.com/investors/financial-reports-information/annual-reports

Food Waste Receiving and Digestion Program at JWPCP- Addendum 2
Construction Energy Analysis

Temporary Construction Trailer - Electricity						
Land Use	**Square Feet**	**Electricity Demand Factor (kWh/sf)**	**Energy Use per year (kWh)**	**Total Energy Use (kWh)**	**Total GHG Emissions (MTCO2e)**	**Annual GHG Emissions (MTCO2e)**
General Office	1,000	17.17	17,170	17,170	1.6	1.6

Note: CalEEMod 2020.4.0 factors used to estimate energy use for temporary construction office. Energy demand factor is conservatively based on the maximum non-historical demand factor for all climate zones.

Food Waste Receiving and Digestion Program at JWPCP- Addendum 2
Construction Energy
Construction Water Energy Estimates

Park Zone	Source	Acreage/Day	Number of Days	Total Construction Water Use (Mgal)	Total Electricity Demand from Water Conveyance (MWh)	Annual Average Electricity Demand from Water Conveyance (MWh)
Food Waste	Grading	1.0	66	0.198	0.6	0.6
Food Waste	Building Construction	0.0	87	0.000	0.0	0.0
Food Waste	Paving	0.0	30	0.000	0.0	0.0
Food Waste	Architectural Coating	0.0	30	0.000	0.0	0.0
Food Waste	Trenching	0.0	69	0.000	0.0	0.0
Total				**0.198**	**0.6**	**0.6**

CalEEMod Water Electricity Factors	Electricity Intensity Factor To Supply (kWh/Mgal)	Electricity Intensity Factor To Treat (kWh/Mgal)	Electricity Intensity Factor To Distribute (kWh/Mgal)	Electricity Intensity Factor For Wastewater Treatment (kWh/Mgal)
	827	748	166	1519

Sources and Assumptions:

CalEEMod Appendix A, Pg. 8, based on given piece of equipment can pass over in an 8-hour workday

-Electricity Intensity Factors - California Air Resources Board, CalEEMod, Version 2022.1.1.3. Table G-32 Water Energy Intensity Factors Hydrologic Region and Process (KWh per million gallon)

-Estimated construction water use assumed to be generally equivalent to landscape irrigation, based on a factor of 20.94 gallons per year per square foot of landscaped area within the Los Angeles area (Mediterranean climate), which assumes high water demand landscaping materials and an irrigation system efficiency of 85%. Factor is therefore (20.94 GAL/SF/year) x (43,560 SF/acre) / (365 days/year) / (0.85) = 2,940 gallons/acre/day, rounded up to 3,000 gallons/acre/day. (U.S. Department of Energy, Energy Efficiency & Renewable Energy, Federal Energy Management Program. "Guidelines for Estimating Unmetered Landscaping Water Use." July 2010. Page 12, Table 4 - Annual Irrigation Factor – Landscaped Areas with High Water Requirements).

Food Waste Receiving and Digestion Program at JWPCP- Addendum 2
Construction Energy Analysis
Off-Road Equipment

Equipment ≤ 100 hp		
pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.408	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0574	gal/hp-hr
Total horsepower-hours:	194,120	hp-hr
Total diesel gallons:	11,141	gal
Equipment > 100 hp		
pounds diesel fuel/hp-hr (lb/hp-hr):[1]	0.367	lb/hp-hr
diesel density (lb/gal):[1]	7.11	lb/gal
diesel gallons/hp-hr:	0.0516	gal/hp-hr
Total horsepower-hours:	298,154	hp-hr
Total diesel gallons:	15,392	gal
Total diesel gallons (off-road equipment):	**26,533**	**gal**

CARB, https://www.arb.ca.gov/msei/ordiesel/ordas_ef_fcf_2017.pdf
1. OFFROAD2017 Emission Factor Documentation

Project	Construction Phase	Equipment	Number	Hours/Day	HP	Load	Days	Total hp-hr	Electric Equipment	Electric Conversion (kW/HP)	Electric Demand (kWh)
Food Waste	Grading	Air Compressors	1	8	37	0.48	66	9,377		-	-
Food Waste	Grading	Concrete/Industrial Saws	1	8	33	0.73	66	12,720		-	-
Food Waste	Grading	Cement and Mortar Mixers	1	8	10	0.56	66	2,957		-	-
Food Waste	Grading	Graders	1	8	148	0.41	66	32,039		-	-
Food Waste	Grading	Pumps	1	8	11	0.74	66	4,298		-	-
Food Waste	Grading	Rubber Tired Dozers	1	8	367	0.40	66	77,510		-	-
Food Waste	Grading	Tractors/Loaders/Backhoes	1	8	84	0.37	66	16,410		-	-
Food Waste	Building Construction	Concrete/Industrial Saws	1	8.0	33	0.73	87	16,767		-	-
Food Waste	Building Construction	Cranes	1	8	367	0.29	87	74,075		-	-
Food Waste	Building Construction	Forklifts	2	8	82	0.20	87	22,829		-	-
Food Waste	Building Construction	Tractors/Loaders/Backhoes	2	8	84	0.37	87	43,263		-	-
Food Waste	Paving	Tractors/Loaders/Backhoes	1	7	84	0.37	30	6,527		-	-
Food Waste	Paving	Cement and Mortar Mixers	1	6	10	0.56	30	1,008		-	-
Food Waste	Paving	Pavers	1	7.0	81	0.42	30	7,144		-	-
Food Waste	Paving	Rollers	1	7	36	0.38	30	2,873		-	-
Food Waste	Architectural Coating	Air Compressors	1	6	37	0.48	30	3,197		-	-
Food Waste	Trenching	Air Compressors	1	8.0	37	0.48	69	9,804		-	-
Food Waste	Trenching	Concrete/Industrial Saws	1	8	33	0.73	69	13,298		-	-
Food Waste	Trenching	Graders	1	8	148	0.41	69	33,495		-	-
Food Waste	Trenching	Pumps	1	8.0	11	0.74	69	4,493		-	-
Food Waste	Trenching	Rubber Tired Dozers	1	8	367	0.40	69	81,034		-	-
Food Waste	Trenching	Tractors/Loaders/Backhoes	1	8	84	0.37	69	17,156		-	-
								-		-	-
							Total - >100 hp	**298,154**		**Total Electricity**	**-**
							Total - <100 hp	**194,120**		**Average per Year**	**-**

Food Waste Receiving and Digestion Program at JWPCP - Addendum 2

Total On-Road Fuel Consumption

		gal/mile
2021Hauling	Hauling	0.17163556
2021Vendor	Vendor	0.14228491
2021Worker	Worker	0.04006185
2022Hauling	Hauling	0.16994622
2022Vendor	Vendor	0.14134669
2022Worker	Worker	0.03932686
2023Hauling	Hauling	0.16765003
2023Vendor	Vendor	0.13998726
2023Worker	Worker	0.03854242
2024Hauling	Hauling	0.1656907
2024Vendor	Vendor	0.13888166
2024Worker	Worker	0.03771161
2025Hauling	Hauling	0.16346378
2025Vendor	Vendor	0.13752209
2025Worker	Worker	0.0368976

Total On-Road Fuel Consumption

Source	Fuel Type	Total Fuel Use (gal)
Hauling	Diesel	1,228
Vendor	Diesel	1,775
Worker	Gasoline	2,217

Fuel Type	Total Fuel Use	Annual Fuel Use
Diesel	3,004	6,057
Gasoline	2,217	4,470

Duration of Construction	
Start	11/1/2024
End	5/1/2025
0.5	years

Construction Phase	Daily One-Way Trips	Haul Days per Phase (days)	Work Hours per Day (hours/day)	One-Way Trip Distance per Day (miles)	Idling per Day (minutes)	Regional Emissions (gallons) gal/mile	gal/min	gal/day	Total Gallons/yr
Grading - 2024	2022								
Total Haul Trips	225								
Hauling	6	43	8	18.5	15	0.17	0.00E+00	19	811
Vendor	6	43	8	10.2	6.9	0.14	0.00E+00	9	372
Worker	16	43	8	20	0	0.04	0.00E+00	13	541
Grading - 2025	2025								
Total Haul Trips	120								
Hauling	6	23	8	18.5	15	0.16	0.00E+00	18	417
Vendor	6	23	8	10.2	6.9	0.14	0.00E+00	8	194
Worker	16	23	8	20	0	0.04	0.00E+00	12	272
Building Construction - 2025	2025								
Total Haul Trips	0								
Hauling	0	87	8	18.5	15	0.16	0.00E+00	0	0
Vendor	2	87	8	10.2	6.9	0.14	0.00E+00	3	244
Worker	4	87	8	20	0	0.04	0.00E+00	3	257
Paving - 2024	2024								
Total Haul Trips	0								
Hauling	0	21	8	18.5	15	0.17	0.00E+00	0	0
Vendor	6	21	8	10.2	6.9	0.14	0.00E+00	8	178
Worker	10	21	8	20	0	0.04	0.00E+00	8	158
Paving - 2025	2025								
Total Haul Trips	0								
Hauling	0	9	8	18.5	15	0.16	0.00E+00	0	0
Vendor	6	9	8	10.2	6.9	0.14	0.00E+00	8	76
Worker	10	9	8	20	0	0.04	0.00E+00	7	66
Architectural Coating - 2024	2024								
Total Haul Trips	0								
Hauling	0	21	8	18.5	15	0.17	0.00E+00	0	0
Vendor	3	21	8	10.2	6.9	0.14	0.00E+00	4	89
Worker	2	21	8	20	0	0.04	0.00E+00	2	32
Architectural Coating - 2025	2025								
Total Haul Trips	0								
Hauling	0	9	8	18.5	15	0.16	0.00E+00	0	0
Vendor	3	9	8	10.2	6.9	0.14	0.00E+00	4	38
Worker	2	9	8	20	0	0.04	0.00E+00	1	13
Trenching - 2024	2024								
Total Haul Trips	0								
Hauling	0	43	8	18.5	15	0.17	0.00E+00	0	0
Vendor	6	43	8	10.2	6.9	0.14	0.00E+00	8	365
Worker	17	43	8	20	0	0.04	0.00E+00	13	551
Trenching - 2025	2025								
Total Haul Trips	0								
Hauling	0	26	8	18.5	15	0.16	0.00E+00	0	0
Vendor	6	26	8	10.2	6.9	0.14	0.00E+00	8	219
Worker	17	26	8	20	0	0.04	0.00E+00	13	326

A.3 Greenhouse Gas (GHG) Emission Calculations

Food Waste Receiving and Digestion Program at JWPCP- Addendum 2

GHG Construction Summary

Year	On-Site Emissions	Mobile Emissions	Annual Total
2024	118	30	148
2025	164	21	185
Grand Total	**282**	**51**	**333**
Amortized	**-**	**-**	**11**

A.4 Noise Analysis

Project: Food Waste Receiving and Digestion Facility at JWPCP

Construction Noise Impact on Sensitive Receptors

				Residential Uses to the Southeast and Southweat					Residential Uses to the North				
Construction Phase **Equipment Type**	**No. of Equip.**	**Reference Noise Level at 50ft, Lmax**	**Acoustical Usage Factor**	**Distance (ft)**	**Lmax**	**Leq**	**L10**	**Estimated Noise Shielding, dBA**	**Distance (ft)**	**Lmax**	**Leq**	**L10**	**Estimated Noise Shielding, dBA**
Relief Disgester Gas Pipelines						***55***					***63***		
Excavator	1	81	40%	850	51	47	50	5	700	58	54	57	
Dump/Haul Trucks	1	76	20%	850	46	39	42	5	700	53	46	49	
Tractor/Loader/Backhoe	1	80	25%	950	49	43	46	5	700	57	51	54	
Cranes	1	81	40%	950	50	46	49	5	700	58	54	57	
Forklift	1	75	10%	950	44	34	37	5	700	52	42	45	
Paving Equipment	1	90	20%	1050	59	52	55	5	700	67	60	63	
Flat Bed Delivery Truck	1	76	20%	1050	45	38	41	5	700	53	46	49	
Compactor (Ground)	1	83	20%	1050	52	45	48	5	700	60	53	56	
Expansion of the Biogas Conditioning System						***41***					***59***		
Excavator	1	81	40%	3100	35	31	34	10	700	53	49	52	5
Dump/Haul Trucks	1	76	20%	3100	30	23	26	10	700	48	41	44	5
Tractor/Loader/Backhoe	1	80	25%	3200	34	28	31	10	700	52	46	49	5
Rubber Tired Dozer	1	82	40%	3200	36	32	35	10	700	54	50	53	5
Loader	1	79	40%	3200	33	29	32	10	700	51	47	50	5
Compactor (Ground)	1	83	20%	3300	37	30	33	10	700	55	48	51	5
Cranes	1	81	40%	3300	35	31	34	10	700	53	49	52	5
Forklift	1	75	10%	3300	29	19	22	10	700	47	37	40	5
Paving Equipment	1	90	20%	3300	44	37	40	10	700	62	55	58	5
Flat Bed Delivery Truck	1	76	20%	3300	30	23	26	10	700	48	41	44	5

Source for Ref. Noise Levels: LA CEQA Guides, 2006 & FHWA RCNM, 2005