Appendix B1

Air Quality Regulations/Methodology and Air Quality and GHG Emissions/Energy

Contents

1.0 Introduction

This appendix describes, in detail, the regulatory background, methods and results of the emissions inventory analysis for the Proposed Project at Berths 191-194. The analysis estimated the emissions of criteria pollutants and greenhouse gases for the construction and operations of the Proposed Project and alternatives across annual, peak daily, and hourly temporal periods.

2.0 Applicable Regulations

2.1 International Regulations

International Maritime Organization International Convention for the Prevention of Pollution from Ships Annex VI

The International Maritime Organization (IMO) International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI, which came into force in May 2005, set new international NOx emission limits on marine engines over 130 kilowatts (kW) installed on new vessels retroactive to the year 2000. In October 2008, IMO adopted amendments to international requirements under MARPOL Annex VI, which introduced NOx emission standards for new engines and more stringent fuel quality requirements. In April 2014, amendments to MARPOL Annex VI were adopted regarding the effective date of NOx Tier III standards (DieselNet, 2022a; IMO 2008). The Annex VI North American Emission Control Area (ECA) requirements applicable to the Proposed Project include:

- Limits on the sulfur content of fuel as a measure to control SOx emissions and, indirectly, PM emissions. For ECAs, the sulfur limits are capped at 0.1 percent effective in 2015. The Proposed Project and alternatives assume full compliance with MARPOL Annex VI SOx limits.[1]
- Ships constructed on or after 1 January 2016 shall comply with the Tier III NOx emission limits when operating within the North American ECA (IMO, 2010). Tier I and Tier II limits effective 2000 and 2011 are global limits, whereas Tier III limits, effective in 2016, apply only in NOx ECAs.

2.2 Federal Regulations

State Implementation Plan (SIP)

In federal nonattainment areas, the Federal Clean Air Act (CAA) requires preparation of a SIP detailing how the state will attain the NAAQS within mandated timeframes. In response to this requirement, Southern California Air Quality Management District (SCAQMD), in collaboration with other agencies, such as CARB and Southern California Association of Governments (SCAG), periodically prepares an AQMP designed to bring the SCAB into attainment with federal requirements and/or to

[1] The sulfur requirements in ECA's are 1.0 percent as of July 2010 and 0.1 percent starting in January 2015. North America was designated as ECA in August 2012, and the sulfur requirements became applicable as of the time of designation.

incorporate the latest technical planning information. The AQMP is then incorporated into the SIP, which is submitted by CARB to EPA for approval.

SCAQMD has prepared AQMPs in 1997, 2003, 2007, 2012, 2016, and most recently in 2022. Each iteration of the AQMP is an update of the previous AQMP. The focus of the 2007 AQMP was to demonstrate compliance with the NAAQS for PM2.5 and 8-hour ozone and other planning requirements, including compliance with the NAAQS for PM10 (SCAQMD, 2007a). The 2007 AQMP proposed attainment demonstration of the federal PM2.5 standards through a focused control of SOx, directly emitted PM2.5, and NOx, supplemented with VOCs by 2015. The SCAQMD did not meet the standards by the original attainment year; therefore, subsequent AQMPs address new attainment deadlines.

In December 2012, the SCAQMD Governing Board adopted the 2012 AQMP (SCAQMD, 2013). The 2012 AQMP focuses on PM2.5 control measures designed to attain the federal 24-hour PM2.5 standard and contingency measures in case the targeted attainment date is missed. The 2012 AQMP also contains proposed actions to reduce ozone. The Final 2016 AQMP, which is a comprehensive and integrated plan primarily focused on addressing the ozone and PM2.5 standards, was approved in March 2017 (SCAQMD, 2017). The 2022 AQMP, released in December 2022, addresses requirements for meeting the 70ppb ozone standard. The 2022 AQMP focuses on NOx control measures for residential, commercial, and large industrial combustion sources. Many of the control measures rely on research and development, demonstration, and incentives to facilitate the widespread deployment of zero-emissions (ZE) and low NOx technologies alongside funding programs to support research, development, and demonstration of such advanced technologies (SCAQMD, 2022a).

EPA Emissions Standards for Marine Diesel Compression Ignition Engines—Category 1 and 2 Engines

Engine Categories are identified on the basis of engine displacement per cylinder. Category 1 engines have engine displacements per cylinder of less than 5 liters, whereas Category 2 engines have engine displacements of between 5 and 30 liters. Category 1 and 2 engines are often the auxiliary engines on large ocean-going vessels (OGVs) as well as auxiliary and propulsion engines on harbor craft. To reduce emissions from these marine diesel engines, EPA established 1999 emission standards for newly built engines, referred to as Tier 2 marine engine standards. These standards were based on the land-based standard for non-road engines. The Tier 2 standards were phased in from 2004 to 2007 (year of manufacture), depending on the engine size.

On March 14, 2008, EPA finalized a program to reduce emissions from marine diesel Category 1 and 2 engines (73 FR 88 25098-25352). The regulations introduced Tier 3 and Tier 4 standards, which apply to both new and remanufactured diesel engines. The phase-in of Tier 3 standards extended from 2009 to 2014 for new Category 1 engines and from 2013 to 2014 for new Category 2 engines. Tier 4 standards were phased in for new Category 1 and 2 engines above 600 kW from 2014 to 2017. For remanufactured engines, standards apply only to commercial marine diesel engines above 600 kW when the engines are remanufactured and as soon as certified systems are available.

EPA Emission Standards for Large Marine Diesel Engines—Category 3 Engines

Category 3 engines have engine displacements per cylinder greater than 30 liters. Category 3 engines are propulsion engines on OGVs. To reduce emissions from these engines, EPA established 2003 Tier 1 NOx standards for marine diesel engines above 30 liters per cylinder, large Category 3 marine propulsion engines on U.S. flagged ocean-going vessels (40 CFR Part 9 and 94) (68 FR 9745-9789). The standards went into effect for new engines built in 2004 and later. Tier 1 limits were achieved by engine-based controls, without the need for exhaust gas after-treatment.

In December 2009, EPA adopted Tier 2 and Tier 3 emissions standards for newly built Category 3 engines installed on U.S. flagged vessels, as well as marine fuel sulfur limits. The Tier 2 and 3 engines standards and fuel limits are equivalent to the amendments to MARPOL Annex VI. Tier 2 NOx standards for newly built engines applied beginning in 2011 and require the use of engine-based controls, such as engine timing, engine cooling, and advanced electronic controls. Tier 3 standards applied beginning in 2016 in ECAs and would be met with the use of high efficiency emission control technology, such as selective catalytic reduction. The Tier 2 standards are anticipated to result in a 15 to 25 percent NOx reduction below the Tier 1 levels; Tier 3 standards are expected to achieve NOx reductions 80 percent below the Tier 1 levels (DieselNet 2022a). In addition to the Tier 2 and Tier 3 NOx standards, the final regulation established standards for hydrocarbon (HC) and CO.

EPA Emission Standards for Non-Road Diesel Engines

To reduce emissions from non-road diesel equipment, EPA established a series of increasingly strict emission standards for new non-road diesel engines (DieselNet 2022b). Tier 1 standards were phased in on newly manufactured equipment from 1996 through 2000 (year of manufacture), depending on the engine horsepower category. Tier 2 standards were phased in on newly manufactured equipment from 2001 through 2006. Tier 3 standards were phased in on newly manufactured equipment from 2006 through 2008. Tier 4 standards, which require advanced emission control technology to attain them, were phased in between 2008 to 2015. These standards apply to construction off-road land-based equipment.

EPA Emission Standards for On-Road Trucks

Heavy-duty trucks are subdivided into three categories by the vehicle's GVWR: light heavy-duty trucks (8,500 to 19,500 pounds), medium heavy-duty trucks (19,500 to 33,000 pounds), and heavy heavy-duty trucks (greater than 33,000 pounds).

To reduce emissions from on-road, heavy-duty diesel trucks, EPA established a series of increasingly strict emission standards for new truck engines (DieselNet 2022a). The latest US federal emission standards affecting criteria pollutants from heavy-duty engines were adopted by EPA on December 20, 2022. These standards set new limits for NOx, PM, VOC, and CO for heavy-duty engines starting with model year 2027 and newer.

On September 15, 2011, EPA and Department of Transportation's National Highway Traffic Safety Administration (NHTSA) finalized regulations to reduce greenhouse gas (GHG) emissions and improve fuel efficiency of medium- and heavy-duty vehicles (EPA, 2011a), including large pickup trucks and vans, semi-trucks, and all types and sizes of work trucks and buses. The regulations incorporate all on-road vehicles rated at a gross vehicle weight at or above 8,500 pounds, and the engines that power them. Under the regulations, fuel economy will be improved and GHG emissions will be reduced in model years 2014 to 2018. On August 16, 2016, EPA and NHTSA implemented Phase 2 of the Heavy-Duty National Program to cover model years 2018 to 2027 for certain trailers and model years 2021 to 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks (EPA 2016).

EPA and National Highway Traffic Safety Administration Light-Duty Vehicle GHG Emission Standards and Corporate Average Fuel Economy Standards

In May 2010, EPA, in conjunction with the NHTSA, finalized the Light-Duty Vehicle Rule that established a national program consisting of GHG emissions standards and Corporate Average Fuel Economy standards for light-duty vehicles (EPA 2010). Light-Duty Vehicle Rule standards first applied to new cars and trucks starting with model year 2012. Although the rule is primarily designed to address GHG emissions, the fuel economy standards portion of the rule would serve to also reduce criteria pollutant emissions. On August 28, 2012, EPA and NHTSA extended the National Program of harmonized GHG and fuel economy standards to model year 2017 through 2025 passenger vehicles (EPA 2012). The 2010 and 2012 rules affect passenger vehicles (i.e., terminal workers) and other light-duty vehicles traveling to the terminal.

40 CFR PART 60 SUBPART OOO, Standards of Performance for Non-metallic Mineral Processing Plants

This rule applies to operations including the following affected facilities in fixed non-metallic mineral processing plants: each grinding mill, bucket elevator, belt conveyor, storage bin, and enclosed truck or railcar loading station. Non-metallic mineral processing plants are defined as any combination of equipment used to crush or grind any non-metallic mineral wherever located, including Portland cement plants, or any other facility processing non-metallic minerals. The facility is expected to comply with the emissions limits by maintaining the stack concentration limit of 0.014 gr/dscf for PM and the visible emission limit of 7% opacity for fugitive PM from grinding mills, bucket elevators, transfer points on belt conveyors, storage bins, enclosed truck or railcar loading stations or from any other affected facility. The facility is expected to comply with performance testing limits by completing an initial performance test to demonstrate stack concentration limits and fugitive emission limits followed by repeated performance tests every five years. The facility is expected to comply with monitoring requirements by completing quarterly visible emissions observations using Method 22 for the baghouse and completing corrective action within 24 hours. The facility is expected to comply with reporting requirements listed in this rule.

40 CFR PART 60 SUBPART UUU, Standards of Performance for Calciners and Dryers in Mineral Industries

This rule applies to operations including each dryer at a mineral processing plant, not including feed and product conveyors. A facility with these types of sources would comply with the emissions limits by maintaining the concentration limit of 0.025 gr/dscf for PM and the visible emission limit of 10% opacity. The facility is expected to comply with monitoring requirements by installing, calibrating, maintaining, and operating a continuous monitoring system to measure and record opacity. The facility is expected to comply with reporting requirements by submitting semi-annual reports of exceedances of the control device operating parameters to the Administrator. The facility is expected to comply with recordkeeping requirements by maintaining records in accordance with the requirements in this rule.

2.3 State Regulations and Agreements

California Clean Air Act

The California Clean Air Act of 1988, as amended in 1992, outlines a program to attain the CAAQS by the earliest practical date. Because the CAAQS are more stringent than the NAAQS, attainment of the CAAQS requires more emissions reductions than what would be required to show attainment of the NAAQS. Consequently, the focus of attainment planning in California has shifted from the federal to state requirements. Similar to the federal system, the state requirements and compliance dates are based upon the severity of the ambient air quality standard violation within a region.

AB 2650

AB 2650 (Lowenthal) was signed into law by Governor Davis and became effective on January 1, 2003. Under AB 2650, shipping terminal operators are required to limit truck-waiting times to no more than 30 minutes at the Ports of Los Angeles, Long Beach, and Oakland, or face fines of $250 per violation. A companion piece of legislation (AB 1971) was approved in September 2004 to ensure that the intent of AB 2650 is not circumvented by moving trucks with appointments inside the terminal gates to wait.

CARB Heavy Duty Diesel Vehicle Idling Emission Reduction Regulation

This CARB rule has been in effect for heavy-duty diesel trucks in California since 2008. The rule requires that heavy-duty trucks be equipped with a non-programmable engine shutdown system that shuts down the engine after five minutes or optionally meet a stringent NOx idling emission standard (CCR Title 13, Section 1956.8 and 2485). This regulation applies to trucks used during construction and operation.

CARB California Diesel Fuel Regulation

With this rule, CARB set sulfur limitations for diesel fuel sold in California for use in on-road and off-road motor vehicles (CARB, 2014a). Harbor craft and intrastate locomotives were originally excluded from the rule but were later included by a 2004 rule amendment (CARB, 2005). Under this rule, diesel fuel used in motor vehicles except harbor craft and intrastate locomotives has been limited to 500-ppm sulfur since 1993. The sulfur limit was reduced to 15 ppm on September 1, 2006. A federal diesel rule similarly limited sulfur content nationwide to 15 ppm by October 15, 2006. Diesel fuel used in harbor craft in the SCAQMD was limited to 500-ppm sulfur starting January 1, 2006, and 15-ppm sulfur starting September 1, 2006. Diesel fuel used in intrastate locomotives (switch locomotives) was limited to 15-ppm sulfur starting January 1, 2007.

CARB General Requirements for In-Use Off-Road Diesel-Fueled Fleets

In 2007, CARB adopted a rule that requires owners of off-road mobile equipment powered by diesel engines 25 hp or larger to meet the fleet average or best available control technology (BACT) requirements for NOx and PM emissions by March 1 of each year (CCR Title 13, Section 2449). The rule is structured by fleet size: large, medium, and small fleets. The regulation was adopted in April 2008 and subsequently amended to delay the turnover of Tier 1 equipment for meeting the NOx performance requirements of the regulation, and then to delay overall implementation of the equipment turnover compliance schedule in response to the economic downturn in 2008 and 2009.

In September 2013, CARB received authorization from EPA to enforce the In-Use Off-road Diesel Vehicle Regulation, including the regulation's performance requirements, such as turnover requirements and restrictions on adding older, dirtier Tier 0 and 1 vehicles. Enforcement of the restrictions on adding Tier 0 and 1 vehicles began January 1, 2014. Enforcement of the restrictions on adding Tier 2 vehicles began January 1, 2018, for large and medium fleets and began on January 1, 2023, for smaller fleets (CARB, 2022a). Enforcement of the first fleet average requirements for large fleets (greater than 5,000 total fleet horsepower) began on July 1, 2014.

CARB Measures to Reduce Emissions from Goods Movement Activities

CARB Regulations for Fuel Sulfur and Other Operational Requirements for OGVs within California Waters and 24 Nautical Miles of the California Baseline

In July 2008, CARB approved the Regulation for Fuel Sulfur and Other Operational Requirements for Ocean-Going Vessels within California Waters and 24 Nautical Miles of the California Baseline (CCR Title 13, Section 2299.2). These regulations have required ship main engines, auxiliary engines, and auxiliary boilers operating in California waters since July 2009 to either use MDO with a maximum sulfur content of 0.5 percent or MGO with a maximum sulfur content of 1.5 percent. By August 1, 2012, these source activities were required to meet an MDO limit of 0.5 percent or MGO limit of 1.0 percent (CARB, 2011). Starting in 2009, this regulation has gradually reduced the permitted sulfur content of OGV fuels. Currently, ship main engines, auxiliary engines, and auxiliary boilers operating in California waters must use MDO or MGO with a maximum sulfur content of 0.1 percent.

CARB Regulation to Reduce Emissions from Diesel Auxiliary Engines on OGVs While at Berth at a California Port

In December 2007, CARB adopted a regulation to reduce emissions from diesel auxiliary engines on OGVs while at berth for container, cruise, and refrigerated cargo vessels (CCR Title 17, Section 93118.3). The regulation requires that auxiliary diesel engines on the covered types of OGVs be shut down for specified percentages of fleet's visits and for the fleet's at-berth auxiliary engine power generation to be reduced by the same percentages.

The At-Berth Regulation was amended on December 30, 2020, increasing its requirements for already-covered vessel types, and expanding its requirements to include auto carriers (roll-on/roll-off vessels) and tanker ships to control hoteling emissions at-berth starting in 2025 for the Ports of Los Angeles and Long Beach (CARB, 2019). The container and refrigerated cargo vessels were due to comply with the new requirements effective January 1, 2023. A Vessel Incident Event (VIE) or Terminal Incident Event (TIE) accommodates a limited number of situations where a vessel does not reduce emissions during a visit. However, dry-bulk vessels of the type that would be part of the

Proposed Project and the two build alternatives are not covered by the regulation, and therefore its requirements do not apply to the Proposed Project and Alternatives analyzed here.

CARB Emission Standards, Test Procedures, for Large Spark Ignition Engine Forklifts and Other Industrial Equipment

Since 2007, CARB has promulgated more stringent emissions standards for hydrocarbon and oxides of nitrogen combined (HC + NOx) emissions and test procedures. The engine emission standards and test procedures were implemented in two phases. The first phase was implemented for engines built between January 2007 and December 2009. The second more stringent phase was implemented for engines built starting in January 2010. The regulation was amended in 2010 establishing fleet average emissions requirements for existing engines (CCR Title 13, Section 2775).

CARB California Drayage (Heavy Duty) Truck Regulation

CARB adopted the drayage truck regulation in December 2007 to modernize the class 8 drayage truck fleet (trucks with GVWR greater than 33,000 pounds) in use at California's ports; subsequent amendments of the rule accelerated the compliance schedule and expanded the definition of drayage trucks. The regulation currently requires that all trucks operating at California ports must comply with the 2007 and newer on-road heavy-duty engine standards.

For purposes of this analysis, this regulation affects the drayage truck fleet mix projections for the Proposed Project and Alternatives, which is embedded in CARB's EMFAC model and is the basis of the regional diesel truck fleet emission factors used in the calculations.

CARB On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation—Truck and Bus Regulation

In December 2011, CARB amended the 2008 State-wide Truck and Bus Regulation to modernize in-use heavy-duty vehicles operating throughout the state. Under this regulation, existing heavy-duty trucks are required to be replaced with trucks meeting the latest NOx and PM BACT or retrofitted to meet these levels.

Trucks with GVWR less than 26,000 pounds were required to replace engines with 2010 or newer engines, or equivalent, by January 2023. Trucks with GVWR greater than 26,000 pounds must meet PM BACT and upgrade to a 2010 or newer model year emissions equivalent engine pursuant to the compliance schedule set forth by the rule. By January 1, 2023, all model year 2007 and older class 8 heavy duty trucks were required to meet NOx and PM BACT (i.e., EPA 2010 and newer standards) (CARB 2022b).

For purposes of this analysis, this regulation affects the drayage truck fleet mix projections for the Proposed Project and Alternatives, which is embedded in CARB's EMFAC model and is the basis of the regional diesel truck fleet emission factors used in the calculations.

Advanced Clean Trucks (ACT) / Advanced Clean Fleets (ACF) Regulations

In March 15, 2021, CARB approved the final Advanced Clean Trucks Regulation to reduce the release of criteria pollutants, toxic air contaminants, and GHGs through the accelerated penetration of zero-emission medium-and heavy-duty vehicles. This regulation requires manufacturers to comply with ZEV sale mandates and reporting requirements. The ZEV sale mandates would be based on the model year and weight class modifier of the rule's Final Regulation Order (CARB 2023a; CARB 2023b). By 2035, 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales will need to be zero-emission vehicles. The rule does not specifically address cement-hauler trucks, but those trucks, which tend to be Class 8 vehicles, may be affected by this rule because electric or ZEV models of Class 8 vehicles may become available.

Additionally, in April 2023, the Advanced Clean Fleets (ACF) regulation was proposed by CARB, with the goal of achieving a zero-emission truck and bus California fleet by 2045 for certain market segments such as government fleets, last mile delivery, and drayage applications. However, since the ACF rule does not specify cement truck fleets and has yet to receive a waiver by the USEPA; no emissions reduction credits from this rule, as well the Advanced Clean Trucks (ACT) rule, were quantified in the analysis. Per the Clean Air Act, California must seek a waiver from the USEPA to enact emissions standards that are more stringent than those enacted at the federal level. California is granted this ability because of its unique air quality issues, but for each California regulation CARB must seek a waiver from USEPA.

This analysis conservatively does not take credit for potential emissions reductions from these rules by assuming a 100 percent diesel fleet.

CARB Regulation to Reduce Emissions from Diesel Engines on Commercial Harbor Craft (CHC)

In November 2007, CARB adopted a regulation to reduce DPM and NOx emissions from new and in-use commercial harbor crafts. Under CARB's definition, commercial harbor craft includes tugboats, tow boats, ferries, excursion vessels, work boats, crew boats, and fishing vessels. The regulation implemented stringent emission limits on harbor craft auxiliary and propulsion engines. In 2010, CARB amended the regulation to add specific in-use requirements for barges, dredges, and crew/supply vessels.

The regulation requires that all in-use, newly purchased, or replacement engines meet EPA's most stringent emission standards per a compliance schedule set forth by CARB. For harbor craft with home ports in the SCAQMD, the compliance schedule is accelerated by two years, as compared to state-wide requirements. The compliance schedule as listed in the 2007 regulation ("2007 CHC ruling") for in-use engine replacement was supposed to begin in 2009, but was not enforced until August 2012, after EPA approved CARB's regulation (CCR Title 13 Section 2299.5; CCR Title 17 Section 93118.5). The current regulation requires accelerated turnover to Tier 2 and 3 engines for select categories between 2009 and 2022. The CARB compliance schedule for harbor crafts is applied to determine the average model year of the tug assist fleet, ultimately shaping emission factors.

The 2022 amendments to this regulation declare that effective January 2023, all commercial harbor crafts operating within regulated California Waters must comply with the renewable diesel fuel requirements as laid forth in Section 93118.5. Similarly, under the amendment, new and newly acquired engines are required to meet the most stringent marine standards (Tier 4 for most applications, and Tier 3 or cleaner for commercial fishing) based on the rule's implementation schedule that begins in 2024 (CARB, 2023).

For purposes of the current study, because there is not yet an enforceable mechanism for this rule, the analysis does not quantify potential reductions benefits of the 2022 CHC rule amendments.

2.4 Local Regulations and Agreements

SCAQMD develops Rules and Regulations to regulate sources of air pollution in the SCAB. SCAQMD's regulatory authority applies primarily to stationary sources. Several of SCAQMD's rules apply to the Proposed Project or alternatives as listed below.

SCAQMD Rule 212 — Standards for Approving Permits and Issuing Public Notice

Rule 212(c) contains standards defining which stationary source projects require public notification, which in turn depends on a project's distance from a school and the increases of criteria pollutants and TACs proposed in the permit application. The increase in criteria pollutant emissions is compared to the daily maximum emissions limits specified per Rule 212(g). TAC emission increases from the project are evaluated to determine if the project results in a maximum individual cancer risk (MICR) greater than the one in a million threshold specified in Rule 212(c)(3)(A).

The Proposed Project and alternatives would be subject to this rule as the new facility would need an air permit from the SCAQMD. However, the stationary source permitting thresholds in this rule to did not affect the determination of CEQA impacts because the CEQA analysis used different thresholds.

SCAQMD Regulation—Prohibition

SCAQMD Rule 401—Visible Emissions

This rule prohibits the discharge of emissions into the atmosphere for a period aggregating to over three minutes in any hour that as dark or darker than the designated No. 1 on the Ringelmann Chart or as to obscure an observers view at or more than does smoke. For the proposed project, the natural gas-fired hot gas generator and exhaust points for the dust collector and process bag filters are not expected to emit visible emissions. Particulate emissions from aggregate storage piles and materials handling would be controlled by wet suppression. Particulate emissions from the mill, hot gas generator, covered and enclosed conveyors, bucket elevators, and storage and loading silos would be controlled by baghouses. The pneumatic tankers at the weigh station would be within an enclosed building and the material transfer would be controlled by a dust collector filter. Therefore, visible emissions are expected to be compliant.

SCAQMD Rule 402—Nuisance

This rule prohibits discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any such persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403—Fugitive Dust

This rule prohibits emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area that remains visible beyond the emission source property line. Additional requirements apply to construction projects on property with 50 or more acres of disturbed surface area, or for any earth-moving operation with a daily earth-moving or throughput volume of 5,000 cubic yards or more three times during the most recent 365-day period. These requirements include submitting a dust control plan, maintaining dust control records, and designating a SCAQMD-certified dust control supervisor.

During proposed construction, best available control measures identified in the rule would be required to minimize fugitive dust emissions from proposed earth-moving and grading activities. These measures would include site watering as necessary to maintain sufficient soil moisture content. Additionally, the proposed facility would not be a large operation due to the estimated site size of less than 50 acres. The facility would meet the rule requirements during project operations by implementing applicable best available control measures listed in Rule 403 Table 1 to activities such as importing of bulk materials and stockpiles/bulk material handling.

SCAQMD Rule 404, Particulate Matter – Concentration

This rule sets limits on particulate concentrations in the discharge air stream from permitted sources. The limits depend on the volume discharged per minute.

SCAQMD Rule 405, Particulate Matter – Weight

This rule prohibits discharge into the atmosphere from any source, solid particulate matter including lead and lead compounds in excess of the rate shown in Table 405(a) within the rule based on the process weight per hour.

SCAQMD Rule 431.1—Sulfur Content of Gaseous Fuels

This rule prohibits the transfer, sale, or offer of sale of natural gas containing sulfur compounds calculated as H_2S in excess of 16 ppm by volume. The site would remain in compliance with this rule because the dryer would be fired with natural gas that is compliant with the sulfur compound limits.

The Proposed Project and alternatives would be subject to rules 401, 402, 403, 404, 405 and 431.1 (although Alternative 3 [Product Import Terminal] would have no hot gas generator and therefore would not be subject to Rule 431.1). The control requirements of these rules are reflected in the emissions calculations for Stationary Sources described in Section 5.5 of this appendix.

SCAQMD Regulation IX (New Source Performance Standards)

40 CFR Part 60 Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants

This rule applies to operations of fixed non-metallic mineral processing plants, defined as any combination of equipment used to crush or grind any non-metallic mineral or any other facility processing non-metallic minerals. This rule establishes particulate matter emission limit concentrations for stack concentration of 0.014 gr/dscf and fugitive emissions limit of 7% opacity along with mandated performance testing, monitoring, reporting requirements, and recordkeeping requirements.

40 CFR PART 60 SUBPART UUU, Standards of Performance for Calciners and Dryers in Mineral Industries

40 CFR 60 Subpart UUU applies to operations including each dryer at a mineral processing plant, not including feed and product conveyors. A mineral processing plant is defined as any facility that processes or produces any of the following minerals, their concentrates, or any mixture of which the majority (>50 percent) is any of the following minerals or a combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller's earth, gypsum, industrial sand, kaolin, lightweight aggregate, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, and vermiculite.

40 CFR 60 Subpart UUU requirements include:

1) Emission limits
   a) Concentration limit for PM of 0.025 gr/dscf for dryers
   b) Visible emissions limit of 10% opacity, unless controlled by a wet scrubber
2) Monitoring
   a) For a dry control device, install, calibrate, maintain, and operate a continuous monitoring system to measure and record opacity.
   b) For a wet scrubber, install, calibrate, maintain, and operate a monitoring device to continuously measure and record pressure loss of the gas stream through the scrubber and the scrubbing liquid flow rate to the scrubber
3) Reporting requirements
   a) Semi-annual reports of exceedances of the control device operating parameters required to be monitored must be submitted to the Administrator
4) Recordkeeping requirements

The Proposed Project and alternatives would be subject to rules described under Regulation IX as the new facility would need an air permit from the SCAQMD. The control requirements of these rules are reflected in the emissions calculations for Stationary Sources described in Section 5.5 of this appendix.

SCAQMD Regulation XI – Source Specific Rules

Rule 1147 .1, Emissions from Gaseous - and Liquid-Fueled Engines

South Coast AQMD Rule 1147.1 applies to gaseous fuel-fired aggregate dryers with NOx emissions greater than or equal to one pound per day with a rated heat input capacity greater than 2 million British Thermal units (MMBtu) per hour. Rule 1147.1 requires a concentration limit for NOx of 30 ppmv at 3% oxygen, dry and a concentration limit for CO of 1,000 ppmv at 3% O_2, dry.

Rule 1155, Particulate Matter (PM) Control Devices

South Coast AQMD Rule 1155 applies to permitted PM air pollution control devices (APCDs) venting process that have direct (non-combustion) PM emissions. With the exception of paragraph (d)(1), high efficiency particulate air (HEPA) APCDs are exempt from the provisions of Rule 1155. Rule 1155 requirements include:

5) Prohibit any visible emissions from any permitted PM APCD
6) PM outlet concentration does not apply because both filters are Tier 1.
7) Meet minimum capture velocity requirement in U.S. Industrial Ventilation Handbook, American Conference of Governmental Industrial Hygienists (ACGIH)
8) Minimize fugitive dust in collected material disposal (e.g., shrouding or dust suppressants)
9) Monitoring requirements
   a) Minimum of one person trained in the reading of visible emissions pursuant to EPA Method 22
   b) For Tier 1 (i.e., filter surface area less than or equal to 500 sf) baghouses that do not utilize verified filtration products, conduct a continuous five-minute visible emission observation using EPA Method 22 once a week and implement/verify corrective actions, as needed
   c) For Tier 1 (i.e., filter surface area less than or equal to 500 sf) that utilize verified filtration products, conduct visible emissions observations once per month and implement/verify corrective actions, as needed
10) Recordkeeping requirements

The Proposed Project and alternatives would be subject to rules described under Regulation XI. The the new facility would need an air permit from the SCAQMD. The control requirements of these rules are reflected in the emissions calculations for Stationary Sources described in Section 5.5 of this appendix.

SCAQMD Regulation XIII – New Source Review

Rule 1303, New Source Review Requirements

Rule 1303(a), Best Available Control Technology (BACT) Analysis

South Coast AQMD Rule 1303(a)(1) requires that any new source that results in an emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia must use Best Available Control Technology (BACT) for each pollutant.

Rule 1303(b)(3), (4), (5), Sensitive Zone Requirements, Facility Compliance, Major Polluting Facilities

This rule prohibits a new or modified facility to emit a regulated air pollutant in any amount greater than or equal to the following thresholds:

- NOx = 25 tons per year (tpy)
- PM10 = 15 tpy
- SOx = 25 tpy
- VOC = 25 tpy

Any new or modified facility with the potential to emit a nonattainment air pollutant in an amount greater than or equal to the thresholds above will be required to obtain offsets and be equipped with BACT pursuant to subsection (A)(3).

The Proposed Project and alternatives would be subject to rules described under Regulation XIII as the new facility will need an air permit with SCAQMD. The control requirements of these rules are reflected in the emissions calculations for Stationary Sources described in Section 5.5 of this appendix.

SCAQMD Rule 1401—New Source Review of Toxic Air Contaminants

A permit to construct for a new permit unit will not be issued if emissions of any TAC results in an increased maximum individual cancer risk (MICR) greater than one in a million at any receptor location without T-BACT or ten in a million with Best Available Control Technology for Toxics (T-BACT), a cancer burden greater than 0.5, a total chronic hazard index (HI) for any target organic system greater than 1.0 at any receptor location, or a total acute HI for any target organic system greater than 1.0 at any receptor location.

The Proposed Project and alternatives would be subject to this rule as the new facility would need an air permit from the SCAQMD. However, the stationary source permitting thresholds in this rule did not affect the determination of CEQA impacts because the CEQA analysis used thresholds independent from this rule.

2.5 LAHD Emission Reduction Programs

The Los Angeles Harbor Department (LAHD) has developed several programs designed to reduce pollution from mobile sources associated with Port operations. Programs pertinent to the Proposed Project and alternatives are listed below.

San Pedro Bay Ports Clean Air Action Plan

The Ports of Los Angeles and Long Beach, with the participation and cooperation of EPA, CARB, and SCAQMD staff, developed the San Pedro Bay Ports Clean Air Action Plan (CAAP), a planning and policy document that sets goals and implementation strategies to reduce air emissions and health risks associated with port operations while allowing port development to continue (POLA and POLB, 2006). In addition, the CAAP sought the reduction of criteria pollutant emissions to the levels that ensure port-related sources decrease their "fair share" of regional emissions to enable the SCAB to attain state and federal ambient air quality standards. Each individual CAAP measure is a proposed strategy for achieving these emissions reductions goals. The ports approved the first CAAP in November 2006. Specific strategies to significantly reduce the health risks posed by air pollution from port-related sources include:

- Aggressive milestones with measurable goals for air quality improvements;
- Specific goals set forth as standards for individual source categories to act as a guide for decision-making;
- Technology advancement programs to reduce emissions; and
- Public participation processes with environmental organizations and the business communities.

The CAAP focuses primarily on reducing DPM, as well as NOx and SOx. DPM reduction reduces emissions and health risk and thereby allows for future port growth while progressively controlling the impacts associated with growth. The CAAP includes emission control measures as proposed strategies that are designed to further these goals, expressed as Source-Specific Performance Standards, which may be implemented through the environmental review process, or could be included in new leases or port-wide tariffs, MOUs, voluntary action, grants, or incentive programs.

The CAAP Update adopted in November 2010 includes updated and new emission control measures as proposed strategies that support the goals expressed as the Source-Specific Performance Standards and the Project-Specific Standards. In addition, the CAAP Update includes the recently developed San Pedro Bay Standards, which establish emission and health risk reduction goals to assist the ports in their planning for adopting and implementing strategies to significantly reduce the effects of cumulative port-related operations (POLA and POLB, 2010).

The goals set forth as the San Pedro Bay Standards, as part of the 2010 CAAP update, are the most significant addition to the CAAP and include both a Bay-wide health risk reduction standard and a Bay-wide mass emission reduction standard. Ongoing port-wide CAAP progress and effectiveness is measured against these Bay-wide Standards, which consist of the following reductions as compared to 2005 emissions levels:

- Health Risk Reduction Standard: 85 percent reduction in DPM by 2020
- Emission Reduction Standards:
    - By 2014, reduce emissions by 72 percent for DPM, 22 percent for NOx, and 93 percent for SOx
    - By 2023, reduce emissions by 77 percent for DPM, 59 percent for NOx, and 92 percent for SOx

The Project-Specific Standard remains as adopted in the original CAAP in 2006, requiring that new projects fall below the 10 in 1,000,000 excess residential cancer risk threshold, as determined by health risk assessments conducted subject to CEQA statutes, regulations, and guidelines, and implemented through required CEQA mitigations and/or lease negotiations. Although each port has adopted the Project-Specific Standard as a policy, the LAHD Board of Harbor Commissioners retains the discretion to consider and approve projects that exceed this threshold if the Board deems it necessary by adoption of a statement of overriding considerations at the time of project approval.

The goals set forth as the Source-Specific Performance Standards of the CAAP address a variety of port-related emission sources—ships, trucks, and harbor craft—and outline specific strategies to reduce emissions from each source category. The Source-Specific Performance Standards have been updated as detailed in Section 2 of the CAAP Update, and the applicable emission control measures (as detailed in Section 4 of the CAAP Update) for the Proposed Project and alternatives are discussed below.

Although LAHD has adopted a general policy that its leases will be compliant with the CAAP, the Board of Harbor Commissioners has discretion regarding the form of all lease provisions and CAAP measures at the time of lease approval. In addition, tenants must comply with all applicable federal, state, and local air quality regulations.

As the CAAP is a planning document that sets goals and implementation strategies to guide future actions, it does not constrain the discretion of the Board of Harbor Commissioners as to any specific future action. Each individual CAAP measure is a proposed strategy for achieving necessary emission reductions. The Board of Harbor Commissioners uses its discretion in its approvals of projects, leases, tariffs, contracts, or other implementing activities in order to appropriately apply the CAAP to the particular situation and may make adjustments if any proposed measure proves infeasible or if better alternatives for a measure emerge.

CAAP Measure—SPBP- OGV1, Vessel Speed Reduction Program

Under this voluntary program, LAHD has requested that ships coming into the Port reduce their speed to 12 knots or less within 20 nm of the Point Fermin Lighthouse. Reduction in speed demands less power from the main engine, which in turn reduces fuel usage and emissions. This reduction of 3 to 10 knots per ship (depending on the ship's cruising speed) can substantially reduce emissions from the main propulsion engines of the ships. The program started in May 2001. The CAAP adopted the VSRP as control measure OGV1 and expanded the program out to 40 nm from the Point Fermin Lighthouse in 2008.

CAAP Measure—SPBP-OGV2, Reduction of At-Berth OGV Emissions

This measure requires the use of shore power to reduce hoteling emissions at all container and cruise terminals by 2014. This measure also requires demonstration and application of alternative emissions reduction technologies for ships that are not viable candidates for shore power, to be facilitated through the Technology Advancement Program (TAP).

CAAP Measures—SPBP-OGV3 and 4, OGV Low Sulfur Fuel for Auxiliary Engines, Auxiliary Boilers, and Main Engines

This measure originally required the use of 0.2 percent or lower sulfur distillate fuels in the auxiliary engines, auxiliary boilers, and main engines of OGVs within 40 nm of Point Fermin and while at berth. As of January 1, 2014, CARB's regulation surpasses these CAAP measures by requiring the use of MGO and MDO with a sulfur fuel content of 0.1 percent within 24 nm of the California coastline. The analysis assumes compliance with CARB's regulation.

CAAP Measure—SPBP-OGV5 and 6, Cleaner OGV Engines and OGV Engine Emissions Reduction Technology Improvements and Environmental Ship Index Program

Measure OGV5 seeks to maximize the early introduction and preferential deployment of vessels to the San Pedro Bay Ports with cleaner/newer engines meeting the new IMO NOx standard for ECAs. Measure OGV6 focuses on reducing DPM and NOx from older vessels in the fleet through identification and deployment of effective emission reduction technologies.

In order to advance the goals of OGV5 and 6, LAHD approved the voluntary Environmental Ship Index (ESI) Program in May 2012. The ESI Program is an international clean ship indexing program developed through the International Association of Ports and Harbors' World Ports Climate Initiative. Operators registered under this program earn an ESI score for their vessels by using cleaner technology and practices that reduce emissions beyond the regulatory requirements set by IMO. The ESI Program rewards vessel operators for reducing NOx, SOx, and GHG emissions in advance of regulatory requirements. The ESI Program also rewards vessel operators for bringing their newest and cleanest vessels to the Port and demonstrating technologies onboard their vessels. This program became effective in July 2012.

CAAP Measure—SPBP-HC1, Performance Standards for Harbor Craft

The measure calls for repowering all harbor craft home-based in the San Pedro Bay to Tier 3 within five years after Tier 3 engines become available. The measure also requires the use of shore power. In addition, LAHD plans to accelerate harbor craft emission reductions through emerging technologies, such as hybrid tugs, more efficient engine configurations, and alternative fuels, through incentives or voluntary measures.

CAAP Measure—SPBP-HDV1, Performance Standards for On-Road Heavy-Duty Vehicles; Clean Trucks Program

The Port Clean Trucks Program (CTP) is a central element of the CAAP. The CTP established a progressive ban on polluting trucks. As of January 1, 2012, all trucks that did not meet the 2007 Federal Clean Truck Emissions Standards were banned from the Port. Following full implementation in 2014, Port truck emissions were reduced by more than 90 percent for DPM, PM and SOx, and by 71 percent for NOx (LAHD, 2014a).

For purposes of this analysis, the emission estimates did not consider the benefits of these CAAP measures, except for SPBP-OGV3 and 4 (Low Sulfur Requirements) and SPBP-OGV1 (VSRP) where current (as of 2021) levels of compliance/voluntary action are assumed to remain constant in future years.

2017 CAAP Update

The latest CAAP Update (LAHD 2017), adopted in November 2017, re-affirms the Ports' commitment to the goals and standards of previous CAAP versions, but also introduces new goals, standards, and programs. The 2017 CAAP Update incorporates two new emission reduction targets:

- Reduce greenhouse gases (GHG) from port-related sources to 40% below 1990 levels by 2030
- Reduce GHGs from port-related sources to 80% below 1990 levels by 2050.

The 2017 update retains the reduction targets for emissions of diesel particulates, nitrogen oxides, and sulfur oxides set in the 2010 update. It also retains the health risk reduction goals set by the 2010 update, re-affirms the Ports' commitment to those goals, and further commits the Ports to working with regulators and stakeholders toward further reductions in emissions and health risks.

In addition, the 2017 CAAP Update incorporates the recent commitment by the mayors of Los Angeles and Long Beach to move towards zero emissions at the Ports, including setting goals of zero-emissions cargo-handling equipment by 2030 and zero-emissions heavy duty trucks by 2035. Accordingly, the updated CAAP includes provisions for new investments in clean technology, expanded use of at-berth emission reduction technologies, and a zero-emissions heavy duty truck pilot program. The updated CAAP also includes a CAAP Implementation Stakeholder Advisory Group to advise the Ports on details of CAAP implementation and ongoing operational efficiency and energy conservation programs; a commitment to the nationwide Green Ports Collaborative; and a commitment to a joint effort to secure funding for necessary equipment purchases and infrastructure development.

LAHD Sustainable Construction Guidelines

As part of LAHD's overall environmental goals and CAAP strategies, any construction at the Port must follow the Sustainable Construction Guidelines, adopted in February 2008 and updated in 2009 (LAHD 2009). The guidelines reinforce and require sustainability measures under construction contracts, addressing a variety of emission sources that operate at the Port during construction. Examples include ships and barges used to deliver construction related materials, harbor craft, dredging equipment, haul and delivery trucks, and off-road construction equipment. In addition, the LAHD Construction Guidelines include Best Management Practices (BMPs) based on CARB-verified BACT, designed to reduce air emissions from construction sources.

3.0 Emissions Analysis Introduction

The Draft EIR air quality analysis studies emissions from the Proposed Project and alternatives construction in future years 2024 and 2025 and operations over the life of the project. Operational emissions are analysed for future years 2025, 2027, and 2049 which correspond to the first full year of operations, the year when operations reach full capacity, and a future year selected for the purpose of the health risk analysis, respectively. Any postponement of construction activities would not likely result in any higher emissions as increasingly stringent regulatory requirements related to construction equipment and cleaner engines from turnover are implemented compared to those assumed in the analyzed years. It was assumed that the emissions would remain consistent between 2049 to 2055, encompassing the 30 years of project lifetime from the start of the lease date. The methodology for calculating emissions for the various construction and operational sources at Berths 191-194 terminal is discussed below. The scenarios analyzed are as follows:

1) Proposed Project – this scenario includes emissions associated with construction of storage facilities, mill, and loading facilities on the backlands behind Berths 192-194 and wharf repairs at Berth 191, as well as operational emissions with projected changes in activity through 2027. Offroad equipment, vehicle and harbor craft fleet natural turnover, and future regulations that are suspected to affect pertinent emission sources were also considered.
2) Alternative 1 No Project - this scenario assumes the continuation of negligible on-site activities occurring during the baseline into future years. As zero emissions are associated with de minimis baseline activities, this scenario is not further analyzed for purposes of air quality.
3) Alternative 2 Reduced Project - this scenario includes emissions associated with construction and terminal operations similar to the Proposed Project with a reduced maximum capacity for the Orcem facility. Offroad equipment, vehicle and harbor craft fleet natural turnover, and future regulations that are suspected to affect pertinent emission sources were also considered.
4) Alternative 3 Product Import Terminal - this scenario includes emissions associated with construction and terminal operations that excludes any processing and storage of raw materials. Construction activities would be simpler as certain facility features are no longer needed. Product materials would come ready from overseas imported by vessel. Offroad equipment, vehicle and harbor craft fleet natural turnover, and future

regulations that are suspected to affect pertinent emission sources were also considered.

4.0 Methodology for Determining Construction Emissions

Construction emissions would occur during the years 2024 and 2025 in all three project scenarios; Proposed Project, Alternative 2 Reduced Project, and Alternative 3 Product Import Terminal. The construction for the Proposed Project scenario includes two main activities; the construction of facilities on the backlands behind Berths 192-194 and wharf repairs at Berth 191. The Reduced Project (Alternative 2) includes all the construction activities required for the Proposed Project. The Product Import Terminal (Alternative 3) differs from the other two scenarios as it would not require the construction of facilities to process raw materials such as the mill nor associated infrastructure. The construction activities would result in emissions from the following sources:

- Engine exhaust emissions from off-road construction equipment;
- Engine exhaust, tire and break wear, and road dust emissions from construction trucks hauling materials;
- Engine exhaust, tire and break wear, and road dust emissions from work vehicles visiting the site during construction;
- Engine exhaust emission from harbor crafts used to support wharf repairs; and
- Fugitive dust emissions from construction activities including concrete and net fill, waste materials, and wind erosion.

Construction activities for the Proposed Project and Alternatives would include concrete paving of the project site. Because asphalt would not be used, pavement degassing emissions are not expected. Similarly, architectural coating VOC emissions are expected to be negligible and were not quantified in the analysis given that the only painted area in the facility would be the small office building (3,650 sq. ft), and all other building structures would be made of galvanized steel with no further treatment. Table B1-2 summarizes the regulations assumed in the future construction emissions calculations for all scenarios. Existing regulations are treated as default project elements because they represent enforceable rules. In addition to applicable regulations, the construction emissions from the Proposed Project and associated alternatives were adjusted to reflect the Port of LA’s Sustainable Construction Guidelines (LAHD, 2009). The summary of emissions related to construction can be found in the tables on pages B1-65 to B1-73.

Table B1-2. Regulations and Agreements Assumed as Part of the Construction Emissions Analysis

Off-road Equipment	On-Road Trucks	Harbor Craft	Fugitive Dust
EPA Emission Standards for Non-road Diesel Engines: Tier 1, 2, 3, and 4 standards gradually phased in over all years due to normal construction equipment fleet turnover. **CARB In-Use Off-road Diesel Vehicle Regulation:** Off-road mobile equipment powered by diesel engines 25 hp or larger are required to meet the fleet average or BACT requirements for NOx and PM emissions. **California Diesel Fuel Regulation**: 15-ppm sulfur. **CARB Portable Diesel-Fueled Engines Air Toxic Control Measure (ATCM)**: Portable engines having a maximum rated horsepower of 50 bhp and greater and fueled with diesel must meet weighted fleet average PM emission standards. **LAHD Sustainable Construction Guidelines**: Idling restricted to maximum 5 minutes. All off-road diesel-powered construction equipment greater than 50hp, will meet Tier-4 offroad emission standards at a minimum.	**EPA Emission Standards for On-Road Trucks**: Increasingly stringent engine standards phased in due to truck turnover. **CARB Heavy Duty Diesel Vehicle Idling Emission Reduction**: Diesel trucks are subject to idling limits when not being used to power concrete mixing, water pumps, etc. **CARB Statewide Truck and Bus Regulation**: Trucks less than 26,000 GVWR are required to replace engines with 2010+ engines by January 2023. Trucks with GVWR greater than 26,000 must meet PM BACT and upgrade to a 2010+ model year emissions equivalent engine pursuant to the rule compliance schedule. **California Diesel Fuel Regulation**: 15-ppm sulfur. **LAHD Sustainable Construction Guidelines:** Idling restricted to maximum 5 minutes. On-road trucks shall comply with EPA 2007 on-road emission standards for PM_{10} and NOx (0.01 g/bhp-hr and at least 1.2 g/bhp-hr respectively).	**California Diesel Fuel Regulation:** 15-ppm sulfur. **CARB Regulation for Commercial Harbor Craft (CHC)**: Harbor craft are subject to engine replacement/retrofit schedule set forth by CARB. **LAHD Sustainable Construction Guidelines:** All HC with C1 or C2 engines must utilize a USEPA Tier-3 engine or cleaner.	**LAHD Sustainable Construction Guidelines:** Active grading site shall be watered 3 times a day. Soil disturbance activities shall be suspended when winds exceed 25mph. Traffic speeds on unpaved roads shall be reduced to 15mph or less
Implementation			
EPA and CARB regulation effects are included in emission factors from CARB's OFFROAD2021 model.	EPA and CARB regulation effects are included in emission factors from CARB's EMFAC2021 model. Idling limited to 5 minutes.	This analysis includes effects of the 2007 CHC rule. Recent 2022 amendments to the CHC regulation are not reflected in future projections.	Control factors were implemented for road dust, material handling, and wind erosion emissions based on CalEEMod assumptions.

Note: This table is not a comprehensive list of all applicable regulations; rather, the table lists key regulations and agreements that substantially affect the emission calculations for the Proposed Project and alternatives. For other applicable regulations see Section 2.0 of Appendix B1.

4.1 Harbor Craft

Harbor craft (HC) vessels would be used during construction to assist in moving barge-mounted equipment associated with wharf repairs. HC main and auxiliary engine sizes and load factors were obtained from the 2021 Port Emissions Inventory (LAHD 2022a). HC emission factors were derived based on EPA standards for marine compression-ignition engines (EPA, 2008). In its 2021 Commercial Harbor Craft Model, CARB provides zero-hour emission rates along with deterioration rates by vessel type and engine size (CARB, 2021g), which were used to estimate deteriorated emission factors in each analysis year. The applicable HC characteristics were based on POLA fleet-average HC per 2021 inventory. The model year (and therefore, tier level) selected for zero-hour emission factors were based on the Port's 2008 Sustainable Construction Guidelines, requiring all construction HCs to be tier 3. The characteristics and emission factors related to construction harbor crafts can be found in the tables on page B1-60.

4.2 On-road Vehicles (Trucks)

On-road vehicles during construction consist mainly of heavy-duty diesel trucks used for hauling and delivering materials and equipment to/from the construction site. Exhaust and idling emissions for on-road, heavy-duty diesel trucks during construction were calculated using emission factors generated from EMFAC2021 on-road mobile source model for "T7 tractor class 8" truck category, representative of the average SCAB fleet (CARB, 2021b). The EMFAC2021 model output shows that, on a per-mile basis, emission factors will steadily decline in future years as older trucks are replaced with newer, cleaner trucks that meet the required state and federal on-road engine emission standards. Other assumptions regarding on-road trucks during construction include:

- The average off-site one-way trip travel distances for construction material delivery trucks were assumed to be 65 miles for all phases and years based on information provided by POLA Engineering Department and 6.9 miles for construction water trucks based on vendor truck trip distance from the latest version of CalEEMod2020.4.0 (CAPCOA, 2022). The average on-site one-way trip mileage for all construction trucks was assumed 0.1 miles.
- Onsite truck idling times were assumed to be 5 minutes per one-way trip on-site per the requirements of the Port's Sustainable Construction Guidelines.
- PM10 and PM2.5 emissions from road dust were calculated for on-site and off-site driving using CARB's methodology to estimate entrained road dust emission factors; this involves using the equations in EPA's Compilation of Air Pollutant Emission Factors AP-42 (EPA, 2011b) and CARB silt loading values for California roadways in its 2021 guidance document for estimating entrained road dust emissions from paved roads (CARB, 2021c). Control factors were also applied to PM10 and PM2.5 emission factors to account for water application on unpaved roadways on-site. Off-site driving is assumed to be on paved roads and uncontrolled. Based on the latest CalEEMod Version 2022.1, application of water controls 55% of fugitive dust emissions from vehicle activity on on-site unpaved roads/surfaces (CAPCOA, 2022).

The characteristics and emission factors related to heavy duty truck construction activity can be found in the tables on pages B1-52 and B1-62.

4.3 Worker Vehicles

Worker vehicle emissions consist of light duty gasoline on-road vehicles used for construction workers commuting to and from the Berths 191-194 terminal. On-site idling from worker vehicles was assumed to be negligible.

- Emission factors from EMFAC2021 for gasoline light duty trucks (EMFAC category LDA) were used to represent construction worker vehicle emissions, such as pick-up trucks. The South Coast default light duty truck fleet mix was used for the emission factor derivation.
- The average off-site round-trip travel distances for worker vehicles were assumed to be 14.7 miles from the latest version of CalEEMod2020.4.0. The average onsite round-trip distance was assumed to be 0.1 mile.
- PM10 and PM2.5 emissions from paved road dust were calculated for on-terminal driving, off-terminal driving following CARB's methodology to estimate entrained road dust emission factors; this involves using the equations in EPA's Compilation of Air Pollutant Emission Factors AP-42 (EPA, 2011b) and CARB silt loading values for California roadways in its 2021 guidance document for estimating entrained road dust emissions from paved roads (CARB, 2021d).

The characteristics and emission factors related to worker vehicle construction activity can be found in the tables on pages B1-52 and B1-62.

4.4 Off-road Construction Equipment

Off-road equipment used during construction includes but is not limited to diesel-fueled cranes, forklifts, generators, pavers, and excavators. All off-road equipment was assumed to be diesel-fueled.

Emissions of CAPs and GHGs were calculated using emission factors from the EMFAC2021 Emissions Inventory Model (CARB, 2021e) for equipment representative of Tier 4 engines, which are required based on the Sustainable Construction Guidelines (LAHD, 2009). That is, South Coast Air Basin representative EFs were aggregated for model years 2015 and newer. Emission factors were calculated for each type of equipment based on the horsepower rating of the equipment and corresponding total accumulated equipment operating hours. Emission factors estimated as gram per hp-hrs for each equipment type were used to calculate emissions. The characteristics and emission factors related to off-road construction equipment activity can be found in the tables on pages B1-53 to B1-55 and B1-63.

4.5 Fugitive Dust from Construction Activities

Fugitive dust emissions from construction would be generated by wind erosion and material handling during paving and filling. Emission factors for material handing were calculated based on EPA's Aggregate Handing and Storage Piles (AP-42 – Section 13.2.4) methodologies (EPA, 2006a). Tons of material loaded onto truckswere provided by Ecocem. Emission factors for wind erosion were calculated based on EPA's Industrial Wind Erosion profile (AP42-13.2.5) (EPA, 2006b). Disturbed areas in acreages were sourced from Ecocem early project design and wind speed inputs were sourced from the National Institute of Standards and Technology (NIST, 1952). A watering control factor of 61%, representing a control of watering three times per day, was applied to both emission calculations based on CalEEMod's assumptions (CAPCOA, 2022). The calculations for fugitive dust emissions related to construction activity can be found in the tables on pages B1-56 to B1-57 and B1-64.

5.0 Methodology for Determining Operational Emissions

Operational emissions would occur from five major source types: (1) Ocean Going Vessels (OGVs, specifically bulk vessels); (2) Harbor crafts (HCs); (3) On-road Vehicles (such as material delivery heavy duty trucks and worker vehicles); (4) Backland off-road equipment (diesel-fueled front end loader and excavator) ; and (5) Stationary sources that are part of the Ecocem manufacturing facility being proposed at the Berths 191-194, which are described individually in Section 5.5. These sources would generate emissions in the form of CAPs and GHGs. In addition, movement of mobile sources and handling of materials as part of the operation would contribute to fugitive dust PM10 and PM2.5 emissions.

Electricity consumption during operations was estimated to quantify associated indirect GHG emissions and energy consumption. Sources of electricity consumption include on-site equipment such as mills, separators, power fans, and general power demands such as building lights. Information regarding the activity and characteristics of the operational sources and associated energy demands were sourced from Ecocem.

Table B1-3 summarizes the regulations assumed in the future operational emissions calculations. Current in-place regulations are treated as project elements rather than mitigation because they represent enforceable rules, with or without Proposed Project approval. The summary of emissions related to operations can be found in the tables on pages B1-127 to B1-143.

Table B1-3. Regulations and Agreements Assumed as Part of the Operational Emissions

Ocean Going Vessels (OGVs)	Harbor Crafts	Off-road Equipment	On-road Vehicles	Stationary Sources
MARPOL Annex VI: 0.1% sulfur limit for fuels, beginning in 2015 (200 nm of CA coast). NOx engine emission limits (tier levels) for new engines. **EPA Engine Standards for Marine Diesel Engines:** NOx, HC, and CO engine emission standards for new engines. **CARB Airborne Toxic Control**	**EPA Engine Standards for Marine Diesel Engines:** NOx, HC, and CO engine emission standards for new engines. **CARB Regulation to Reduce Emissions from Diesel Engines on Commercial Harbor Craft:** Requires that harbor craft engines meet EPA's most stringent emission standards per an accelerated, rule-specified compliance schedule.	**EPA Emission Standards for Non-road Diesel Engines:** Engine standards for newly built engines. **California Diesel Fuel Regulation:** 15-ppm sulfur.	**EPA Emission Standards for On-road Trucks:** Tiered standards gradually phased in over all years due to normal truck fleet turnover. **California Diesel Fuel Regulation:** 15-ppm sulfur. **Heavy Duty Diesel Vehicle Idling Emission Reduction Regulation:** Idling limits for on-terminal trucks.	**SCAQMD Rule 403 – Fugitive Dust** **SCAQMD Rule 431.1 – Sulfur Content of Gaseous Fuels** **SCAQMD Rule 1147.1, Emissions from Gaseous and Liquid Fueled Engines** **SCAQMD Regulation XIII – New Source Review** **40 CFR 60 Subpart OOO, Standards of**

Ocean Going Vessels (OGVs)	Harbor Crafts	Off-road Equipment	On-road Vehicles	Stationary Sources
Measure for Fuel Sulfur and Other Operational Requirements for Ocean-Going Vessels Within California Waters and 24 Nautical Miles of the California Coast: Limits sulfur content for marine gas oil or marine diesel oil to 0.1% sulfur by January 2014.	**California Diesel Fuel Regulation:** 15 ppm sulfur.		**CARB On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation:** Trucks are required to replace engines with 2010+ engines by January 2023. Trucks with GVWR greater than 26,000 must also meet PM BACT.	**Performance for Nonmetallic Mineral Processing Plants** **40 CFR 60 Subpart UUU, Standards of Performance for Calciners and Dryers in Mineral Industries**
Implementation				
EPA standard emission factors are selected to reflect 0.1% sulfur limits. Vessel fleet mix (Tier mix) reflects emission standards for NOx.	This analysis includes effects of the 2007 CHC rule. Recent 2022 CHC amendments to the regulation are not reflected in future projections.	EPA standards and CARB requirements are included in EMFAC2021 model offroad emission factors.	EPA standards and CARB requirements are included in EMFAC2021 model onroad emission factors. The analysis assumes all trucks are diesel and does not take credit for potential ACT rule benefits.	Rules are considered in calculations on a source-by-source basis. Stationary emissions are controlled per federal and SCAQMD requirements.

5.1 Ocean Going Vessels (OGVs) – Dry Bulk Vessels

The ocean-going vessels (OGVs) operating during the Proposed Project and alternatives would be dry bulk vessels. Emissions from OGVs were calculated for each engine type (main propulsion engine, and auxiliary engine), operating mode, and location. The types of activity/operating modes include transit, hoteling at berth, and anchorage. The dry bulk vessels used for the Proposed Project and Alternatives would have small electric water boilers according to the Ecocem vessel fleet provider, hence, no boiler combustion emissions are expected. Activity assumptions for future years, for the Proposed Project and Reduced Project alternative, including number of vessel calls, vessel characteristics, engine sizes and hotelling duration were based on project design information provided by Ecocem. For the Product Import Terminal alternative, the activity in terms of vessel calls and hotelling duration was provided by Ecocem; however, the vessels used in this alternative would be slightly different bulk vessels than those expected to be contracted by Ecocem for the Proposed Project or Reduced Project. Therefore, the vessel characteristics (engine sized, tier mix) for Product Import Terminal alternative are based on the averaged bulk vessel fleet visiting the Port of Los Angeles in 2021. The characteristics and emission factors related to operational ocean-going vessel activity can be found in the tables on pages B1-85 to B1-106.

5.1.1 OGV Emission Factor Assumptions:

- Emission factors for propulsion engines and auxiliary engines were obtained on a per tier-level basis from the 2021 San Pedro Bay Ports Emissions Inventory Methodology Report (LAHD, 2022a).
- Based on the POLA inventory (LAHD, 2022b), it was assumed that diesel propulsion engines would be low-speed and auxiliary engines would be medium-speed.
- Emission factors for propulsion and auxiliary engines are dependent upon engine tier, which in turn is dependent upon engine age. The distribution of vessels by tier is expected to be 50% tier 2 and 50% tier 3 for the Proposed and Reduced Project, based on information provided by Ecocem's vessel fleet provider through Orcem. For the Product Import Terminal alternative, the distribution of vessels by tier is expected to be that of the bulk vessel fleet visiting the Port of Los Angeles in 2021.
- In all calculations, 0.1% fuel sulfur content was assumed per CARB's ATCM for Fuel Sulfur and Other Operational Requirements for Ocean-Going Vessels within California Waters and 24 Nautical Miles of the California Baseline and MARPOL Annex VI (CARB 2011).
- Propulsion engines were assumed to be MAN 2-stroke engines with slide valves. Therefore, adjustments factors for this type of engine were applied to the emission factors to reflect changes in vessel speed and load during transit. Adjustment factors by percent load relative to the maximum rated propulsion load were applied to the main engine emission factors to account for engine loads at different transit zones. These adjustment factors were obtained from the 2021 San Pedro Bay Ports Emissions Inventory Methodology Report (LAHD, 2022a).
- The estimation of annual vessel emissions assumed an engine tier mix of 50% Tier 2 and 50% Tier 3. The estimation of peak day and peak hour emissions assumed that the vessel engines would be Tier 2.

5.1.2 OGV Engine Assumptions:

- During transit, main engine loads were determined using the propeller law, which states that the engine load factor is proportional to the ratio of ship speed to maximum rated speed cubed, as shown in Equation 1. For maneuvering and transit within the precautionary area average speeds from the 2021Port Inventory were used (LAHD 2022a). Transit speeds from the precautionary area to 20 nm and 20 nm to 40 nm were based on the 2021 VSRP compliance record by POLA (LAHD, 2022c).

$$Load\ [kw] = \left(\frac{Vessel\ speed\ in\ zone}{Max\ Rated\ Speed}\right)^3 x\ Max.Power\ Rating\ [kW] \qquad \text{(eq. 1)}$$

  - Main engines: The maximum rated power and speed for vessels were provided by the vessel fleet provider's vessel specification sheet and the Port Emissions Inventory, respectively.

- For the future year calculations, auxiliary engine loads by operating mode were obtained from Ecocem for vessels in the Proposed Project and Reduced Project, and from the 2021 Port Inventory (LAHD, 2022b) for the Product Import Terminal alternative.
- The type of boiler used in the dry bulk vessels would be small electric boilers used for onboard water heating based on information from Ecocem.

5.1.3 OGV VSRP Assumptions:

- Vessel speed reduction program (VSRP) compliance was determined from the 2021 compliance record by POLA (LAHD 2022c). The VSRP compliance was roughly 96.9% for the area between the precautionary zone and 20 nm (zone 4) and 94.1% in the area between 20nm and 40nm (zone 5). Based on the average "maximum rated speed" for dry bulk vessels (LAHD 2022c) of 14 knots and the VSRP compliant speed of 12 knots, an average speed of approximately 12.1 knots was estimated. This assumption applies to all alternatives in any future year, both for annual and peak periods.

5.1.4 OGV Hoteling Assumptions:

- During hoteling, ships were assumed to turn off main engines but leave the auxiliary engines running.
- The average hoteling duration per call was determined based on expected vessel cargo loads and project design data from Ecocem. The average hotelling duration per call would be 120 hours. Auxiliary engines for bulk vessel carriers are not subject to CARB's At-Berth controls, and thus are assumed to be uncontrolled during the visit.
- Because vessel transit is the greatest contributor to peak day emissions, peak day hoteling durations were determined by assuming the time remaining from one full transit to or from the 40 nm boundary.

5.1.5 Additional Vessel Assumptions:

- Because the Proposed Project would have a relatively low number of vessel call (a maximum of 24 per year) compared to other Port terminals, ample time between calls would enable planning and prevent anchorage events. However, one anchorage event per year has been conservatively assumed. Anchorage event time is assumed to last 24 hours.
- The estimate of peak day emissions assumed one full transit from the 40nm boundary to berth, which would last approximately 5 hrs, and the remaining time hotelling at berth.
- Annual GHG emissions from OGV transit were estimated from the California state water boundary to berth, an additional 130 nm outside of the boundary used for criteria pollutants.
- The estimate of peak hour emissions assumed one hour of hotelling. Because peak hour emissions are meant to be used for estimating localized ambient pollutant concentrations and the acute hazard index, hotelling activity, which is nearest to the receptors, instead of transit, was used.

5.2 Harbor Craft – Assist Tugboats

Tugboats would be utilized during the facility operation in two activities: assisting bulk vessels to and from Berth 191 and deploying and removing the Yokohama fenders at Berth 191. The assumptions below were applied to estimate peak day and annual emissions. The characteristics and emission factors related to operational harbor craft activity can be found in the tables on pages B1-107 to B1-109.

- Two vessel assist tugboats were assumed for each arrival/departure of a bulk vessel. One tugboat transit was assumed for the temporary installation of Yokahama fenders before each dry bulk vessel call, and one tugboat transit for the removal of the fenders after the end of the call.
- Assist tugboat transit time was assumed to equal the average vessel transit times for the maneuvering and precautionary zones, multiplied by 1.3 to account for tug movement to and from base (LAHD, 2014b).
- Tugboat maneuvering time for fender deployment was based on the duration of operation during transit, working, and return to the storage location provided by Ecocem.
- Tugboat engine characteristics (engine count, average model year, and horsepower rating) were sourced from the 2021 Port Emissions Inventory (LAHD 2022a).
- Tugboat emission factors were derived based on EPA standards for marine compression-ignition engines. The fleet was assumed to turnover naturally over the life of the project. In its 2021 Commercial Harbor Craft Model, CARB provides zero-hour emission rates along with deterioration rates by vessel type and engine size (CARB, 2021), which were used to estimate deteriorated emission factors in each analysis year.
- The fuel sulfur content was assumed to be 15 ppm for all analysis years, in accordance with California Diesel Fuel Regulation (CARB 2005).
- Peak daily activity was based on vessel maneuvering transit durations for the modeled peak day for OGVs. Since the modeled peak hour for OGVs includes only hotelling, there are no HC emissions in this period.
- For the purpose of the Localized Significance Threshold (LST) analysis explained in Section 1.0 of Appendix B2, only 10% of HC emissions were categorized as onsite emissions as the rest were assumed to occur during transit.

5.3 Heavy Duty Trucks – Delivery/Customer Trucks

The assumptions below were applied to estimate peak day and annual emissions for heavy duty trucks delivering raw material (gypsum) and loading product (GGBFS) at the Berths 191-194 terminal during operations in all years and scenarios. These two unique heavy-duty diesel truck groups are used to transport each specific material type during the operational phase and are characterized as GGBFS trucks and Gypsum trucks throughout the analysis. Emissions produced by these mobile sources were derived from their activity (Table B1-4) while driving inside the South Coast Air Basin (SCAB). Two routes that account for the "before and after" construction of the Berth 200 roadway extension project (set to be done by 2027) were determined by the Port's Goods Movement department. The routes, shown in Figure 2-7 from Chapter 2: Project

Description, include the roadways allowed for Port's truck traffic to access both the I-110 and I-710 freeways coming to and from the project site. Routes were segmented by road-links, and emissions calculated for each to account for trips during construction and operations prior to 2027 (before the Berth 200 roadway would be available), and operations during and beyond 2027 (after the Berth 200 roadway would be available). The characteristics and emission factors related to operational heavy duty truck activity can be found in the tables on pages B1-75 to B1-81.

- Emissions from on-road, heavy-duty diesel trucks with travel only within California were calculated using emission factors generated by the EMFAC2021 on-road mobile source emission factor model (CARB, 2021e). GGBFS trucks were classified as T7 Tractor Class 8.
- For GGBFS trucks, emission factors were aggregated by model year into composite fleet-wide emission factors using the EMFAC truck fleet mix for the South Coast Air Basin, in their respective calendar years (CARB 2021e).
- For Gypsum trucks, emission factors were calculated using average Nevada emission factors generated by the MOVES3 model (EPA 2022a) as it is the expected origin of the truck fleet. Gypsum trucks were classified as single unit long-haul trucks.
- PM10 and PM2.5 emissions from paved road dust were calculated separately and added to the emissions from truck exhaust, tire wear, and brake wear. Road dust emission factors for on-terminal driving, off-terminal local streets, and freeways followed CARB's methodology to estimate entrained road dust emission factors, using the equations in EPA's Compilation of Air Pollutant Emission Factors AP-42 (EPA 2011b) and CARB silt loading values for California roadways in its March 2021 guidance document for estimating entrained road dust emissions from paved roads (CARB 2021f).
- On-site idling times and the on-site driving distance were determined to be 5 minutes per visit and 0.1 miles per trip, respectively. CARB and Los Angeles County restricts idling time to 5 minutes for heavy duty diesel vehicles with a Gross Vehicle Weight Rating of 10,000 lbs or heavier (CARB 2016).
- Table B1-4 shows annual and daily Heavy Duty Truck activity for the Proposed Project. Activity for the Reduced Project would be lower based on the reduced throughput. Activity for the Product Import Terminal scenario would be the same as the Proposed Project, except there would be no Gypsum trucks. The total annual mileage represents that total fleet mileage out to the destinations.

Table B1-4. Proposed Project Heavy Duty Truck Activity

Activity	Year	GGBFS trucks	Gypsum Trucks	Total Trucks
Total Annual Round-Trips	2025	15,500	988	16,488
	2027	31,000	1,975	32,975
	2049	31,000	1,975	32,975
Total Annual Mileage	2025	1,405,072	151,489	1,556,561
	2027	2,810,144	302,978	3,113,123
	2049	2,810,144	302,978	3,113,123
Total Daily Round-Trips	2025	62	4	66
	2027	124	8	132
	2049	124	8	132

Activity	Year	GGBFS trucks	Gypsum Trucks	Total Trucks
Total Daily Mileage	2025	5,620	606	6,226
	2027	11,241	1,212	12,452
	2049	11,241	1,212	12,452

Note: mileage covers transit within the South Coast Air Basin boundary.

5.4 Worker Vehicles

Worker vehicle emissions would consist of light duty on-road vehicles used for workers commuting to and from the Berths 191-194 terminal. Activities tracked consist of off-site driving to/from the terminal and on-site driving to the employee parking lot. On-site idling from worker vehicles was assumed to be negligible. The characteristics and emission factors related to operational worker commute activity can be found in the tables on pages B1-75 to B1-81.

- Emissions from worker trips during the Proposed Project operation were calculated using the number of employees on-site annually and the expected worker mileage. Based on the project description, there would be 26, 18, and 12 employees on site for the Proposed, Reduced, and Product import terminal projects respectively once fully operational.
- Emission factors from EMFAC2021 for gasoline passenger cars (LDA) were used to represent worker vehicle emissions. The South Coast default light duty vehicle fleet mix was used for the emission factor derivation.
- PM10 and PM2.5 emissions from paved road dust were calculated and added to the EMFAC2021 emissions. Road dust emission factors for on-terminal driving, off-terminal local streets, and freeways followed CARB's methodology to estimate entrained road dust emission factors; this involves using the equations in EPA's Compilation of Air Pollutant Emission Factors AP-42 (EPA 2011b) and CARB silt loading values for California roadways in its 2021 guidance document for estimating entrained road dust emissions from paved roads (CARB 2021d).

5.5 Stationary Sources – Process Sources and Fugitive Dust

Stationary source emissions would consist of fugitive dust and combustion emissions generated by process equipment and operations in the Proposed Project and Alternatives facility. Only the dryer which is natural gas powered, would generate combustion exhaust emissions of various criteria pollutants. The remaining sources in this category consist of fugitive dust from various GGBFS manufacturing steps. Figure B1-1 shows the locations of the Proposed Project stationary sources/ process elements that are discussed in this section (in addition to the mobile sources discussed in Section 5.6). The characteristics and emission factors related to operational stationary source activity can be found in the tables on pages B1-110 to B1-126.

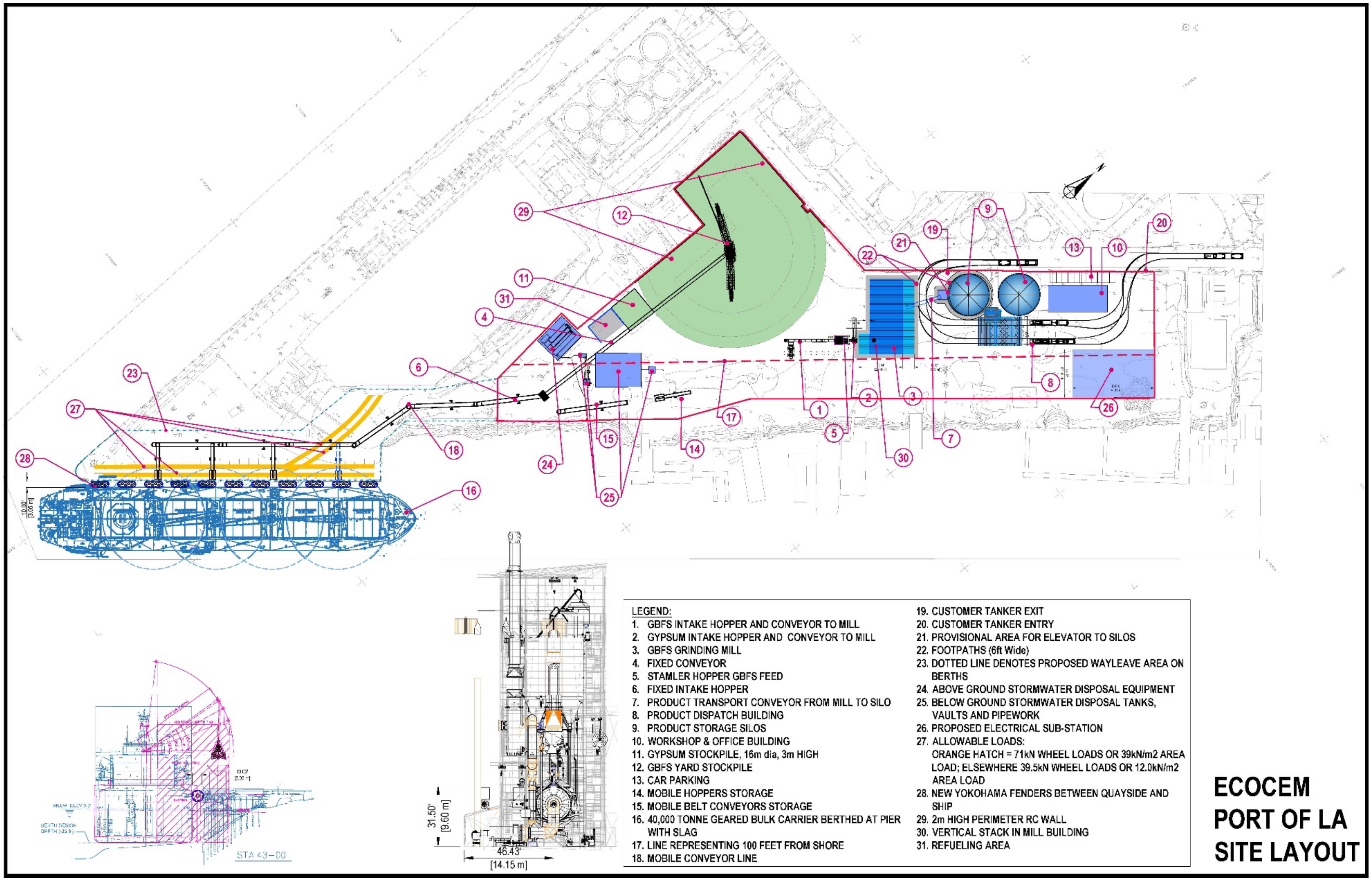

Figure B1-1. Proposed Project Process Elements

5.5.1 Natural gas combustion from the dryer (i.e., hot gas generator)

The dryer (or hot gas generator) is located within the mill building and its exhaust is released through the vertical stack atop the building. The hot gas generator would have a maximum heat input capacity rating of 36 million British thermal units per hour (MMBtu/hr). South Coast AQMD AER default emission factors were used for carbon monoxide (CO), oxides of sulfur (SOx), and volatile organic compounds (VOCs) (SCAQMD, 2020). The emission factor for oxides of nitrogen (NOx) was calculated based on the manufacturer guarantee of 30 milligrams per normal cubic meter (mg/Nm3) at 3% oxygen (O2) dry. Emissions of the greenhouse gases (GHGs) carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O) were estimated using emission factors from South Coast AQMD's 400-CEQA Greenhouse Gas Combustion Emission Estimator (SCAQMD, 2018). A sum of the carbon dioxide equivalent (CO2e) emissions was calculated using the global warming potentials (GWP) as referenced from the South Coast AQMD's 400-CEQA Greenhouse Gas Combustion Emission Estimator (SCAQMD 2018). PM emissions are discussed in Section 5.5.2 below.

5.5.2 Point source particulates from the mill

PM_{10} and $PM_{2.5}$ emissions from the electric grinding mill were calculated based on a manufacturer guarantee for the filter specification (i.e., 2.5 mg/Nm^3 on dry basis). The average and maximum exhaust flow rate as well as temperature were based on the project design. The PM emissions were assumed to have 100% capture efficiency due to pneumatic conveyance from the mill to the process bag filter. The volume of air that would carry that material would pass through the process bag filter. The process bag filter would control PM emissions before the exhaust air is emitted from the mill building via stack. Therefore, the basis of this capture efficiency is inferred from the process design.

5.5.3 Point source particulates from the material transfer points within the mill building

PM_{10} and $PM_{2.5}$ emissions from material transfer drop points within the mill building (e.g., conveyors, bucket elevator, and separator) were calculated using the same methodology discussed in Section 5.5.2. The material transfer points are fully enclosed. The exhaust would be released from the mill exhaust point (controlled by dust collection/process bag filter). The capture efficiency was assumed to be 100% because the conveyances, bucket elevator, and air slides would be completely enclosed and the exhaust from the pneumatic movement of material would be vented to a dust collector or process bag filters before exiting a stack or dust collector filter exhaust point.

5.5.4 Point source particulates from silos

PM_{10} and $PM_{2.5}$ emissions from material transfer via air slide to/from the storage/loading silos were calculated based on the PM concentration and exhaust flow rate. Both the PM outlet concentration manufacturer guarantee (i.e., 2.5 mg/Nm^3) and exhaust flow rates were obtained from the project design.

5.5.5 Fugitive particulates from material handling drop points

Fugitive dust emissions (i.e., PM10 and PM2.5 emissions) from material handling drop points when materials are transferred to/from the OGV, hoppers, conveyors, radial stacker, front end loader, excavator, or storage piles were calculated based on US EPA's AP-42 Chapter 13.2.4 Aggregated Handling and Storage Piles (EPA 2006a). The water spray control efficiencies, for water spray with downstream effects (25-75%, depending on the specific source) and a conveyor with full cover (85%), were referenced from Material Handling Table 5 of the Mojave Desert AQMD/Antelope Valley APCD's Emission Inventory Guidance (MDAQMD/AVAPCD 2013).

5.5.6 Fugitive particulates from stockpiles

Fugitive dust emissions (i.e., PM_{10} and $PM_{2.5}$ emissions) from wind erosion of open aggregate storage piles (one GBFS and one gypsum) were calculated based on AP-42 Chapter 13.2.5 Industrial Wind Erosion as a large relatively flat piles or exposed areas with little penetration into the surface wind layer (height to base ratio less than or equal to 0.2) with dry, exposed materials with limited erosion potential (EPA 2006b). Limited erosion potential is due to the cementation potential of the surface of the stockpiles following its weathering. The maximum windspeed at the project location is 5.23 miles per hour[2] and atmospheric wind speeds are not strong enough to maintain wind erosion from flat surfaces. The water spray/cover control efficiency (90%), referenced from Table XI-E of SCAQMD's fugitive dust mitigation measure tables, was applied to these emissions (SCAQMD 2007b).

5.5.7 Fugitive particulates from on-site paved roads

Vehicles and other mobile sources (i.e., FEL, forklift, GGBFS trucks, and gypsum trucks) traveling on paved roads within the Project site would generate fugitive dust (i.e., PM_{10} and $PM_{2.5}$ emissions). Emissions were quantified based on AP-42 Chapter 13.2.1 for paved roads (EPA 2011c). The silt loading factor was referenced from CARB's Miscellaneous Process Methodologies - Paved Road Dust (CARB 2021c). Annual rainfall days for the South Coast Air District, Los Angeles, were referenced from Table 5 of CARB's Miscellaneous Process Methodology 7.9. Entrained Road Travel, Paved Road Dust (CARB, 2021d). Brake-wear, and tire-wear emissions were assumed to be negligible. The water flushing control efficiency (i.e., 46%-63% (depending on the location) for FEL, 67% for forklift, 34% for GGBFS Trucks, and 65% for Gypsum Trucks), referenced from Table 6 of the Mojave Desert AQMD/Antelope Valley APCD mineral handling and processing industries emission inventory guidance, was applied to these emissions (MDAQMD/AVAPCD 2013). The control efficiency is based on the type of vehicle or mobile source activity and the frequency of water flush every eight hours.

5.5.8 Fugitive particulates from unpaved roads (excavator on GBFS stockpile)

An excavator moving across the GBFS stockpile within the Project site would generate fugitive dust (i.e., PM10 and PM2.5 emissions). Unpaved road emission factors were used

[2] The maximum wind speed was calculated as the average daily wind speed from January 1, 2021 - December 31, 2021 for Long Beach Daugherty Airport, California (Station ID WBAN 23129) was referenced from National Oceanic & Atmospheric Administration. 2022. Local Climate Data. Accessed at https://www.ncei.noaa.gov/products/land-based-station/local-climatological-data in June 2022. The maximum daily peak wind speed was selected for each day of the month (1st to 31st).

to represent the excavator movements atop the stockpile. Emissions were quantified based on AP-42 Chapter 13.2.2 for unpaved roads (EPA 2006c). The silt loading factor was referenced from Table 13.2.2-1 of AP-42. The rainfall days were referenced from data on rainfall day counts for the South Coast Air District, Los Angeles .Control factors were referenced from Table 5 of CARB's Miscellaneous Process Methodology 7.9. Entrained Road Travel, Paved Road Dust (CARB 2021c). Brake-wear and tire-wear emissions were assumed to be negligible.

5.5.9 Summary of Stationary Source Activity and Operating Schedule

Table B1-5 below summarizes the various stationary emission sources as well as the associated activity, and operating schedule for each source.

Table B1-5. Stationary Source Activity and Operating Schedule.

Emission Source	Activity				Operating Schedule	
	Units	Maximum Hourly	Maximum Daily	Average Annual	Maximum Hours per day	Average Hours per year
Dryer Combustion	MMBtu	28	674	93,668	24	7,560
Grinding mill	tonnes	120	2,880	831,600	24	7,560
Mill Exhaust Point	Nm^3 (of exhaust)	52,244	1,253,852	231,331,162	24	7,560
Material handling within building	Tonnes (of material)	450	10,800	2,625,000	24	7,560
Transport to storage silo	Tonnes (of material)	120	2,880	756,000	24	7,560
Large silo top	Tonnes (of material)	120	2,880	756,000	24	7,560
Transport to outload	Tonnes (of material)	250	6,000	1,092,000	24	5,460
Outload silo top	Tonnes (of material)	250	6,000	1,092,000	24	5,460
Loading chutes (Sum for 6 chutes)	Tonnes (of material)	450	10,800	1,365,000	24	5,460
Transport to storage silo	m^3 (of exhaust)	1,800	43,200	13,608,000	24	7,560
Large silo top	m^3 (of exhaust)	1,800	43,200	13,608,000	24	7,560
Transport to outload	m^3 (of exhaust)	1,800	43,200	9,828,000	24	5,460
Outload silo top	m^3 (of exhaust)	3,000	72,000	16,380,000	24	5,460
Loading chutes (Sum for 6 chutes)	m^3 (of exhaust)	1,800	43,200	9,828,000	24	5,460
Material handling (GBFS Import)	Tonnes (of material)	900	21,600	800,000	24	1,600
Material handling (Gypsum Import)	Tonnes (of material)	60	1,440	36,400	24	1,820
Material handling (Mill Intake)	Tonnes (of material)	120	2,880	831,600	24	7,560
Unpaved roads onsite GBFS stockpile (Excavator)	mile	0.4	4	543	12	1,456
Paved roads onsite (FEL, GBFS)	mile	3	65	18,748	24	7,644
Paved roads onsite (FEL, Gypsum)	mile	1	25	631	24	1,456
Paved roads onsite (Forklift)	mile	1	1	52	1	104
Paved roads onsite (Gypsum trucks)	trip	2	48	3,950	24	1,820
Paved roads onsite (GGBFS trucks)	trip	19	238	62,000	17	4,420
Stockpile	meter	80 dia, 16 h (GBFS); 16 dia, 3 h (Gypsum)			24	8,736

5.6 Off-road Equipment – Backland Mobile Equipment

Off-road equipment used during routine operations includes one excavator and one front-end loader. All offroad equipment is assumed to be diesel fueled. The assumptions below were applied to estimate peak day and annual emissions. The characteristics and emission factors related to operational offroad equipment activity can be found in the tables on pages B1-82 to B1-84.

- Annual activity was determined based on the average hours of activity per day, which was provided by Orcem, multiplied by the average number of active days per week and weeks per year. Engine size (in kw) for the excavator and front-end loader were provided by Ecocem based on their project design and these were multiplied by the annual hours to obtain kw-hrs.
- One excavator and front-end loader each were assumed for routine operations in the Proposed Project and Reduced Project Alternative 2. The design of the Product Import Terminal Alternative 3 would not include stockpiles and material processing, and therefore would not require off-road equipment. The Reduced Project activity was scaled down from that of the Proposed Project based on the reduced throughput for that alternative.
- Excavators are assumed to turnover naturally over the life of the project, every 14 years, according to default useful life assumptions for excavators in CARB Mobile Source Emissions Inventory (MSEI) for offroad diesel-powered equipment (CARB 2022c). Zero-hour emission rates, deterioration rates, and fuel correction factors were sourced from the CARB MSEI tools. Load factors and fuel consumption were sourced from the EMFAC OFFROAD2021 (v1.0.2) emissions inventory model (CARB 2021e).
- Consistent with their operations abroad, Ecocem (Orcem) plans to participate in a two-year lease program with Caterpillar for the front-end loader, and the currently available model selected by Orcem is a Tier 4 diesel engine (medium wheel loader 966 XE) certified by CARB under Executive Order U-R-001-00-0662. Zero-hour emission rates (in grams per kw-hr) were sourced from the Executive Order (EO), and deterioration factors were sourced from the CARB MSEI (CARB 2022c) and scaled to match the zero-hour emission rates from the EO. Load factors and fuel consumption were sourced from the EMFAC OFFROAD2021 (v1.0.2) emissions inventory model (CARB 2021e).
- Deteriorated emission factors in gram/kw-hr were combined with the activity by modeled period (in kw-hrs), that is, annual, daily, or hourly, to obtain mass emissions by year for each equipment piece.

6.0 Energy Consumption Calculations

Energy would be consumed by the Project and alternatives in the form of electricity and liquid fossil fuels during operations and construction of the facility. During construction, liquid fuels would be used to power construction vehicles (diesel and gasoline), off-road equipment and harbor craft (diesel). Electricity usage during construction would be negligible. During operations, electricity would be used to power several on-site stationary equipment and for general facility lighting; diesel would be used in off-road equipment, assisting harbor craft, and visiting heavy duty trucks; gasoline would be used from worker vehicles; and marine diesel fuel would be used to power dry bulk oceangoing vessels. There would also be a dryer among the processing equipment powered by natural gas (in the case of the Proposed Project and Reduced Project Alternative 2, but not Alternative 3).

6.1 Fuel consumption by mobile sources

Fuel consumption from mobile sources was calculated consistently for each source category as follows, regardless of being part of construction or operations:

Off-road Equipment

Off-road equipment consumption of fuel, specifically diesel, for construction and operations was estimated based on fuel consumption rates (on a gallon of fuel per kw-hr basis) obtained from the EMFAC2021 model (OFFROAD module), using the same specifications (calendar year, South Coast Air Basin, model year or fleet mix) as those selected for the emission factors in the air emissions and GHG analysis. The annual activity (kw-hrs) by equipment type were multiplied by the fuel consumption rates to arrive at annual gallons of fuel per year.

On-road Vehicles

Vehicle consumption of fuel, both gasoline and diesel, during construction and operations was estimated based on fuel consumption rates (on a gallon of fuel per mile basis) obtained from the EMFAC2021 model, using the same specifications (calendar year, South Coast Air Basin, model year or fleet mix) as those selected for the emission factors in the air emissions and GHG analysis. The annual activity (miles per year) by vehicle group was multiplied by the fuel consumption rates to arrive at annual gallons of fuel per year.

Harbor Craft

Harbor craft fuel, specifically diesel, during construction and operations was estimated based on brake-specific fuel consumption (BSFC) (in grams of fuel per hp-hr, or kw-hr) rates obtained from CARB's Commercial Harbor Craft Emissions Inventory (CARB, 2021g). The annual activity (kw-hrs) by harbor craft group was multiplied by the fuel consumption rates, and converted to volume by diesel average density (g/gal of fuel) to arrive at annual gallons of fuel per year.

Ocean Going Vessels – Dry bulk vessels

Fuel consumed by ocean going vessel, specifically marine distillate, during operations both at berth and during transit was estimated based on fuel consumption rates (in grams of fuel per kw-hr) obtained from CARB's Emissions Estimation Methodology for Ocean Going Vessels (CARB 2011b). The annual activity (kw-hrs) was estimated for each activity mode (transit and hotelling) and engine (main and auxiliary) for total annual vessel calls related to the Proposed Project and each Alternative. Aggregated annual activity in kw-hrs was multiplied by the fuel consumption rates and converted to volume by marine distillate average density (g/gal of fuel) to arrive at annual gallons of fuel per year.

6.2 Natural gas consumption

The hot gas generator attached to the dryer would consume natural gas used to remove moisture from the GGBFS and gypsum mixture. Based on the maximum heat input capacity rating of 36 million British thermal units per hour (MMBtu/hr) of the equipment, and the expected annual hours of operation, the annual energy in term of natural gas (in MMBTUs) was estimated.

6.3 On-site electricity usage

Electricity on site would be mainly consumed by electrical stationary equipment used in the production of GGBFS. Electricity consumed at the Berths 191-194 terminal was estimated for the various electrical components of the manufacturing process, such as the material conveyors, mill, static separator, compressor, and general backland energy consumption sources such as office lighting. Electricity usage during construction is expected to be negligible and covered by portable diesel generators.

Ecocem provided a list of process equipment and engine loads (in kW), as well as annual hours of operation for each electric piece in the Proposed Project and the Import Terminal Alternative 3. The loads and hours were combined and aggregated to annual kw-hrs at peak production levels (calendar year 2027). The list for the Reduced Project Alternative would be similar to that of the Proposed Project but hours of operation would be smaller due to the lower throughput; therefore, total kw-hrs were scaled down based on throughput. Similarly, electricity for other analysis years in each category were scaled down based on throughput.

The mill would be the largest component of electrical consumption in the Proposed Project and Reduced Project Alternative 2. Hence, the energy consumption for Alternative 3, in which no milling is necessary, would be much lower.

The assumptions related to electricity consumption estimates can be found in the tables on pages B1-145.

6.4 Greenhouse Gas Emissions (GHG) from Electricity Consumption

GHG emissions from electricity consumed at the Berths 191-194 terminal during operations were estimated based on the annual energy expenditures (in kw-hrs) described in Section 6.3.

The electricity consumption (in kw-hrs) values can be converted to CO2 equivalence (in metric tons per year) based on an EPA eGRID sourced conversion factor for lb of CO2e per megawatt-hour (EPA 2023). A California region eGRID emission factor (CAMX Region) available for year 2021 was used. The N2O and CH4 emissions were not evaluated as grid emissions factors were not available. A brief description of the emission calculation for each source category follows.

It is expected that over time, the electrical grid in California will increase its contribution from renewable sources, thereby reducing the carbon intensity of its electricity. This would be reflected in a reduction of its electricity emission factor (in lb CO2/MWhr) over time related to the increasing contribution of renewable energy in the grid over fossil fuel-based electricity.

On September 10, 2018, Governor Brown signed Senate Bill 100, establishing that 100% of all electricity in California must be obtained from renewable and zero-carbon energy resources by December 31, 2045 through the Renewable Portfolio Standard (RPS). The RPS goals (also revisited by Senate Bill 350) are considered achievable, since many California energy providers are already meeting or exceeding the RPS goals established by SB 350. The U.S. Department of Energy, in collaboration with the National Renewable Energy Laboratory (NREL), has developed a set of studies on future trends in renewable energy within the electrical grid (and its related emissions) throughout the US and for individual states, which it compiled into the graphic tool "Scenario Viewer" that plots such projections (NREL, DOE 2023). The tool has many scenarios, geographical settings, and variables to choose from, but for purposes of this analysis, the "Standard Scenarios 2022" study was used, geography was set for California, and a mid-case[3] scenario was selected representing an "average" set of conditions, including effects of current state policies and nascent technologies. This scenario is reflected in Figure B1-2 from the Scenario Viewer. This average scenario still falls below the goal noted in SB100 of 100% renewable electricity by 2045, as the graph shows a small percentage of Natural Gas-based electricity by 2050.

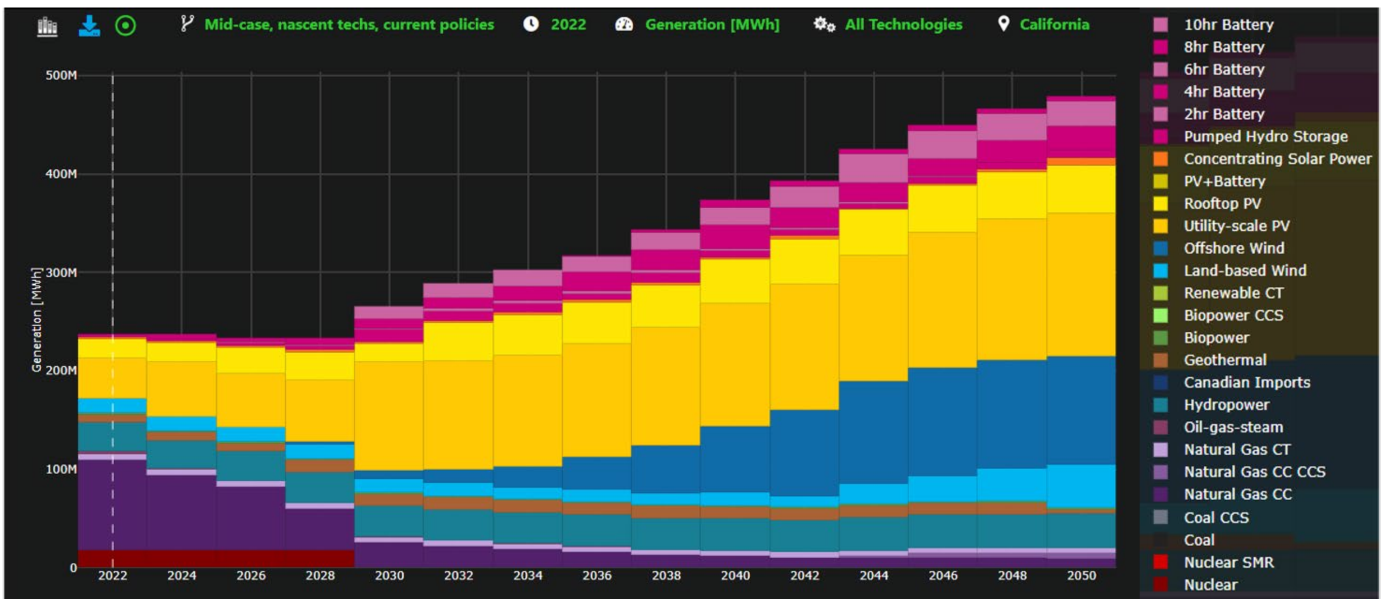

Figure B1-2. California Electrical Grid Renewable Energy Projections from NREL 2022 Scenarios (NREL, 2023).

The tool also provides the GHG emission rate (in kg/MWh) from combustion in conjunction with the trend above, shown in Figure B1-3.

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[3] "The Standard Scenarios includes a scenario called the Mid-case, which has central or median values for core inputs such as technology costs and fuel prices, moderately paced demand growth averaging 1.3% per year, and electricity sector policies as they existed in September 2022 (including IRA)." (Gagnon et al. 2022)

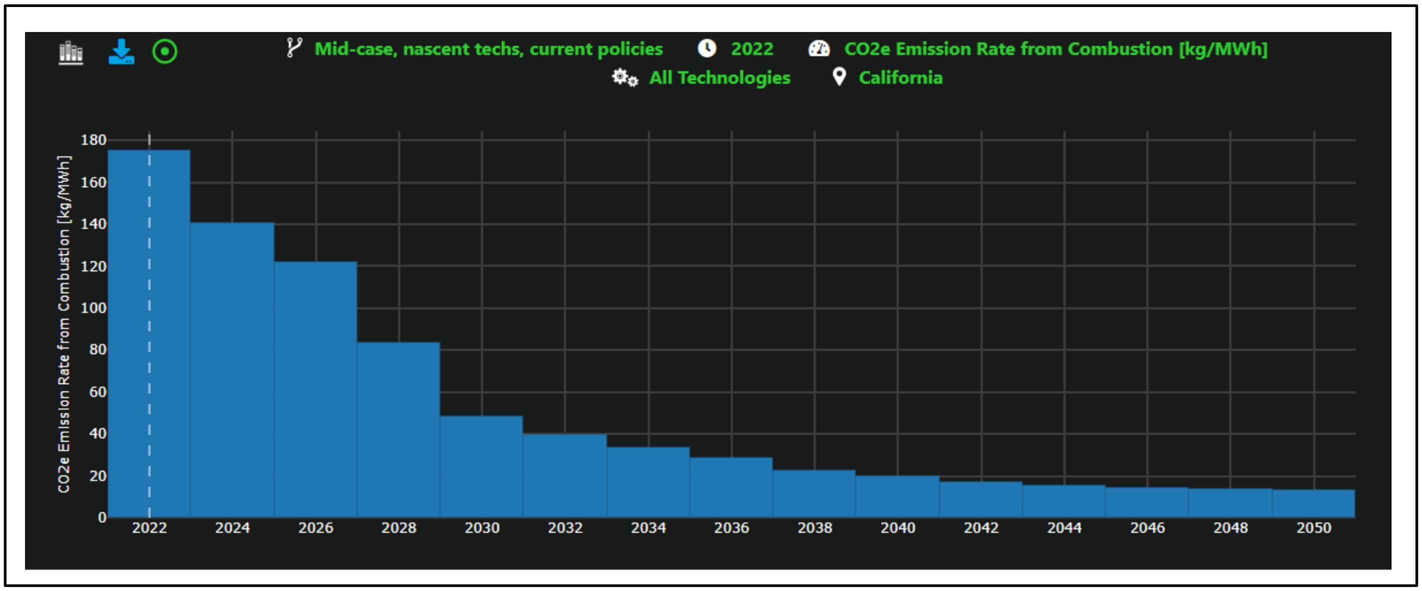

Figure B1-3. California Emission Rate Projections for Electricity (NREL, 2023).

The percent change year-to-year in Figure B1-3 was used to forecast the baseline electricity emission rate from EPA's eGRID for California, which is more conservatively high in value and released as of January 2023, towards future years studied in this analysis (2025, 2027 and 2049). These CO2e rates were combined with annual electricity consumption (in kw-hr) estimated for the Proposed Project and alternatives, to arrive at CO2e mass emissions related to electrical consumption.

The characteristics and assumptions described here can be found in the tables on pages B1-146.

7.0 References

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8.0 Emissions Calculations and Input Data

This section contains tables summarizing the activity inputs, assumptions, emission rates and mass emissions totals for each source category and modeled time periods (annual, peak day). Emissions and assumptions are organized by scenarios in the following groups:

- Construction Emissions
  - Proposed Project
  - Reduced Project – Alternative 2
  - Product Import Terminal –Alternative 3
- Operational Emissions

  Calculation Inputs by Source Category
  - On-road Equipment
  - Off-road Equipment
  - Ocean Going Vessels
  - Harbor Craft
  - Stationary Sources
  - Heavy-Duty Trucks and Worker Vehicles

  Emissions summaries by Scenario and by Year
  - Proposed Project
  - Reduced Project – Alternative 2
  - Product Import Terminal –Alternative 3

  Energy Calculations
  - Proposed Project and Reduced Project – Alternative 2
  - Product Import Terminal – Alternative 3
  - Greenhouse Gases related to Electricity

8.0 Emissions Calculations and Input Data

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  - Product Import Terminal – Alternative 3
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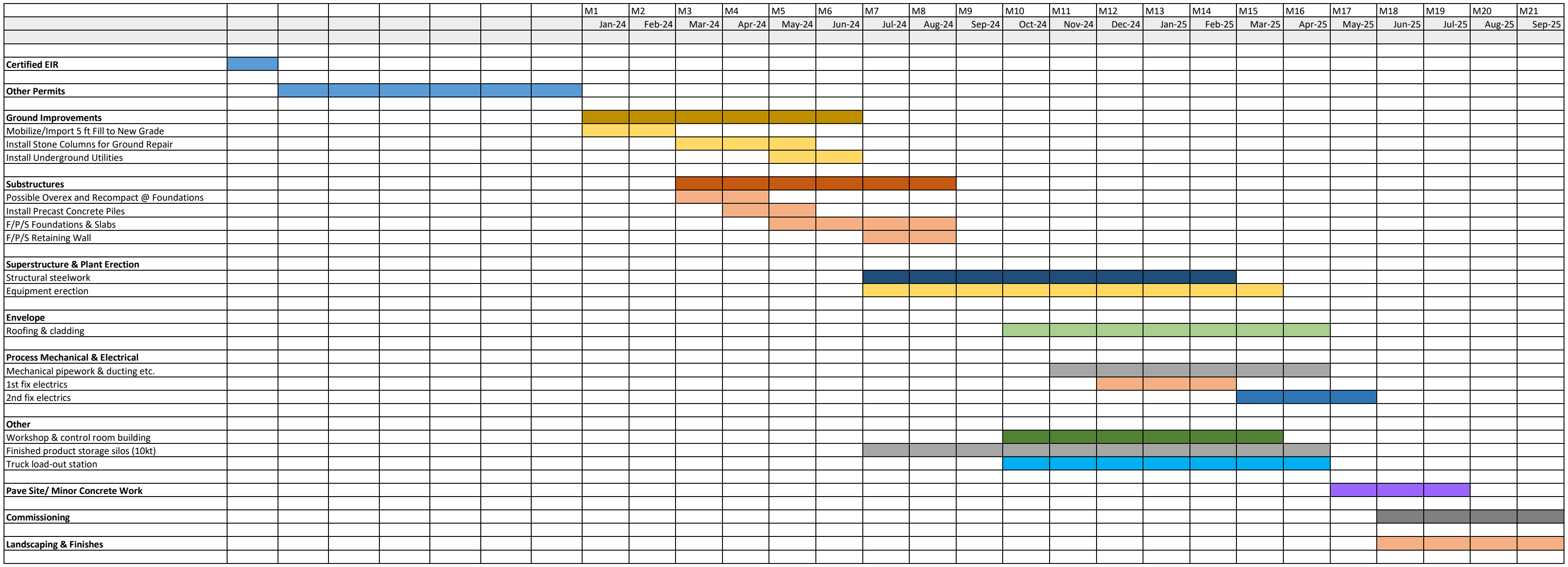
Construction Emission Inventory

Estimated Construction Schedule Chart by Activity - Proposed and Reduced Project



Note: This schedule is a rough estimate derived for the CEQA analysis. Start of the construction and operations may happen further in the future. Air analysis assumes construction begins in 2024 and happens through 2025.

Construction Onroad Vehicle Activity and Emission Factors - Proposed and Reduced Project Scenarios

Onsite Onroad Vehicle Activity

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	One-Way Trip Length (miles)	Annual Vehicle-Days (days/year)	Annual Vehicle Mileage (miles/year)	Idle Hours (hours/trip)	Daily Vehicle-Days (vehicle-days/day)	Daily Vehicle Mileage (miles/day)	Construction Phase
2024	Operatives	LDA	Aggregate	15	Gasoline	0.1	12,715	2,543	0	55	11.0	Regular Backlands
2024	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	5,750	1,150	0.08	4	0.8	Regular Backlands
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	314	63	0.08	1	0.2	Regular Backlands
2024	Pickup	LDT1	Aggregate	15	Gasoline	0.1	175	35	0	1	0.2	Quay Repairs
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	175	35	0.08	1	0.2	Quay Repairs
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	175	35	0.08	1	0.2	Quay Repairs
2025	Operatives	LDA	Aggregate	15	Gasoline	0.1	4,280	856	0	35	7.0	Regular Backlands
2025	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	1,165	233	0.08	15	3.0	Regular Backlands
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	182	36	0.08	1	0.2	Regular Backlands
2025	Pickup	LDT1	Aggregate	15	Gasoline	0.1	86	17	0	1	0.2	Quay Repairs
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	86	17	0.08	1	0.2	Quay Repairs
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	86	17	0.08	1	0.2	Quay Repairs

[1] Onsite trip length = 0.1 mile per trip
[2] Quay Repairs onroad vehicle activity unavaiable, annual vehicle days assumed full Quay Repairs project length
[3] Maximum idling time of 5 minutes per hour assumed
[4] All starts are assumed to occur onsite

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Running Emissions (g/mile)												
						NOx	VOC	CO	SO2	PM10	PM10TW	PM10BW	PM2.5	PM2.5TW	PM2.5BW	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	15	Gasoline	0.06	0.03	1.21	0.00	0.00	0.01	0.01	0.00	0.00	0.00	445.87	0.01	0.01
2024	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,238.69	0.00	0.35
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,237.96	0.00	0.35
2024	Pickup	LDT1	Aggregate	15	Gasoline	0.23	0.11	2.93	0.01	0.01	0.01	0.01	0.01	0.00	0.00	532.72	0.02	0.02
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,237.96	0.00	0.35
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,237.96	0.00	0.35
2025	Operatives	LDA	Aggregate	15	Gasoline	0.05	0.02	1.15	0.00	0.00	0.01	0.01	0.00	0.00	0.00	436.68	0.01	0.01
2025	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,199.66	0.00	0.35
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,198.97	0.00	0.35
2025	Pickup	LDT1	Aggregate	15	Gasoline	0.21	0.10	2.70	0.01	0.01	0.01	0.01	0.01	0.00	0.00	522.69	0.02	0.01
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,198.97	0.00	0.35
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,198.97	0.00	0.35

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Idle Emissions (g/vehicle-day)								
						NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2024	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Pickup	LDT1	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2025	Operatives	LDA	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2025	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Pickup	LDT1	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Start Emissions (g/trip)								
						NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	15	Gasoline	0.24	0.30	2.97	0.00	0.00	0.00	69.36	0.07	0.03
2024	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Pickup	LDT1	Aggregate	15	Gasoline	0.42	0.59	5.61	0.00	0.00	0.00	87.44	0.11	0.04
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2025	Operatives	LDA	Aggregate	15	Gasoline	0.23	0.29	2.81	0.00	0.00	0.00	67.84	0.06	0.03
2025	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Pickup	LDT1	Aggregate	15	Gasoline	0.39	0.55	5.22	0.00	0.00	0.00	85.38	0.11	0.04
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-

Construction Onroad Vehicle Activity and Emission Factors - Proposed and Reduced Project Scenarios

Offsite Onroad Vehicle Activity

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	One-way Trip Length (miles)	Annual Vehicle-Days (vehicle-days/year)	Annual Vehicle Mileage (miles/year)	Idle Hours (hours/trip)	Daily Vehicle-Days (vehicle-days/day)	Daily Vehicle Mileage (miles/day)	Construction Phase
2024	Operatives	LDA	Aggregate	60	Gasoline	14.7	12,715	371,278	0	55	1,606	Regular Backlands
2024	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	65	5,750	746,350	0	4	519	Regular Backlands
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	6.9	314	4,270	0	1	14	Regular Backlands
2024	Pickup	LDT1	Aggregate	15	Gasoline	14.7	175	5,110	0	1	29	Quay Repairs
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	65	175	22,715	0	1	130	Quay Repairs
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	6.9	175	2,380	0	1	14	Quay Repairs
2025	Operatives	LDA	Aggregate	60	Gasoline	14.7	4,280	124,976	0	35	1,022	Regular Backlands
2025	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	65	1,165	151,217	0	15	1,947	Regular Backlands
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	6.9	182	2,475	0	1	14	Regular Backlands
2025	Pickup	LDT1	Aggregate	15	Gasoline	14.7	86	2,511	0	1	29	Quay Repairs
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	65	86	11,163	0	1	130	Quay Repairs
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	6.9	86	1,170	0	1	14	Quay Repairs

[1] Trip Length for water trucks and LDA is based on CalEEMod default trip lengths and CalEEMod vehicle categories (Operatives, Pickup = Worker, Water Truck = Vendor
[2] Material delivery and waste material truck one-way trip length conservatively assumed maximum distance for B121-131 project delivery trucks
[3] Quay Repairs onroad vehicle activity unavaiable, annual vehicle days assumed full Quay Repairs project length

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Running Emissions (g/mile)												
						NOx	VOC	CO	SO2	PM10	PM10TW	PM10BW	PM2.5	PM2.5TW	PM2.5BW	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	60	Gasoline	0.04	0.01	0.61	0.00	0.00	0.01	0.00	0.00	0.00	0.00	282.78	0.00	0.00
2024	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	1.20	0.01	0.05	0.01	0.03	0.04	0.07	0.02	0.01	0.02	1,480.69	0.00	0.23
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,238.69	0.00	0.35
2024	Pickup	LDT1	Aggregate	15	Gasoline	0.23	0.11	2.93	0.01	0.01	0.01	0.01	0.01	0.00	0.00	532.72	0.02	0.02
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	1.20	0.01	0.05	0.01	0.03	0.04	0.07	0.02	0.01	0.02	1,480.69	0.00	0.23
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,238.69	0.00	0.35
2025	Operatives	LDA	Aggregate	60	Gasoline	0.03	0.01	0.58	0.00	0.00	0.01	0.00	0.00	0.00	0.00	276.97	0.00	0.00
2025	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	1.17	0.01	0.04	0.01	0.03	0.04	0.07	0.02	0.01	0.02	1,468.74	0.00	0.23
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,199.66	0.00	0.35
2025	Pickup	LDT1	Aggregate	15	Gasoline	0.21	0.10	2.70	0.01	0.01	0.01	0.01	0.01	0.00	0.00	522.69	0.02	0.01
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	1.17	0.01	0.04	0.01	0.03	0.04	0.07	0.02	0.01	0.02	1,468.74	0.00	0.23
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,199.66	0.00	0.35

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Idle Emissions (g/vehicle-day)								
						NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	60	Gasoline	-	-	-	-	-	-	-	-	-
2024	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Pickup	LDT1	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2025	Operatives	LDA	Aggregate	60	Gasoline	-	-	-	-	-	-	-	-	-
2025	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Pickup	LDT1	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Start Emissions (g/trip)								
						NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	60	Gasoline	0.24	0.30	2.97	0.00	0.00	0.00	69.36	0.07	0.03
2024	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Pickup	LDT1	Aggregate	15	Gasoline	0.42	0.59	5.61	0.00	0.00	0.00	87.44	0.11	0.04
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2025	Operatives	LDA	Aggregate	60	Gasoline	0.23	0.29	2.81	0.00	0.00	0.00	67.84	0.06	0.03
2025	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Pickup	LDT1	Aggregate	15	Gasoline	0.39	0.55	5.22	0.00	0.00	0.00	85.38	0.11	0.04
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-

Nonroad Equipment Characteristics and Activity - Proposed and Reduced Project

Annual Activity Data and Characteristics

Calendar Year	Equipment	Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	Hours per Day (Hours/day)	Annual Equipment Days (days/year)	Load Factor
2024	Excavators	Construction and Mining - Excavators	Aggregate	50	50	Diesel	8	210	0.38
2024	Mobile Crane	Construction and Mining - Cranes	2015+	600	600	Diesel	7	290	0.29
2024	Stone column rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	104	0.50
2024	Wheel Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	260	0.37
2024	Piling Rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	53	0.50
2024	Fork Lift	Industrial - Forklifts	2015+	100	100	Diesel	8	524	0.20
2024	MEWPs	Industrial - Aerial Lifts	Aggregate	50	50	Diesel	8	474	0.31
2024	Roller Compactor	Construction and Mining - Rollers	Aggregate	50	50	Diesel	6	77	0.38
2024	Air Compressor	Light Commercial - Misc - Air Compressors	Aggregate	50	50	Diesel	6	314	0.42
2024	Welding Rigs	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	366	0.50
2024	Sweeper	Construction and Mining - Other	2015+	100	100	Diesel	8	210	0.46
2024	Backhoe	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	105	0.37
2024	Skidsteer	Construction and Mining - Skid Steer Loaders	2015+	75	75	Diesel	8	104	0.37
2024	Generator	Light Commercial - Misc - Generator Sets	Aggregate	15	15	Diesel	8	470	0.31
2024	Scraper	Construction and Mining - Scrapers	2015+	600	600	Diesel	8	158	0.48
2024	Motor Grader	Construction and Mining - Graders	2015+	175	175	Diesel	8	79	0.41
2024	Dozer	Construction and Mining - Rubber Tired Dozers	2015+	600	600	Diesel	8	79	0.40
2024	Skip Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	262	0.37
2024	Excavator	Construction and Mining - Excavators	2015+	316	600	Diesel	6	175	0.38
2024	Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	128	175	Diesel	6	175	0.37
2024	Scraper	Construction and Mining - Scrapers	2015+	330	600	Diesel	6	132	0.48
2024	Forklift	Industrial - Forklifts	2015+	100	100	Diesel	6	175	0.20
2024	Concrete Pumper	Construction and Mining - Other	2015+	100	100	Diesel	6	22	0.42
2024	Compactor	Construction and Mining - Other	2015+	125	175	Diesel	6	0	0.42
2024	Diesel Hammer	Construction and Mining - Bore/Drill Rigs	2015+	70	100	Diesel	4	44	0.50
2024	Mobile Crane	Construction and Mining - Cranes	2015+	300	600	Diesel	6	87	0.29
2025	Excavators	Construction and Mining - Excavators	Aggregate	50	50	Diesel	8	0	0.38
2025	Mobile Crane	Construction and Mining - Cranes	2015+	600	600	Diesel	7	232	0.29
2025	Stone column rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2025	Wheel Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	52	0.37
2025	Piling Rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2025	Fork Lift	Industrial - Forklifts	2015+	100	100	Diesel	8	206	0.20
2025	MEWPs	Industrial - Aerial Lifts	Aggregate	50	50	Diesel	8	517	0.31
2025	Roller Compactor	Construction and Mining - Rollers	Aggregate	50	50	Diesel	6	105	0.38
2025	Air Compressor	Light Commercial - Misc - Air Compressors	Aggregate	50	50	Diesel	6	182	0.42
2025	Welding Rigs	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	102	0.50
2025	Sweeper	Construction and Mining - Other	2015+	100	100	Diesel	8	79	0.46
2025	Backhoe	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2025	Skidsteer	Construction and Mining - Skid Steer Loaders	2015+	75	75	Diesel	8	0	0.37
2025	Generator	Light Commercial - Misc - Generator Sets	Aggregate	15	15	Diesel	8	103	0.31
2025	Scraper	Construction and Mining - Scrapers	2015+	600	600	Diesel	8	52	0.48
2025	Motor Grader	Construction and Mining - Graders	2015+	175	175	Diesel	8	52	0.41
2025	Dozer	Construction and Mining - Rubber Tired Dozers	2015+	600	600	Diesel	8	0	0.40
2025	Skip Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	155	0.37
2025	Excavator	Construction and Mining - Excavators	2015+	316	600	Diesel	6	64	0.38
2025	Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	128	175	Diesel	6	86	0.37
2025	Scraper	Construction and Mining - Scrapers	2015+	330	600	Diesel	6	0	0.48
2025	Forklift	Industrial - Forklifts	2015+	100	100	Diesel	6	86	0.20
2025	Concrete Pumper	Construction and Mining - Other	2015+	100	100	Diesel	6	64	0.42
2025	Compactor	Construction and Mining - Other	2015+	125	175	Diesel	6	86	0.42
2025	Diesel Hammer	Construction and Mining - Bore/Drill Rigs	2015+	70	100	Diesel	4	0	0.50
2025	Mobile Crane	Construction and Mining - Cranes	2015+	300	600	Diesel	6	0	0.29

[1] Equipment hours not provided by client are based on Table 3.2: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-d2020-4-0-full-merge.pdf?sfvrsn=12
[2] Equipment hours not provided by client or CalEEMod defaults are assumed 8 hours per day
[3] All equipment greater than 50 HP must be follow Tier 4 offroad standards (2015+ MYs)
[4] Data with missing horsepower information, maximum horsepower across the most populous horsepower BIN based on EMFAC is assumed

Daily Activity Data and Characteristics

Calendar Year	Equipment	Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	Hours per Day (Hours/day)	Daily Equipment Days (days)	Load Factor
2024	Excavators	Construction and Mining - Excavators	Aggregate	50	50	Diesel	8	0	0.38
2024	Mobile Crane	Construction and Mining - Cranes	2015+	600	600	Diesel	7	2	0.29
2024	Stone column rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2024	Wheel Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2024	Piling Rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2024	Fork Lift	Industrial - Forklifts	2015+	100	100	Diesel	8	2	0.20
2024	MEWPs	Industrial - Aerial Lifts	Aggregate	50	50	Diesel	8	4	0.31
2024	Roller Compactor	Construction and Mining - Rollers	Aggregate	50	50	Diesel	6	0	0.38
2024	Air Compressor	Light Commercial - Misc - Air Compressors	Aggregate	50	50	Diesel	6	1	0.42
2024	Welding Rigs	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	2	0.50
2024	Sweeper	Construction and Mining - Other	2015+	100	100	Diesel	8	0	0.46
2024	Backhoe	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2024	Skidsteer	Construction and Mining - Skid Steer Loaders	2015+	75	75	Diesel	8	0	0.37
2024	Generator	Light Commercial - Misc - Generator Sets	Aggregate	15	15	Diesel	8	1	0.31
2024	Scraper	Construction and Mining - Scrapers	2015+	600	600	Diesel	8	0	0.48
2024	Motor Grader	Construction and Mining - Graders	2015+	175	175	Diesel	8	0	0.41
2024	Dozer	Construction and Mining - Rubber Tired Dozers	2015+	600	600	Diesel	8	0	0.40
2024	Skip Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	1	0.37
2024	Excavator	Construction and Mining - Excavators	2015+	316	600	Diesel	6	1	0.38
2024	Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	128	175	Diesel	6	1	0.37
2024	Scraper	Construction and Mining - Scrapers	2015+	330	600	Diesel	6	1	0.48
2024	Forklift	Industrial - Forklifts	2015+	100	100	Diesel	6	1	0.20
2024	Concrete Pumper	Construction and Mining - Other	2015+	100	100	Diesel	6	0	0.42
2024	Compactor	Construction and Mining - Other	2015+	125	175	Diesel	6	0	0.42
2024	Diesel Hammer	Construction and Mining - Bore/Drill Rigs	2015+	70	100	Diesel	4	1	0.50
2024	Mobile Crane	Construction and Mining - Cranes	2015+	300	600	Diesel	6	1	0.29
2025	Excavators	Construction and Mining - Excavators	Aggregate	50	50	Diesel	8	0	0.38
2025	Mobile Crane	Construction and Mining - Cranes	2015+	600	600	Diesel	7	2	0.29
2025	Stone column rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2025	Wheel Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2025	Piling Rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2025	Fork Lift	Industrial - Forklifts	2015+	100	100	Diesel	8	2	0.20
2025	MEWPs	Industrial - Aerial Lifts	Aggregate	50	50	Diesel	8	4	0.31
2025	Roller Compactor	Construction and Mining - Rollers	Aggregate	50	50	Diesel	6	0	0.38
2025	Air Compressor	Light Commercial - Misc - Air Compressors	Aggregate	50	50	Diesel	6	1	0.42
2025	Welding Rigs	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	2	0.50
2025	Sweeper	Construction and Mining - Other	2015+	100	100	Diesel	8	0	0.46
2025	Backhoe	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2025	Skidsteer	Construction and Mining - Skid Steer Loaders	2015+	75	75	Diesel	8	0	0.37
2025	Generator	Light Commercial - Misc - Generator Sets	Aggregate	15	15	Diesel	8	1	0.31
2025	Scraper	Construction and Mining - Scrapers	2015+	600	600	Diesel	8	0	0.48
2025	Motor Grader	Construction and Mining - Graders	2015+	175	175	Diesel	8	0	0.41
2025	Dozer	Construction and Mining - Rubber Tired Dozers	2015+	600	600	Diesel	8	0	0.40
2025	Skip Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	1	0.37
2025	Excavator	Construction and Mining - Excavators	2015+	316	600	Diesel	6	1	0.38
2025	Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	128	175	Diesel	6	1	0.37
2025	Scraper	Construction and Mining - Scrapers	2015+	330	600	Diesel	6	0	0.48
2025	Forklift	Industrial - Forklifts	2015+	100	100	Diesel	6	1	0.20
2025	Concrete Pumper	Construction and Mining - Other	2015+	100	100	Diesel	6	1	0.42
2025	Compactor	Construction and Mining - Other	2015+	125	175	Diesel	6	1	0.42
2025	Diesel Hammer	Construction and Mining - Bore/Drill Rigs	2015+	70	100	Diesel	4	0	0.50
2025	Mobile Crane	Construction and Mining - Cranes	2015+	300	600	Diesel	6	0	0.29

[1] Equipment hours not provided by client are based on Table 3.2: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-d2020-4-0-full-merge.pdf?sfvrsn=12
[2] Equipment hours not provided by client or CalEEMod defaults are assumed 8 hours per day
[3] All equipment greater than 50 HP must be follow Tier 4 offroad standards (2015+ MYs)
[4] Data with missing horsepower information, maximum horsepower across the most populous horsepower BIN based on EMFAC is assumed

Nonroad Controlled Emission Factors - For All Scenarios

						Emission Factors (g/hp-hr)						
Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bin	Fuel	VOC	CO	NOX	SO2	PM10	PM2.5	CO2
South Coast	2024	Construction and Mining - Bore/Drill Rigs	2015+	100	Diesel	0.067979	3.276915	1.951725	0.004819	0.072292	0.066612	521.434
South Coast	2024	Construction and Mining - Bore/Drill Rigs	2015+	175	Diesel	0.049601	2.960199	1.040561	0.004913	0.047566	0.043833	532.0585
South Coast	2024	Construction and Mining - Bore/Drill Rigs	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2024	Construction and Mining - Bore/Drill Rigs	2015+	300	Diesel	0.047548	1.057931	1.118028	0.004852	0.036286	0.033351	524.9219
South Coast	2024	Construction and Mining - Bore/Drill Rigs	Aggreagate	50	Diesel	0.534908	4.374427	4.200799	0.005516	0.221251	0.203392	598.6526
South Coast	2024	Construction and Mining - Bore/Drill Rigs	2015+	600	Diesel	0.04883	0.982055	0.768789	0.004825	0.027705	0.025493	522.3192
South Coast	2024	Construction and Mining - Bore/Drill Rigs	2015+	75	Diesel	0.034902	3.296042	3.304428	0.004786	0.160016	0.147438	518.4842
South Coast	2024	Construction and Mining - Bore/Drill Rigs	2015+	750	Diesel	0.04618	0.966584	0.560431	0.004921	0.021577	0.019835	532.5608
South Coast	2024	Construction and Mining - Bore/Drill Rigs	2015+	9999	Diesel	0.011201	0.990494	3.853893	0.004861	0.089057	0.081862	526.9391
South Coast	2024	Construction and Mining - Cranes	2015+	100	Diesel	0.043349	3.85055	4.282736	0.00485	0.268756	0.247344	526.2642
South Coast	2024	Construction and Mining - Cranes	2015+	175	Diesel	0.030738	3.398628	3.790029	0.004873	0.204849	0.188494	528.4008
South Coast	2024	Construction and Mining - Cranes	Aggreagate	25	Diesel	1.07567	5.736663	4.866099	0.005384	0.381941	0.351245	586.599
South Coast	2024	Construction and Mining - Cranes	2015+	300	Diesel	0.029033	1.68439	3.150343	0.004869	0.13139	0.120868	527.5666
South Coast	2024	Construction and Mining - Cranes	Aggreagate	50	Diesel	1.764138	7.535914	5.982926	0.005428	0.602371	0.555311	592.5355
South Coast	2024	Construction and Mining - Cranes	2015+	600	Diesel	0.031008	1.680238	2.130578	0.004876	0.085732	0.078876	527.5317
South Coast	2024	Construction and Mining - Cranes	2015+	75	Diesel	1.157533	4.580299	9.966731	0.004881	0.938045	0.86476	531.1388
South Coast	2024	Construction and Mining - Cranes	2015+	750	Diesel	0.019244	2.885039	3.916678	0.004869	0.193673	0.178241	527.3209
South Coast	2024	Construction and Mining - Cranes	2015+	9999	Diesel	0.019726	4.894406	6.839958	0.004864	0.303301	0.278978	527.5663
South Coast	2024	Construction and Mining - Excavators	2015+	100	Diesel	0.076115	3.455018	2.170379	0.004855	0.093988	0.086462	525.3522
South Coast	2024	Construction and Mining - Excavators	2015+	175	Diesel	0.05261	3.086315	1.33882	0.004879	0.066313	0.061008	528.391
South Coast	2024	Construction and Mining - Excavators	Aggreagate	25	Diesel	3.456372	11.15515	7.583487	0.005332	1.056406	0.972145	587.3115
South Coast	2024	Construction and Mining - Excavators	2015+	300	Diesel	0.054069	1.110895	1.13916	0.004886	0.037227	0.034248	528.965
South Coast	2024	Construction and Mining - Excavators	Aggreagate	50	Diesel	0.3612	4.196634	3.501265	0.005421	0.119161	0.109615	587.3168
South Coast	2024	Construction and Mining - Excavators	2015+	600	Diesel	0.056349	1.048439	0.826442	0.004878	0.02841	0.026137	528.0008
South Coast	2024	Construction and Mining - Excavators	2015+	75	Diesel	0.614438	4.10181	6.388761	0.004859	0.55939	0.514593	527.6827
South Coast	2024	Construction and Mining - Excavators	2015+	750	Diesel	0.033908	1.567333	2.047003	0.004903	0.081253	0.074808	530.8247
South Coast	2024	Construction and Mining - Excavators	2015+	9999	Diesel	0.065784	0.992178	2.358586	0.004927	0.021352	0.019583	533.6635
South Coast	2024	Construction and Mining - Graders	2015+	100	Diesel	0.059565	4.199553	5.478519	0.004821	0.415505	0.382259	523.6053
South Coast	2024	Construction and Mining - Graders	2015+	175	Diesel	0.048881	3.404502	3.17634	0.004887	0.175385	0.161364	530.1705
South Coast	2024	Construction and Mining - Graders	Aggreagate	25	Diesel	1.735173	7.739844	6.092006	0.00538	0.734037	0.675364	586.9798
South Coast	2024	Construction and Mining - Graders	2015+	300	Diesel	0.029943	1.257733	2.898188	0.004855	0.096808	0.089064	525.909
South Coast	2024	Construction and Mining - Graders	Aggreagate	50	Diesel	1.708085	7.480366	5.317548	0.00537	0.548162	0.503414	586.7016
South Coast	2024	Construction and Mining - Graders	2015+	600	Diesel	0.008933	1.097707	3.105058	0.004841	0.11558	0.106326	524.569
South Coast	2024	Construction and Mining - Graders	2015+	75	Diesel	1.332466	5.164705	11.94162	0.005033	1.01232	0.931709	548.2648
South Coast	2024	Construction and Mining - Graders	2015+	9999	Diesel	0.019465	1.980273	5.912709	0.004865	0.169377	0.155683	527.8166
South Coast	2024	Construction and Mining - Misc - Plate Compactors	Aggreagate	15	Diesel	0	0	0	0	0	0	0
South Coast	2024	Construction and Mining - Other	2015+	100	Diesel	0.049491	3.248478	2.954869	0.004451	0.190138	0.174906	481.8253
South Coast	2024	Construction and Mining - Other	2015+	175	Diesel	0.032386	2.879396	2.319897	0.004426	0.120362	0.11072	479.4649
South Coast	2024	Construction and Mining - Other	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2024	Construction and Mining - Other	2015+	300	Diesel	0.034119	1.218709	2.04389	0.00446	0.079211	0.072857	482.0699
South Coast	2024	Construction and Mining - Other	Aggreagate	50	Diesel	0.654664	4.57342	4.099262	0.004954	0.277058	0.254886	538.0235
South Coast	2024	Construction and Mining - Other	2015+	600	Diesel	0.034929	1.189795	1.42515	0.004451	0.053438	0.049158	481.6155
South Coast	2024	Construction and Mining - Other	2015+	75	Diesel	0.665516	3.897197	7.005698	0.004363	0.527315	0.485205	473.6671
South Coast	2024	Construction and Mining - Other	2015+	750	Diesel	0.027551	1.003305	1.632202	0.00445	0.056769	0.052228	481.9728
South Coast	2024	Construction and Mining - Other	2015+	9999	Diesel	0.032561	0.913575	2.645361	0.00445	0.048635	0.04482	480.9988
South Coast	2024	Construction and Mining - Rollers	2015+	100	Diesel	0.052698	3.418606	2.749326	0.004867	0.143648	0.132161	528.1075
South Coast	2024	Construction and Mining - Rollers	2015+	175	Diesel	0.040065	2.911376	1.322958	0.004883	0.060445	0.055609	527.4508
South Coast	2024	Construction and Mining - Rollers	Aggreagate	25	Diesel	3.526271	11.13539	7.677702	0.005309	1.056365	0.971964	586.4458
South Coast	2024	Construction and Mining - Rollers	2015+	300	Diesel	0.027021	1.522237	2.356862	0.004872	0.090568	0.083266	528.1127
South Coast	2024	Construction and Mining - Rollers	Aggreagate	50	Diesel	0.538096	4.194714	3.814011	0.005412	0.191843	0.176502	586.798
South Coast	2024	Construction and Mining - Rollers	2015+	600	Diesel	0.030056	1.417227	1.446838	0.004901	0.049266	0.045182	530.5413
South Coast	2024	Construction and Mining - Rollers	2015+	75	Diesel	1.628474	6.145724	15.05464	0.004837	1.070096	0.985808	527.792
South Coast	2024	Construction and Mining - Rubber Tired Dozers	2015+	100	Diesel	0.062039	4.179602	5.315199	0.0049	0.393194	0.361608	531.8647
South Coast	2024	Construction and Mining - Rubber Tired Dozers	2015+	175	Diesel	0.038593	3.762972	5.165256	0.00487	0.333006	0.306443	528.0424
South Coast	2024	Construction and Mining - Rubber Tired Dozers	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2024	Construction and Mining - Rubber Tired Dozers	2015+	300	Diesel	0.038058	3.784265	5.776312	0.004881	0.257346	0.236804	528.7588
South Coast	2024	Construction and Mining - Rubber Tired Dozers	Aggreagate	50	Diesel	0.38773	4.867613	3.577366	0.005418	0.113757	0.104776	586.8966
South Coast	2024	Construction and Mining - Rubber Tired Dozers	2015+	600	Diesel	0.033381	3.252504	4.010225	0.004905	0.178524	0.164246	532.2031
South Coast	2024	Construction and Mining - Rubber Tired Dozers	2015+	75	Diesel	0.071239	4.365178	5.76152	0.004871	0.416667	0.383469	528.7949
South Coast	2024	Construction and Mining - Rubber Tired Dozers	2015+	750	Diesel	0.066037	1.08982	2.868485	0.004867	0.081122	0.074633	527.8759
South Coast	2024	Construction and Mining - Scrapers	2015+	100	Diesel	0.016916	3.995226	5.412887	0.004877	0.386312	0.355303	530.3809
South Coast	2024	Construction and Mining - Scrapers	2015+	175	Diesel	0.044123	3.342361	2.914573	0.004907	0.152654	0.140453	531.8197
South Coast	2024	Construction and Mining - Scrapers	Aggreagate	25	Diesel	0.152875	3.419533	2.891605	0.005423	0.011098	0.010211	586.9598
South Coast	2024	Construction and Mining - Scrapers	2015+	300	Diesel	0.037426	1.700489	3.212225	0.004859	0.145418	0.133773	527.3266
South Coast	2024	Construction and Mining - Scrapers	Aggreagate	50	Diesel	2.981197	9.619967	6.744353	0.005247	0.948656	0.87306	577.1535
South Coast	2024	Construction and Mining - Scrapers	2015+	600	Diesel	0.034469	1.708941	2.289178	0.004879	0.088441	0.081366	528.3799
South Coast	2024	Construction and Mining - Scrapers	2015+	75	Diesel	0.03978	4.08146	5.825267	0.004905	0.495418	0.456047	531.9432
South Coast	2024	Construction and Mining - Scrapers	2015+	750	Diesel	0.618228	6.815083	9.627666	0.004877	0.39785	0.366069	529.7755
South Coast	2024	Construction and Mining - Scrapers	2015+	9999	Diesel	0.025689	4.048623	5.963856	0.004872	0.204688	0.188372	527.722
South Coast	2024	Construction and Mining - Skid Steer Loaders	2015+	100	Diesel	0.979074	4.111436	7.861747	0.004815	0.784514	0.720176	523.5243
South Coast	2024	Construction and Mining - Skid Steer Loaders	2015+	175	Diesel	0.043561	2.879645	1.243579	0.004867	0.052613	0.048393	526.3462
South Coast	2024	Construction and Mining - Skid Steer Loaders	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2024	Construction and Mining - Skid Steer Loaders	2015+	300	Diesel	0.036243	0.989628	1.18421	0.00488	0.036484	0.033596	528.2503
South Coast	2024	Construction and Mining - Skid Steer Loaders	Aggreagate	50	Diesel	0.303405	3.661992	3.337524	0.005436	0.088491	0.081428	588.969
South Coast	2024	Construction and Mining - Skid Steer Loaders	2015+	600	Diesel	0.011469	1.000395	2.085033	0.004881	0.091089	0.083717	528.5348
South Coast	2024	Construction and Mining - Skid Steer Loaders	2015+	75	Diesel	0.062027	3.255399	1.91829	0.004876	0.059207	0.054475	528.1701
South Coast	2024	Construction and Mining - Skid Steer Loaders	2015+	9999	Diesel	0.03109	0.952974	2.287139	0.004901	0.030767	0.028317	528.5352
South Coast	2024	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	Diesel	0.079103	3.492783	2.190299	0.004891	0.097105	0.089338	529.6203
South Coast	2024	Construction and Mining - Tractors/Loaders/Backhoes	2015+	175	Diesel	0.053265	3.096355	1.37965	0.00486	0.068623	0.063132	526.2857
South Coast	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2024	Construction and Mining - Tractors/Loaders/Backhoes	2015+	300	Diesel	0.048224	1.226075	1.647173	0.004857	0.059999	0.055201	526.1443
South Coast	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggreagate	50	Diesel	0.518562	4.658456	3.808564	0.005346	0.16767	0.154264	580.9443
South Coast	2024	Construction and Mining - Tractors/Loaders/Backhoes	2015+	600	Diesel	0.054579	1.210955	1.154821	0.004859	0.04448	0.04093	525.8717
South Coast	2024	Construction and Mining - Tractors/Loaders/Backhoes	2015+	75	Diesel	1.418719	5.417091	12.79533	0.004847	1.025541	0.943448	528.2147
South Coast	2024	Construction and Mining - Tractors/Loaders/Backhoes	2015+	750	Diesel	0.057433	2.677233	2.296306	0.004783	0.0954	0.087338	518.1436
South Coast	2024	Construction and Mining - Tractors/Loaders/Backhoes	2015+	9999	Diesel	0.050019	1.034984	3.140978	0.004884	0.058645	0.053957	527.8741
South Coast	2024	Industrial - Aerial Lifts	2015+	100	Diesel	0.070424	3.175511	1.437895	0.004881	0.018658	0.017139	527.9883
South Coast	2024	Industrial - Aerial Lifts	2015+	175	Diesel	0.048664	2.856948	0.571921	0.004879	0.024231	0.022273	527.7185
South Coast	2024	Industrial - Aerial Lifts	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2024	Industrial - Aerial Lifts	2015+	300	Diesel	0.03242	0.966498	0.683214	0.004877	0.009276	0.008499	527.7136
South Coast	2024	Industrial - Aerial Lifts	Aggreagate	50	Diesel	0.137916	3.110603	2.886131	0.005433	0.021652	0.01992	586.9027
South Coast	2024	Industrial - Aerial Lifts	2015+	600	Diesel	0.05674	0.954255	0.263593	0.004881	0.00923	0.008448	527.7109
South Coast	2024	Industrial - Aerial Lifts	2015+	75	Diesel	0.056892	3.166539	1.641945	0.004857	0.036496	0.033582	527.849
South Coast	2024	Industrial - Forklifts	2015+	100	Diesel	0.06858	3.611828	2.748743	0.004863	0.157197	0.144623	526.6389
South Coast	2024	Industrial - Forklifts	2015+	175	Diesel	0.047845	3.18064	1.874132	0.004887	0.096448	0.088737	528.8057
South Coast	2024	Industrial - Forklifts	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2024	Industrial - Forklifts	2015+	300	Diesel	0.04603	1.208097	1.579897	0.004876	0.059618	0.054856	528.2435
South Coast	2024	Industrial - Forklifts	Aggreagate	50	Diesel	0.601755	5.08293	4.035085	0.005413	0.202758	0.186549	587.1462
South Coast	2024	Industrial - Forklifts	2015+	600	Diesel	0.027203	1.252487	1.905387	0.004902	0.072264	0.066452	531.0993
South Coast	2024	Industrial - Forklifts	2015+	75	Diesel	1.491145	5.647502	13.48702	0.004803	1.050623	0.967088	524.5084
South Coast	2024	Industrial - Forklifts	2015+	9999	Diesel	0.092896	1.03063	2.413259	0.004884	0.022325	0.020517	527.6411
South Coast	2024	Light Commercial - Misc - Air Compressors	Aggreagate	15	Diesel	0	0	0	0	0	0	0
South Coast	2024	Light Commercial - Misc - Air Compressors	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2024	Light Commercial - Misc - Air Compressors	Aggreagate	50	Diesel	0.604719	5.667692	4.478608	0.008478	0.159796	0.146991	656.6793
South Coast	2024	Light Commercial - Misc - Generator Sets	Aggreagate	15	Diesel	0	0	0	0	0	0	0
South Coast	2024	Light Commercial - Misc - Generator Sets	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2024	Light Commercial - Misc - Generator Sets	Aggreagate	50	Diesel	0.848209	9.082644	8.575759	0.017543	0.262498	0.241507	1356.583

[1] This is a lookup table sourced directly from EMFAC: OFFROAD2021 v1.0.2 used in the emission calculation. Not all of the rows were used in the emission calculations.

Nonroad Controlled Emission Factors - For All Scenarios

Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bin	Fuel	Emission Factors (g/hp-hr)						
						VOC	CO	NOX	SO2	PM10	PM2.5	CO2
South Coast	2025	Construction and Mining - Bore/Drill Rigs	2015+	100	Diesel	0.072725	3.249151	1.744722	0.004821	0.05077	0.046703	522.5672
South Coast	2025	Construction and Mining - Bore/Drill Rigs	2015+	175	Diesel	0.051695	2.951964	0.900042	0.004906	0.039999	0.036857	530.6186
South Coast	2025	Construction and Mining - Bore/Drill Rigs	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2025	Construction and Mining - Bore/Drill Rigs	2015+	300	Diesel	0.049055	1.055308	1.055059	0.004857	0.034678	0.031934	525.6086
South Coast	2025	Construction and Mining - Bore/Drill Rigs	Aggreagate	50	Diesel	0.517889	4.301207	4.004127	0.005534	0.194742	0.178844	599.9692
South Coast	2025	Construction and Mining - Bore/Drill Rigs	2015+	600	Diesel	0.048043	0.982554	0.825503	0.004815	0.029486	0.027139	521.0595
South Coast	2025	Construction and Mining - Bore/Drill Rigs	2015+	75	Diesel	0.260695	3.327675	4.671124	0.004587	0.254855	0.23483	497.786
South Coast	2025	Construction and Mining - Bore/Drill Rigs	2015+	750	Diesel	0.049264	0.959432	0.416974	0.004902	0.015613	0.014378	530.3053
South Coast	2025	Construction and Mining - Bore/Drill Rigs	2015+	9999	Diesel	0.012351	0.994296	3.861671	0.004868	0.089485	0.082256	526.9394
South Coast	2025	Construction and Mining - Cranes	2015+	100	Diesel	0.051047	3.726702	3.56379	0.004853	0.206103	0.18961	526.4357
South Coast	2025	Construction and Mining - Cranes	2015+	175	Diesel	0.035567	3.362337	3.321333	0.004878	0.180553	0.166127	528.6831
South Coast	2025	Construction and Mining - Cranes	Aggreagate	25	Diesel	1.102137	5.865362	4.8996	0.00541	0.388833	0.357989	586.5868
South Coast	2025	Construction and Mining - Cranes	2015+	300	Diesel	0.033303	1.536518	2.772434	0.004862	0.117585	0.108176	527.5638
South Coast	2025	Construction and Mining - Cranes	Aggreagate	50	Diesel	1.641835	7.307753	5.811554	0.005418	0.563831	0.519732	592.0603
South Coast	2025	Construction and Mining - Cranes	2015+	600	Diesel	0.035308	1.662872	1.949682	0.004875	0.079095	0.072772	527.5846
South Coast	2025	Construction and Mining - Cranes	2015+	75	Diesel	1.197349	4.696871	9.721549	0.004825	0.983423	0.901471	525.4144
South Coast	2025	Construction and Mining - Cranes	2015+	750	Diesel	0.017881	2.674835	3.763749	0.004868	0.187061	0.172041	527.2074
South Coast	2025	Construction and Mining - Cranes	2015+	9999	Diesel	0.025199	4.086863	6.034152	0.004862	0.251413	0.231378	527.4468
South Coast	2025	Construction and Mining - Excavators	2015+	100	Diesel	0.083801	3.460474	2.044949	0.004844	0.080618	0.074183	524.8721
South Coast	2025	Construction and Mining - Excavators	2015+	175	Diesel	0.056355	3.064781	1.158751	0.004855	0.057099	0.052527	525.8185
South Coast	2025	Construction and Mining - Excavators	Aggreagate	25	Diesel	3.450625	11.14901	7.576399	0.005322	1.055768	0.970765	586.7705
South Coast	2025	Construction and Mining - Excavators	2015+	300	Diesel	0.058591	1.102925	0.989972	0.004897	0.03286	0.030234	530.0041
South Coast	2025	Construction and Mining - Excavators	Aggreagate	50	Diesel	0.349768	4.211034	3.446439	0.005423	0.107041	0.098485	587.1378
South Coast	2025	Construction and Mining - Excavators	2015+	600	Diesel	0.059817	1.043622	0.714665	0.004874	0.025225	0.023204	527.2798
South Coast	2025	Construction and Mining - Excavators	2015+	75	Diesel	0.049176	3.341666	2.513743	0.004863	0.138836	0.127808	527.2232
South Coast	2025	Construction and Mining - Excavators	2015+	750	Diesel	0.032717	1.509768	2.426611	0.004889	0.089589	0.082364	530.4277
South Coast	2025	Construction and Mining - Excavators	2015+	9999	Diesel	0.064517	0.991774	2.359822	0.00495	0.02125	0.019596	534.9212
South Coast	2025	Construction and Mining - Graders	2015+	100	Diesel	0.074252	3.969902	4.217635	0.00482	0.31042	0.285603	522.9446
South Coast	2025	Construction and Mining - Graders	2015+	175	Diesel	0.0556	3.418949	2.858575	0.004899	0.159099	0.146374	531.1942
South Coast	2025	Construction and Mining - Graders	Aggreagate	25	Diesel	1.730304	7.739411	6.083654	0.005381	0.733802	0.674847	587.0413
South Coast	2025	Construction and Mining - Graders	2015+	300	Diesel	0.036954	1.214517	2.448184	0.00488	0.081546	0.075021	528.3878
South Coast	2025	Construction and Mining - Graders	Aggreagate	50	Diesel	1.723805	7.563359	5.334434	0.005357	0.546929	0.505722	586.2558
South Coast	2025	Construction and Mining - Graders	2015+	600	Diesel	0.010055	1.098511	3.115447	0.00485	0.113399	0.104355	525.7075
South Coast	2025	Construction and Mining - Graders	2015+	75	Diesel	1.28614	5.016848	11.52765	0.004997	0.991256	0.912521	544.1009
South Coast	2025	Construction and Mining - Graders	2015+	9999	Diesel	0.042437	1.380071	3.876445	0.004873	0.085326	0.078442	528.1215
South Coast	2025	Construction and Mining - Misc - Plate Compactors	Aggreagate	15	Diesel	0	0	0	0	0	0	0
South Coast	2025	Construction and Mining - Other	2015+	100	Diesel	0.054911	3.202233	2.635675	0.004431	0.157088	0.144514	481.1771
South Coast	2025	Construction and Mining - Other	2015+	175	Diesel	0.03718	2.869084	1.999615	0.004434	0.104095	0.095743	480.0305
South Coast	2025	Construction and Mining - Other	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2025	Construction and Mining - Other	2015+	300	Diesel	0.036484	1.247574	1.977199	0.004435	0.077237	0.071043	481.9582
South Coast	2025	Construction and Mining - Other	Aggreagate	50	Diesel	0.600553	4.442491	3.924561	0.004973	0.244086	0.224611	539.2937
South Coast	2025	Construction and Mining - Other	2015+	600	Diesel	0.037621	1.157068	1.287972	0.004454	0.048854	0.044947	481.7943
South Coast	2025	Construction and Mining - Other	2015+	75	Diesel	0.775794	4.108371	7.773582	0.004381	0.59551	0.547814	476.2585
South Coast	2025	Construction and Mining - Other	2015+	750	Diesel	0.035492	1.011109	1.380125	0.004451	0.046431	0.042717	482.1233
South Coast	2025	Construction and Mining - Other	2015+	9999	Diesel	0.038173	0.910488	2.471825	0.004439	0.041197	0.037844	481.0051
South Coast	2025	Construction and Mining - Rollers	2015+	100	Diesel	0.057224	3.413675	2.601176	0.004865	0.128761	0.118461	528.0334
South Coast	2025	Construction and Mining - Rollers	2015+	175	Diesel	0.04398	2.90596	1.099885	0.004883	0.049379	0.045425	527.4516
South Coast	2025	Construction and Mining - Rollers	Aggreagate	25	Diesel	3.543218	11.13419	7.687244	0.005335	1.05597	0.971164	586.5285
South Coast	2025	Construction and Mining - Rollers	2015+	300	Diesel	0.030237	1.522414	2.17536	0.004881	0.086749	0.079837	528.0854
South Coast	2025	Construction and Mining - Rollers	Aggreagate	50	Diesel	0.493256	4.112989	3.678166	0.005394	0.166403	0.153089	586.9024
South Coast	2025	Construction and Mining - Rollers	2015+	600	Diesel	0.032004	1.422506	1.428142	0.004894	0.049449	0.045606	529.7224
South Coast	2025	Construction and Mining - Rollers	2015+	75	Diesel	1.636004	6.172232	15.10867	0.004819	1.079466	0.994651	527.5465
South Coast	2025	Construction and Mining - Rubber Tired Dozers	2015+	100	Diesel	0.072899	4.156472	4.914956	0.004897	0.355199	0.326877	531.6322
South Coast	2025	Construction and Mining - Rubber Tired Dozers	2015+	175	Diesel	0.046245	3.687308	4.472338	0.004869	0.289822	0.266636	528.1251
South Coast	2025	Construction and Mining - Rubber Tired Dozers	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2025	Construction and Mining - Rubber Tired Dozers	2015+	300	Diesel	0.050775	2.584643	4.598594	0.004874	0.200621	0.184563	528.5604
South Coast	2025	Construction and Mining - Rubber Tired Dozers	Aggreagate	50	Diesel	0.459096	5.181371	3.679201	0.005418	0.127204	0.116523	586.9864
South Coast	2025	Construction and Mining - Rubber Tired Dozers	2015+	600	Diesel	0.04111	2.90209	3.506282	0.004919	0.153959	0.141654	532.1718
South Coast	2025	Construction and Mining - Rubber Tired Dozers	2015+	75	Diesel	0.08032	4.257097	5.408121	0.004866	0.385085	0.354758	527.9174
South Coast	2025	Construction and Mining - Rubber Tired Dozers	2015+	750	Diesel	0.071195	1.100182	2.870627	0.004891	0.081512	0.074991	527.8763
South Coast	2025	Construction and Mining - Scrapers	2015+	100	Diesel	0.018204	4.034771	5.505839	0.004896	0.399276	0.367519	530.0763
South Coast	2025	Construction and Mining - Scrapers	2015+	175	Diesel	0.048091	3.356548	2.737348	0.004917	0.142479	0.131083	531.8204
South Coast	2025	Construction and Mining - Scrapers	Aggreagate	25	Diesel	0.170113	3.58064	2.929614	0.005425	0.011706	0.010766	587.0079
South Coast	2025	Construction and Mining - Scrapers	2015+	300	Diesel	0.042051	1.734586	2.713648	0.004869	0.122675	0.112859	527.1488
South Coast	2025	Construction and Mining - Scrapers	Aggreagate	50	Diesel	2.995525	9.666202	6.761873	0.005258	0.953216	0.877256	577.1572
South Coast	2025	Construction and Mining - Scrapers	2015+	600	Diesel	0.04025	1.578057	1.911672	0.004891	0.074035	0.068113	529.5947
South Coast	2025	Construction and Mining - Scrapers	2015+	75	Diesel	0.051281	3.892406	4.649221	0.00489	0.373141	0.343049	531.2645
South Coast	2025	Construction and Mining - Scrapers	2015+	750	Diesel	0.028643	2.993063	3.468394	0.004871	0.142809	0.13139	527.9046
South Coast	2025	Construction and Mining - Scrapers	2015+	9999	Diesel	0.027986	4.054997	5.97041	0.004865	0.20522	0.188827	527.7219
South Coast	2025	Construction and Mining - Skid Steer Loaders	2015+	100	Diesel	1.508553	5.849654	14.40748	0.004848	0.969526	0.890989	528.0125
South Coast	2025	Construction and Mining - Skid Steer Loaders	2015+	175	Diesel	0.045817	2.877537	1.004944	0.004869	0.038782	0.035668	527.0776
South Coast	2025	Construction and Mining - Skid Steer Loaders	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2025	Construction and Mining - Skid Steer Loaders	2015+	300	Diesel	0.037907	0.995001	1.194917	0.004883	0.036931	0.034031	528.0127
South Coast	2025	Construction and Mining - Skid Steer Loaders	Aggreagate	50	Diesel	0.296397	3.652409	3.302378	0.005441	0.083717	0.077015	589.204
South Coast	2025	Construction and Mining - Skid Steer Loaders	2015+	600	Diesel	0.011785	0.999912	2.089763	0.004883	0.091526	0.08412	528.5355
South Coast	2025	Construction and Mining - Skid Steer Loaders	2015+	75	Diesel	0.064166	3.248842	1.861877	0.004883	0.056308	0.051809	528.3741
South Coast	2025	Construction and Mining - Skid Steer Loaders	2015+	9999	Diesel	0.034061	0.954842	2.291621	0.004872	0.030399	0.027983	527.0416
South Coast	2025	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	Diesel	0.086919	3.478601	2.007827	0.00489	0.077309	0.071124	529.3948
South Coast	2025	Construction and Mining - Tractors/Loaders/Backhoes	2015+	175	Diesel	0.0585	3.089234	1.182684	0.004863	0.058575	0.053887	525.9966
South Coast	2025	Construction and Mining - Tractors/Loaders/Backhoes	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2025	Construction and Mining - Tractors/Loaders/Backhoes	2015+	300	Diesel	0.05433	1.220574	1.399061	0.004868	0.052966	0.048736	526.8437
South Coast	2025	Construction and Mining - Tractors/Loaders/Backhoes	Aggreagate	50	Diesel	0.483466	4.605551	3.698647	0.005339	0.146464	0.134735	580.4935
South Coast	2025	Construction and Mining - Tractors/Loaders/Backhoes	2015+	600	Diesel	0.06031	1.167116	0.9894	0.00486	0.038182	0.035134	525.8635
South Coast	2025	Construction and Mining - Tractors/Loaders/Backhoes	2015+	75	Diesel	1.40076	5.356608	12.62086	0.004832	1.018516	0.937043	527.2242
South Coast	2025	Construction and Mining - Tractors/Loaders/Backhoes	2015+	750	Diesel	0.052627	1.6603	1.120146	0.004658	0.045403	0.041888	503.9248
South Coast	2025	Construction and Mining - Tractors/Loaders/Backhoes	2015+	9999	Diesel	0.054626	1.031998	2.998213	0.004878	0.052368	0.048182	528.1473
South Coast	2025	Industrial - Aerial Lifts	2015+	100	Diesel	0.073987	3.204802	1.471001	0.004881	0.02196	0.020237	528.0267
South Coast	2025	Industrial - Aerial Lifts	2015+	175	Diesel	0.047159	2.845377	0.571503	0.004888	0.024146	0.022211	527.7186
South Coast	2025	Industrial - Aerial Lifts	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2025	Industrial - Aerial Lifts	2015+	300	Diesel	0.033854	0.971729	0.686249	0.004875	0.009333	0.008564	527.7145
South Coast	2025	Industrial - Aerial Lifts	Aggreagate	50	Diesel	0.133608	3.086127	2.876718	0.005408	0.0207	0.019027	586.9
South Coast	2025	Industrial - Aerial Lifts	2015+	600	Diesel	0.059097	0.966351	0.264394	0.004878	0.009277	0.008504	527.7125
South Coast	2025	Industrial - Aerial Lifts	2015+	75	Diesel	0.059295	3.144753	1.532461	0.004864	0.028022	0.025794	527.8642
South Coast	2025	Industrial - Forklifts	2015+	100	Diesel	0.075979	3.602382	2.553957	0.004873	0.135111	0.124299	527.6319
South Coast	2025	Industrial - Forklifts	2015+	175	Diesel	0.052609	3.161123	1.657464	0.00486	0.084819	0.078026	526.1842
South Coast	2025	Industrial - Forklifts	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2025	Industrial - Forklifts	2015+	300	Diesel	0.050888	1.204464	1.426168	0.004882	0.054657	0.050264	528.2435
South Coast	2025	Industrial - Forklifts	Aggreagate	50	Diesel	0.553232	5.025563	3.929143	0.005415	0.178195	0.163905	587.3499
South Coast	2025	Industrial - Forklifts	2015+	600	Diesel	0.030623	1.254404	1.832283	0.004895	0.068177	0.062683	531.0994
South Coast	2025	Industrial - Forklifts	2015+	75	Diesel	1.484374	5.617538	13.42482	0.004772	1.044398	0.960883	520.49
South Coast	2025	Industrial - Forklifts	2015+	9999	Diesel	0.099009	1.043718	2.432209	0.004889	0.022912	0.021062	527.6389
South Coast	2025	Light Commercial - Misc - Air Compressors	Aggreagate	15	Diesel	0	0	0	0	0	0	0
South Coast	2025	Light Commercial - Misc - Air Compressors	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2025	Light Commercial - Misc - Air Compressors	Aggreagate	50	Diesel	0.566685	5.634386	4.352243	0.008466	0.137621	0.126585	656.7093
South Coast	2025	Light Commercial - Misc - Generator Sets	Aggreagate	15	Diesel	0	0	0	0	0	0	0
South Coast	2025	Light Commercial - Misc - Generator Sets	Aggreagate	25	Diesel	0	0	0	0	0	0	0
South Coast	2025	Light Commercial - Misc - Generator Sets	Aggreagate	50	Diesel	0.785182	9.011826	8.334015	0.017518	0.227128	0.208956	1356.578

[1] This is a lookup table sourced directly from EMFAC: OFFROAD2021 v1.0.2 used in the emission calculation. Not all of the rows were used in the emission calculations.

Onroad Vehicle Fugitive Dust Emissions - For All Scenarios

Emission Factors Parameters for Road Dust Paved Roads

Paved Roads Emission Factor Formula:

E (lb/VMT) = k (sL)0.91 * (W)1.02 * (1-P/4N)

Parameter	PM_{10}	$PM_{2.5}$
k	0.0022	0.00054

Function/Variable Description	Assumed Value	Reference
sL = Road surface silt loading (g/m^2)	0.135	LA & Orange Counties Local Roads, specific silt loading [3]
W = Average weight (tons) of the vehicles traveling the road - Offsite	2.4	http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf
W = Average weight (tons) of the vehicles traveling the road - Onsite	13.8	See [4]
N = Number of hours in averaging period (Hours)	8760	EPA AP-42 Section 13.2.2
P = Number of days precipitation per year	26	http://scacis.rcc-acis.org/

[1] Number of precipitation days based on FT Macarthur AFB Monitoring Station from the latest available period 6/30/2021 - 6/30/2022

[2] Paved road dust emission factors are used for onsite driving during the second year of construction and offsite driving during both years of construction

[3] Methodology for paved roads and silt loading value for local roadwayds in LA County from CARB's Miscellaneous Process Methodology 7.9. Available at https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

[4] Average weight of vehicles travelling onsite during construction period was estimated by the number of trips on site for the different vehicle classes (LDA, LDT1 and T7) and their approximate weight: LDA (2.1 tons), LDT1 (3 tons) and Trucks (25 tons). Average weight for onsite trucks based on water tank truck of 9,000 gal has a combined cargo and GVWR of 80,000 lbs (40 tons). The average of an empty truck (8.3 tons) and loaded truck (40 tons) would be approximately 25 tons.

Emission Factors Parameters for Road Dust Unpaved Roads

Unpaved Roads Emission Factor Formula:

E (lb/VMT) = k (s/12)^a * (W/3)^b

Parameter	PM_{10}	$PM_{2.5}$
k	1.5	0.15
a	0.9	0.9
b	0.45	0.45

Function/Variable Description		Assumed Value	Reference		
Control for watering		55%	Watering control is 55% based on latest CalEEMod Version 2022.1 (https://caleemod.com/)		
s = surface material silt content (%)		8.5	EPA AP-42 Section 13.2.2, Table 13.2.2-1, Construction sites		
W = Average weight (tons) of the vehicles traveling the road - Onsite		13.8	See [4]		

[5] Assumed onsite ground improvements was completed half way through 2024, therefor 2024 Efs will be 50/50 paved and unpaved with 2025 Efs all paved.

[6] Emission controls from watering only applied to onsite driving

Unpaved Road PM10 Emission Factor (lb/VMT)	Unpaved Road PM2.5 Emission Factor (lb/VMT)
2.19	0.22

Offsite Fugitive Dust Emission Estimations for Onroad Vehicles on Paved Roads - Proposed and Reduced Project Annual

Year	Activity	Equipment Type	Total Annual Vehicle Miles	PM_{10}			$PM_{2.5}$		
				Uncontrolled Em. Factor (lb/VMT)	Emissions		Uncontrolled Em. Factor (lb/VMT)	Emissions	
					(short tons/vehicle type)	(short tons/year)		(short tons/vehicle type)	(short tons/year)
2024	Construction	LDA	371,278	0.0009	1.61E-01	1.61E-01	0.0002	3.96E-02	3.96E-02
2024	Construction	T7 Tractor Class 8	746,350	0.0009	3.24E-01	3.24E-01	0.0002	7.95E-02	7.95E-02
2024	Construction	T7 Tractor Class 8	4,270	0.0009	1.85E-03	1.85E-03	0.0002	4.55E-04	4.55E-04
2024	Construction	LDT1	5,110	0.0009	2.22E-03	2.22E-03	0.0002	5.44E-04	5.44E-04
2024	Construction	T7 Tractor Class 8	22,715	0.0009	9.86E-03	9.86E-03	0.0002	2.42E-03	2.42E-03
2024	Construction	T7 Tractor Class 8	2,380	0.0009	1.03E-03	1.03E-03	0.0002	2.54E-04	2.54E-04
2025	Construction	LDA	124,976	0.0009	5.42E-02	5.42E-02	0.0002	1.33E-02	1.33E-02
2025	Construction	T7 Tractor Class 8	151,217	0.0009	6.56E-02	6.56E-02	0.0002	1.61E-02	1.61E-02
2025	Construction	T7 Tractor Class 8	2,475	0.0009	1.07E-03	1.07E-03	0.0002	2.64E-04	2.64E-04
2025	Construction	LDT1	2,511	0.0009	1.09E-03	1.09E-03	0.0002	2.68E-04	2.68E-04
2025	Construction	T7 Tractor Class 8	11,163	0.0009	4.84E-03	4.84E-03	0.0002	1.19E-03	1.19E-03
2025	Construction	T7 Tractor Class 8	1,170	0.0009	5.08E-04	5.08E-04	0.0002	1.25E-04	1.25E-04
				Total	**6.27E-01**	**6.27E-01**		**1.54E-01**	**1.54E-01**

Onsite Fugitive Dust Emission Estimations for Onroad Vehicles - Proposed and Reduced Project Annual

Year	Activity	Equipment Type	Total Annual Vehicle Miles	PM_{10}			$PM_{2.5}$		
				Controlled Em. Factor (lb/VMT)	Emissions		Controlled Em. Factor (lb/VMT)	Emissions	
					(short tons/vehicle type)	(short tons/year)		(short tons/vehicle type)	(short tons/year)
2024	Construction	LDA	2,543	1.0953	6.27E-01	6.27E-01	0.1099	6.29E-02	6.29E-02
2024	Construction	T7 Tractor Class 8	1,150	1.0953	2.83E-01	2.83E-01	0.1099	2.84E-02	2.84E-02
2024	Construction	T7 Tractor Class 8	63	1.0953	1.55E-02	1.55E-02	0.1099	1.55E-03	1.55E-03
2024	Construction	LDT1	35	1.0953	8.63E-03	8.63E-03	0.1099	8.66E-04	8.66E-04
2024	Construction	T7 Tractor Class 8	35	1.0953	8.63E-03	8.63E-03	0.1099	8.66E-04	8.66E-04
2024	Construction	T7 Tractor Class 8	35	1.0953	8.63E-03	8.63E-03	0.1099	8.66E-04	8.66E-04
2025	Construction	LDA	856	0.0052	9.95E-04	9.95E-04	0.0013	2.44E-04	2.44E-04
2025	Construction	T7 Tractor Class 8	233	0.0052	2.71E-04	2.71E-04	0.0013	6.65E-05	6.65E-05
2025	Construction	T7 Tractor Class 8	36	0.0052	4.23E-05	4.23E-05	0.0013	1.04E-05	1.04E-05
2025	Construction	LDT1	17	0.0052	2.00E-05	2.00E-05	0.0013	4.91E-06	4.91E-06
2025	Construction	T7 Tractor Class 8	17	0.0052	2.00E-05	2.00E-05	0.0013	4.91E-06	4.91E-06
2025	Construction	T7 Tractor Class 8	17	0.0052	2.00E-05	2.00E-05	0.0013	4.91E-06	4.91E-06
				Total	**9.53E-01**	**9.53E-01**		**9.58E-02**	**9.58E-02**

Offsite Fugitive Dust Emission Estimations for Onroad Vehicles on Paved Roads - Proposed and Reduced Project Daily

Year	Activity	Equipment Type	Total Daily Vehicle Miles	PM_{10}			$PM_{2.5}$		
				Uncontrolled Em. Factor (lb/VMT)	Emissions		Uncontrolled Em. Factor (lb/VMT)	Emissions	
					(lbs/vehicle type)	(lbs/day)		(lbs/vehicle type)	(lbs/day)
2024	Construction	LDA	1,606	0.0009	1.39E+00	1.39E+00	0.0002	3.42E-01	3.42E-01
2024	Construction	T7 Tractor Class 8	519	0.0009	4.51E-01	4.51E-01	0.0002	1.11E-01	1.11E-01
2024	Construction	T7 Tractor Class 8	14	0.0009	1.18E-02	1.18E-02	0.0002	2.90E-03	2.90E-03
2024	Construction	LDT1	29	0.0009	2.53E-02	2.53E-02	0.0002	6.22E-03	6.22E-03
2024	Construction	T7 Tractor Class 8	130	0.0009	1.13E-01	1.13E-01	0.0002	2.77E-02	2.77E-02
2024	Construction	T7 Tractor Class 8	14	0.0009	1.18E-02	1.18E-02	0.0002	2.90E-03	2.90E-03
2025	Construction	LDA	1,022	0.0009	8.87E-01	8.87E-01	0.0002	2.18E-01	2.18E-01
2025	Construction	T7 Tractor Class 8	1,947	0.0009	1.69E+00	1.69E+00	0.0002	4.15E-01	4.15E-01
2025	Construction	T7 Tractor Class 8	14	0.0009	1.18E-02	1.18E-02	0.0002	2.90E-03	2.90E-03
2025	Construction	LDT1	29	0.0009	2.53E-02	2.53E-02	0.0002	6.22E-03	6.22E-03
2025	Construction	T7 Tractor Class 8	130	0.0009	1.13E-01	1.13E-01	0.0002	2.77E-02	2.77E-02
2025	Construction	T7 Tractor Class 8	14	0.0009	1.18E-02	1.18E-02	0.0002	2.90E-03	2.90E-03
				Total	**4.75E+00**	**4.75E+00**		**1.16E+00**	**1.16E+00**

Onsite Fugitive Dust Emission Estimations for Onroad Vehicles on Unpaved Roads - Proposed and Reduced Project Daily

Year	Activity	Equipment Type	Total Daily Vehicle Miles	PM_{10}			$PM_{2.5}$		
				Controlled Em. Factor (lb/VMT)	Emissions		Controlled Em. Factor (lb/VMT)	Emissions	
					(lbs/vehicle type)	(lbs/day)		(lbs/vehicle type)	(lbs/day)
2024	Construction	LDA	11	1.0953	5.42E+00	5.42E+00	0.1099	5.44E-01	5.44E-01
2024	Construction	T7 Tractor Class 8	1	1.0953	3.94E-01	3.94E-01	0.1099	3.96E-02	3.96E-02
2024	Construction	T7 Tractor Class 8	0	1.0953	9.86E-02	9.86E-02	0.1099	9.89E-03	9.89E-03
2024	Construction	LDT1	0	1.0953	9.86E-02	9.86E-02	0.1099	9.89E-03	9.89E-03
2024	Construction	T7 Tractor Class 8	0	1.0953	9.86E-02	9.86E-02	0.1099	9.89E-03	9.89E-03
2024	Construction	T7 Tractor Class 8	0	1.0953	9.86E-02	9.86E-02	0.1099	9.89E-03	9.89E-03
2025	Construction	LDA	7	0.0052	1.63E-02	1.63E-02	0.0013	4.00E-03	4.00E-03
2025	Construction	T7 Tractor Class 8	3	0.0052	6.98E-03	6.98E-03	0.0013	1.71E-03	1.71E-03
2025	Construction	T7 Tractor Class 8	0	0.0052	4.65E-04	4.65E-04	0.0013	1.14E-04	1.14E-04
2025	Construction	LDT1	0	0.0052	4.65E-04	4.65E-04	0.0013	1.14E-04	1.14E-04
2025	Construction	T7 Tractor Class 8	0	0.0052	4.65E-04	4.65E-04	0.0013	1.14E-04	1.14E-04
2025	Construction	T7 Tractor Class 8	0	0.0052	4.65E-04	4.65E-04	0.0013	1.14E-04	1.14E-04
				Total	**6.24E+00**	**6.24E+00**		**6.29E-01**	**6.29E-01**

Material Handling Fugitive Dust Emissions - applies to proposed Project and alternatives
Annual Emissions

Year	Project Activity	Project Sub-Activity	Days in Year	Total Material Loaded (tons/year)	Average Daily Material Loaded (tons/day)	Emission Factors (lbs/ton)		Controlled Emissions (tons/yr)	
						PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$
2024	Construction	Concrete Fill	79	7400	93.7	1.17E-04	1.76E-05	0.336	0.051
2024	Construction	Net Fill	79	41717	528.1	1.17E-04	1.76E-05	1.896	0.287
2024	Construction	Waste Materials	175	335	1.9	1.17E-04	1.76E-05	0.015	0.002
2025	Construction	Concrete Fill	0	0	0.0	1.17E-04	1.76E-05	0.000	0.000
2025	Construction	Net Fill	0	0	0.0	1.17E-04	1.76E-05	0.000	0.000
2025	Construction	Waste Materials	86	165	1.9	1.17E-04	1.76E-05	0.007	0.001

[1] Tons of material loaded provided by ORCEM
[2] Emission factor based on AP-42 Section 13.2.4

Notes:

[1] Emission factor is based on AP-42, Section 13.2.4 for aggregate handling. The equation is:
$EF = k \times (0.0032) \times (U/5)^{1.3} / (M/2)^{1.4}$, where the following default values are used:

0.35 = k_{PM10}, PM_{10} particle size multiplier
0.053 = $k_{PM2.5}$, $PM_{2.5}$ particle size multiplier
2.7 = mean wind speed (U), meters per second
6.0 = mean wind speed (U), miles per hour
12 = material moisture content (M), %
61% = PM reduction based on watering control

Abbreviations:

CalEEMod® - California Emissi
EF - emission factor
lbs - pounds
PM_{10} - particulate matter less than 10 microns in aerodynamic diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in aerodynamic diameter

Conversions:

2 = tons per cubic yard of concrete
3600 = seconds per hour
1609.34 = meters per mile
1.264166 = tons per cubic yard (CalEEMod assumption)
2000 lb/ton

Wind Erosion Fugitive Dust Emissions - For All Scenarios

Emission Factors Parameters for Wind Erosion

Threshold Friction Velocity (U_t)	1.33	m/s (2.97 mph) for roads (AP-42 Table 13.2.5-2 Roadbed material)
Disturbance Area	5.7	unit acres disturbance
	22,893	square meters disturbance
Number of days above threshold	1	Number of days per month 2 minute wind is >= 30 mph (disturbances/month)
Fastest Mile Wind Speed (U_{10}^{+})	36.57	meters/sec (82 mph) Shreveport, LA (http://www.wrcc.dri.edu)
Control for Watering	61	% control

[1] 5.7 acres based on NOP

[2] Watering control is 61% based on latest CalEEMod Version 2022.1 (https://caleemod.com/)

Equations (AP-42 13.2.5.2 Industrial Wind Erosion)

Friction Velocity $U^* = 0.053\ U_{10}^{+}$

Erosion Potential P (g/m^2/period) = $58*(U^*-U_t^*)^2 + 25*(U^*-U_t^*)$ for $U^*>U_t^*$, P = 0 for $U^* =< U_t^*$

Emissions (tons/month) = Erosion Potential(g/m^2/period)*Disturbed Area(m^2)*Disturbances/month*(k)/(453.6 g/lb)/2000 lbs/ton/Develop Period

Particle Size Multiplier (k)		
30 µm	**<10 µm**	**<2.5 µm**
1.0	0.5	0.075

Maximum U_{10}^{+} Wind Speed (m/s)	**Maximum U* Friction Velocity m/s**	**U_t* Threshold Velocity[a] m/s**	**Erosion Potential g/m^2**
36.57	1.94	1.33	36.67

Harborcraft Emissions

HC Characteristics									HC Engine Activity per HC						HC Count per vessel					
Year	Vessel Type	HC Classification	Engine Type	Engine Count per HC	HC Average MY	HC Average HP	HC Average kW	Load Factor	Berthing (hr)	Maneuvering (hr/one-way trip)	Precautionary Area (hr/one-way trip)	20-Nautical Miles to Precautionary Area (hr/one-way trip)	40 to 20 Nautical Miles (hr/one-way trip)	State Boundary to 40-Nautical Miles (hr/one-way trip)	Berthing	Maneuvering	Precautionary Area	20-Nautical Miles to Precautionary Area	40 to 20 Nautical Miles	State Boundary to 40-Nautical Miles
2024	Barge Crane Assist	Assist Tugboat	Propulsion	2	2016	2,419	1,805	0.31		7.0						1				
2024	Barge Crane Assist	Assist Tugboat	Auxiliary	2	2014	195	145	0.43		7.0						1				
2025	Barge Crane Assist	Assist Tugboat	Propulsion	2	2016	2,419	1,805	0.31		2.0						1				
2025	Barge Crane Assist	Assist Tugboat	Auxiliary	2	2014	195	145	0.43		2.0						1				

Notes:
[1] Tugboats are used to assist barge Crane during maneuvering but otherwise are unused.
[2] Average model year and tier level represents port-wide assist tugs fleet for 2020
Example:
2004 MY engine (Tier 1 per EPA standards) would have to be replaced at the end of 2017, based on ARB's compliance schedule. At that time, the engine will need to be replaced with the relevant Tier engine applicable at the time (Tier 4).
[3] Assumed 1 barge crane assist round-trip per day that mobile crane is operating for Quay repairs

HC Activity: Time required to assist vessel (hr/one-way trip)

Engine	Berthing	Maneuvering	Precautionary Area	20-Nautical Miles to Precautionary Area	40 to 20 Nautical Miles	State Boundary to 40-Nautical Miles
Propulsion	0	3.50	0.00	0.00	0.00	0.00
Auxiliary	0	3.50	0.00	0.00	0.00	0.00

[1] Zone 1: Transit time assumed 1.5 hours from base to terminal
[2] Tugs do not transit outside Maneuvering Zone 1

Harbor Craft Emission Factors

							Zero Hour Efs (g/hp-hr)				Deterioration Factor			
Year	Engine Type	Average MY	Average HP	HP Bin	Age in Project Year	Useful Life	ROG	CO	NOx	PM	HC	CO	NOx	PM
2024	Propulsion	2016	2419	9999	8	21	0.17	0.74	3.69	0.05	0.03	0.02	0.02	0.05
2024	Auxiliary	2014	195	300	10	23	0.12	0.78	3.22	0.07	0.02	0.01	0.01	0.03
2025	Propulsion	2016	2419	9999	9	21	0.17	0.74	3.69	0.05	0.03	0.02	0.02	0.05
2025	Auxiliary	2014	195	300	11	23	0.12	0.78	3.22	0.07	0.02	0.01	0.01	0.03

Year	Engine Type	Emission Factors (g/hp-hr)							
		VOC	CO	NOx	PM10	PM2.5	CO2	CH4	N2O
2024	Propulsion	0.1	0.7	3.5	0.0	0.0	486.57	0.004	0.02
2024	Auxiliary	0.1	0.8	3.1	0.1	0.1	486.57	0.004	0.02
2025	Propulsion	0.1	0.7	3.5	0.0	0.0	486.57	0.004	0.02
2025	Auxiliary	0.1	0.8	3.1	0.1	0.1	486.57	0.004	0.02

Notes:
[1] ROG = VOC
[2] Average engine HP and MY pulled 2020 Port Emissions Inventory, Propulsion Engines Table 4.1 and Auxiliary Engine Tab
[3] Useful life from San Pedro Bay Ports Emission Inventory Methodology Report Version 2-2021, Table 3.3. September 202
[4] Zero hour and Deterioration factors are from CARB Appendix B: Emissions Estimation for Commercial Harbor Craft Operating in California. p.34 (https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2007/chc07/appb.pdf)
[5] EPA emission standards, which are reported as NOx+THC, were converted by NOx and HC assuming 95% and 5% are NOx and HC,
[6] SOx emission factor is based on 15 ppm fuel sulfur content.
[7] PM2.5 is 89% of PM10, per SCAQMD 2006 Final Methodology to Calculate PM2.5 and PM 2.5 Significance Thresholds, Table 5.
[8] CO2 and N2O emission factors are from IVL: Methodology for Calculating Emissions from Ships: Update on Emission Factors, 2004, also summarized in POLA 2019 Emissions Inventory, Appendix B. CH4 is 2% of HC, per IVL study.
Source:
[1] Tugboat engine characteristics (engine count, average model year, and horsepower rating) are from the 2020 Port Emissions Inventory,
[2] CO2 and N2O emission factors are from IVL: Methodology for Calculating Emissions from Ships: Update on Emission Factors, 2004, also summarized in POLA 2019 Emissions Inventory, Appendix B. CH4 is 2% of HC, per IVL study.

Correction Factors

Type	Value	Description
HC	0.72	Fuel Correction Factor for ULSD
NOx	0.948	Fuel Correction Factor for ULSD
PM10	0.8	Fuel Correction Factor for ULSD - MY older than 2011
PM10	0.852	Fuel Correction Factor for ULSD - MY 2011 or newer
PM2.5/PM10	0.92	Offroad model

Source:
[1] https://www.arb.ca.gov/regact/2007/chc07/appb.pdf

SOx Emission Factor

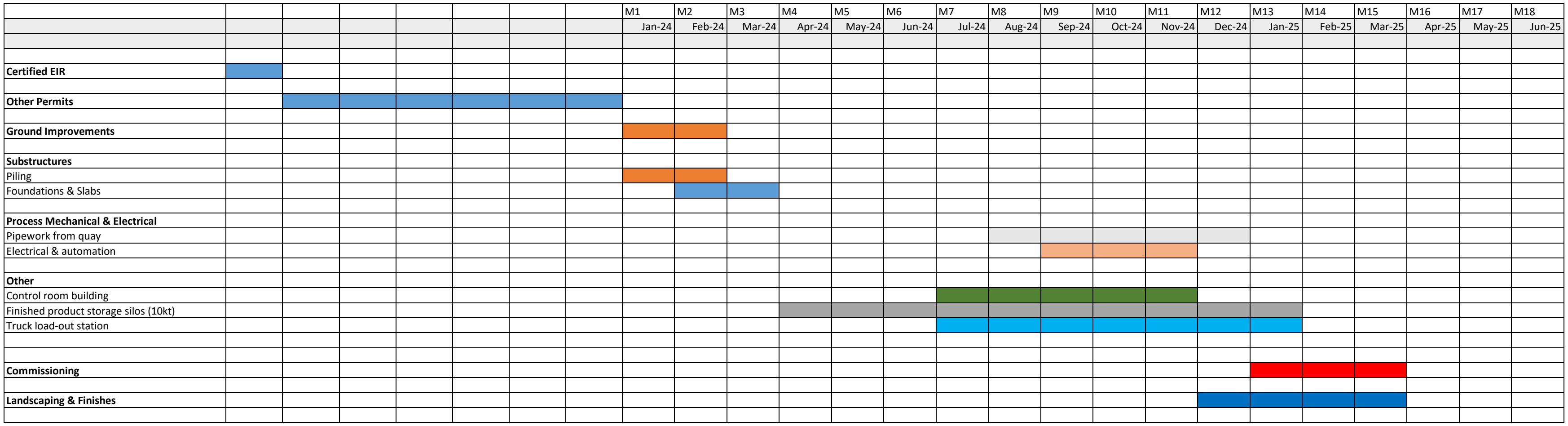
Harbor Craft	0.00552 g/hp-hr	0.00740 g/kw-hr	
Dredging Equipm	use OFFROAD BSCF and convert to g SOx /hp-hr		
SOx (gms/hp-hr) = (S content in X/1,000,000) x (MW SO2/ MW S) x BSF =			
Where:			
X = S content in parts per million (ppm)			15 ppm
S MW = Molecular Weight			32
SO2 MW = Molecular Weight			64
BSFC for harbor craft = Brake Specific Fuel Consumption (per CARB 2007 Harbor Craft Methodology)			184 (g/hp-hr)

Harbor Craft Load Factor

Type		Main Engine	Auxiliary Engine
Assist tugboat		0.31	0.43
Commercial fishing		0.27	0.43
Crew boat		0.38	0.32
Excursion		0.42	0.43
Ferry		0.42	0.43
Government		0.51	0.43
Ocean tug		0.68	0.43
Tugboat		0.31	0.43
Dive boat	Work boat	0.38	0.32

Source:
San Pedro Bay Ports Emission Inventory Methodology Report Version 2-2021, Table 3.1. September 2021.

Estimated Construction Schedule Chart by Activity - Product Import Terminal



Note: This schedule is a rough estimate derived for the CEQA analysis. Start of the construction and operations may happen further in the future. Air analysis assumes construction begins in 2024 and happens through 2025.

Construction Onroad Vehicle Activity and Emission Factors - Product Import Terminal Scenario

Onsite Onroad Vehicle Activity

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	One-Way Trip Length (miles)	Annual Vehicle-Days (days/year)	Annual Vehicle Mileage (miles/year)	Idle Hours (hours/trip)	Daily Vehicle-Days (vehicle-days/day)	Daily Vehicle Mileage (miles/day)	Location
2024	Operatives	LDA	Aggregate	15	Gasoline	0.1	5,500	1,100	0	20	4.0	Regular Backlands
2024	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	2,875	575	0.08	2	0.4	Regular Backlands
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	314	63	0.08	1	0.2	Regular Backlands
2024	Pickup	LDT1	Aggregate	15	Gasoline	0.1	175	35	0	1	0.2	Quay Repairs
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	175	35	0.08	1	0.2	Quay Repairs
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	175	35	0.08	1	0.2	Quay Repairs
2025	Operatives	LDA	Aggregate	15	Gasoline	0.1	770	154	0	10	2.0	Regular Backlands
2025	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	307	61	0.08	5	1.0	Regular Backlands
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	77	15	0.08	1	0.2	Regular Backlands
2025	Pickup	LDT1	Aggregate	15	Gasoline	0.1	86	17	0	1	0.2	Quay Repairs
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	86	17	0.08	1	0.2	Quay Repairs
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	0.1	86	17	0.08	1	0.2	Quay Repairs

[1] Onsite trip length = 0.1 mile per trip
[2] Quay Repairs onroad vehicle activity unavaiable, annual vehicle days assumed full Quay Repairs project length
[3] Maximum idling time of 5 minutes per hour assumed
[4] All starts are assumed to occur onsite

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Running Emissions (g/mile)												
						NOx	VOC	CO	SO2	PM10	PM10TW	PM10BW	PM2.5	PM2.5TW	PM2.5BW	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	15	Gasoline	0.06	0.03	1.21	0.00	0.00	0.01	0.01	0.00	0.00	0.00	445.87	0.01	0.01
2024	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,238.69	0.00	0.35
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,237.96	0.00	0.35
2024	Pickup	LDT1	Aggregate	15	Gasoline	0.23	0.11	2.93	0.01	0.01	0.01	0.01	0.01	0.00	0.00	532.72	0.02	0.02
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,237.96	0.00	0.35
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,237.96	0.00	0.35
2025	Operatives	LDA	Aggregate	15	Gasoline	0.05	0.02	1.15	0.00	0.00	0.01	0.01	0.00	0.00	0.00	436.68	0.01	0.01
2025	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,199.66	0.00	0.35
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,198.97	0.00	0.35
2025	Pickup	LDT1	Aggregate	15	Gasoline	0.21	0.10	2.70	0.01	0.01	0.01	0.01	0.01	0.00	0.00	522.69	0.02	0.01
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,198.97	0.00	0.35
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,198.97	0.00	0.35

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Idle Emissions (g/vehicle-day)								
						NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2024	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Pickup	LDT1	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2025	Operatives	LDA	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2025	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Pickup	LDT1	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Start Emissions (g/trip)								
						NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	15	Gasoline	0.24	0.30	2.97	0.00	0.00	0.00	69.36	0.07	0.03
2024	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Pickup	LDT1	Aggregate	15	Gasoline	0.42	0.59	5.61	0.00	0.00	0.00	87.44	0.11	0.04
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2025	Operatives	LDA	Aggregate	15	Gasoline	0.23	0.29	2.81	0.00	0.00	0.00	67.84	0.06	0.03
2025	Material Delivery	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Pickup	LDT1	Aggregate	15	Gasoline	0.39	0.55	5.22	0.00	0.00	0.00	85.38	0.11	0.04
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-

Construction Onroad Vehicle Activity and Emission Factors - Proposed and Reduced Project Scenarios

Offsite Onroad Vehicle Activity

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	One-way Trip Length (miles)	Annual Vehicle-Days (vehicle-days/year)	Annual Vehicle Mileage (miles/year)	Idle Hours (hours/trip)	Daily Vehicle-Days (vehicle-days/day)	Daily Vehicle Mileage (miles/day)	Location
2024	Operatives	LDA	Aggregate	60	Gasoline	14.7	5,500	160,600	0	20	584	Regular Backlands
2024	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	65	2,875	373,175	0	2	260	Regular Backlands
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	6.9	314	4,270	0	1	14	Regular Backlands
2024	Pickup	LDT1	Aggregate	15	Gasoline	14.7	175	5,110	0	1	29	Quay Repairs
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	65	175	22,715	0	1	130	Quay Repairs
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	6.9	175	2,380	0	1	14	Quay Repairs
2025	Operatives	LDA	Aggregate	60	Gasoline	14.7	770	22,484	0	10	292	Regular Backlands
2025	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	65	307	39,849	0	5	649	Regular Backlands
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	6.9	77	1,047	0	1	14	Regular Backlands
2025	Pickup	LDT1	Aggregate	15	Gasoline	14.7	86	2,511	0	1	29	Quay Repairs
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	65	86	11,163	0	1	130	Quay Repairs
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	6.9	86	1,170	0	1	14	Quay Repairs

[1] Trip Length for water trucks and LDA is based on CalEEMod default trip lengths and CalEEMod vehicle categories (Operatives, Pickup = Worker, Water Truck = Vendor
[2] Material delivery and waste material truck one-way trip length conservatively assumed maximum distance for B121-131 project delivery trucks
[3] Quay Repairs onroad vehicle activity unavaiable, annual vehicle days assumed full Quay Repairs project length

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Running Emissions (g/mile)												
						NOx	VOC	CO	SO2	PM10	PM10TW	PM10BW	PM2.5	PM2.5TW	PM2.5BW	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	60	Gasoline	0.04	0.01	0.61	0.00	0.00	0.01	0.00	0.00	0.00	0.00	282.78	0.00	0.00
2024	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	1.20	0.01	0.05	0.01	0.03	0.04	0.07	0.02	0.01	0.02	1,480.69	0.00	0.23
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,238.69	0.00	0.35
2024	Pickup	LDT1	Aggregate	15	Gasoline	0.23	0.11	2.93	0.01	0.01	0.01	0.01	0.01	0.00	0.00	532.72	0.02	0.02
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	1.20	0.01	0.05	0.01	0.03	0.04	0.07	0.02	0.01	0.02	1,480.69	0.00	0.23
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.81	0.04	0.42	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,238.69	0.00	0.35
2025	Operatives	LDA	Aggregate	60	Gasoline	0.03	0.01	0.58	0.00	0.00	0.01	0.00	0.00	0.00	0.00	276.97	0.00	0.00
2025	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	1.17	0.01	0.04	0.01	0.03	0.04	0.07	0.02	0.01	0.02	1,468.74	0.00	0.23
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,199.66	0.00	0.35
2025	Pickup	LDT1	Aggregate	15	Gasoline	0.21	0.10	2.70	0.01	0.01	0.01	0.01	0.01	0.00	0.00	522.69	0.02	0.01
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	1.17	0.01	0.04	0.01	0.03	0.04	0.07	0.02	0.01	0.02	1,468.74	0.00	0.23
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	4.79	0.04	0.40	0.02	0.01	0.04	0.14	0.01	0.01	0.05	2,199.66	0.00	0.35

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Idle Emissions (g/vehicle-day)								
						NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	60	Gasoline	-	-	-	-	-	-	-	-	-
2024	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Pickup	LDT1	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	40.72	3.45	50.56	0.08	0.02	0.02	8,348.62	0.16	1.32
2025	Operatives	LDA	Aggregate	60	Gasoline	-	-	-	-	-	-	-	-	-
2025	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Pickup	LDT1	Aggregate	15	Gasoline	-	-	-	-	-	-	-	-	-
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	39.97	3.45	50.64	0.08	0.02	0.02	8,246.33	0.16	1.30

Onsite Onroad Vehicle Emission Factors

Calendar Year	Vehicle	Vehicle Category	Model Year	Speed	Fuel	Start Emissions (g/trip)								
						NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2024	Operatives	LDA	Aggregate	60	Gasoline	0.24	0.30	2.97	0.00	0.00	0.00	69.36	0.07	0.03
2024	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Pickup	LDT1	Aggregate	15	Gasoline	0.42	0.59	5.61	0.00	0.00	0.00	87.44	0.11	0.04
2024	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	3.93	-	-	-	-	-	-	-	-
2024	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.93	-	-	-	-	-	-	-	-
2025	Operatives	LDA	Aggregate	60	Gasoline	0.23	0.29	2.81	0.00	0.00	0.00	67.84	0.06	0.03
2025	Material Delivery	T7 Tractor Class 8	Aggregate	60	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Pickup	LDT1	Aggregate	15	Gasoline	0.39	0.55	5.22	0.00	0.00	0.00	85.38	0.11	0.04
2025	Waste Material Truck	T7 Tractor Class 8	Aggregate	60	Diesel	3.95	-	-	-	-	-	-	-	-
2025	Water Truck	T7 Tractor Class 8	Aggregate	15	Diesel	3.95	-	-	-	-	-	-	-	-

Nonroad Equipment Characteristics and Activity - Product Import Terminal

Annual Activity Data and Characteristics

Calendar Year	Equipment	Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	Hours per Day (Hours/day)	Annual Equipment Days (days/year)	Load Factor
2024	Excavators	Construction and Mining - Excavators	Aggregate	50	50	Diesel	8	210	0.38
2024	Mobile Crane	Construction and Mining - Cranes	2015+	600	600	Diesel	7	290	0.29
2024	Stone column rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	52	0.50
2024	Wheel Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2024	Piling Rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	53	0.50
2024	Fork Lift	Industrial - Forklifts	2015+	100	100	Diesel	8	314	0.20
2024	MEWPs	Industrial - Aerial Lifts	Aggregate	50	50	Diesel	8	316	0.31
2024	Roller Compactor	Construction and Mining - Rollers	Aggregate	50	50	Diesel	6	77	0.38
2024	Air Compressor	Light Commercial - Misc - Air Compressors	Aggregate	50	50	Diesel	6	314	0.42
2024	Welding Rigs	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	183	0.50
2024	Sweeper	Construction and Mining - Other	2015+	100	100	Diesel	8	210	0.46
2024	Backhoe	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	105	0.37
2024	Skidsteer	Construction and Mining - Skid Steer Loaders	2015+	75	75	Diesel	8	104	0.37
2024	Generator	Light Commercial - Misc - Generator Sets	Aggregate	15	15	Diesel	8	470	0.31
2024	Scraper	Construction and Mining - Scrapers	2015+	600	600	Diesel	8	158	0.48
2024	Motor Grader	Construction and Mining - Graders	2015+	175	175	Diesel	8	79	0.41
2024	Dozer	Construction and Mining - Rubber Tired Dozers	2015+	600	600	Diesel	8	79	0.40
2024	Skip Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	262	0.37
2024	Excavator	Construction and Mining - Excavators	2015+	316	600	Diesel	6	175	0.38
2024	Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	128	175	Diesel	6	175	0.37
2024	Scraper	Construction and Mining - Scrapers	2015+	330	600	Diesel	6	132	0.48
2024	Forklift	Industrial - Forklifts	2015+	100	100	Diesel	6	175	0.20
2024	Concrete Pumper	Construction and Mining - Other	2015+	100	100	Diesel	6	22	0.42
2024	Compactor	Construction and Mining - Other	2015+	125	175	Diesel	6	0	0.42
2024	Diesel Hammer	Construction and Mining - Bore/Drill Rigs	2015+	70	100	Diesel	4	44	0.50
2024	Mobile Crane	Construction and Mining - Cranes	2015+	300	600	Diesel	6	87	0.29
2025	Excavators	Construction and Mining - Excavators	Aggregate	50	50	Diesel	8	0	0.38
2025	Mobile Crane	Construction and Mining - Cranes	2015+	600	600	Diesel	7	154	0.29
2025	Stone column rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2025	Wheel Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2025	Piling Rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2025	Fork Lift	Industrial - Forklifts	2015+	100	100	Diesel	8	77	0.20
2025	MEWPs	Industrial - Aerial Lifts	Aggregate	50	50	Diesel	8	104	0.31
2025	Roller Compactor	Construction and Mining - Rollers	Aggregate	50	50	Diesel	6	0	0.38
2025	Air Compressor	Light Commercial - Misc - Air Compressors	Aggregate	50	50	Diesel	6	77	0.42
2025	Welding Rigs	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	51	0.50
2025	Sweeper	Construction and Mining - Other	2015+	100	100	Diesel	8	0	0.46
2025	Backhoe	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2025	Skidsteer	Construction and Mining - Skid Steer Loaders	2015+	75	75	Diesel	8	0	0.37
2025	Generator	Light Commercial - Misc - Generator Sets	Aggregate	15	15	Diesel	8	77	0.31
2025	Scraper	Construction and Mining - Scrapers	2015+	600	600	Diesel	8	0	0.48
2025	Motor Grader	Construction and Mining - Graders	2015+	175	175	Diesel	8	0	0.41
2025	Dozer	Construction and Mining - Rubber Tired Dozers	2015+	600	600	Diesel	8	0	0.40
2025	Skip Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	77	0.37
2025	Excavator	Construction and Mining - Excavators	2015+	316	600	Diesel	6	64	0.38
2025	Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	128	175	Diesel	6	86	0.37
2025	Scraper	Construction and Mining - Scrapers	2015+	330	600	Diesel	6	0	0.48
2025	Forklift	Industrial - Forklifts	2015+	100	100	Diesel	6	86	0.20
2025	Concrete Pumper	Construction and Mining - Other	2015+	100	100	Diesel	6	64	0.42
2025	Compactor	Construction and Mining - Other	2015+	125	175	Diesel	6	86	0.42
2025	Diesel Hammer	Construction and Mining - Bore/Drill Rigs	2015+	70	100	Diesel	4	0	0.50
2025	Mobile Crane	Construction and Mining - Cranes	2015+	300	600	Diesel	6	0	0.29

[1] Equipment hours not provided by client are based on Table 3.2: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-d2020-4-0-full-merge.pdf?sfvrsn=12
[2] Equipment hours not provided by client or CalEEMod defaults are assumed 8 hours per day
[3] All equipment greater than 50 HP must be follow Tier 4 offroad standards (2015+ MYs)
[4] Data with missing horsepower information, maximum horsepower across the most populous horsepower BIN based on EMFAC is assumed

Daily Activity Data and Characteristics

Calendar Year	Equipment	Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	Hours per Day (Hours/day)	Daily Equipment Days (days)	Load Factor
2024	Excavators	Construction and Mining - Excavators	Aggregate	50	50	Diesel	8	0	0.38
2024	Mobile Crane	Construction and Mining - Cranes	2015+	600	600	Diesel	7	2	0.29
2024	Stone column rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2024	Wheel Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2024	Piling Rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2024	Fork Lift	Industrial - Forklifts	2015+	100	100	Diesel	8	1	0.20
2024	MEWPs	Industrial - Aerial Lifts	Aggregate	50	50	Diesel	8	2	0.31
2024	Roller Compactor	Construction and Mining - Rollers	Aggregate	50	50	Diesel	6	0	0.38
2024	Air Compressor	Light Commercial - Misc - Air Compressors	Aggregate	50	50	Diesel	6	1	0.42
2024	Welding Rigs	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	1	0.50
2024	Sweeper	Construction and Mining - Other	2015+	100	100	Diesel	8	0	0.46
2024	Backhoe	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2024	Skidsteer	Construction and Mining - Skid Steer Loaders	2015+	75	75	Diesel	8	0	0.37
2024	Generator	Light Commercial - Misc - Generator Sets	Aggregate	15	15	Diesel	8	1	0.31
2024	Scraper	Construction and Mining - Scrapers	2015+	600	600	Diesel	8	0	0.48
2024	Motor Grader	Construction and Mining - Graders	2015+	175	175	Diesel	8	0	0.41
2024	Dozer	Construction and Mining - Rubber Tired Dozers	2015+	600	600	Diesel	8	0	0.40
2024	Skip Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	1	0.37
2024	Excavator	Construction and Mining - Excavators	2015+	316	600	Diesel	6	1	0.38
2024	Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	128	175	Diesel	6	1	0.37
2024	Scraper	Construction and Mining - Scrapers	2015+	330	600	Diesel	6	1	0.48
2024	Forklift	Industrial - Forklifts	2015+	100	100	Diesel	6	1	0.20
2024	Concrete Pumper	Construction and Mining - Other	2015+	100	100	Diesel	6	0	0.42
2024	Compactor	Construction and Mining - Other	2015+	125	175	Diesel	6	0	0.42
2024	Diesel Hammer	Construction and Mining - Bore/Drill Rigs	2015+	70	100	Diesel	4	1	0.50
2024	Mobile Crane	Construction and Mining - Cranes	2015+	300	600	Diesel	6	1	0.29
2025	Excavators	Construction and Mining - Excavators	Aggregate	50	50	Diesel	8	0	0.38
2025	Mobile Crane	Construction and Mining - Cranes	2015+	600	600	Diesel	7	2	0.29
2025	Stone column rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2025	Wheel Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2025	Piling Rig	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	0	0.50
2025	Fork Lift	Industrial - Forklifts	2015+	100	100	Diesel	8	1	0.20
2025	MEWPs	Industrial - Aerial Lifts	Aggregate	50	50	Diesel	8	2	0.31
2025	Roller Compactor	Construction and Mining - Rollers	Aggregate	50	50	Diesel	6	0	0.38
2025	Air Compressor	Light Commercial - Misc - Air Compressors	Aggregate	50	50	Diesel	6	1	0.42
2025	Welding Rigs	Construction and Mining - Bore/Drill Rigs	2015+	100	100	Diesel	8	1	0.50
2025	Sweeper	Construction and Mining - Other	2015+	100	100	Diesel	8	0	0.46
2025	Backhoe	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	0	0.37
2025	Skidsteer	Construction and Mining - Skid Steer Loaders	2015+	75	75	Diesel	8	0	0.37
2025	Generator	Light Commercial - Misc - Generator Sets	Aggregate	15	15	Diesel	8	1	0.31
2025	Scraper	Construction and Mining - Scrapers	2015+	600	600	Diesel	8	0	0.48
2025	Motor Grader	Construction and Mining - Graders	2015+	175	175	Diesel	8	0	0.41
2025	Dozer	Construction and Mining - Rubber Tired Dozers	2015+	600	600	Diesel	8	0	0.40
2025	Skip Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	100	100	Diesel	8	1	0.37
2025	Excavator	Construction and Mining - Excavators	2015+	316	600	Diesel	6	1	0.38
2025	Loader	Construction and Mining - Tractors/Loaders/Backhoes	2015+	128	175	Diesel	6	1	0.37
2025	Scraper	Construction and Mining - Scrapers	2015+	330	600	Diesel	6	0	0.48
2025	Forklift	Industrial - Forklifts	2015+	100	100	Diesel	6	1	0.20
2025	Concrete Pumper	Construction and Mining - Other	2015+	100	100	Diesel	6	1	0.42
2025	Compactor	Construction and Mining - Other	2015+	125	175	Diesel	6	1	0.42
2025	Diesel Hammer	Construction and Mining - Bore/Drill Rigs	2015+	70	100	Diesel	4	0	0.50
2025	Mobile Crane	Construction and Mining - Cranes	2015+	300	600	Diesel	6	0	0.29

[1] Equipment hours not provided by client are based on Table 3.2: http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-d2020-4-0-full-merge.pdf?sfvrsn=12
[2] Equipment hours not provided by client or CalEEMod defaults are assumed 8 hours per day
[3] All equipment greater than 50 HP must be follow Tier 4 offroad standards (2015+ MYs)
[4] Data with missing horsepower information, maximum horsepower across the most populous horsepower BIN based on EMFAC is assumed

Offsite Fugitive Dust Emission Estimations for Onroad Vehicles on Paved Roads - Product Import Terminal Annual

				PM_{10}			$PM_{2.5}$		
					Emissions			Emissions	
Year	Activity	Equipment Type	Total Annual Vehicle Miles	Uncontrolled Em. Factor (lb/VMT)	(short tons/vehicle type)	(short tons/year)	Uncontrolled Em. Factor (lb/VMT)	(short tons/vehicle type)	(short tons/year)
2024	Construction	LDA	160,600	0.0009	6.97E-02	6.97E-02	0.0002	1.71E-02	1.71E-02
2024	Construction	T7 Tractor Class 8	373,175	0.0009	1.62E-01	1.62E-01	0.0002	3.98E-02	3.98E-02
2024	Construction	T7 Tractor Class 8	4,270	0.0009	1.85E-03	1.85E-03	0.0002	4.55E-04	4.55E-04
2024	Construction	LDT1	5,110	0.0009	2.22E-03	2.22E-03	0.0002	5.44E-04	5.44E-04
2024	Construction	T7 Tractor Class 8	22,715	0.0009	9.86E-03	9.86E-03	0.0002	2.42E-03	2.42E-03
2024	Construction	T7 Tractor Class 8	2,380	0.0009	1.03E-03	1.03E-03	0.0002	2.54E-04	2.54E-04
2025	Construction	LDA	22,484	0.0009	9.76E-03	9.76E-03	0.0002	2.40E-03	2.40E-03
2025	Construction	T7 Tractor Class 8	39,849	0.0009	1.73E-02	1.73E-02	0.0002	4.24E-03	4.24E-03
2025	Construction	T7 Tractor Class 8	1,047	0.0009	4.54E-04	4.54E-04	0.0002	1.12E-04	1.12E-04
2025	Construction	LDT1	2,511	0.0009	1.09E-03	1.09E-03	0.0002	2.68E-04	2.68E-04
2025	Construction	T7 Tractor Class 8	11,163	0.0009	4.84E-03	4.84E-03	0.0002	1.19E-03	1.19E-03
2025	Construction	T7 Tractor Class 8	1,170	0.0009	5.08E-04	5.08E-04	0.0002	1.25E-04	1.25E-04
				Total	**2.81E-01**	**2.81E-01**		**6.89E-02**	**6.89E-02**

Onsite Fugitive Dust Emission Estimations for Onroad Vehicles - Product Import Terminal Annual

				PM_{10}			$PM_{2.5}$		
					Emissions			Emissions	
Year	Activity	Equipment Type	Total Annual Vehicle Miles	Controlled Em. Factor (lb/VMT)	(short tons/vehicle type)	(short tons/year)	Controlled Em. Factor (lb/VMT)	(short tons/vehicle type)	(short tons/year)
2024	Construction	LDA	1,100	1.0953	2.71E-01	2.71E-01	0.1099	2.72E-02	2.72E-02
2024	Construction	T7 Tractor Class 8	575	1.0953	1.42E-01	1.42E-01	0.1099	1.42E-02	1.42E-02
2024	Construction	T7 Tractor Class 8	63	1.0953	1.55E-02	1.55E-02	0.1099	1.55E-03	1.55E-03
2024	Construction	LDT1	35	1.0953	8.63E-03	8.63E-03	0.1099	8.66E-04	8.66E-04
2024	Construction	T7 Tractor Class 8	35	1.0953	8.63E-03	8.63E-03	0.1099	8.66E-04	8.66E-04
2024	Construction	T7 Tractor Class 8	35	1.0953	8.63E-03	8.63E-03	0.1099	8.66E-04	8.66E-04
2025	Construction	LDA	154	0.0052	1.79E-04	1.79E-04	0.0013	4.40E-05	4.40E-05
2025	Construction	T7 Tractor Class 8	61	0.0052	7.14E-05	7.14E-05	0.0013	1.75E-05	1.75E-05
2025	Construction	T7 Tractor Class 8	15	0.0052	1.79E-05	1.79E-05	0.0013	4.40E-06	4.40E-06
2025	Construction	LDT1	17	0.0052	2.00E-05	2.00E-05	0.0013	4.91E-06	4.91E-06
2025	Construction	T7 Tractor Class 8	17	0.0052	2.00E-05	2.00E-05	0.0013	4.91E-06	4.91E-06
2025	Construction	T7 Tractor Class 8	17	0.0052	2.00E-05	2.00E-05	0.0013	4.91E-06	4.91E-06
				Total	**4.54E-01**	**4.54E-01**		**4.57E-02**	**4.57E-02**

Offsite Fugitive Dust Emission Estimations for Onroad Vehicles on Paved Roads - Product Import Terminal Daily

				PM_{10}			$PM_{2.5}$		
					Emissions			Emissions	
Year	Activity	Equipment Type	Total Daily Vehicle Miles	Uncontrolled Em. Factor (lb/VMT)	(lbs/vehicle type)	(lbs/day)	Uncontrolled Em. Factor (lb/VMT)	(lbs/vehicle type)	(lbs/day)
2024	Construction	LDA	584	0.0009	5.07E-01	5.07E-01	0.0002	1.24E-01	1.24E-01
2024	Construction	T7 Tractor Class 8	260	0.0009	2.25E-01	2.25E-01	0.0002	5.53E-02	5.53E-02
2024	Construction	T7 Tractor Class 8	14	0.0009	1.18E-02	1.18E-02	0.0002	2.90E-03	2.90E-03
2024	Construction	LDT1	29	0.0009	2.53E-02	2.53E-02	0.0002	6.22E-03	6.22E-03
2024	Construction	T7 Tractor Class 8	130	0.0009	1.13E-01	1.13E-01	0.0002	2.77E-02	2.77E-02
2024	Construction	T7 Tractor Class 8	14	0.0009	1.18E-02	1.18E-02	0.0002	2.90E-03	2.90E-03
2025	Construction	LDA	292	0.0009	2.53E-01	2.53E-01	0.0002	6.22E-02	6.22E-02
2025	Construction	T7 Tractor Class 8	649	0.0009	5.63E-01	5.63E-01	0.0002	1.38E-01	1.38E-01
2025	Construction	T7 Tractor Class 8	14	0.0009	1.18E-02	1.18E-02	0.0002	2.90E-03	2.90E-03
2025	Construction	LDT1	29	0.0009	2.53E-02	2.53E-02	0.0002	6.22E-03	6.22E-03
2025	Construction	T7 Tractor Class 8	130	0.0009	1.13E-01	1.13E-01	0.0002	2.77E-02	2.77E-02
2025	Construction	T7 Tractor Class 8	14	0.0009	1.18E-02	1.18E-02	0.0002	2.90E-03	2.90E-03
				Total	**1.87E+00**	**1.87E+00**		**4.60E-01**	**4.60E-01**

Onsite Fugitive Dust Emission Estimations for Onroad Vehicles on Unpaved Roads - Product Import Terminal Daily

				PM_{10}			$PM_{2.5}$		
					Emissions			Emissions	
Year	Activity	Equipment Type	Total Daily Vehicle Miles	Controlled Em. Factor (lb/VMT)	(lbs/vehicle type)	(lbs/day)	Controlled Em. Factor (lb/VMT)	(lbs/vehicle type)	(lbs/day)
2024	Construction	LDA	4	1.0953	1.97E+00	1.97E+00	0.1099	1.98E-01	1.98E-01
2024	Construction	T7 Tractor Class 8	0	1.0953	1.97E-01	1.97E-01	0.1099	1.98E-02	1.98E-02
2024	Construction	T7 Tractor Class 8	0	1.0953	9.86E-02	9.86E-02	0.1099	9.89E-03	9.89E-03
2024	Construction	LDT1	0	1.0953	9.86E-02	9.86E-02	0.1099	9.89E-03	9.89E-03
2024	Construction	T7 Tractor Class 8	0	1.0953	9.86E-02	9.86E-02	0.1099	9.89E-03	9.89E-03
2024	Construction	T7 Tractor Class 8	0	1.0953	9.86E-02	9.86E-02	0.1099	9.89E-03	9.89E-03
2025	Construction	LDA	2	0.0052	4.65E-03	4.65E-03	0.0013	1.14E-03	1.14E-03
2025	Construction	T7 Tractor Class 8	1	0.0052	2.33E-03	2.33E-03	0.0013	5.71E-04	5.71E-04
2025	Construction	T7 Tractor Class 8	0	0.0052	4.65E-04	4.65E-04	0.0013	1.14E-04	1.14E-04
2025	Construction	LDT1	0	0.0052	4.65E-04	4.65E-04	0.0013	1.14E-04	1.14E-04
2025	Construction	T7 Tractor Class 8	0	0.0052	4.65E-04	4.65E-04	0.0013	1.14E-04	1.14E-04
2025	Construction	T7 Tractor Class 8	0	0.0052	4.65E-04	4.65E-04	0.0013	1.14E-04	1.14E-04
				Total	**2.57E+00**	**2.57E+00**		**2.59E-01**	**2.59E-01**

Construction Emissions Summary

Construction Master Summary for Modeling

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0156	0.0031	0.2488	0.0011	0.0004	0.0033	0.0011	0.0004	0.0008	0.0004	115.7314	0.0008	0.0018	0.1611	0.0396	0.1660	0.0412	-
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.9907	0.0102	0.0378	0.0115	0.0208	0.0296	0.0570	0.0199	0.0074	0.0200	1,218.1790	0.0005	0.1919	0.3239	0.0795	0.4313	0.1267	0.0208
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0227	0.0002	0.0020	0.0001	0.0000	0.0002	0.0006	0.0000	0.0000	0.0002	10.5382	0.0000	0.0017	0.0019	0.0005	0.0027	0.0008	0.0000
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0013	0.0006	0.0165	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	3.0007	0.0001	0.0001	0.0022	0.0005	0.0024	0.0006	-
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0302	0.0003	0.0012	0.0004	0.0006	0.0009	0.0017	0.0006	0.0002	0.0006	37.0750	0.0000	0.0058	0.0099	0.0024	0.0131	0.0039	0.0006
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0126	0.0001	0.0011	0.0001	0.0000	0.0001	0.0004	0.0000	0.0000	0.0001	5.8732	0.0000	0.0009	0.0010	0.0003	0.0015	0.0004	0.0000
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0048	0.0009	0.0793	0.0004	0.0001	0.0011	0.0004	0.0001	0.0003	0.0001	38.1554	0.0002	0.0006	0.0542	0.0133	0.0559	0.0139	-
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.1948	0.0020	0.0072	0.0023	0.0042	0.0060	0.0116	0.0040	0.0015	0.0040	244.8213	0.0001	0.0386	0.0656	0.0161	0.0874	0.0257	0.0042
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0131	0.0001	0.0011	0.0001	0.0000	0.0001	0.0004	0.0000	0.0000	0.0001	6.0016	0.0000	0.0009	0.0011	0.0003	0.0016	0.0004	0.0000
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0006	0.0003	0.0075	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.4469	0.0001	0.0000	0.0011	0.0003	0.0012	0.0003	-
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0144	0.0001	0.0005	0.0002	0.0003	0.0004	0.0009	0.0003	0.0001	0.0003	18.0726	0.0000	0.0028	0.0048	0.0012	0.0064	0.0019	0.0003
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0062	0.0000	0.0005	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000	0.0001	2.8359	0.0000	0.0004	0.0005	0.0001	0.0007	0.0002	0.0000
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0215	0.0018	0.0267	0.0000	0.0000	-	-	0.0000	-	-	4.4097	0.0001	0.0007	-	-	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0012	0.0001	0.0015	0.0000	0.0000	-	-	0.0000	-	-	0.2408	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0007	0.0001	0.0008	0.0000	0.0000	-	-	0.0000	-	-	0.1342	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0007	0.0001	0.0008	0.0000	0.0000	-	-	0.0000	-	-	0.1342	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0043	0.0004	0.0054	0.0000	0.0000	-	-	0.0000	-	-	0.8825	0.0000	0.0001	-	-	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0007	0.0001	0.0008	0.0000	0.0000	-	-	0.0000	-	-	0.1379	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0003	0.0000	0.0004	0.0000	0.0000	-	-	0.0000	-	-	0.0651	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0003	0.0000	0.0004	0.0000	0.0000	-	-	0.0000	-	-	0.0651	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0036	0.0043	0.0450	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.2221	0.0010	0.0005	0.6267	0.0629	0.6268	0.0629	-
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0310	0.0000	0.0005	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000	0.0001	2.8379	0.0000	0.0004	0.2834	0.0284	0.2836	0.0285	0.0000
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1549	0.0000	0.0000	0.0155	0.0016	0.0155	0.0016	0.0000
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0001	0.0001	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0374	0.0000	0.0000	0.0086	0.0009	0.0086	0.0009	-
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0863	0.0000	0.0000	0.0086	0.0009	0.0086	0.0009	0.0000
Annual	tpy	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0863	0.0000	0.0000	0.0086	0.0009	0.0086	0.0009	0.0000
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0011	0.0014	0.0143	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7321	0.0003	0.0002	0.0010	0.0002	0.0010	0.0003	-
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0063	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.5650	0.0000	0.0001	0.0003	0.0001	0.0003	0.0001	0.0000
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0882	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0000	0.0001	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1238	0.0128	0.1484	0.0002	0.0042	-	-	0.0039	-	-	20.7685	0.0008	0.0000	-	-	0.0042	0.0039	0.0042
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.8241	0.0120	0.6499	0.0019	0.0332	-	-	0.0305	-	-	204.0531	0.0083	0.0000	-	-	0.0332	0.0305	0.0332
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0899	0.0031	0.1510	0.0002	0.0033	-	-	0.0031	-	-	24.0305	0.0010	0.0000	-	-	0.0033	0.0031	0.0033
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1851	0.0067	0.2951	0.0004	0.0082	-	-	0.0075	-	-	44.7476	0.0018	0.0000	-	-	0.0082	0.0075	0.0082
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0458	0.0016	0.0770	0.0001	0.0017	-	-	0.0016	-	-	12.2463	0.0005	0.0000	-	-	0.0017	0.0016	0.0017
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.2553	0.0064	0.3355	0.0005	0.0146	-	-	0.0134	-	-	48.9141	0.0020	0.0000	-	-	0.0146	0.0134	0.0146
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1859	0.0089	0.2004	0.0003	0.0014	-	-	0.0013	-	-	37.8043	0.0015	0.0000	-	-	0.0014	0.0013	0.0014
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0364	0.0051	0.0401	0.0001	0.0018	-	-	0.0017	-	-	5.6062	0.0002	0.0000	-	-	0.0018	0.0017	0.0018
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1932	0.0261	0.2445	0.0004	0.0069	-	-	0.0063	-	-	28.3253	0.0011	0.0000	-	-	0.0069	0.0063	0.0069
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.3165	0.0110	0.5315	0.0008	0.0117	-	-	0.0108	-	-	84.5689	0.0034	0.0000	-	-	0.0117	0.0108	0.0117
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.2493	0.0042	0.2741	0.0004	0.0160	-	-	0.0148	-	-	40.6525	0.0016	0.0000	-	-	0.0160	0.0148	0.0160
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0747	0.0027	0.1192	0.0002	0.0033	-	-	0.0030	-	-	18.0711	0.0007	0.0000	-	-	0.0033	0.0030	0.0033
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0486	0.0016	0.0825	0.0001	0.0015	-	-	0.0014	-	-	13.3875	0.0005	0.0000	-	-	0.0015	0.0014	0.0015
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.9232	0.0139	0.6892	0.0020	0.0357	-	-	0.0328	-	-	213.0865	0.0086	0.0000	-	-	0.0357	0.0328	0.0357
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1583	0.0024	0.1696	0.0002	0.0087	-	-	0.0080	-	-	26.4168	0.0011	0.0000	-	-	0.0087	0.0080	0.0087
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.6626	0.0055	0.5374	0.0008	0.0295	-	-	0.0271	-	-	87.9380	0.0036	0.0000	-	-	0.0295	0.0271	0.0295
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1865	0.0067	0.2974	0.0004	0.0083	-	-	0.0076	-	-	45.0918	0.0018	0.0000	-	-	0.0083	0.0076	0.0083
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.1154	0.0079	0.1464	0.0007	0.0040	-	-	0.0037	-	-	73.7505	0.0030	0.0000	-	-	0.0040	0.0037	0.0040
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0756	0.0029	0.1697	0.0003	0.0038	-	-	0.0035	-	-	28.8487	0.0012	0.0000	-	-	0.0038	0.0035	0.0038
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.3166	0.0048	0.2363	0.0007	0.0122	-	-	0.0113	-	-	73.0686	0.0030	0.0000	-	-	0.0122	0.0113	0.0122
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0639	0.0016	0.0840	0.0001	0.0037	-	-	0.0034	-	-	12.2519	0.0005	0.0000	-	-	0.0037	0.0034	0.0037
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0181	0.0003	0.0199	0.0000	0.0012	-	-	0.0011	-	-	2.9445	0.0001	0.0000	-	-	0.0012	0.0011	0.0012
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0133	0.0005	0.0223	0.0000	0.0005	-	-	0.0005	-	-	3.5407	0.0001	0.0000	-	-	0.0005	0.0005	0.0005
Annual	tpy	Proposed Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.1060	0.0015	0.0836	0.0002	0.0043	-	-	0.0039	-	-	26.2354	0.0011	0.0000	-	-	0.0043	0.0039	0.0043
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.6033	0.0109	0.5146	0.0015	0.0245	-	-	0.0225	-	-	163.2589	0.0066	0.0000	-	-	0.0245	0.0225	0.0245
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0339	0.0015	0.0588	0.0001	0.0013	-	-	0.0012	-	-	8.9457	0.0004	0.0000	-	-	0.0013	0.0012	0.0013
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0933	0.0028	0.1315	0.0002	0.0049	-	-	0.0045	-	-	19.2659	0.0008	0.0000	-	-	0.0049	0.0045	0.0049
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.2021	0.0094	0.2168	0.0004	0.0015	-	-	0.0013	-	-	41.2336	0.0017	0.0000	-	-	0.0015	0.0013	0.0015
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0479	0.0064	0.0536	0.0001	0.0022	-	-	0.0020	-	-	7.6462	0.0003	0.0000	-	-	0.0022	0.0020	0.0022
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1088	0.0142	0.1409	0.0002	0.0034	-	-	0.0032	-	-	16.4186	0.0007	0.0000	-	-	0.0034	0.0032	0.0034
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0789	0.0033	0.1469	0.0002	0.0023	-	-	0.0021	-	-	23.6196	0.0010	0.0000	-	-	0.0023	0.0021	0.0023
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0837	0.0017	0.1016	0.0001	0.0050	-	-	0.0046	-	-	15.2725	0.0006	0.0000	-	-	0.0050	0.0046	0.0050
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.2537	0.0053	0.2094	0.0006	0.0098	-	-	0.0090	-	-	70.2910	0.0029	0.0000	-	-	0.0098	0.0090	0.0098
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0938	0.0018	0.1121	0.0002	0.0052	-	-	0.0048	-	-	17.4218	0.0007	0.0000	-	-	0.0052	0.0048	0.0052
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1011	0.0044	0.1752	0.0002	0.0039	-	-	0.0036	-	-	26.6651	0.0011	0.0000	-	-	0.0039	0.0036	0.0039
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0365	0.0033	0.0533	0.0002	0.0013	-	-	0.0012	-	-	26.9348	0.0011	0.0000	-	-	0.0013	0.0012	0.0013
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0319	0.0016	0.0832	0.0001	0.0016	-	-	0.0015	-	-	14.1693	0.0006	0.0000	-	-	0.0016	0.0015	0.0016
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0292	0.0009	0.0412	0.0001	0.0015	-	-	0.0014	-	-	6.0323	0.0002	0.0000	-	-	0.0015	0.0014	0.0015
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0469	0.0010	0.0569	0.0001	0.0028	-	-	0.0026	-	-	8.5544	0.0003	0.0000	-	-	0.0028	0.0026	0.0028
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0597	0.0011	0.0857	0.0001	0.0031	-	-	0.0029	-	-	14.3345	0.0006	0.0000	-	-	0.0031	0.0029	0.0031
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2024	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3363	0.0509	0.3363	0.0509	-
Annual	tpy	Proposed Project	Controlled	2024	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8961	0.2871	1.8961	0.2871	-
Annual	tpy	Proposed Project	Controlled	2024	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0152	0.0023	0.0152	0.0023	-
Annual	tpy	Proposed Project	Controlled	2025	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Annual	tpy	Proposed Project	Controlled	2025	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0075	0.0011	0.0075	0.0011	-
Annual	tpy	Proposed Project	Controlled	2024	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0836	0.0125	0.0836	0.0125	-
Annual	tpy	Proposed Project	Controlled	2024	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0466	0.0070	0.0466	0.0070	-
Annual	tpy	Proposed Project	Controlled	2025	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0274	0.0041	0.0274	0.0041	-
Annual	tpy	Proposed Project	Controlled	2025	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0229	0.0034	0.0229	0.0034	-
Annual	tpy	Proposed Project	Controlled	2024	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0204	0.0007	0.0043	0.0000	0.0003	0	0	0.0002	0	0	2.8144	0.0000	0.0001	0	0	0.0003	0.0002	0.0003
Annual	tpy	Proposed Project	Controlled	2024	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0020	0.0001	0.0005	0.0000	0.0000	0	0	0.0000	0	0	0.3147	0.0000	0.0000	0	0	0.0000	0.0000	0.0000
Annual	tpy	Proposed Project	Controlled	2025	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0058	0.0002	0.0012	0.0000	0.0001	0	0	0.0001	0	0	0.8041	0.0000	0.0000	0	0	0.0001	0.0001	0.0001
Annual	tpy	Proposed Project	Controlled	2025	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0006	0.0000	0.0001	0.0000	0.0000	0	0	0.0000	0	0	0.0899	0.0000	0.0000	0	0	0.0000	0.0000	0.0000
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.1352	0.0265	2.1523	0.0099	0.0038	0.0283	0.0099	0.0035	0.0071	0.0035	1,001.2168	0.0070	0.0152	1.3940	0.3422	1.4360	0.3562	-
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	1.3783	0.0141	0.0526	0.0160	0.0289	0.0412	0.0794	0.0276	0.0103	0.0278	1,694.8595	0.0007	0.2670	0.4507	0.1106	0.6001	0.1763	0.0289
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.1443	0.0011	0.0125	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	67.1224	0.0001	0.0106	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0151	0.0069	0.1885	0.0003	0.0004	0.0005	0.0008	0.0004	0.0001	0.0003	34.2936	0.0015	0.0010	0.0253	0.0062	0.0271	0.0070	-
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.3446	0.0035	0.0131	0.0040	0.0072	0.0103	0.0198	0.0069	0.0026	0.0069	423.7149	0.0002	0.0668	0.1127	0.0277	0.1500	0.0441	0.0072
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.1443	0.0011	0.0125	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	67.1224	0.0001	0.0106	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0785	0.0152	1.2969	0.0062	0.0024	0.0180	0.0063	0.0022	0.0045	0.0022	624.0372	0.0041	0.0092	0.8871	0.2177	0.9138	0.2266	-
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	5.0157	0.0512	0.1860	0.0597	0.1076	0.1545	0.2978	0.1030	0.0386	0.1042	6,304.4177	0.0024	0.9933	1.6900	0.4148	2.2500	0.6607	0.1076
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.1435	0.0011	0.0121	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	65.9522	0.0001	0.0104	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0137	0.0062	0.1738	0.0003	0.0004	0.0005	0.0008	0.0004	0.0001	0.0003	33.6485	0.0014	0.0010	0.0253	0.0062	0.0271	0.0070	-
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.3344	0.0034	0.0124	0.0040	0.0072	0.0103	0.0199	0.0069	0.0026	0.0069	420.2945	0.0002	0.0662	0.1127	0.0277	0.1500	0.0440	0.0072
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.1435	0.0011	0.0121	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	65.9522	0.0001	0.0104	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0299	0.0025	0.0372	0.0001	0.0000	-	-	0.0000	-	-	6.1352	0.0001	0.0010	-	-	0.0000	0.0000	0.0000
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0075	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5338	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0075	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5338	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0075	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5338	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.1101	0.0095	0.1396	0.0002	0.0000	-	-	0.0000	-	-	22.7251	0.0004	0.0036	-	-	0.0000	0.0000	0.0000
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0073	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5150	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0073	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5150	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0073	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5150	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0308	0.0376	0.3890	0.0002	0.0004	0.0002	0.0002	0.0003	0.0000	0.0001	19.2235	0.0084	0.0041	5.4218	0.5440	5.4226	0.5445	-
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0432	0.0001	0.0007	0.0000	0.0000	0.0001	0.0002	0.0000	0.0000	0.0001	3.9484	0.0000	0.0006	0.3943	0.0396	0.3946	0.0397	0.0000
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9868	0.0000	0.0002	0.0986	0.0099	0.0987	0.0099	0.0000
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0010	0.0013	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4277	0.0003	0.0001	0.0986	0.0099	0.0986	0.0099	-
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9868	0.0000	0.0002	0.0986	0.0099	0.0987	0.0099	0.0000
Daily	lbd	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9868	0.0000	0.0002	0.0986	0.0099	0.0987	0.0099	0.0000
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0187	0.0224	0.2346	0.0001	0.0002	0.0001	0.0001	0.0002	0.0000	0.0000	11.9740	0.0050	0.0025	0.0163	0.0040	0.0168	0.0043	-
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.1623	0.0002	0.0027	0.0001	0.0000	0.0002	0.0009	0.0000	0.0001	0.0003	14.5483	0.0000	0.0023	0.0070	0.0017	0.0082	0.0021	0.0000
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9696	0.0000	0.0002	0.0005	0.0001	0.0005	0.0001	0.0000
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0010	0.0012	0.0127	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4187	0.0002	0.0001	0.0005	0.0001	0.0005	0.0001	-
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9696	0.0000	0.0002	0.0005	0.0001	0.0005	0.0001	0.0000
Daily	lbd	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9696	0.0000	0.0002	0.0005	0.0001	0.0005	0.0001	0.0000
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	11.3672	0.1654	8.9645	0.0260	0.4574	-	-	0.4208	-	-	2,814.5289	0.1142	0.0000	-	-	0.4574	0.4208	0.4574
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.9489	0.0486	2.5608	0.0034	0.1115	-	-	0.1025	-	-	373.3908	0.0151	0.0000	-	-	0.1115	0.1025	0.1115
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	3.1376	0.1499	3.3817	0.0059	0.0235	-	-	0.0217	-	-	638.0479	0.0259	0.0000	-	-	0.0235	0.0217	0.0235
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.2305	0.1661	1.5571	0.0023	0.0439	-	-	0.0404	-	-	180.4163	0.0073	0.0000	-	-	0.0439	0.0404	0.0439
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	3.4595	0.1205	5.8084	0.0085	0.1281	-	-	0.1181	-	-	924.2511	0.0375	0.0000	-	-	0.1281	0.1181	0.1281
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.4235	0.0514	2.2700	0.0032	0.0631	-	-	0.0581	-	-	344.2126	0.0140	0.0000	-	-	0.0631	0.0581	0.0631
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.3193	0.0900	1.6737	0.0078	0.0454	-	-	0.0417	-	-	842.8634	0.0342	0.0000	-	-	0.0454	0.0417	0.0454
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.8643	0.0334	1.9398	0.0030	0.0430	-	-	0.0395	-	-	329.7001	0.0134	0.0000	-	-	0.0430	0.0395	0.0430
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	4.7965	0.0722	3.5807	0.0102	0.1853	-	-	0.1705	-	-	1,107.1011	0.0449	0.0000	-	-	0.1853	0.1705	0.1853
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.7308	0.0182	0.9603	0.0013	0.0418	-	-	0.0385	-	-	140.0215	0.0057	0.0000	-	-	0.0418	0.0385	0.0418
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.6024	0.0210	1.0114	0.0015	0.0223	-	-	0.0206	-	-	160.9393	0.0065	0.0000	-	-	0.0223	0.0206	0.0223
Daily	lbd	Proposed Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	2.4358	0.0355	1.9210	0.0056	0.0980	-	-	0.0902	-	-	603.1133	0.0245	0.0000	-	-	0.0980	0.0902	0.0980
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	10.4021	0.1884	8.8719	0.0260	0.4220	-	-	0.3883	-	-	2,814.8110	0.1142	0.0000	-	-	0.4220	0.3883	0.4220
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.8108	0.0539	2.5541	0.0035	0.0958	-	-	0.0881	-	-	374.0948	0.0152	0.0000	-	-	0.0958	0.0881	0.0958
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	3.1274	0.1453	3.3551	0.0059	0.0225	-	-	0.0207	-	-	638.0450	0.0259	0.0000	-	-	0.0225	0.0207	0.0225
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.1957	0.1557	1.5480	0.0023	0.0378	-	-	0.0348	-	-	180.4245	0.0073	0.0000	-	-	0.0378	0.0348	0.0378
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	3.0926	0.1289	5.7592	0.0085	0.0900	-	-	0.0828	-	-	926.2597	0.0376	0.0000	-	-	0.0900	0.0828	0.0900
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.3049	0.0565	2.2608	0.0032	0.0502	-	-	0.0462	-	-	344.0660	0.0140	0.0000	-	-	0.0502	0.0462	0.0502
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.1408	0.0955	1.6660	0.0078	0.0403	-	-	0.0370	-	-	841.7124	0.0341	0.0000	-	-	0.0403	0.0370	0.0403
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.7409	0.0366	1.9353	0.0030	0.0367	-	-	0.0338	-	-	329.5190	0.0134	0.0000	-	-	0.0367	0.0338	0.0367
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.6790	0.0202	0.9578	0.0013	0.0359	-	-	0.0330	-	-	140.2856	0.0057	0.0000	-	-	0.0359	0.0330	0.0359
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.4643	0.0305	1.7790	0.0025	0.0873	-	-	0.0803	-	-	267.3253	0.0108	0.0000	-	-	0.0873	0.0803	0.0873
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.3886	0.0258	1.9925	0.0031	0.0723	-	-	0.0665	-	-	333.3604	0.0135	0.0000	-	-	0.0723	0.0665	0.0723
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2024	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0043	0.0006	0.0043	0.0006	-
Daily	lbd	Proposed Project	Controlled	2024	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0240	0.0036	0.0240	0.0036	-
Daily	lbd	Proposed Project	Controlled	2024	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0001	0.0000	0.0001	0.0000	-
Daily	lbd	Proposed Project	Controlled	2025	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Daily	lbd	Proposed Project	Controlled	2025	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0001	0.0000	0.0001	0.0000	-
Daily	lbd	Proposed Project	Controlled	2024	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5324	0.0799	0.5324	0.0799	-
Daily	lbd	Proposed Project	Controlled	2024	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5324	0.0799	0.5324	0.0799	-
Daily	lbd	Proposed Project	Controlled	2025	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5324	0.0799	0.5324	0.0799	-
Daily	lbd	Proposed Project	Controlled	2025	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5324	0.0799	0.5324	0.0799	-
Daily	lbd	Proposed Project	Controlled	2024	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	40.7220	1.4191	8.5724	0.0639	0.5251	0	0	0.4831	0	0	5,628.7352	0.0475	0.2676	0	0	0.5251	0.4831	0.5251
Daily	lbd	Proposed Project	Controlled	2024	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	3.9663	0.1106	1.0115	0.0071	0.0810	0	0	0.0745	0	0	629.3849	0.0052	0.0299	0	0	0.0810	0.0745	0.0810
Daily	lbd	Proposed Project	Controlled	2025	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0
Daily	lbd	Proposed Project	Controlled	2025	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0

Construction Master Summary for Modeling

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0156	0.0031	0.2488	0.0011	0.0004	0.0033	0.0011	0.0004	0.0008	0.0004	115.7314	0.0008	0.0018	0.1611	0.0396	0.1660	0.0412	0
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.9907	0.0102	0.0378	0.0115	0.0208	0.0296	0.0570	0.0199	0.0074	0.0200	1,218.1790	0.0005	0.1919	0.3239	0.0795	0.4313	0.1267	0.0208
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0227	0.0002	0.0020	0.0001	0.0000	0.0002	0.0006	0.0000	0.0000	0.0002	10.5382	0.0000	0.0017	0.0019	0.0005	0.0027	0.0008	0.0000
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0013	0.0006	0.0165	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	3.0007	0.0001	0.0001	0.0022	0.0005	0.0024	0.0006	0
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0302	0.0003	0.0012	0.0004	0.0006	0.0009	0.0017	0.0006	0.0002	0.0006	37.0750	0.0000	0.0058	0.0099	0.0024	0.0131	0.0039	0.0006
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0126	0.0001	0.0011	0.0001	0.0000	0.0001	0.0004	0.0000	0.0000	0.0001	5.8732	0.0000	0.0009	0.0010	0.0003	0.0015	0.0004	0.0000
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0048	0.0009	0.0793	0.0004	0.0001	0.0011	0.0004	0.0001	0.0003	0.0001	38.1554	0.0002	0.0006	0.0542	0.0133	0.0559	0.0139	0
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.1948	0.0020	0.0072	0.0023	0.0042	0.0060	0.0116	0.0040	0.0015	0.0040	244.8213	0.0001	0.0386	0.0656	0.0161	0.0874	0.0257	0.0042
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0131	0.0001	0.0011	0.0001	0.0000	0.0001	0.0004	0.0000	0.0000	0.0001	6.0016	0.0000	0.0009	0.0011	0.0003	0.0016	0.0004	0.0000
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0006	0.0003	0.0075	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.4469	0.0001	0.0000	0.0011	0.0003	0.0012	0.0003	0
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0144	0.0001	0.0005	0.0002	0.0003	0.0004	0.0009	0.0003	0.0001	0.0003	18.0726	0.0000	0.0028	0.0048	0.0012	0.0064	0.0019	0.0003
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0062	0.0000	0.0005	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000	0.0001	2.8359	0.0000	0.0004	0.0005	0.0001	0.0007	0.0002	0.0000
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0215	0.0018	0.0267	0.0000	0.0000	0	0	0.0000	0	0	4.4097	0.0001	0.0007	0	0	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0012	0.0001	0.0015	0.0000	0.0000	0	0	0.0000	0	0	0.2408	0.0000	0.0000	0	0	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0007	0.0001	0.0008	0.0000	0.0000	0	0	0.0000	0	0	0.1342	0.0000	0.0000	0	0	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0007	0.0001	0.0008	0.0000	0.0000	0	0	0.0000	0	0	0.1342	0.0000	0.0000	0	0	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0043	0.0004	0.0054	0.0000	0.0000	0	0	0.0000	0	0	0.8825	0.0000	0.0001	0	0	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0007	0.0001	0.0008	0.0000	0.0000	0	0	0.0000	0	0	0.1379	0.0000	0.0000	0	0	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0003	0.0000	0.0004	0.0000	0.0000	0	0	0.0000	0	0	0.0651	0.0000	0.0000	0	0	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0003	0.0000	0.0004	0.0000	0.0000	0	0	0.0000	0	0	0.0651	0.0000	0.0000	0	0	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0036	0.0043	0.0450	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.2221	0.0010	0.0005	0.6267	0.0629	0.6268	0.0629	0
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0310	0.0000	0.0005	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000	0.0001	2.8379	0.0000	0.0004	0.2834	0.0284	0.2836	0.0285	0.0000
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1549	0.0000	0.0000	0.0155	0.0016	0.0155	0.0016	0.0000
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0001	0.0001	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0374	0.0000	0.0000	0.0086	0.0009	0.0086	0.0009	0
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0863	0.0000	0.0000	0.0086	0.0009	0.0086	0.0009	0.0000
Annual	tpy	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0863	0.0000	0.0000	0.0086	0.0009	0.0086	0.0009	0.0000
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0011	0.0014	0.0143	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7321	0.0003	0.0002	0.0010	0.0002	0.0010	0.0003	0
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0063	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.5650	0.0000	0.0001	0.0003	0.0001	0.0003	0.0001	0.0000
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0882	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0000	0.0001	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1238	0.0128	0.1484	0.0002	0.0042	0	0	0.0039	0	0	20.7685	0.0008	0.0000	0	0	0.0042	0.0039	0.0042
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.8241	0.0120	0.6499	0.0019	0.0332	0	0	0.0305	0	0	204.0531	0.0083	0.0000	0	0	0.0332	0.0305	0.0332
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0899	0.0031	0.1510	0.0002	0.0033	0	0	0.0031	0	0	24.0305	0.0010	0.0000	0	0	0.0033	0.0031	0.0033
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1851	0.0067	0.2951	0.0004	0.0082	0	0	0.0075	0	0	44.7476	0.0018	0.0000	0	0	0.0082	0.0075	0.0082
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0458	0.0016	0.0770	0.0001	0.0017	0	0	0.0016	0	0	12.2463	0.0005	0.0000	0	0	0.0017	0.0016	0.0017
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.2553	0.0064	0.3355	0.0005	0.0146	0	0	0.0134	0	0	48.9141	0.0020	0.0000	0	0	0.0146	0.0134	0.0146
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1859	0.0089	0.2004	0.0003	0.0014	0	0	0.0013	0	0	37.8043	0.0015	0.0000	0	0	0.0014	0.0013	0.0014
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0364	0.0051	0.0401	0.0001	0.0018	0	0	0.0017	0	0	5.6062	0.0002	0.0000	0	0	0.0018	0.0017	0.0018
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1932	0.0261	0.2445	0.0004	0.0069	0	0	0.0063	0	0	28.3253	0.0011	0.0000	0	0	0.0069	0.0063	0.0069
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.3165	0.0110	0.5315	0.0008	0.0117	0	0	0.0108	0	0	84.5689	0.0034	0.0000	0	0	0.0117	0.0108	0.0117
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.2493	0.0042	0.2741	0.0004	0.0160	0	0	0.0148	0	0	40.6525	0.0016	0.0000	0	0	0.0160	0.0148	0.0160
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0747	0.0027	0.1192	0.0002	0.0033	0	0	0.0030	0	0	18.0711	0.0007	0.0000	0	0	0.0033	0.0030	0.0033
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0486	0.0016	0.0825	0.0001	0.0015	0	0	0.0014	0	0	13.3875	0.0005	0.0000	0	0	0.0015	0.0014	0.0015
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.9232	0.0139	0.6892	0.0020	0.0357	0	0	0.0328	0	0	213.0865	0.0086	0.0000	0	0	0.0357	0.0328	0.0357
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1583	0.0024	0.1696	0.0002	0.0087	0	0	0.0080	0	0	26.4168	0.0011	0.0000	0	0	0.0087	0.0080	0.0087
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.6626	0.0055	0.5374	0.0008	0.0295	0	0	0.0271	0	0	87.9380	0.0036	0.0000	0	0	0.0295	0.0271	0.0295
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1865	0.0067	0.2974	0.0004	0.0083	0	0	0.0076	0	0	45.0918	0.0018	0.0000	0	0	0.0083	0.0076	0.0083
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.1154	0.0079	0.1464	0.0007	0.0040	0	0	0.0037	0	0	73.7505	0.0030	0.0000	0	0	0.0040	0.0037	0.0040
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0756	0.0029	0.1697	0.0003	0.0038	0	0	0.0035	0	0	28.8487	0.0012	0.0000	0	0	0.0038	0.0035	0.0038
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.3166	0.0048	0.2363	0.0007	0.0122	0	0	0.0113	0	0	73.0686	0.0030	0.0000	0	0	0.0122	0.0113	0.0122
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0639	0.0016	0.0840	0.0001	0.0037	0	0	0.0034	0	0	12.2519	0.0005	0.0000	0	0	0.0037	0.0034	0.0037
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0181	0.0003	0.0199	0.0000	0.0012	0	0	0.0011	0	0	2.9445	0.0001	0.0000	0	0	0.0012	0.0011	0.0012
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0133	0.0005	0.0223	0.0000	0.0005	0	0	0.0005	0	0	3.5407	0.0001	0.0000	0	0	0.0005	0.0005	0.0005
Annual	tpy	Reduced Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.1060	0.0015	0.0836	0.0002	0.0043	0	0	0.0039	0	0	26.2354	0.0011	0.0000	0	0	0.0043	0.0039	0.0043
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.6033	0.0109	0.5146	0.0015	0.0245	0	0	0.0225	0	0	163.2589	0.0066	0.0000	0	0	0.0245	0.0225	0.0245
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0339	0.0015	0.0588	0.0001	0.0013	0	0	0.0012	0	0	8.9457	0.0004	0.0000	0	0	0.0013	0.0012	0.0013
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0933	0.0028	0.1315	0.0002	0.0049	0	0	0.0045	0	0	19.2659	0.0008	0.0000	0	0	0.0049	0.0045	0.0049
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.2021	0.0094	0.2168	0.0004	0.0015	0	0	0.0013	0	0	41.2336	0.0017	0.0000	0	0	0.0015	0.0013	0.0015
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0479	0.0064	0.0536	0.0001	0.0022	0	0	0.0020	0	0	7.6462	0.0003	0.0000	0	0	0.0022	0.0020	0.0022
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1088	0.0142	0.1409	0.0002	0.0034	0	0	0.0032	0	0	16.4186	0.0007	0.0000	0	0	0.0034	0.0032	0.0034
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0789	0.0033	0.1469	0.0002	0.0023	0	0	0.0021	0	0	23.6196	0.0010	0.0000	0	0	0.0023	0.0021	0.0023
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0837	0.0017	0.1016	0.0001	0.0050	0	0	0.0046	0	0	15.2725	0.0006	0.0000	0	0	0.0050	0.0046	0.0050
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.2537	0.0053	0.2094	0.0006	0.0098	0	0	0.0090	0	0	70.2910	0.0029	0.0000	0	0	0.0098	0.0090	0.0098
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0938	0.0018	0.1121	0.0002	0.0052	0	0	0.0048	0	0	17.4218	0.0007	0.0000	0	0	0.0052	0.0048	0.0052
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1011	0.0044	0.1752	0.0002	0.0039	0	0	0.0036	0	0	26.6651	0.0011	0.0000	0	0	0.0039	0.0036	0.0039
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0365	0.0031	0.0533	0.0002	0.0013	0	0	0.0012	0	0	26.9348	0.0011	0.0000	0	0	0.0013	0.0012	0.0013
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0319	0.0016	0.0832	0.0001	0.0016	0	0	0.0015	0	0	14.1693	0.0006	0.0000	0	0	0.0016	0.0015	0.0016
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0292	0.0009	0.0412	0.0001	0.0015	0	0	0.0014	0	0	6.0323	0.0002	0.0000	0	0	0.0015	0.0014	0.0015
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0469	0.0010	0.0569	0.0001	0.0028	0	0	0.0026	0	0	8.5544	0.0003	0.0000	0	0	0.0028	0.0026	0.0028
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0597	0.0011	0.0857	0.0001	0.0031	0	0	0.0029	0	0	14.3345	0.0006	0.0000	0	0	0.0031	0.0029	0.0031
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2024	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3363	0.0509	0.3363	0.0509	0
Annual	tpy	Reduced Project	Controlled	2024	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	1.8961	0.2871	1.8961	0.2871	0
Annual	tpy	Reduced Project	Controlled	2024	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0152	0.0023	0.0152	0.0023	0
Annual	tpy	Reduced Project	Controlled	2025	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Controlled	2025	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0075	0.0011	0.0075	0.0011	0
Annual	tpy	Reduced Project	Controlled	2024	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0836	0.0125	0.0836	0.0125	0
Annual	tpy	Reduced Project	Controlled	2024	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0466	0.0070	0.0466	0.0070	0
Annual	tpy	Reduced Project	Controlled	2025	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0274	0.0041	0.0274	0.0041	0
Annual	tpy	Reduced Project	Controlled	2025	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0229	0.0034	0.0229	0.0034	0
Annual	tpy	Reduced Project	Controlled	2024	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0204	0.0007	0.0043	0.0000	0.0003	0	0	0.0002	0	0	2.8144	0.0000	0.0001	0	0	0.0003	0.0002	0.0003
Annual	tpy	Reduced Project	Controlled	2024	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0020	0.0001	0.0005	0.0000	0.0000	0	0	0.0000	0	0	0.3147	0.0000	0.0000	0	0	0.0000	0.0000	0.0000
Annual	tpy	Reduced Project	Controlled	2025	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0058	0.0002	0.0012	0.0000	0.0001	0	0	0.0001	0	0	0.8041	0.0000	0.0000	0	0	0.0001	0.0001	0.0001
Annual	tpy	Reduced Project	Controlled	2025	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0006	0.0000	0.0001	0.0000	0.0000	0	0	0.0000	0	0	0.0899	0.0000	0.0000	0	0	0.0000	0.0000	0.0000
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.1352	0.0265	2.1523	0.0099	0.0038	0.0283	0.0099	0.0035	0.0071	0.0035	1,001.2168	0.0070	0.0152	1.3940	0.3422	1.4360	0.3562	0
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	1.3783	0.0141	0.0526	0.0160	0.0289	0.0412	0.0794	0.0276	0.0103	0.0278	1,694.8595	0.0007	0.2670	0.4507	0.1106	0.6001	0.1763	0.0289
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.1443	0.0011	0.0125	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	67.1224	0.0001	0.0106	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0151	0.0069	0.1885	0.0003	0.0004	0.0005	0.0008	0.0004	0.0001	0.0003	34.2936	0.0015	0.0010	0.0253	0.0062	0.0271	0.0070	0
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.3446	0.0035	0.0131	0.0040	0.0072	0.0103	0.0198	0.0069	0.0026	0.0069	423.7149	0.0002	0.0668	0.1127	0.0277	0.1500	0.0441	0.0072
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.1443	0.0011	0.0125	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	67.1224	0.0001	0.0106	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0785	0.0152	1.2969	0.0062	0.0024	0.0180	0.0063	0.0022	0.0045	0.0022	624.0372	0.0041	0.0092	0.8871	0.2177	0.9138	0.2266	0
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	5.0157	0.0512	0.1860	0.0597	0.1076	0.1545	0.2978	0.1030	0.0386	0.1042	6,304.4177	0.0024	0.9933	1.6900	0.4148	2.2500	0.6607	0.1076
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.1435	0.0011	0.0121	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	65.9522	0.0001	0.0104	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0137	0.0062	0.1738	0.0003	0.0004	0.0005	0.0008	0.0004	0.0001	0.0003	33.6485	0.0014	0.0010	0.0253	0.0062	0.0271	0.0070	0
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.3344	0.0034	0.0124	0.0040	0.0072	0.0103	0.0199	0.0069	0.0026	0.0069	420.2945	0.0002	0.0662	0.1127	0.0277	0.1500	0.0440	0.0072
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.1435	0.0011	0.0121	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	65.9522	0.0001	0.0104	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0299	0.0025	0.0372	0.0001	0.0000	0	0	0.0000	0	0	6.1352	0.0001	0.0010	0	0	0.0000	0.0000	0.0000
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0075	0.0006	0.0093	0.0000	0.0000	0	0	0.0000	0	0	1.5338	0.0000	0.0002	0	0	0.0000	0.0000	0.0000
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0075	0.0006	0.0093	0.0000	0.0000	0	0	0.0000	0	0	1.5338	0.0000	0.0002	0	0	0.0000	0.0000	0.0000
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0075	0.0006	0.0093	0.0000	0.0000	0	0	0.0000	0	0	1.5338	0.0000	0.0002	0	0	0.0000	0.0000	0.0000
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.1101	0.0095	0.1396	0.0002	0.0000	0	0	0.0000	0	0	22.7251	0.0004	0.0036	0	0	0.0000	0.0000	0.0000
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0073	0.0006	0.0093	0.0000	0.0000	0	0	0.0000	0	0	1.5150	0.0000	0.0002	0	0	0.0000	0.0000	0.0000
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0073	0.0006	0.0093	0.0000	0.0000	0	0	0.0000	0	0	1.5150	0.0000	0.0002	0	0	0.0000	0.0000	0.0000
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0073	0.0006	0.0093	0.0000	0.0000	0	0	0.0000	0	0	1.5150	0.0000	0.0002	0	0	0.0000	0.0000	0.0000
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0308	0.0376	0.3890	0.0002	0.0004	0.0002	0.0002	0.0003	0.0000	0.0001	19.2235	0.0084	0.0041	5.4218	0.5440	5.4226	0.5445	0
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0432	0.0001	0.0007	0.0000	0.0000	0.0001	0.0002	0.0000	0.0000	0.0001	3.9484	0.0000	0.0006	0.3943	0.0396	0.3946	0.0397	0.0000
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9868	0.0000	0.0002	0.0986	0.0099	0.0987	0.0099	0.0000
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0010	0.0013	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4277	0.0003	0.0001	0.0986	0.0099	0.0986	0.0099	0
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9868	0.0000	0.0002	0.0986	0.0099	0.0987	0.0099	0.0000
Daily	lbd	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9868	0.0000	0.0002	0.0986	0.0099	0.0987	0.0099	0.0000
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0187	0.0224	0.2346	0.0001	0.0002	0.0001	0.0001	0.0002	0.0000	0.0001	11.9740	0.0050	0.0025	0.0163	0.0040	0.0168	0.0043	0
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.1623	0.0002	0.0027	0.0001	0.0000	0.0002	0.0009	0.0000	0.0001	0.0003	14.5483	0.0000	0.0023	0.0070	0.0017	0.0082	0.0021	0.0000
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9696	0.0000	0.0002	0.0005	0.0001	0.0005	0.0001	0.0000
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0010	0.0012	0.0127	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4187	0.0002	0.0001	0.0005	0.0001	0.0005	0.0001	0
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9696	0.0000	0.0002	0.0005	0.0001	0.0005	0.0001	0.0000
Daily	lbd	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9696	0.0000	0.0002	0.0005	0.0001	0.0005	0.0001	0.0000
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	11.3672	0.1654	8.9645	0.0260	0.4574	0	0	0.4208	0	0	2,814.5289	0.1142	0.0000	0	0	0.4574	0.4208	0.4574
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.9489	0.0486	2.5608	0.0034	0.1115	0	0	0.1025	0	0	373.3908	0.0151	0.0000	0	0	0.1115	0.1025	0.1115
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	3.1376	0.1499	3.3817	0.0059	0.0235	0	0	0.0217	0	0	638.0479	0.0259	0.0000	0	0	0.0235	0.0217	0.0235
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.2305	0.1661	1.5571	0.0023	0.0439	0	0	0.0404	0	0	180.4163	0.0073	0.0000	0	0	0.0439	0.0404	0.0439
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	3.4595	0.1205	5.8084	0.0085	0.1281	0	0	0.1181	0	0	924.2511	0.0375	0.0000	0	0	0.1281	0.1181	0.1281
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.4235	0.0514	2.2700	0.0032	0.0631	0	0	0.0581	0	0	344.2126	0.0140	0.0000	0	0	0.0631	0.0581	0.0631
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.3193	0.0900	1.6737	0.0078	0.0454	0	0	0.0417	0	0	842.8634	0.0342	0.0000	0	0	0.0454	0.0417	0.0454
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.8643	0.0334	1.9398	0.0030	0.0430	0	0	0.0395	0	0	329.7001	0.0134	0.0000	0	0	0.0430	0.0395	0.0430
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	4.7965	0.0722	3.5807	0.0102	0.1853	0	0	0.1705	0	0	1,107.1011	0.0449	0.0000	0	0	0.1853	0.1705	0.1853
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.7308	0.0182	0.9603	0.0013	0.0418	0	0	0.0385	0	0	140.0215	0.0057	0.0000	0	0	0.0418	0.0385	0.0418
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.6024	0.0210	1.0114	0.0015	0.0223	0	0	0.0206	0	0	160.9393	0.0065	0.0000	0	0	0.0223	0.0206	0.0223
Daily	lbd	Reduced Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	2.4358	0.0355	1.9210	0.0056	0.0980	0	0	0.0902	0	0	603.1133	0.0245	0.0000	0	0	0.0980	0.0902	0.0980
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	10.4021	0.1884	8.8719	0.0260	0.4220	0	0	0.3883	0	0	2,814.8110	0.1142	0.0000	0	0	0.4220	0.3883	0.4220
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.8108	0.0539	2.5541	0.0035	0.0958	0	0	0.0881	0	0	374.0948	0.0152	0.0000	0	0	0.0958	0.0881	0.0958
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	3.1274	0.1453	3.3551	0.0059	0.0225	0	0	0.0207	0	0	638.0450	0.0259	0.0000	0	0	0.0225	0.0207	0.0225
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.1957	0.1557	1.5480	0.0023	0.0378	0	0	0.0348	0	0	180.4245	0.0073	0.0000	0	0	0.0378	0.0348	0.0378
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	3.0926	0.1289	5.7592	0.0085	0.0900	0	0	0.0828	0	0	926.2597	0.0376	0.0000	0	0	0.0900	0.0828	0.0900
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.3049	0.0565	2.2608	0.0032	0.0502	0	0	0.0462	0	0	344.0660	0.0140	0.0000	0	0	0.0502	0.0462	0.0502
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.1408	0.0955	1.6660	0.0078	0.0403	0	0	0.0370	0	0	841.7124	0.0341	0.0000	0	0	0.0403	0.0370	0.0403
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.7409	0.0366	1.9353	0.0030	0.0367	0	0	0.0338	0	0	329.5190	0.0134	0.0000	0	0	0.0367	0.0338	0.0367
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.6790	0.0202	0.9578	0.0013	0.0359	0	0	0.0330	0	0	140.2856	0.0057	0.0000	0	0	0.0359	0.0330	0.0359
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.4643	0.0305	1.7790	0.0025	0.0873	0	0	0.0803	0	0	267.3253	0.0108	0.0000	0	0	0.0873	0.0803	0.0873
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.3886	0.0258	1.9925	0.0031	0.0723	0	0	0.0665	0	0	333.3604	0.0135	0.0000	0	0	0.0723	0.0665	0.0723
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2024	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0043	0.0006	0.0043	0.0006	0
Daily	lbd	Reduced Project	Controlled	2024	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0240	0.0036	0.0240	0.0036	0
Daily	lbd	Reduced Project	Controlled	2024	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0001	0.0000	0.0001	0.0000	0
Daily	lbd	Reduced Project	Controlled	2025	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0001	0.0000	0.0001	0.0000	0
Daily	lbd	Reduced Project	Controlled	2024	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5324	0.0799	0.5324	0.0799	0
Daily	lbd	Reduced Project	Controlled	2024	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5324	0.0799	0.5324	0.0799	0
Daily	lbd	Reduced Project	Controlled	2025	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5324	0.0799	0.5324	0.0799	0
Daily	lbd	Reduced Project	Controlled	2025	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5324	0.0799	0.5324	0.0799	0
Daily	lbd	Reduced Project	Controlled	2024	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	40.7220	1.4191	8.5724	0.0639	0.5251	0	0	0.4831	0	0	5,628.7352	0.0475	0.2676	0	0	0.5251	0.4831	0.5251
Daily	lbd	Reduced Project	Controlled	2024	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	3.9663	0.1106	1.0115	0.0071	0.0810	0	0	0.0745	0	0	629.3849	0.0052	0.0299	0	0	0.0810	0.0745	0.0810
Daily	lbd	Reduced Project	Controlled	2025	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Controlled	2025	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Construction Master Summary for Modeling

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0068	0.0013	0.1076	0.0005	0.0002	0.0014	0.0005	0.0002	0.0004	0.0002	50.0608	0.0004	0.0008	0.0697	0.0171	0.0718	0.0178	0
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.4953	0.0051	0.0189	0.0058	0.0104	0.0148	0.0285	0.0099	0.0037	0.0100	609.0895	0.0002	0.0960	0.1620	0.0398	0.2157	0.0634	0.0104
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0227	0.0002	0.0020	0.0001	0.0000	0.0002	0.0006	0.0000	0.0000	0.0002	10.5382	0.0000	0.0017	0.0019	0.0005	0.0027	0.0008	0.0000
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0013	0.0006	0.0165	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	3.0007	0.0001	0.0001	0.0022	0.0005	0.0024	0.0006	0
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0302	0.0003	0.0012	0.0004	0.0006	0.0009	0.0017	0.0006	0.0002	0.0006	37.0750	0.0000	0.0058	0.0099	0.0024	0.0131	0.0039	0.0006
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0126	0.0001	0.0011	0.0001	0.0000	0.0001	0.0004	0.0000	0.0000	0.0001	5.8732	0.0000	0.0009	0.0010	0.0003	0.0015	0.0004	0.0000
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0009	0.0002	0.0143	0.0001	0.0000	0.0002	0.0001	0.0000	0.0000	0.0000	6.8644	0.0000	0.0001	0.0098	0.0024	0.0101	0.0025	0
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0513	0.0005	0.0019	0.0006	0.0011	0.0016	0.0030	0.0011	0.0004	0.0011	64.5151	0.0000	0.0102	0.0173	0.0042	0.0230	0.0068	0.0011
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0055	0.0000	0.0005	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000	0.0001	2.5392	0.0000	0.0004	0.0005	0.0001	0.0007	0.0002	0.0000
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0006	0.0003	0.0075	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.4469	0.0001	0.0000	0.0011	0.0003	0.0012	0.0003	0
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0144	0.0001	0.0005	0.0002	0.0003	0.0004	0.0009	0.0003	0.0001	0.0003	18.0726	0.0000	0.0028	0.0048	0.0012	0.0064	0.0019	0.0003
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0062	0.0000	0.0005	0.0000	0.0000	0.0000	0.0002	0.0000	0.0000	0.0001	2.8359	0.0000	0.0004	0.0005	0.0001	0.0007	0.0002	0.0000
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0108	0.0009	0.0134	0.0000	0.0000	-	-	0.0000	-	-	2.2048	0.0000	0.0003	-	-	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0012	0.0001	0.0015	0.0000	0.0000	-	-	0.0000	-	-	0.2408	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0007	0.0001	0.0008	0.0000	0.0000	-	-	0.0000	-	-	0.1342	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0007	0.0001	0.0008	0.0000	0.0000	-	-	0.0000	-	-	0.1342	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0011	0.0001	0.0014	0.0000	0.0000	-	-	0.0000	-	-	0.2326	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0003	0.0000	0.0004	0.0000	0.0000	-	-	0.0000	-	-	0.0583	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0003	0.0000	0.0004	0.0000	0.0000	-	-	0.0000	-	-	0.0651	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0003	0.0000	0.0004	0.0000	0.0000	-	-	0.0000	-	-	0.0651	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0015	0.0019	0.0195	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.9612	0.0004	0.0002	0.2711	0.0272	0.2711	0.0272	0
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0155	0.0000	0.0003	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	1.4189	0.0000	0.0002	0.1417	0.0142	0.1418	0.0143	0.0000
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1549	0.0000	0.0000	0.0155	0.0016	0.0155	0.0016	0.0000
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0001	0.0001	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0374	0.0000	0.0000	0.0086	0.0009	0.0086	0.0009	0
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0863	0.0000	0.0000	0.0086	0.0009	0.0086	0.0009	0.0000
Annual	tpy	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0863	0.0000	0.0000	0.0086	0.0009	0.0086	0.0009	0.0000
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0002	0.0002	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1317	0.0001	0.0000	0.0002	0.0000	0.0002	0.0000	0
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1489	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0373	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0000	0.0001	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1238	0.0128	0.1484	0.0002	0.0042	-	-	0.0039	-	-	20.7685	0.0008	0.0000	-	-	0.0042	0.0039	0.0042
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.8241	0.0120	0.6499	0.0019	0.0332	-	-	0.0305	-	-	204.0531	0.0083	0.0000	-	-	0.0332	0.0305	0.0332
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0450	0.0016	0.0755	0.0001	0.0017	-	-	0.0015	-	-	12.0153	0.0005	0.0000	-	-	0.0017	0.0015	0.0017
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0458	0.0016	0.0770	0.0001	0.0017	-	-	0.0016	-	-	12.2463	0.0005	0.0000	-	-	0.0017	0.0016	0.0017
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1530	0.0038	0.2010	0.0003	0.0087	-	-	0.0080	-	-	29.3111	0.0012	0.0000	-	-	0.0087	0.0080	0.0087
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1239	0.0059	0.1336	0.0002	0.0009	-	-	0.0009	-	-	25.2029	0.0010	0.0000	-	-	0.0009	0.0009	0.0009
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0364	0.0051	0.0401	0.0001	0.0018	-	-	0.0017	-	-	5.6062	0.0002	0.0000	-	-	0.0018	0.0017	0.0018
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1932	0.0261	0.2445	0.0004	0.0069	-	-	0.0063	-	-	28.3253	0.0011	0.0000	-	-	0.0069	0.0063	0.0069
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1583	0.0055	0.2657	0.0004	0.0059	-	-	0.0054	-	-	42.2844	0.0017	0.0000	-	-	0.0059	0.0054	0.0059
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.2493	0.0042	0.2741	0.0004	0.0160	-	-	0.0148	-	-	40.6525	0.0016	0.0000	-	-	0.0160	0.0148	0.0160
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0747	0.0027	0.1192	0.0002	0.0033	-	-	0.0030	-	-	18.0711	0.0007	0.0000	-	-	0.0033	0.0030	0.0033
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0486	0.0016	0.0825	0.0001	0.0015	-	-	0.0014	-	-	13.3875	0.0005	0.0000	-	-	0.0015	0.0014	0.0015
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.9232	0.0139	0.6892	0.0020	0.0357	-	-	0.0328	-	-	213.0865	0.0086	0.0000	-	-	0.0357	0.0328	0.0357
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1583	0.0024	0.1696	0.0002	0.0087	-	-	0.0080	-	-	26.4168	0.0011	0.0000	-	-	0.0087	0.0080	0.0087
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.6626	0.0055	0.5374	0.0008	0.0295	-	-	0.0271	-	-	87.9380	0.0036	0.0000	-	-	0.0295	0.0271	0.0295
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1865	0.0067	0.2974	0.0004	0.0083	-	-	0.0076	-	-	45.0918	0.0018	0.0000	-	-	0.0083	0.0076	0.0083
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.1154	0.0079	0.1464	0.0007	0.0040	-	-	0.0037	-	-	73.7505	0.0030	0.0000	-	-	0.0040	0.0037	0.0040
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0756	0.0029	0.1697	0.0003	0.0038	-	-	0.0035	-	-	28.8487	0.0012	0.0000	-	-	0.0038	0.0035	0.0038
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.3166	0.0048	0.2363	0.0007	0.0122	-	-	0.0113	-	-	73.0686	0.0030	0.0000	-	-	0.0122	0.0113	0.0122
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0639	0.0016	0.0840	0.0001	0.0037	-	-	0.0034	-	-	12.2519	0.0005	0.0000	-	-	0.0037	0.0034	0.0037
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0181	0.0003	0.0199	0.0000	0.0012	-	-	0.0011	-	-	2.9445	0.0001	0.0000	-	-	0.0012	0.0011	0.0012
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0133	0.0005	0.0223	0.0000	0.0005	-	-	0.0005	-	-	3.5407	0.0001	0.0000	-	-	0.0005	0.0005	0.0005
Annual	tpy	Product Import Terminal	Controlled	2024	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.1060	0.0015	0.0836	0.0002	0.0043	-	-	0.0039	-	-	26.2354	0.0011	0.0000	-	-	0.0043	0.0039	0.0043
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.4005	0.0073	0.3416	0.0010	0.0162	-	-	0.0149	-	-	108.3701	0.0044	0.0000	-	-	0.0162	0.0149	0.0162
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0349	0.0010	0.0492	0.0001	0.0018	-	-	0.0017	-	-	7.2013	0.0003	0.0000	-	-	0.0018	0.0017	0.0018
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0407	0.0019	0.0436	0.0001	0.0003	-	-	0.0003	-	-	8.2946	0.0003	0.0000	-	-	0.0003	0.0003	0.0003
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0460	0.0060	0.0596	0.0001	0.0015	-	-	0.0013	-	-	6.9463	0.0003	0.0000	-	-	0.0015	0.0013	0.0015
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0394	0.0016	0.0734	0.0001	0.0011	-	-	0.0011	-	-	11.8098	0.0005	0.0000	-	-	0.0011	0.0011	0.0011
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0502	0.0022	0.0870	0.0001	0.0019	-	-	0.0018	-	-	13.2465	0.0005	0.0000	-	-	0.0019	0.0018	0.0019
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0365	0.0031	0.0533	0.0002	0.0013	-	-	0.0012	-	-	26.9348	0.0011	0.0000	-	-	0.0013	0.0012	0.0013
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0319	0.0016	0.0832	0.0001	0.0016	-	-	0.0015	-	-	14.1693	0.0006	0.0000	-	-	0.0016	0.0015	0.0016
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0292	0.0009	0.0412	0.0001	0.0015	-	-	0.0014	-	-	6.0323	0.0002	0.0000	-	-	0.0015	0.0014	0.0015
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0469	0.0010	0.0569	0.0001	0.0028	-	-	0.0026	-	-	8.5544	0.0003	0.0000	-	-	0.0028	0.0026	0.0028
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0597	0.0011	0.0857	0.0001	0.0031	-	-	0.0029	-	-	14.3345	0.0006	0.0000	-	-	0.0031	0.0029	0.0031
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2024	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.3363	0.0509	0.3363	0.0509	0
Annual	tpy	Product Import Terminal	Controlled	2024	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	1.8961	0.2871	1.8961	0.2871	0
Annual	tpy	Product Import Terminal	Controlled	2024	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0152	0.0023	0.0152	0.0023	0
Annual	tpy	Product Import Terminal	Controlled	2025	Fugitives	Concrete Fill	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Fugitives	Net Fill	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Annual	tpy	Product Import Terminal	Controlled	2025	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0075	0.0011	0.0075	0.0011	0
Annual	tpy	Product Import Terminal	Controlled	2024	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0869	0.0130	0.0869	0.0130	0
Annual	tpy	Product Import Terminal	Controlled	2024	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0484	0.0073	0.0484	0.0073	0
Annual	tpy	Product Import Terminal	Controlled	2025	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0213	0.0032	0.0213	0.0032	0
Annual	tpy	Product Import Terminal	Controlled	2025	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0238	0.0036	0.0238	0.0036	0
Annual	tpy	Product Import Terminal	Controlled	2024	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0204	0.0007	0.0043	0.0000	0.0003	-	-	0.0002	-	-	2.8144	0.0000	0.0001	-	-	0.0003	0.0002	0.0003
Annual	tpy	Product Import Terminal	Controlled	2024	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0020	0.0001	0.0005	0.0000	0.0000	-	-	0.0000	-	-	0.3147	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Annual	tpy	Product Import Terminal	Controlled	2025	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0058	0.0002	0.0012	0.0000	0.0001	-	-	0.0001	-	-	0.8041	0.0000	0.0000	-	-	0.0001	0.0001	0.0001
Annual	tpy	Product Import Terminal	Controlled	2025	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0006	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0899	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0492	0.0096	0.7826	0.0036	0.0014	0.0103	0.0036	0.0013	0.0026	0.0013	364.0789	0.0026	0.0055	0.5069	0.1244	0.5222	0.1295	0
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.6892	0.0071	0.0263	0.0080	0.0144	0.0206	0.0397	0.0138	0.0052	0.0139	847.4298	0.0003	0.1335	0.2253	0.0553	0.3000	0.0882	0.0144
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.1443	0.0011	0.0125	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	67.1224	0.0001	0.0106	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0151	0.0069	0.1885	0.0003	0.0004	0.0005	0.0008	0.0004	0.0001	0.0003	34.2936	0.0015	0.0010	0.0253	0.0062	0.0271	0.0070	0
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.3446	0.0035	0.0131	0.0040	0.0072	0.0103	0.0198	0.0069	0.0026	0.0069	423.7149	0.0002	0.0668	0.1127	0.0277	0.1500	0.0441	0.0072
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.1443	0.0011	0.0125	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	67.1224	0.0001	0.0106	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0224	0.0043	0.3705	0.0018	0.0007	0.0052	0.0018	0.0006	0.0013	0.0006	178.2963	0.0012	0.0026	0.2535	0.0622	0.2611	0.0647	0
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	1.6719	0.0171	0.0620	0.0199	0.0359	0.0515	0.0993	0.0343	0.0129	0.0347	2,101.4726	0.0008	0.3311	0.5633	0.1383	0.7500	0.2202	0.0359
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.1435	0.0011	0.0121	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	65.9522	0.0001	0.0104	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0137	0.0062	0.1738	0.0003	0.0004	0.0005	0.0008	0.0004	0.0001	0.0003	33.6485	0.0014	0.0010	0.0253	0.0062	0.0271	0.0070	0
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.3344	0.0034	0.0124	0.0040	0.0072	0.0103	0.0199	0.0069	0.0026	0.0069	420.2945	0.0002	0.0662	0.1127	0.0277	0.1500	0.0440	0.0072
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.1435	0.0011	0.0121	0.0006	0.0002	0.0011	0.0041	0.0002	0.0003	0.0014	65.9522	0.0001	0.0104	0.0118	0.0029	0.0171	0.0048	0.0002
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0150	0.0013	0.0186	0.0000	0.0000	-	-	0.0000	-	-	3.0676	0.0001	0.0005	-	-	0.0000	0.0000	0.0000
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0075	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5338	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0075	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5338	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0075	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5338	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0367	0.0032	0.0465	0.0001	0.0000	-	-	0.0000	-	-	7.5750	0.0001	0.0012	-	-	0.0000	0.0000	0.0000
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0073	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5150	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0073	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5150	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0073	0.0006	0.0093	0.0000	0.0000	-	-	0.0000	-	-	1.5150	0.0000	0.0002	-	-	0.0000	0.0000	0.0000
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0112	0.0137	0.1415	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	6.9904	0.0030	0.0015	1.9716	0.1978	1.9719	0.1980	0
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0216	0.0000	0.0004	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	1.9742	0.0000	0.0003	0.1972	0.0198	0.1973	0.0198	0.0000
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9868	0.0000	0.0002	0.0986	0.0099	0.0987	0.0099	0.0000
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0010	0.0013	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4277	0.0003	0.0001	0.0986	0.0099	0.0986	0.0099	0
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9868	0.0000	0.0002	0.0986	0.0099	0.0987	0.0099	0.0000
Daily	lbd	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.9868	0.0000	0.0002	0.0986	0.0099	0.0987	0.0099	0.0000
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0054	0.0064	0.0670	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	3.4211	0.0014	0.0007	0.0047	0.0011	0.0048	0.0012	0
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0541	0.0001	0.0009	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0001	4.8494	0.0000	0.0008	0.0023	0.0006	0.0027	0.0007	0.0000
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.9696	0.0000	0.0002	0.0005	0.0001	0.0005	0.0001	0.0000
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0010	0.0012	0.0127	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4187	0.0002	0.0001	0.0005	0.0001	0.0005	0.0001	0
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.9696	0.0000	0.0002	0.0005	0.0001	0.0005	0.0001	0.0000
Daily	lbd	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0108	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.9696	0.0000	0.0002	0.0005	0.0001	0.0005	0.0001	0.0000
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	11.3672	0.1654	8.9645	0.0260	0.4574	-	-	0.4208	-	-	2,814.5289	0.1142	0.0000	-	-	0.4574	0.4208	0.4574
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.9744	0.0243	1.2804	0.0017	0.0557	-	-	0.0513	-	-	186.6954	0.0076	0.0000	-	-	0.0557	0.0513	0.0557
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.5688	0.0750	1.6908	0.0030	0.0118	-	-	0.0108	-	-	319.0240	0.0129	0.0000	-	-	0.0118	0.0108	0.0118
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.2305	0.1661	1.5571	0.0023	0.0439	-	-	0.0404	-	-	180.4163	0.0073	0.0000	-	-	0.0439	0.0404	0.0439
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.7297	0.0602	2.9042	0.0043	0.0641	-	-	0.0590	-	-	462.1256	0.0187	0.0000	-	-	0.0641	0.0590	0.0641
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.4235	0.0514	2.2700	0.0032	0.0631	-	-	0.0581	-	-	344.2126	0.0140	0.0000	-	-	0.0631	0.0581	0.0631
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.3193	0.0900	1.6737	0.0078	0.0454	-	-	0.0417	-	-	842.8634	0.0342	0.0000	-	-	0.0454	0.0417	0.0454
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.8643	0.0334	1.9398	0.0030	0.0430	-	-	0.0395	-	-	329.7001	0.0134	0.0000	-	-	0.0430	0.0395	0.0430
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	4.7965	0.0722	3.5807	0.0102	0.1853	-	-	0.1705	-	-	1,107.1011	0.0449	0.0000	-	-	0.1853	0.1705	0.1853
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.7308	0.0182	0.9603	0.0013	0.0418	-	-	0.0385	-	-	140.0215	0.0057	0.0000	-	-	0.0418	0.0385	0.0418
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.6024	0.0210	1.0114	0.0015	0.0223	-	-	0.0206	-	-	160.9393	0.0065	0.0000	-	-	0.0223	0.0206	0.0223
Daily	lbd	Product Import Terminal	Controlled	2024	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	2.4358	0.0355	1.9210	0.0056	0.0980	-	-	0.0902	-	-	603.1133	0.0245	0.0000	-	-	0.0980	0.0902	0.0980
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	10.4021	0.1884	8.8719	0.0260	0.4220	-	-	0.3883	-	-	2,814.8110	0.1142	0.0000	-	-	0.4220	0.3883	0.4220
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.9054	0.0269	1.2771	0.0017	0.0479	-	-	0.0441	-	-	187.0474	0.0076	0.0000	-	-	0.0479	0.0441	0.0479
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.5637	0.0726	1.6775	0.0029	0.0113	-	-	0.0103	-	-	319.0225	0.0129	0.0000	-	-	0.0113	0.0103	0.0113
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.1957	0.1557	1.5480	0.0023	0.0378	-	-	0.0348	-	-	180.4245	0.0073	0.0000	-	-	0.0378	0.0348	0.0378
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.5463	0.0645	2.8796	0.0043	0.0450	-	-	0.0414	-	-	463.1299	0.0188	0.0000	-	-	0.0450	0.0414	0.0450
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.3049	0.0565	2.2608	0.0032	0.0502	-	-	0.0462	-	-	344.0660	0.0140	0.0000	-	-	0.0502	0.0462	0.0502
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.1408	0.0955	1.6660	0.0078	0.0403	-	-	0.0370	-	-	841.7124	0.0341	0.0000	-	-	0.0403	0.0370	0.0403
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.7409	0.0366	1.9353	0.0030	0.0367	-	-	0.0338	-	-	329.5190	0.0134	0.0000	-	-	0.0367	0.0338	0.0367
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.6790	0.0202	0.9578	0.0013	0.0359	-	-	0.0330	-	-	140.2856	0.0057	0.0000	-	-	0.0359	0.0330	0.0359
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.4643	0.0305	1.7790	0.0025	0.0873	-	-	0.0803	-	-	267.3253	0.0108	0.0000	-	-	0.0873	0.0803	0.0873
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	1.3886	0.0258	1.9925	0.0031	0.0723	-	-	0.0665	-	-	333.3604	0.0135	0.0000	-	-	0.0723	0.0665	0.0723
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2024	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0043	0.0006	0.0043	0.0006	0
Daily	lbd	Product Import Terminal	Controlled	2024	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0240	0.0036	0.0240	0.0036	0
Daily	lbd	Product Import Terminal	Controlled	2024	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0001	0.0000	0.0001	0.0000	0
Daily	lbd	Product Import Terminal	Controlled	2025	Fugitives	Concrete Fill	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Fugitives	Net Fill	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0001	0.0000	0.0001	0.0000	0
Daily	lbd	Product Import Terminal	Controlled	2024	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5536	0.0830	0.5536	0.0830	0
Daily	lbd	Product Import Terminal	Controlled	2024	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5536	0.0830	0.5536	0.0830	0
Daily	lbd	Product Import Terminal	Controlled	2025	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5536	0.0830	0.5536	0.0830	0
Daily	lbd	Product Import Terminal	Controlled	2025	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5536	0.0830	0.5536	0.0830	0
Daily	lbd	Product Import Terminal	Controlled	2024	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	40.7220	1.4191	8.5724	0.0639	0.5251	-	-	0.4831	-	-	5,628.7352	0.0475	0.2676	-	-	0.5251	0.4831	0.5251
Daily	lbd	Product Import Terminal	Controlled	2024	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	3.9663	0.1106	1.0115	0.0071	0.0810	-	-	0.0745	-	-	629.3849	0.0052	0.0299	-	-	0.0810	0.0745	0.0810
Daily	lbd	Product Import Terminal	Controlled	2025	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Daily	lbd	Product Import Terminal	Controlled	2025	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0

Construction Master Summary for Modeling

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0169	0.0033	0.2690	0.0012	0.0005	0.0035	0.0012	0.0004	0.0009	0.0004	125.1521	0.0009	0.0019	0.1743	0.0428	0.1795	0.0445	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.1723	0.0018	0.0066	0.0020	0.0036	0.0052	0.0099	0.0035	0.0013	0.0035	211.8574	0.0001	0.0334	0.0563	0.0138	0.0750	0.0220	0.0036
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0180	0.0001	0.0016	0.0001	0.0000	0.0001	0.0005	0.0000	0.0000	0.0002	8.3903	0.0000	0.0013	0.0015	0.0004	0.0021	0.0006	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0019	0.0009	0.0236	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	4.2867	0.0002	0.0001	0.0032	0.0008	0.0034	0.0009	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0431	0.0004	0.0016	0.0005	0.0009	0.0013	0.0025	0.0009	0.0003	0.0009	52.9644	0.0000	0.0083	0.0141	0.0035	0.0188	0.0055	0.0009
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0180	0.0001	0.0016	0.0001	0.0000	0.0001	0.0005	0.0000	0.0000	0.0002	8.3903	0.0000	0.0013	0.0015	0.0004	0.0021	0.0006	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0098	0.0019	0.1621	0.0008	0.0003	0.0023	0.0008	0.0003	0.0006	0.0003	78.0047	0.0005	0.0011	0.1109	0.0272	0.1142	0.0283	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.6270	0.0064	0.0232	0.0075	0.0135	0.0193	0.0372	0.0129	0.0048	0.0130	788.0522	0.0003	0.1242	0.2112	0.0519	0.2812	0.0826	0.0135
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0179	0.0001	0.0015	0.0001	0.0000	0.0001	0.0005	0.0000	0.0000	0.0002	8.2440	0.0000	0.0013	0.0015	0.0004	0.0021	0.0006	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0017	0.0008	0.0217	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	4.2061	0.0002	0.0001	0.0032	0.0008	0.0034	0.0009	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0418	0.0004	0.0015	0.0005	0.0009	0.0013	0.0025	0.0009	0.0003	0.0009	52.5368	0.0000	0.0083	0.0141	0.0035	0.0187	0.0055	0.0009
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0179	0.0001	0.0015	0.0001	0.0000	0.0001	0.0005	0.0000	0.0000	0.0002	8.2440	0.0000	0.0013	0.0015	0.0004	0.0021	0.0006	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0037	0.0003	0.0046	0.0000	0.0000	-	-	0.0000	-	-	0.7669	0.0000	0.0001	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0009	0.0001	0.0012	0.0000	0.0000	-	-	0.0000	-	-	0.1917	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0009	0.0001	0.0012	0.0000	0.0000	-	-	0.0000	-	-	0.1917	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0009	0.0001	0.0012	0.0000	0.0000	-	-	0.0000	-	-	0.1917	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0138	0.0012	0.0174	0.0000	0.0000	-	-	0.0000	-	-	2.8406	0.0001	0.0004	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0009	0.0001	0.0012	0.0000	0.0000	-	-	0.0000	-	-	0.1894	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0009	0.0001	0.0012	0.0000	0.0000	-	-	0.0000	-	-	0.1894	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0009	0.0001	0.0012	0.0000	0.0000	-	-	0.0000	-	-	0.1894	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0039	0.0047	0.0486	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.4029	0.0010	0.0005	0.6777	0.0680	0.6778	0.0681	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0054	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4935	0.0000	0.0001	0.0493	0.0049	0.0493	0.0050	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1233	0.0000	0.0000	0.0123	0.0012	0.0123	0.0012	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0001	0.0002	0.0017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0535	0.0000	0.0000	0.0123	0.0012	0.0123	0.0012	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1233	0.0000	0.0000	0.0123	0.0012	0.0123	0.0012	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0013	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1233	0.0000	0.0000	0.0123	0.0012	0.0123	0.0012	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0023	0.0028	0.0293	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.4967	0.0006	0.0003	0.0020	0.0005	0.0021	0.0005	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0203	0.0000	0.0003	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	1.8185	0.0000	0.0003	0.0009	0.0002	0.0010	0.0003	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1212	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0001	0.0002	0.0016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0523	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1212	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0014	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1212	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.4209	0.0207	1.1206	0.0033	0.0572	-	-	0.0526	-	-	351.8161	0.0143	0.0000	-	-	0.0572	0.0526	0.0572
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.2436	0.0061	0.3201	0.0004	0.0139	-	-	0.0128	-	-	46.6738	0.0019	0.0000	-	-	0.0139	0.0128	0.0139
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.3922	0.0187	0.4227	0.0007	0.0029	-	-	0.0027	-	-	79.7560	0.0032	0.0000	-	-	0.0029	0.0027	0.0029
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1538	0.0208	0.1946	0.0003	0.0055	-	-	0.0050	-	-	22.5520	0.0009	0.0000	-	-	0.0055	0.0050	0.0055
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.4324	0.0151	0.7260	0.0011	0.0160	-	-	0.0148	-	-	115.5314	0.0047	0.0000	-	-	0.0160	0.0148	0.0160
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1779	0.0064	0.2838	0.0004	0.0079	-	-	0.0073	-	-	43.0266	0.0017	0.0000	-	-	0.0079	0.0073	0.0079
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.1649	0.0112	0.2092	0.0010	0.0057	-	-	0.0052	-	-	105.3579	0.0043	0.0000	-	-	0.0057	0.0052	0.0057
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.1080	0.0042	0.2425	0.0004	0.0054	-	-	0.0049	-	-	41.2125	0.0017	0.0000	-	-	0.0054	0.0049	0.0054
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.5996	0.0090	0.4476	0.0013	0.0232	-	-	0.0213	-	-	138.3876	0.0056	0.0000	-	-	0.0232	0.0213	0.0232
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0914	0.0023	0.1200	0.0002	0.0052	-	-	0.0048	-	-	17.5027	0.0007	0.0000	-	-	0.0052	0.0048	0.0052
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0753	0.0026	0.1264	0.0002	0.0028	-	-	0.0026	-	-	20.1174	0.0008	0.0000	-	-	0.0028	0.0026	0.0028
Hourly	lb/hr	Proposed Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.3045	0.0044	0.2401	0.0007	0.0123	-	-	0.0113	-	-	75.3892	0.0031	0.0000	-	-	0.0123	0.0113	0.0123
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	1.3003	0.0235	1.1090	0.0033	0.0527	-	-	0.0485	-	-	351.8514	0.0143	0.0000	-	-	0.0527	0.0485	0.0527
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.2263	0.0067	0.3193	0.0004	0.0120	-	-	0.0110	-	-	46.7619	0.0019	0.0000	-	-	0.0120	0.0110	0.0120
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.3909	0.0182	0.4194	0.0007	0.0028	-	-	0.0026	-	-	79.7556	0.0032	0.0000	-	-	0.0028	0.0026	0.0028
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1495	0.0195	0.1935	0.0003	0.0047	-	-	0.0043	-	-	22.5531	0.0009	0.0000	-	-	0.0047	0.0043	0.0047
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.3866	0.0161	0.7199	0.0011	0.0112	-	-	0.0103	-	-	115.7825	0.0047	0.0000	-	-	0.0112	0.0103	0.0112
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1631	0.0071	0.2826	0.0004	0.0063	-	-	0.0058	-	-	43.0083	0.0017	0.0000	-	-	0.0063	0.0058	0.0063
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.1426	0.0119	0.2082	0.0010	0.0050	-	-	0.0046	-	-	105.2141	0.0043	0.0000	-	-	0.0050	0.0046	0.0050
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0926	0.0046	0.2419	0.0004	0.0046	-	-	0.0042	-	-	41.1899	0.0017	0.0000	-	-	0.0046	0.0042	0.0046
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0849	0.0025	0.1197	0.0002	0.0045	-	-	0.0041	-	-	17.5357	0.0007	0.0000	-	-	0.0045	0.0041	0.0045
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.1830	0.0038	0.2224	0.0003	0.0109	-	-	0.0100	-	-	33.4157	0.0014	0.0000	-	-	0.0109	0.0100	0.0109
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.1736	0.0032	0.2491	0.0004	0.0090	-	-	0.0083	-	-	41.6701	0.0017	0.0000	-	-	0.0090	0.0083	0.0090
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0005	0.0001	0.0005	0.0001	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0030	0.0005	0.0030	0.0005	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0000	0.0000	0.0000	0.0000	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0000	0.0000	0.0000	0.0000	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0665	0.0100	0.0665	0.0100	0
Hourly	lb/hr	Proposed Project	Controlled	2024	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0665	0.0100	0.0665	0.0100	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0665	0.0100	0.0665	0.0100	0
Hourly	lb/hr	Proposed Project	Controlled	2025	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0665	0.0100	0.0665	0.0100	0
Hourly	lb/hr	Proposed Project	Controlled	2024	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	5.0903	0.1774	1.0715	0.0080	0.0656	-	-	0.0604	-	-	703.5919	0.0059	0.0335	-	-	0.0656	0.0604	0.0656
Hourly	lb/hr	Proposed Project	Controlled	2024	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.4958	0.0138	0.1264	0.0009	0.0101	-	-	0.0093	-	-	78.6731	0.0007	0.0037	-	-	0.0101	0.0093	0.0101
Hourly	lb/hr	Proposed Project	Controlled	2025	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Proposed Project	Controlled	2025	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0020	0.0004	0.0311	0.0001	0.0001	0.0004	0.0001	0.0001	0.0001	0.0000	14.4664	0.0001	0.0002	0.0201	0.0049	0.0207	0.0051	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.1238	0.0013	0.0047	0.0014	0.0026	0.0037	0.0071	0.0025	0.0009	0.0025	152.2724	0.0001	0.0240	0.0405	0.0099	0.0539	0.0158	0.0026
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0028	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	1.3173	0.0000	0.0002	0.0002	0.0001	0.0003	0.0001	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0002	0.0001	0.0021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3751	0.0000	0.0000	0.0003	0.0001	0.0003	0.0001	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0038	0.0000	0.0001	0.0000	0.0001	0.0001	0.0002	0.0001	0.0000	0.0001	4.6344	0.0000	0.0007	0.0012	0.0003	0.0016	0.0005	0.0001
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0016	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7342	0.0000	0.0001	0.0001	0.0000	0.0002	0.0001	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0006	0.0001	0.0099	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	4.7694	0.0000	0.0001	0.0068	0.0017	0.0070	0.0017	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0243	0.0002	0.0009	0.0003	0.0005	0.0008	0.0014	0.0005	0.0002	0.0005	30.6027	0.0000	0.0048	0.0082	0.0020	0.0109	0.0032	0.0005
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0016	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7502	0.0000	0.0001	0.0001	0.0000	0.0002	0.0001	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0001	0.0000	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1809	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0018	0.0000	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	2.2591	0.0000	0.0004	0.0006	0.0001	0.0008	0.0002	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0008	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3545	0.0000	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0027	0.0002	0.0033	0.0000	0.0000	-	-	0.0000	-	-	0.5512	0.0000	0.0001	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0001	0.0000	0.0002	0.0000	0.0000	-	-	0.0000	-	-	0.0301	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0168	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0168	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0005	0.0000	0.0007	0.0000	0.0000	-	-	0.0000	-	-	0.1103	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0001	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0172	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0000	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0081	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0000	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0081	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0004	0.0005	0.0056	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2778	0.0001	0.0001	0.0783	0.0079	0.0784	0.0079	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0039	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3547	0.0000	0.0001	0.0354	0.0036	0.0355	0.0036	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0194	0.0000	0.0000	0.0019	0.0002	0.0019	0.0002	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0047	0.0000	0.0000	0.0011	0.0001	0.0011	0.0001	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0108	0.0000	0.0000	0.0011	0.0001	0.0011	0.0001	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0108	0.0000	0.0000	0.0011	0.0001	0.0011	0.0001	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0001	0.0002	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0915	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0008	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0706	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0110	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0052	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0052	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0155	0.0016	0.0186	0.0000	0.0005	-	-	0.0005	-	-	2.5961	0.0001	0.0000	-	-	0.0005	0.0005	0.0005
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1030	0.0015	0.0812	0.0002	0.0041	-	-	0.0038	-	-	25.5066	0.0010	0.0000	-	-	0.0041	0.0038	0.0041
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0112	0.0004	0.0189	0.0000	0.0004	-	-	0.0004	-	-	3.0038	0.0001	0.0000	-	-	0.0004	0.0004	0.0004
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0231	0.0008	0.0369	0.0001	0.0010	-	-	0.0009	-	-	5.5934	0.0002	0.0000	-	-	0.0010	0.0009	0.0010
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0057	0.0002	0.0096	0.0000	0.0002	-	-	0.0002	-	-	1.5308	0.0001	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0319	0.0008	0.0419	0.0001	0.0018	-	-	0.0017	-	-	6.1143	0.0002	0.0000	-	-	0.0018	0.0017	0.0018
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0232	0.0011	0.0250	0.0000	0.0002	-	-	0.0002	-	-	4.7255	0.0002	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0046	0.0006	0.0050	0.0000	0.0002	-	-	0.0002	-	-	0.7008	0.0000	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0241	0.0033	0.0306	0.0000	0.0009	-	-	0.0008	-	-	3.5407	0.0001	0.0000	-	-	0.0009	0.0008	0.0009
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0396	0.0014	0.0664	0.0001	0.0015	-	-	0.0014	-	-	10.5711	0.0004	0.0000	-	-	0.0015	0.0014	0.0015
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0312	0.0005	0.0343	0.0000	0.0020	-	-	0.0018	-	-	5.0816	0.0002	0.0000	-	-	0.0020	0.0018	0.0020
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0093	0.0003	0.0149	0.0000	0.0004	-	-	0.0004	-	-	2.2589	0.0001	0.0000	-	-	0.0004	0.0004	0.0004
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0061	0.0002	0.0103	0.0000	0.0002	-	-	0.0002	-	-	1.6734	0.0001	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1154	0.0017	0.0861	0.0002	0.0045	-	-	0.0041	-	-	26.6358	0.0011	0.0000	-	-	0.0045	0.0041	0.0045
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0198	0.0003	0.0212	0.0000	0.0011	-	-	0.0010	-	-	3.3021	0.0001	0.0000	-	-	0.0011	0.0010	0.0011
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0828	0.0007	0.0672	0.0001	0.0037	-	-	0.0034	-	-	10.9923	0.0004	0.0000	-	-	0.0037	0.0034	0.0037
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0233	0.0008	0.0372	0.0001	0.0010	-	-	0.0010	-	-	5.6365	0.0002	0.0000	-	-	0.0010	0.0010	0.0010
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0144	0.0010	0.0183	0.0001	0.0005	-	-	0.0005	-	-	9.2188	0.0004	0.0000	-	-	0.0005	0.0005	0.0005
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0095	0.0004	0.0212	0.0000	0.0005	-	-	0.0004	-	-	3.6061	0.0001	0.0000	-	-	0.0005	0.0004	0.0005
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0396	0.0006	0.0295	0.0001	0.0015	-	-	0.0014	-	-	9.1336	0.0004	0.0000	-	-	0.0015	0.0014	0.0015
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0080	0.0002	0.0105	0.0000	0.0005	-	-	0.0004	-	-	1.5315	0.0001	0.0000	-	-	0.0005	0.0004	0.0005
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0023	0.0000	0.0025	0.0000	0.0001	-	-	0.0001	-	-	0.3681	0.0000	0.0000	-	-	0.0001	0.0001	0.0001
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0017	0.0001	0.0028	0.0000	0.0001	-	-	0.0001	-	-	0.4426	0.0000	0.0000	-	-	0.0001	0.0001	0.0001
Hourly	lb/hr	Reduced Project	Controlled	2024	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0132	0.0002	0.0104	0.0000	0.0005	-	-	0.0005	-	-	3.2794	0.0001	0.0000	-	-	0.0005	0.0005	0.0005
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0754	0.0014	0.0643	0.0002	0.0031	-	-	0.0028	-	-	20.4074	0.0008	0.0000	-	-	0.0031	0.0028	0.0031
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0042	0.0002	0.0073	0.0000	0.0002	-	-	0.0002	-	-	1.1182	0.0000	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0117	0.0003	0.0164	0.0000	0.0006	-	-	0.0006	-	-	2.4082	0.0001	0.0000	-	-	0.0006	0.0006	0.0006
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0253	0.0012	0.0271	0.0000	0.0002	-	-	0.0002	-	-	5.1542	0.0002	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0060	0.0008	0.0067	0.0000	0.0003	-	-	0.0002	-	-	0.9558	0.0000	0.0000	-	-	0.0003	0.0002	0.0003
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0136	0.0018	0.0176	0.0000	0.0004	-	-	0.0004	-	-	2.0523	0.0001	0.0000	-	-	0.0004	0.0004	0.0004
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0099	0.0004	0.0184	0.0000	0.0003	-	-	0.0003	-	-	2.9524	0.0001	0.0000	-	-	0.0003	0.0003	0.0003
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0105	0.0002	0.0127	0.0000	0.0006	-	-	0.0006	-	-	1.9091	0.0001	0.0000	-	-	0.0006	0.0006	0.0006
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0317	0.0007	0.0262	0.0001	0.0012	-	-	0.0011	-	-	8.7864	0.0004	0.0000	-	-	0.0012	0.0011	0.0012
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0117	0.0002	0.0140	0.0000	0.0007	-	-	0.0006	-	-	2.1777	0.0001	0.0000	-	-	0.0007	0.0006	0.0007
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0126	0.0005	0.0219	0.0000	0.0005	-	-	0.0004	-	-	3.3331	0.0001	0.0000	-	-	0.0005	0.0004	0.0005
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0046	0.0004	0.0067	0.0000	0.0002	-	-	0.0001	-	-	3.3668	0.0001	0.0000	-	-	0.0002	0.0001	0.0002
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0040	0.0002	0.0104	0.0000	0.0002	-	-	0.0002	-	-	1.7712	0.0001	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0036	0.0001	0.0051	0.0000	0.0002	-	-	0.0002	-	-	0.7540	0.0000	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0059	0.0001	0.0071	0.0000	0.0003	-	-	0.0003	-	-	1.0693	0.0000	0.0000	-	-	0.0003	0.0003	0.0003
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0075	0.0001	0.0107	0.0000	0.0004	-	-	0.0004	-	-	1.7918	0.0001	0.0000	-	-	0.0004	0.0004	0.0004
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0420	0.0064	0.0420	0.0064	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2370	0.0359	0.2370	0.0359	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0019	0.0003	0.0019	0.0003	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0009	0.0001	0.0009	0.0001	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0104	0.0016	0.0104	0.0016	0
Hourly	lb/hr	Reduced Project	Controlled	2024	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0058	0.0009	0.0058	0.0009	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0034	0.0005	0.0034	0.0005	0
Hourly	lb/hr	Reduced Project	Controlled	2025	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0029	0.0004	0.0029	0.0004	0
Hourly	lb/hr	Reduced Project	Controlled	2024	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0025	0.0001	0.0005	0.0000	0.0000	-	-	0.0000	-	-	0.3518	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2024	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0002	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0393	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0007	0.0000	0.0002	0.0000	0.0000	-	-	0.0000	-	-	0.1005	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Reduced Project	Controlled	2025	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0001	0.0000	0.0000	0.0000	0.0000	-	-	0.0000	-	-	0.0112	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0008	0.0002	0.0135	0.0001	0.0000	0.0002	0.0001	0.0000	0.0000	0.0000	6.2576	0.0000	0.0001	0.0087	0.0021	0.0090	0.0022	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0619	0.0006	0.0024	0.0007	0.0013	0.0019	0.0036	0.0012	0.0005	0.0012	76.1362	0.0000	0.0120	0.0202	0.0050	0.0270	0.0079	0.0013
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0028	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	1.3173	0.0000	0.0002	0.0002	0.0001	0.0003	0.0001	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0002	0.0001	0.0021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3751	0.0000	0.0000	0.0003	0.0001	0.0003	0.0001	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0038	0.0000	0.0001	0.0000	0.0001	0.0001	0.0002	0.0001	0.0000	0.0001	4.6344	0.0000	0.0007	0.0012	0.0003	0.0016	0.0005	0.0001
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0016	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7342	0.0000	0.0001	0.0001	0.0000	0.0002	0.0001	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Offsite	Gasoline	Regular Backlands	0.0001	0.0000	0.0018	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.8581	0.0000	0.0000	0.0012	0.0003	0.0013	0.0003	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0064	0.0001	0.0002	0.0001	0.0001	0.0002	0.0004	0.0001	0.0000	0.0001	8.0644	0.0000	0.0013	0.0022	0.0005	0.0029	0.0008	0.0001
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Offsite	Diesel	Regular Backlands	0.0007	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3174	0.0000	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Offsite	Gasoline	Quay Repairs	0.0001	0.0000	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1809	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0018	0.0000	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	2.2591	0.0000	0.0004	0.0006	0.0001	0.0008	0.0002	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Offsite	Diesel	Quay Repairs	0.0008	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.3545	0.0000	0.0001	0.0001	0.0000	0.0001	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0013	0.0001	0.0017	0.0000	0.0000	-	-	0.0000	-	-	0.2756	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0001	0.0000	0.0002	0.0000	0.0000	-	-	0.0000	-	-	0.0301	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0168	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0168	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Operatives	TRUCKS1	Idling Onsite	Gasoline	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0

Construction Master Summary for Modeling

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0001	0.0000	0.0002	0.0000	0.0000	-	-	0.0000	-	-	0.0291	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS1	Idling Onsite	Diesel	Regular Backlands	0.0000	0.0000	0.0000	0.0000	0.0000	-	-	0.0000	-	-	0.0073	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Pickup	TRUCKS2	Idling Onsite	Gasoline	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0000	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0081	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS2	Idling Onsite	Diesel	Quay Repairs	0.0000	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0081	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0002	0.0002	0.0024	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1201	0.0001	0.0000	0.0339	0.0034	0.0339	0.0034	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1774	0.0000	0.0000	0.0177	0.0018	0.0177	0.0018	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0194	0.0000	0.0000	0.0019	0.0002	0.0019	0.0002	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0047	0.0000	0.0000	0.0011	0.0001	0.0011	0.0001	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0108	0.0000	0.0000	0.0011	0.0001	0.0011	0.0001	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0108	0.0000	0.0000	0.0011	0.0001	0.0011	0.0001	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Operatives	TRUCKS1	Running Onsite	Gasoline	Regular Backlands	0.0000	0.0000	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Material Delivery	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0186	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS1	Running Onsite	Diesel	Regular Backlands	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0047	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Pickup	TRUCKS2	Running Onsite	Gasoline	Quay Repairs	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Waste Material Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0052	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Onroad	Water Truck	TRUCKS2	Running Onsite	Diesel	Quay Repairs	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0052	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0155	0.0016	0.0186	0.0000	0.0005	-	-	0.0005	-	-	2.5961	0.0001	0.0000	-	-	0.0005	0.0005	0.0005
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1030	0.0015	0.0812	0.0002	0.0041	-	-	0.0038	-	-	25.5066	0.0010	0.0000	-	-	0.0041	0.0038	0.0041
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0056	0.0002	0.0094	0.0000	0.0002	-	-	0.0002	-	-	1.5019	0.0001	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0057	0.0002	0.0096	0.0000	0.0002	-	-	0.0002	-	-	1.5308	0.0001	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0191	0.0005	0.0251	0.0000	0.0011	-	-	0.0010	-	-	3.6639	0.0001	0.0000	-	-	0.0011	0.0010	0.0011
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0155	0.0007	0.0167	0.0000	0.0001	-	-	0.0001	-	-	3.1504	0.0001	0.0000	-	-	0.0001	0.0001	0.0001
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0046	0.0006	0.0050	0.0000	0.0002	-	-	0.0002	-	-	0.7008	0.0000	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0241	0.0033	0.0306	0.0000	0.0009	-	-	0.0008	-	-	3.5407	0.0001	0.0000	-	-	0.0009	0.0008	0.0009
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0198	0.0007	0.0332	0.0000	0.0007	-	-	0.0007	-	-	5.2856	0.0002	0.0000	-	-	0.0007	0.0007	0.0007
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0312	0.0005	0.0343	0.0000	0.0020	-	-	0.0018	-	-	5.0816	0.0002	0.0000	-	-	0.0020	0.0018	0.0020
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0093	0.0003	0.0149	0.0000	0.0004	-	-	0.0004	-	-	2.2589	0.0001	0.0000	-	-	0.0004	0.0004	0.0004
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0061	0.0002	0.0103	0.0000	0.0002	-	-	0.0002	-	-	1.6734	0.0001	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.1154	0.0017	0.0861	0.0002	0.0045	-	-	0.0041	-	-	26.6358	0.0011	0.0000	-	-	0.0045	0.0041	0.0045
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0198	0.0003	0.0212	0.0000	0.0011	-	-	0.0010	-	-	3.3021	0.0001	0.0000	-	-	0.0011	0.0010	0.0011
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0828	0.0007	0.0672	0.0001	0.0037	-	-	0.0034	-	-	10.9923	0.0004	0.0000	-	-	0.0037	0.0034	0.0037
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0233	0.0008	0.0372	0.0001	0.0010	-	-	0.0010	-	-	5.6365	0.0002	0.0000	-	-	0.0010	0.0010	0.0010
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0144	0.0010	0.0183	0.0001	0.0005	-	-	0.0005	-	-	9.2188	0.0004	0.0000	-	-	0.0005	0.0005	0.0005
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0095	0.0004	0.0212	0.0000	0.0005	-	-	0.0004	-	-	3.6061	0.0001	0.0000	-	-	0.0005	0.0004	0.0005
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0396	0.0006	0.0295	0.0001	0.0015	-	-	0.0014	-	-	9.1336	0.0004	0.0000	-	-	0.0015	0.0014	0.0015
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0080	0.0002	0.0105	0.0000	0.0005	-	-	0.0004	-	-	1.5315	0.0001	0.0000	-	-	0.0005	0.0004	0.0005
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0023	0.0000	0.0025	0.0000	0.0001	-	-	0.0001	-	-	0.3681	0.0000	0.0000	-	-	0.0001	0.0001	0.0001
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0017	0.0001	0.0028	0.0000	0.0001	-	-	0.0001	-	-	0.4426	0.0000	0.0000	-	-	0.0001	0.0001	0.0001
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0132	0.0002	0.0104	0.0000	0.0005	-	-	0.0005	-	-	3.2794	0.0001	0.0000	-	-	0.0005	0.0005	0.0005
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Excavators	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Mobile Crane	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0501	0.0009	0.0427	0.0001	0.0020	-	-	0.0019	-	-	13.5463	0.0005	0.0000	-	-	0.0020	0.0019	0.0020
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Stone column rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Wheel Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Piling Rig	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Fork Lift	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0044	0.0001	0.0061	0.0000	0.0002	-	-	0.0002	-	-	0.9002	0.0000	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	MEWPs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0051	0.0002	0.0055	0.0000	0.0000	-	-	0.0000	-	-	1.0368	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Roller Compactor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Air Compressor	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0058	0.0007	0.0074	0.0000	0.0002	-	-	0.0002	-	-	0.8683	0.0000	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Welding Rigs	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0049	0.0002	0.0092	0.0000	0.0001	-	-	0.0001	-	-	1.4762	0.0001	0.0000	-	-	0.0001	0.0001	0.0001
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Sweeper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Backhoe	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Skidsteer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Generator	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Scraper	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Motor Grader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Dozer	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Skip Loader	OFFROAD1	Running Exhaust	Diesel	Regular Backlands	0.0063	0.0003	0.0109	0.0000	0.0002	-	-	0.0002	-	-	1.6558	0.0001	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Excavator	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0046	0.0004	0.0067	0.0000	0.0002	-	-	0.0001	-	-	3.3668	0.0001	0.0000	-	-	0.0002	0.0001	0.0002
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Loader	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0040	0.0002	0.0104	0.0000	0.0002	-	-	0.0002	-	-	1.7712	0.0001	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Scraper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Forklift	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0036	0.0001	0.0051	0.0000	0.0002	-	-	0.0002	-	-	0.7540	0.0000	0.0000	-	-	0.0002	0.0002	0.0002
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Concrete Pumper	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0059	0.0001	0.0071	0.0000	0.0003	-	-	0.0003	-	-	1.0693	0.0000	0.0000	-	-	0.0003	0.0003	0.0003
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Compactor	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	0.0075	0.0001	0.0107	0.0000	0.0004	-	-	0.0004	-	-	1.7918	0.0001	0.0000	-	-	0.0004	0.0004	0.0004
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Diesel Hammer	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Nonroad	Mobile Crane	OFFROAD2	Running Exhaust	Diesel	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Fugitives	Concrete Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0420	0.0064	0.0420	0.0064	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Fugitives	Net Fill	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2370	0.0359	0.2370	0.0359	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0019	0.0003	0.0019	0.0003	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Fugitives	Concrete Fill	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Fugitives	Net Fill	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Fugitives	Waste Materials	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0009	0.0001	0.0009	0.0001	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0109	0.0016	0.0109	0.0016	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0061	0.0009	0.0061	0.0009	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Fugitives	Wind Erosion	DUST1	Fugitives	0	Regular Backlands	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0027	0.0004	0.0027	0.0004	0
Hourly	lb/hr	Product Import Terminal	Controlled	2025	Fugitives	Wind Erosion	DUST2	Fugitives	0	Quay Repairs	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0030	0.0004	0.0030	0.0004	0
Hourly	lb/hr	Product Import Terminal	Controlled	2024	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0025	0.0001	0.0005	0.0000	0.0000	-	-	0.0000	-	-	0.3518	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2024	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0002	0.0000	0.0001	0.0000	0.0000	-	-	0.0000	-	-	0.0393	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	HC	Assist Tugboat Auxiliary	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0007	0.0000	0.0002	0.0000	0.0000	-	-	0.0000	-	-	0.1005	0.0000	0.0000	-	-	0.0000	0.0000	0.0000
Hourly	lb/hr	Product Import Terminal	Controlled	2025	HC	Assist Tugboat Propulsion	TUGBOATS	Transit	MGO/MDO	Quay Repairs	0.0001	0.0000	0.0000	0.0000	0.0000	-	-	0.0000	-	-	0.0112	0.0000	0.0000	-	-	0.0000	0.0000	0.0000

Operational Emission Inventory

On-road Sources: Trucks and Worker Vehicles

Proposed Project Annual Activity

Activity	Year	GGBFS trucks	Gypsum Trucks	Total Trucks	Worker Vehicles
Total Round-Trips	2025	15,500	988	16,488	5,200
	2027	31,000	1,975	32,975	6,760
	2049	31,000	1,975	32,975	6,760
Total Mileage	2025	1,405,072	151,489	1,556,561	104,000
	2027	2,810,144	302,978	3,113,123	135,200
	2049	2,810,144	302,978	3,113,123	135,200
Total Idling Hours	2025	1,292	82	1,374	-
	2027	2,583	165	2,748	-
	2049	2,583	165	2,748	-

Vehicle Running Emission Factors

Calendar Year	Vehicle Category	Running Emission Factors (g/mile)												
		NOx	VOC	CO	SO2	PM10	PM10TW	PM10BW	PM2.5	PM2.5TW	PM2.5BW	CO2	CH4	N2O
2025	GGBFS trucks	1.490	0.013	0.069	0.014	0.024	0.036	0.078	0.023	0.009	0.027	1526.705	0.001	0.241
2025	Gypsum Trucks	1.483	0.068	1.030	0.003	0.031	0.016	0.070	0.028	0.002	0.009	905.455	0.011	0.003
2025	Worker Vehicles	0.038	0.009	0.749	0.003	0.001	0.008	0.008	0.001	0.002	0.003	279.427	0.002	0.004
2027	GGBFS trucks	1.423	0.013	0.062	0.014	0.024	0.036	0.078	0.023	0.009	0.027	1497.306	0.001	0.236
2027	Gypsum Trucks	1.389	0.057	1.003	0.003	0.025	0.016	0.070	0.023	0.002	0.009	875.143	0.010	0.003
2027	Worker Vehicles	0.032	0.007	0.680	0.003	0.001	0.008	0.008	0.001	0.002	0.003	268.409	0.002	0.004
2049	GGBFS trucks	1.092	0.010	0.039	0.012	0.023	0.036	0.085	0.022	0.009	0.030	1258.829	0.000	0.198
2049	Gypsum Trucks	1.032	0.018	0.901	0.003	0.004	0.016	0.071	0.004	0.002	0.009	771.182	0.009	0.003
2049	Worker Vehicles	0.019	0.003	0.496	0.002	0.001	0.008	0.008	0.000	0.002	0.003	228.949	0.001	0.003

Source:
GGBFS trucks and Worker Vehicles running emission factors are based on EMFAC2021 for SCAB for their respective vehicles and calendar years.
Gypsum Trucks running emission factors are based on MOVES3 run in Nevada for their respective vehicle and calendar years.

Vehicle Idling Emission Factors

Calendar Year	Vehicle Category	Idle Emission Factors (g/hr)								
		NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2025	GGBFS trucks	28.199	2.373	34.787	0.054	0.011	0.011	5628.093	0.110	0.000
2025	Gypsum Trucks	23.862	1.602	12.982	0.018	0.423	0.418	0.000	0.000	0.000
2025	Worker Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	GGBFS trucks	28.138	2.371	34.839	0.053	0.011	0.010	5505.995	0.110	0.000
2027	Gypsum Trucks	23.111	1.425	12.463	0.017	0.334	0.412	0.000	0.000	0.000
2027	Worker Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2049	GGBFS trucks	27.985	2.368	34.988	0.048	0.010	0.010	5055.585	0.110	0.000
2049	Gypsum Trucks	20.470	0.801	11.001	0.015	0.023	0.385	0.000	0.000	0.000
2049	Worker Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Source:
GGBFS trucks and Worker Vehicles running emission factors are based on EMFAC2021 for SCAB for their respective vehicles and calendar years.
Gypsum Trucks running emission factors are based on MOVES3 run in Nevada for their respective vehicle and calendar years.

Vehicle Start Emission Factors

Calendar Year	Vehicle Category	Start Emission Factors (g/trip)								
		NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2025	GGBFS trucks	3.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025	Gypsum Trucks	0.555	0.127	0.319	0.000	0.001	0.001	33.909	0.075	0.005
2025	Worker Vehicles	0.232	0.286	2.810	0.001	0.002	0.002	67.844	0.064	0.031
2027	GGBFS trucks	3.942	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	Gypsum Trucks	0.552	0.126	0.311	0.000	0.001	0.001	33.688	0.076	0.005
2027	Worker Vehicles	0.215	0.252	2.541	0.001	0.002	0.002	64.980	0.058	0.030
2049	GGBFS trucks	3.302	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2049	Gypsum Trucks	0.551	0.122	0.269	0.000	0.001	0.001	33.219	0.078	0.005
2049	Worker Vehicles	0.151	0.111	1.502	0.001	0.001	0.001	53.133	0.030	0.024

Source:
GGBFS trucks and Worker Vehicles running emission factors are based on EMFAC2021 for SCAB for their respective vehicles and calendar years.
Gypsum Trucks running emission factors are based on MOVES3 run in Nevada for their respective vehicle and calendar years.

Proposed Project Onroad Road Dust Emissions

Emission Factors for Road Dust Paved Roads

		Parameter (lb/VMT)	PM_{10}	$PM_{2.5}$
E (lb/VMT) =	$k (sL)^{0.91} * (W)^{1.02} * (1-P/4N)$	k	0.0022	0.00054

Function/Variable Description	Assumed Value	Reference
sL = Road surface silt loading (g/m^2)	0.015	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf
W = Average weight (tons) of the vehicles traveling the road	2.4	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf
N = Number of days in averaging period (days)	365	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf
P = Number of days precip per year	46	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

Source: http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf
13.2.1_paved_roads.pdf (epa.gov)

Proposed Project Offsite Fugitive Dust Emission Estimations for Vehicles on Paved Roads - All Project Years

Year	Activity	Equipment Type	Location	Total Annual Vehicle Miles	PM_{10} Uncontrolled Em. Factor (lb/VMT)	PM_{10} Emissions (short tons/vehicle type)	PM_{10} Emissions (short tons/year)	$PM_{2.5}$ Uncontrolled Em. Factor (lb/VMT)	$PM_{2.5}$ Emissions (short tons/vehicle type)	$PM_{2.5}$ Emissions (short tons/year)
2025	Operations	GGBFS trucks	Within SCAB - 710	932,479	0.0001	5.31E-02	5.31E-02	0.0000	1.30E-02	1.30E-02
2025	Operations	Gypsum Trucks	Within SCAB - 710	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
2025	Operations	Worker Vehicles	Within SCAB	103,480	0.0001	5.89E-03	5.89E-03	0.0000	1.45E-03	1.45E-03
2027	Operations	GGBFS trucks	Within SCAB - 710	1,864,958	0.0001	1.06E-01	1.06E-01	0.0000	2.61E-02	2.61E-02
2027	Operations	Gypsum Trucks	Within SCAB - 710	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
2027	Operations	Worker Vehicles	Within SCAB	134,524	0.0001	7.66E-03	7.66E-03	0.0000	1.88E-03	1.88E-03
2049	Operations	GGBFS trucks	Within SCAB - 710	1,864,958	0.0001	1.06E-01	1.06E-01	0.0000	2.61E-02	2.61E-02
2049	Operations	Gypsum Trucks	Within SCAB - 710	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
2049	Operations	Worker Vehicles	Within SCAB	134,524	0.0001	7.66E-03	7.66E-03	0.0000	1.88E-03	1.88E-03
2025	Operations	GGBFS trucks	Within SCAB - 110	471,043	0.0001	2.68E-02	2.68E-02	0.0000	6.59E-03	6.59E-03
2025	Operations	Gypsum Trucks	Within SCAB - 110	151,390	0.0001	8.62E-03	8.62E-03	0.0000	2.12E-03	2.12E-03
2027	Operations	GGBFS trucks	Within SCAB - 110	942,086	0.0001	5.37E-02	5.37E-02	0.0000	1.32E-02	1.32E-02
2027	Operations	Gypsum Trucks	Within SCAB - 110	302,781	0.0001	1.72E-02	1.72E-02	0.0000	4.23E-03	4.23E-03
2049	Operations	GGBFS trucks	Within SCAB - 110	942,086	0.0001	5.37E-02	5.37E-02	0.0000	1.32E-02	1.32E-02
2049	Operations	Gypsum Trucks	Within SCAB - 110	302,781	0.0001	1.72E-02	1.72E-02	0.0000	4.23E-03	4.23E-03
Total						**5.31E-02**	**5.31E-02**		**1.30E-02**	**1.30E-02**

Reduced Project Annual Activity

Activity	Year	GGBFS trucks	Gypsum Trucks	Total Trucks	Worker Vehicles
Total Round-Trips	2025	10,459	668	11,127	2,340
	2027	20,918	1,335	22,253	4,680
	2049	20,918	1,335	22,253	4,680
Total Mileage	2025	948,106	102,399	1,050,505	46,800
	2027	1,896,213	204,798	2,101,011	93,600
	2049	1,896,213	204,798	2,101,011	93,600
Total Idling Hours	2025	872	56	927	-
	2027	1,743	111	1,854	-
	2049	1,743	111	1,854	-

Vehicle Running Emission Factors

Calendar Year	Vehicle Category	Running Emission Factors (g/mile)												
		NOx	VOC	CO	SO2	PM10	PM10TW	PM10BW	PM2.5	PM2.5TW	PM2.5BW	CO2	CH4	N2O
2025	GGBFS trucks	1.490	0.013	0.069	0.014	0.024	0.036	0.078	0.023	0.009	0.027	1526.705	0.001	0.241
2025	Gypsum Trucks	1.483	0.068	1.030	0.003	0.031	0.016	0.070	0.028	0.002	0.009	905.455	0.011	0.003
2025	Worker Vehicles	0.038	0.009	0.749	0.003	0.001	0.008	0.008	0.001	0.002	0.003	279.427	0.002	0.004
2027	GGBFS trucks	1.423	0.013	0.062	0.014	0.024	0.036	0.078	0.023	0.009	0.027	1497.306	0.001	0.236
2027	Gypsum Trucks	1.389	0.057	1.003	0.003	0.025	0.016	0.070	0.023	0.002	0.009	875.143	0.010	0.003
2027	Worker Vehicles	0.032	0.007	0.680	0.003	0.001	0.008	0.008	0.001	0.002	0.003	268.409	0.002	0.004
2049	GGBFS trucks	1.092	0.010	0.039	0.012	0.023	0.036	0.085	0.022	0.009	0.030	1258.829	0.000	0.198
2049	Gypsum Trucks	1.032	0.018	0.901	0.003	0.004	0.016	0.071	0.004	0.002	0.009	771.182	0.009	0.003
2049	Worker Vehicles	0.019	0.003	0.496	0.002	0.001	0.008	0.008	0.000	0.002	0.003	228.949	0.001	0.003

Source:
GGBFS trucks and Worker Vehicles running emission factors are based on EMFAC2021 for SCAB for their respective vehicles and calendar years.
Gypsum Trucks running emission factors are based on MOVES3 run in Nevada for their respective vehicle and calendar years.

Vehicle Idling Emission Factors

Calendar Year	Vehicle Category	Idle Emission Factors (g/hr)								
		NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2025	GGBFS trucks	28.199	2.373	34.787	0.054	0.011	0.011	5628.093	0.110	0.000
2025	Gypsum Trucks	23.862	1.602	12.982	0.018	0.423	0.418	0.000	0.000	0.000
2025	Worker Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	GGBFS trucks	28.138	2.371	34.839	0.053	0.011	0.010	5505.995	0.110	0.000
2027	Gypsum Trucks	23.111	1.425	12.463	0.017	0.334	0.412	0.000	0.000	0.000
2027	Worker Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2049	GGBFS trucks	27.985	2.368	34.988	0.048	0.010	0.010	5055.585	0.110	0.000
2049	Gypsum Trucks	20.470	0.801	11.001	0.015	0.023	0.385	0.000	0.000	0.000
2049	Worker Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Source:
GGBFS trucks and Worker Vehicles running emission factors are based on EMFAC2021 for SCAB for their respective vehicles and calendar years.
Gypsum Trucks running emission factors are based on MOVES3 run in Nevada for their respective vehicle and calendar years.

Vehicle Start Emission Factors

Calendar Year	Vehicle Category	Start Emission Factors (g/trip)								
		NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2025	GGBFS trucks	3.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025	Gypsum Trucks	0.555	0.127	0.319	0.000	0.001	0.001	33.909	0.075	0.005
2025	Worker Vehicles	0.232	0.286	2.810	0.001	0.002	0.002	67.844	0.064	0.031
2027	GGBFS trucks	3.942	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	Gypsum Trucks	0.552	0.126	0.311	0.000	0.001	0.001	33.688	0.076	0.005
2027	Worker Vehicles	0.215	0.252	2.541	0.001	0.002	0.002	64.980	0.058	0.030
2049	GGBFS trucks	3.302	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2049	Gypsum Trucks	0.551	0.122	0.269	0.000	0.001	0.001	33.219	0.078	0.005
2049	Worker Vehicles	0.151	0.111	1.502	0.001	0.001	0.001	53.133	0.030	0.024

Source:
GGBFS trucks and Worker Vehicles running emission factors are based on EMFAC2021 for SCAB for their respective vehicles and calendar years.
Gypsum Trucks running emission factors are based on MOVES3 run in Nevada for their respective vehicle and calendar years.

Reduced Project Onroad Road Dust Emissions

Emission Factors for Road Dust Paved Roads

		Parameter (lb/VMT)	PM_{10}	$PM_{2.5}$
E (lb/VMT) =	$k (sL)^{0.91} * (W)^{1.02} * (1-P/4N)$	k	0.0022	0.00054

Function/Variable Description	Assumed Value	Reference
sL = Road surface silt loading (g/m^2)	0.015	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf
W = Average weight (tons) of the vehicles traveling the road	2.4	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf
N = Number of days in averaging period (days)	365	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf
P = Number of days precip per year	46	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

Source: http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf
13.2.1_paved_roads.pdf (epa.gov)

Reduced Project Offsite Fugitive Dust Emission Estimations for Recreation Vehicles on Paved Roads - All Project Years

Year	Activity	Equipment Type	Location	Total Annual Vehicle Miles	PM_{10} Uncontrolled Em. Factor (lb/VMT)	PM_{10} Emissions (short tons/vehicle type)	PM_{10} Emissions (short tons/year)	$PM_{2.5}$ Uncontrolled Em. Factor (lb/VMT)	$PM_{2.5}$ Emissions (short tons/vehicle type)	$PM_{2.5}$ Emissions (short tons/year)
2025	Operations	GGBFS trucks	Within SCAB - 710	629,213	0.0001	3.58E-02	3.58E-02	0.0000	8.80E-03	8.80E-03
2025	Operations	Gypsum Trucks	Within SCAB - 710	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
2025	Operations	Worker Vehicles	Within SCAB	46,566	0.0001	2.65E-03	2.65E-03	0.0000	6.51E-04	6.51E-04
2027	Operations	GGBFS trucks	Within SCAB - 710	1,258,426	0.0001	7.17E-02	7.17E-02	0.0000	1.76E-02	1.76E-02
2027	Operations	Gypsum Trucks	Within SCAB - 710	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
2027	Operations	Worker Vehicles	Within SCAB	93,132	0.0001	5.30E-03	5.30E-03	0.0000	1.30E-03	1.30E-03
2049	Operations	GGBFS trucks	Within SCAB - 710	1,258,426	0.0001	7.17E-02	7.17E-02	0.0000	1.76E-02	1.76E-02
2049	Operations	Gypsum Trucks	Within SCAB - 710	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
2049	Operations	Worker Vehicles	Within SCAB	93,132	0.0001	5.30E-03	5.30E-03	0.0000	1.30E-03	1.30E-03
2025	Operations	GGBFS trucks	Within SCAB - 110	317,848	0.0001	1.81E-02	1.81E-02	0.0000	4.44E-03	4.44E-03
2025	Operations	Gypsum Trucks	Within SCAB - 110	102,332	0.0001	5.83E-03	5.83E-03	0.0000	1.43E-03	1.43E-03
2027	Operations	GGBFS trucks	Within SCAB - 110	635,696	0.0001	3.62E-02	3.62E-02	0.0000	8.89E-03	8.89E-03
2027	Operations	Gypsum Trucks	Within SCAB - 110	204,665	0.0001	1.17E-02	1.17E-02	0.0000	2.86E-03	2.86E-03
2049	Operations	GGBFS trucks	Within SCAB - 110	635,696	0.0001	3.62E-02	3.62E-02	0.0000	8.89E-03	8.89E-03
2049	Operations	Gypsum Trucks	Within SCAB - 110	204,665	0.0001	1.17E-02	1.17E-02	0.0000	2.86E-03	2.86E-03
Total						**3.58E-02**	**3.58E-02**		**8.80E-03**	**8.80E-03**

Product Terminal Project Annual Activity

Activity	Year	GGBFS trucks	Gypsum Trucks	Total Trucks	Worker Vehicles
Total Round-Trips	2025	15,500	-	15,500	1,560
	2027	31,000	-	31,000	3,120
	2049	31,000	-	31,000	3,120
Total Mileage	2025	1,405,072	-	1,405,072	31,200
	2027	2,810,144	-	2,810,144	62,400
	2049	2,810,144	-	2,810,144	62,400
Total Idling Hours	2025	1,292	-	1,292	-
	2027	2,583	-	2,583	-
	2049	2,583	-	2,583	-

Vehicle Running Emission Factors

Calendar Year	Vehicle Category	Running Emission Factors (g/mile)												
		NOx	VOC	CO	SO2	PM10	PM10TW	PM10BW	PM2.5	PM2.5TW	PM2.5BW	CO2	CH4	N2O
2025	GGBFS trucks	1.490	0.013	0.069	0.014	0.024	0.036	0.078	0.023	0.009	0.027	1526.705	0.001	0.241
2025	Gypsum Trucks	1.483	0.068	1.030	0.003	0.031	0.016	0.070	0.028	0.002	0.009	905.455	0.011	0.003
2025	Worker Vehicles	0.038	0.009	0.749	0.003	0.001	0.008	0.008	0.001	0.002	0.003	279.427	0.002	0.004
2027	GGBFS trucks	1.423	0.013	0.062	0.014	0.024	0.036	0.078	0.023	0.009	0.027	1497.306	0.001	0.236
2027	Gypsum Trucks	1.389	0.057	1.003	0.003	0.025	0.016	0.070	0.023	0.002	0.009	875.143	0.010	0.003
2027	Worker Vehicles	0.032	0.007	0.680	0.003	0.001	0.008	0.008	0.001	0.002	0.003	268.409	0.002	0.004
2049	GGBFS trucks	1.092	0.010	0.039	0.012	0.023	0.036	0.085	0.022	0.009	0.030	1258.829	0.000	0.198
2049	Gypsum Trucks	1.032	0.018	0.901	0.003	0.004	0.016	0.071	0.004	0.002	0.009	771.182	0.009	0.003
2049	Worker Vehicles	0.019	0.003	0.496	0.002	0.001	0.008	0.008	0.000	0.002	0.003	228.949	0.001	0.003

Source:
GGBFS trucks and Worker Vehicles running emission factors are based on EMFAC2021 for SCAB for their respective vehicles and calendar years.
Gypsum Trucks running emission factors are based on MOVES3 run in Nevada for their respective vehicle and calendar years.

Vehicle Idling Emission Factors

Calendar Year	Vehicle Category	Idle Emission Factors (g/hr)								
		NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2025	GGBFS trucks	28.199	2.373	34.787	0.054	0.011	0.011	5628.093	0.110	0.000
2025	Gypsum Trucks	23.862	1.602	12.982	0.018	0.423	0.418	0.000	0.000	0.000
2025	Worker Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	GGBFS trucks	28.138	2.371	34.839	0.053	0.011	0.010	5505.995	0.110	0.000
2027	Gypsum Trucks	23.111	1.425	12.463	0.017	0.334	0.412	0.000	0.000	0.000
2027	Worker Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2049	GGBFS trucks	27.985	2.368	34.988	0.048	0.010	0.010	5055.585	0.110	0.000
2049	Gypsum Trucks	20.470	0.801	11.001	0.015	0.023	0.385	0.000	0.000	0.000
2049	Worker Vehicles	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Source:
GGBFS trucks and Worker Vehicles running emission factors are based on EMFAC2021 for SCAB for their respective vehicles and calendar years.
Gypsum Trucks running emission factors are based on MOVES3 run in Nevada for their respective vehicle and calendar years.

Vehicle Start Emission Factors

Calendar Year	Vehicle Category	Start Emission Factors (g/trip)								
		NOx	VOC	CO	SO2	PM10	PM2.5	CO2	CH4	N2O
2025	GGBFS trucks	3.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2025	Gypsum Trucks	0.555	0.127	0.319	0.000	0.001	0.001	33.909	0.075	0.005
2025	Worker Vehicles	0.232	0.286	2.810	0.001	0.002	0.002	67.844	0.064	0.031
2027	GGBFS trucks	3.942	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2027	Gypsum Trucks	0.552	0.126	0.311	0.000	0.001	0.001	33.688	0.076	0.005
2027	Worker Vehicles	0.215	0.252	2.541	0.001	0.002	0.002	64.980	0.058	0.030
2049	GGBFS trucks	3.302	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2049	Gypsum Trucks	0.551	0.122	0.269	0.000	0.001	0.001	33.219	0.078	0.005
2049	Worker Vehicles	0.151	0.111	1.502	0.001	0.001	0.001	53.133	0.030	0.024

Source:
GGBFS trucks and Worker Vehicles running emission factors are based on EMFAC2021 for SCAB for their respective vehicles and calendar years.
Gypsum Trucks running emission factors are based on MOVES3 run in Nevada for their respective vehicle and calendar years.

Product Terminal Onroad Road Dust Emissions

Emission Factors for Road Dust Paved Roads

		Parameter (lb/VMT)	PM_{10}	$PM_{2.5}$
E (lb/VMT) =	$k (sL)^{0.91} * (W)^{1.02} * (1-P/4N)$	k	0.0022	0.00054

Function/Variable Description	Assumed Value	Reference
sL = Road surface silt loading (g/m^2)	0.015	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf
W = Average weight (tons) of the vehicles traveling the road	2.4	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf
N = Number of days in averaging period (days)	365	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf
P = Number of days precip per year	46	https://ww3.arb.ca.gov/ei/areasrc/fullpdf/2021_paved_roads_7_9.pdf

Source: http://www.aqmd.gov/docs/default-source/caleemod/caleemod-appendixa.pdf
13.2.1_paved_roads.pdf (epa.gov)

Product Terminal Offsite Fugitive Dust Emission Estimations for Recreation Vehicles on Paved Roads - All Project Years

Year	Activity	Equipment Type	Location	Total Annual Vehicle Miles	PM_{10}			$PM_{2.5}$		
					Uncontrolled Em. Factor (lb/VMT)	Emissions (short tons/vehicle type)	Emissions (short tons/year)	Uncontrolled Em. Factor (lb/VMT)	Emissions (short tons/vehicle type)	Emissions (short tons/year)
2025	Operations	GGBFS trucks	Within SCAB - 710	932,479	0.0001	5.31E-02	5.31E-02	0.0000	1.30E-02	1.30E-02
2025	Operations	Gypsum Trucks	Within SCAB - 710	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
2025	Operations	Worker Vehicles	Within SCAB	31,044	0.0001	1.77E-03	1.77E-03	0.0000	4.34E-04	4.34E-04
2027	Operations	GGBFS trucks	Within SCAB - 710	1,864,958	0.0001	1.06E-01	1.06E-01	0.0000	2.61E-02	2.61E-02
2027	Operations	Gypsum Trucks	Within SCAB - 710	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
2027	Operations	Worker Vehicles	Within SCAB	62,088	0.0001	3.54E-03	3.54E-03	0.0000	8.68E-04	8.68E-04
2049	Operations	GGBFS trucks	Within SCAB - 710	1,864,958	0.0001	1.06E-01	1.06E-01	0.0000	2.61E-02	2.61E-02
2049	Operations	Gypsum Trucks	Within SCAB - 710	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
2049	Operations	Worker Vehicles	Within SCAB	62,088	0.0001	3.54E-03	3.54E-03	0.0000	8.68E-04	8.68E-04
2025	Operations	GGBFS trucks	Within SCAB - 110	471,043	0.0001	2.68E-02	2.68E-02	0.0000	6.59E-03	6.59E-03
2025	Operations	Gypsum Trucks	Within SCAB - 110	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
2027	Operations	GGBFS trucks	Within SCAB - 110	942,086	0.0001	5.37E-02	5.37E-02	0.0000	1.32E-02	1.32E-02
2027	Operations	Gypsum Trucks	Within SCAB - 110	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
2049	Operations	GGBFS trucks	Within SCAB - 110	942,086	0.0001	5.37E-02	5.37E-02	0.0000	1.32E-02	1.32E-02
2049	Operations	Gypsum Trucks	Within SCAB - 110	0	0.0001	0.00E+00	0.00E+00	0.0000	0.00E+00	0.00E+00
Total						**5.31E-02**	**5.31E-02**		**1.30E-02**	**1.30E-02**

Off-road Equipment

Proposed Project OFFROAD Equipment Activity, Emission Factors, and Emissions

Activity

Calendar Year	Equipment	CARB Offroad Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	Annual Hours (hours)	Load Factor
2025	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	728	0.38
2025	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	3822	0.37
2027	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	1456	0.38
2027	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	7644	0.37
2049	Excavator	Construction and Mining - Excavators	2039	325	600	Diesel	1456	0.38
2049	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2043	314	600	Diesel	7644	0.37

[1] Annual Hours Activity provided by Clive Moutray (ORCEM) on 6/23/2022
[2] Load Factor source: EMFAC OFFROAD2021 (v1.0.2) Emissions Inventory

Emission Factors - Zero Hour Rates

							Zero-Hour Emission Factors (g/bhp-hr)						
Calendar Year	Equipment	CARB Offroad Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	VOC	CO	NOX	SO2	PM10	PM2.5	CO2
2025	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	0.009292568	-
2025	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	0.009292568	-
2027	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	0.009292568	-
2027	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	0.009292568	-
2049	Excavator	Construction and Mining - Excavators	2039	325	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	0.009292568	-
2049	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2043	314	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	0.009292568	-

[1] CARB, 2017 Available at: https://ww2.arb.ca.gov/sites/default/files/classic/msei/ordiesel/ordas_ef_fcf_2017.pdf

Emission Factors - Deterioration Factors

							Deterioration Rate (g/hp-hr2)						
Calendar Year	Equipment	CARB Offroad Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	VOC	CO	NOX	SO2	PM10	PM2.5	CO2
2025	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	3.44E-07	-
2025	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	3.44E-07	-
2027	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	3.44E-07	-
2027	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	3.44E-07	-
2049	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	3.44E-07	-
2049	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	3.44E-07	-

[1] CARB, 2017 Available at: https://ww2.arb.ca.gov/sites/default/files/classic/msei/ordiesel/ordas_ef_fcf_2017.pdf

Fuel Correction Factors

							Fuel Correction Factors						
Calendar Year	Equipment	CARB Offroad Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	VOC	CO	NOX	SO2	PM10	PM2.5	CO2
2025	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.9	1	0.95	1	0.9	1	1
2025	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.9	1	0.95	1	0.9	1	1
2027	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.9	1	0.95	1	0.9	1	1
2027	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.9	1	0.95	1	0.9	1	1
2049	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.9	1	0.95	1	0.9	1	1
2049	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.9	1	0.95	1	0.9	1	1

[1] CARB, 2017 Available at: https://ww2.arb.ca.gov/sites/default/files/classic/msei/ordiesel/ordas_ef_fcf_2017.pdf

Final Deteriorated Emission Factors

							Final Emission Factors (g/bhp-hr)								
Calendar Year	Equipment	CARB Offroad Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	VOC	CO	NOX	SO2	PM10	PM2.5	CO2	CH4	N2O
2025	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.047385	0.92	0.126014505	0.004884265	0.008363311	0.007694246	527.6689348	0.021396174	0.004279235
2025	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.047385	0.92	0.126014505	0.004884265	0.008363311	0.007694246	527.1170095	0.021373795	0.004274759
2027	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.079673518	0.9729984	0.130855705	0.004884265	0.009264866	0.008523677	529.7471687	0.021480443	0.004296089
2027	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.21689972	1.1982416	0.151430805	0.004884265	0.013096476	0.012048758	528.2029618	0.021417828	0.004283566
2049	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.20882759	1.184992	0.150220505	0.004884265	0.012871087	0.0118414	527.0196925	0.021369848	0.00427397
2049	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.55592916	1.7547248	0.202263405	0.004884265	0.022562805	0.020757781	527.6008668	0.021393414	0.004278683

[1] Emission Factors for SO2, CO2, CH4, N2O sourced: EMFAC OFFROAD2021 (v1.0.2) Emissions Inventory
[2] Emission Factors for VOC, CO, NOX, PM10, PM2.5 calculated via information from CARB, 2017

Reduced Project OFFROAD Equipment Activity, Emission Factors, and Emissions

Activity

Calendar Year	Equipment	CARB Offroad Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	Annual Hours (hours)	Load Factor
2025	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	491.2356129	0.38
2025	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	2578.986968	0.37
2027	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	982.4712258	0.38
2027	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	5157.973935	0.37
2049	Excavator	Construction and Mining - Excavators	2039	325	600	Diesel	982.4712258	0.38
2049	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2043	314	600	Diesel	5157.973935	0.37

[1] Annual Hours Activity provided by Clive Moutray (ORCEM) on 6/23/2022
[2] Load Factor source: EMFAC OFFROAD2021 (v1.0.2) Emissions Inventory

Emission Factors - Zero Hour Rates

							Zero-Hour Emission Factors (g/bhp-hr)						
Calendar Year	Equipment	CARB Offroad Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	VOC	CO	NOX	SO2	PM10	PM2.5	CO2
2025	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	-	-
2025	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	-	-
2027	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	-	-
2027	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	-	-
2049	Excavator	Construction and Mining - Excavators	2039	325	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	-	-
2049	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2043	314	600	Diesel	0.05265	0.92	0.132646848	-	0.009292568	-	-

[1] CARB, 2017 Available at: https://ww2.arb.ca.gov/sites/default/files/classic/msei/ordiesel/ordas_ef_fcf_2017.pdf

Emission Factors - Deterioration Factors

							Deterioration Rate (g/bhp-hr)						
Calendar Year	Equipment	CARB Offroad Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	VOC	CO	NOX	SO2	PM10	PM2.5	CO2
2025	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	-	-
2025	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	-	-
2027	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	-	-
2027	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	-	-
2049	Excavator	Construction and Mining - Excavators	2039	325	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	-	-
2049	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2043	314	600	Diesel	1.23201E-05	0.0000182	1.75E-06	-	3.44E-07	-	-

[1] CARB, 2017 Available at: https://ww2.arb.ca.gov/sites/default/files/classic/msei/ordiesel/ordas_ef_fcf_2017.pdf

Fuel Correction Factors

							Fuel Correction Factors						
Calendar Year	Equipment	CARB Offroad Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	VOC	CO	NOX	SO2	PM10	PM2.5	CO2
2025	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.9	1	0.95	1	0.9	1	1
2025	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.9	1	0.95	1	0.9	1	1
2027	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.9	1	0.95	1	0.9	1	1
2027	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.9	1	0.95	1	0.9	1	1
2049	Excavator	Construction and Mining - Excavators	2039	325	600	Diesel	0.9	1	0.95	1	0.9	1	1
2049	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2043	314	600	Diesel	0.9	1	0.95	1	0.9	1	1

[1] CARB, 2017 Available at: https://ww2.arb.ca.gov/sites/default/files/classic/msei/ordiesel/ordas_ef_fcf_2017.pdf

Emission Factors

							Final Emission Factors (g/bhp-hr)								
Calendar Year	Equipment	CARB Offroad Equipment Category	Model Year	Horsepower	Horsepower Bin	Fuel	VOC	CO	NOX	SO2	PM10	PM2.5	CO2	CH4	N2O
2025	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.047385	0.92	0.126014505	0.004884265	0.008363311	0.007694246	527.6689348	0.021396174	0.004279235
2025	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.047385	0.92	0.126014505	0.004884265	0.008363311	0.007694246	527.1170095	0.021373795	0.004274759
2027	Excavator	Construction and Mining - Excavators	2025	325	600	Diesel	0.069172459	0.955761953	0.129281222	0.004884265	0.008971657	0.008253925	529.7471687	0.021480443	0.004296089
2027	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2025	314	600	Diesel	0.161769158	1.107750251	0.143164769	0.004884265	0.011557128	0.010632558	528.2029618	0.021417828	0.004283566
2049	Excavator	Construction and Mining - Excavators	2039	325	600	Diesel	0.156322294	1.098809763	0.14234809	0.004884265	0.011405042	0.010492638	527.0196925	0.021369848	0.00427397
2049	Front End Loader	Construction and Mining - Tractors/Loaders/Backhoes	2043	314	600	Diesel	0.390537475	1.483250754	0.177465295	0.004884265	0.017944763	0.016509182	527.6008668	0.021393414	0.004278683

[1] Emission Factors for SO2, CO2, CH4, N2O sourced: EMFAC OFFROAD2021 (v1.0.2) Emissions Inventory
[2] Emission Factors for VOC, CO, NOX, PM10, PM2.5 calculated via information from CARB, 2017

Ocean Going Vessels (OGVs)

Proposed Project Annual Ocean Going Vessel Call Activity

Year	Vessel Type	Total Vessel Activity		by Engine Tier Calls - Berthing				Slide Valves	
		Calls to Berth	Calls to Anchorage	Tier 0	Tier 1	Tier 2	Tier 3	With	Without
2025	Bulk	12	1	0	0	6	6	12	0
2027	Bulk	24	1	0	0	12	12	24	0
2049	Bulk	24	1	0	0	12	12	24	0

Reduced Project Annual Ocean Going Vessel Call Activity

Year	Vessel Type	Total Vessel Activity		by Engine Tier Calls - Berthing				Slide Valves	
		Calls to Berth	Calls to Anchorage	Tier 0	Tier 1	Tier 2	Tier 3	With	Without
2025	Bulk	8	1	0	0	4	4	8	0
2027	Bulk	16	1	0	0	8	8	16	0
2049	Bulk	16	1	0	0	8	8	16	0

Product Import Terminal Annual Ocean Going Vessel Call Activity

Year	Vessel Type	Total Vessel Activity		by Engine Tier Calls - Berthing				Slide Valves	
		Calls to Berth	Calls to Anchorage	Tier 0	Tier 1	Tier 2	Tier 3	With	Without
2025	Bulk	12	1	0	5	7	0	12	0
2027	Bulk	23	1	0	9	14	0	23	0
2049	Bulk	23	1	0	9	14	0	23	0

Source:

[1] 2025, 2027, and 2049 vessel type and call activity provided by Orcem based on project design

[2] Proposed Project and Reduced Project Tier breakdown based on 50/50 Tier 2/Tier 3 mix information by Orcem's vessel fleet provider.
Product Import Terminal Tier breakdown based on POLA 2021 Table 3.10: 2021 Percent of OGV Activity by Main Engine Tier and Vessel Type

[3] Assumes anchorage occurs only once a year, if any.

[4] All vessels assumed to be equipped with slide valves. POLA 2014 EI assumed all 2004 or newer MAN 2-stroke engines have slide valves.

Proposed Project and Reduced Project Peakday Ocean Going Vessel Call Activity for all Years

Year	Vessel Type	Total Vessel Activity		by Engine Tier Calls - Berthing				Slide Valves	
		Calls to Berth	Calls to Anchorage	Tier 0	Tier 1	Tier 2	Tier 3	With	Without
2025	Bulk	1	0	0	0	1.0	0.0	1	0
2027	Bulk	1	0	0	0	1.0	0.0	1	0
2049	Bulk	1	0	0	0	1.0	0.0	1	0

Source:
[1] 2025, 2027, and 2049 vessel type and call activity provided by Orcem based on project design
[2] Assuming 1 call to berth during peakday, and one full transit out to 40nm.
[3] Tier breakdown based on 50/50 Tier 2/Tier 3 mix provided by Orcem
[4] All vessels assumed to be equipped with slide valves. POLA 2014 EI assumed all 2004 or newer MAN 2-stroke engines have slide valves.
https://kentico.portoflosangeles.org/getmedia/8066ecf3-86a1-4fa8-b1c9-f9726b92be67/2014_Air_Emissions_Inventory_Full_Report

Daily Ocean Going Vessel Hotelling and Anchorage Duration in Hours per Call

Year	Vessel Type	Peak Day	
		Hotelling Time at Berth (hr/call)	Time at Anchorage (hr/day)
2025	Bulk	19	0
2027	Bulk	19	0
2049	Bulk	19	0

Source:
[1] Peakday hotelling time was calculated by subtracting the travel time to 40 nm from a 24 hr
[2] Annual average hotelling time was obtained from information provided by ORCEM in March 2023

Product Import Terminal Peakday Ocean Going Vessel Call Activity for all Years

Year	Vessel Type	Total Vessel Activity		by Engine Tier Calls - Berthing				Slide Valves	
		Calls to Berth	Calls to Anchorage	Tier 0	Tier 1	Tier 2	Tier 3	With	Without
2025	Bulk	1	0	0	1.0	0.0	0.0	1	0
2027	Bulk	1	0	0	1.0	0.0	0.0	1	0
2049	Bulk	1	0	0	1.0	0.0	0.0	1	0

Source:

[1] 2025, 2027, and 2049 vessel type and call activity provided by Orcem based on project design

[2] Assuming 1 call to berth during peakday, and one full transit out to 40nm.

[3] Tier breakdown based on POLA 2021 Table 3.10: 2021 Percent of OGV Activity by Main Engine Tier and Vessel Type

[4] All vessels assumed to be equipped with slide valves. POLA 2014 EI assumed all 2004 or newer MAN 2-stroke engines have slide valves.
https://kentico.portoflosangeles.org/getmedia/8066ecf3-86a1-4fa8-b1c9-f9726b92be67/2014_Air_Emissions_Inventory_Full_Report

Annual Ocean Going Vessel Hotelling and Anchorage Duration in Hours per Call

Year	Vessel Type	Peak Day - Uncontrolled1	
		Hotelling Time at Berth (hr/call)	Time at Anchorage (hr/day)
2025	Bulk	19	0
2027	Bulk	19	0
2049	Bulk	19	0

Source:

[1] Peakday hotelling time was calculated by subtracting the travel time to 40 nm from a 24 hr

[2] Annual average hotelling time was obtained from information provided by ORCEM in March 2023

Peakhour Ocean Going Vessel Call Activity for all Years - For all scenarios

Year	Vessel Type	Total Vessel Activity		by Engine Tier Calls - Berthing				Slide Valves	
		Calls to Berth	Calls to Anchorage	Tier 0	Tier 1	Tier 2	Tier 3	With	Without
2025	Bulk	1	1	0	0	1.0	0.0	1	0
2027	Bulk	1	1	0	0	1.0	0.0	1	0
2049	Bulk	1	1	0	0	1.0	0.0	1	0

Source:

[1] 2025, 2027, and 2049 vessel type and call activity provided by Orcem based on project design

[2] Assuming 1 call to berth during peakday. One hour of hotelling activity is captured during peak hour.

[3] Tier breakdown based on 50/50 Tier 2/Tier 3 mix provided by Orcem

[4] All vessels assumed to be equipped with slide valves. POLA 2014 EI assumed all 2004 or newer MAN 2-stroke engines have slide valves.
https://kentico.portoflosangeles.org/getmedia/8066ecf3-86a1-4fa8-b1c9-f9726b92be67/2014_Air_Emissions_Inventory_Full_Report

Hourly Ocean Going Vessel Hotelling and Anchorage Duration in Hours per Call

Year	Vessel Type	Peak Hour	
		Hotelling Time at Berth (hr/call)	Time at Anchorage (hr/day)
2025	Bulk	1	0
2027	Bulk	1	0
2049	Bulk	1	0

Source:

[1] Peakhour hotelling time was calculated by subtracting the travel time to 40 nm from a 24 hr peakday period.

[2] Peakhour average hotelling time was obtained from information provided by ORCEM in March 2023

Proposed Project Annual Ocean Going Vessel Transit Call Count and Tier Distribution

Year	Vessel Type	Annual Calls - Transit Trip				Annual Calls - Percentage Weight			
		Tier 0	Tier 1	Tier 2	Tier 3	Tier 0	Tier 1	Tier 2	Tier 3
2025	Bulk	0	0	6	6	0%	0%	50%	50%
2027	Bulk	0	0	12	12	0%	0%	50%	50%
2049	Bulk	0	0	12	12	0%	0%	50%	50%

[1] Tier Mix Source: POLA Inventory 2021 Available at https://kentico.portoflosangeles.org/getmedia/f26839cd-54cd-4da9-92b7-a34094ee75a8/2021_Air_Emissions_Inventory

Reduced Project Annual Ocean Going Vessel Transit Call Count and Tier Distribution

Year	Vessel Type	Annual Calls - Transit Trip				Annual Calls - Percentage Weight			
		Tier 0	Tier 1	Tier 2	Tier 3	Tier 0	Tier 1	Tier 2	Tier 3
2025	Bulk	0	0	4	4	0%	0%	50%	50%
2027	Bulk	0	0	8	8	0%	0%	50%	50%
2049	Bulk	0	0	8	8	0%	0%	50%	50%

[1] Tier Mix Source: POLA Inventory 2021 Available at https://kentico.portoflosangeles.org/getmedia/f26839cd-54cd-4da9-92b7-a34094ee75a8/2021_Air_Emissions_Inventory

Product Import Terminal Annual Ocean Going Vessel Transit Call Count and Tier Distribution

Year	Vessel Type	Annual Calls - Transit Trip				Annual Calls - Percentage Weight			
		Tier 0	Tier 1	Tier 2	Tier 3	Tier 0	Tier 1	Tier 2	Tier 3
2025	Bulk	0	5	7	0	0%	41%	59%	0%
2027	Bulk	0	9	14	0	0%	41%	59%	0%
2049	Bulk	0	9	14	0	0%	41%	59%	0%

[1] Tier Mix Source: POLA Inventory 2021 Available at https://kentico.portoflosangeles.org/getmedia/f26839cd-54cd-4da9-92b7-a34094ee75a8/2021_Air_Emissions_Inventory

Annual Main Engine Composite Emission Factors in grams per kilowatt hour - For All Scenarios

Year	Vessel Type	Emission Factors (g/kW-hr) - Weighted										
		PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
2025	Bulk	0.184	0.169	0.184	8.900	0.362	1.400	0.600	0.632	593	0.012	0.029
2027	Bulk	0.184	0.169	0.184	8.900	0.362	1.400	0.600	0.632	593	0.012	0.029
2049	Bulk	0.184	0.169	0.184	8.900	0.362	1.400	0.600	0.632	593	0.012	0.029

[1] San Pedro Bay Ports Emission Inventory Methodology Report Version 2-2021, Tables 2.3 and 2.4. September 2021.

Annual Auxiliary Engine Composite Emission Factors in grams per kilowatt hour - For All Scenarios

Year	Vessel Type	Emission Factors (g/kW-hr) - Weighted										
		PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
2025	Bulk	0.189	0.174	0.189	6.550	0.424	1.100	0.400	0.421	696	0.008	0.029
2027	Bulk	0.189	0.174	0.189	6.550	0.424	1.100	0.400	0.421	696	0.008	0.029
2049	Bulk	0.189	0.174	0.189	6.550	0.424	1.100	0.400	0.421	696	0.008	0.029

Note:
[1] Boiler in bulk vessels for the Project and Reduced Project are electric.

OGV Propulsion/Boiler Engine Emission Factors for 0.1% S MGO Fuel (g/kW-hr) - For all scenarios

Engine	IMO Tier	Model Year	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Slow Speed Diesel	Tier 0	≤1999	0.184	0.169	0.184	17.00	0.362	1.4	0.6	0.63	593	0.012	0.029
Medium Speed Diesel	Tier 0	≤1999	0.187	0.172	0.187	13.20	0.401	1.1	0.5	0.53	657	0.010	0.029
Slow Speed Diesel	Tier 1	2000-2010	0.184	0.169	0.184	16.00	0.362	1.4	0.6	0.63	593	0.012	0.029
Medium Speed Diesel	Tier 1	2000-2010	0.187	0.172	0.187	12.20	0.401	1.1	0.5	0.53	657	0.010	0.029
Slow Speed Diesel	Tier 2	2011-2015	0.184	0.169	0.184	14.40	0.362	1.4	0.6	0.63	593	0.012	0.029
Medium Speed Diesel	Tier 2	2011-2015	0.187	0.172	0.187	10.50	0.401	1.1	0.5	0.53	657	0.010	0.029
Slow Speed Diesel	Tier 3	≥2016	0.184	0.169	0.184	3.40	0.362	1.4	0.6	0.63	593	0.012	0.029
Medium Speed Diesel	Tier 3	≥2016	0.187	0.172	0.187	2.60	0.401	1.1	0.5	0.53	657	0.010	0.029
Gas Turbine	na	all	0.010	0.009	0.000	5.70	0.587	0.2	0.1	0.11	962	0.002	0.075
Steam Engine and Boiler	na	all	0.202	0.186	0.000	2.00	0.587	0.2	0.1	0.11	962	0.002	0.075

Notes:

[1] Slow speed diesel: engine speed < 150 rpm; assumed as default for propulsion engines.

Source:

[1] San Pedro Bay Ports Emission Inventory Methodology Report Version 2-2021, Tables 2.3 and 2.4. September 2021.

OGV Auxiliary Engine Emission Factors for 0.1% MGO Fuel (g/kW-hr) - For all scenarios

Engine	IMO Tier	Model Year		PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
High Speed Diesel	Tier 0	≤1999		0.189	0.174	0.189	10.90	0.424	0.90	0.40	0.42	696	0.008	0.029
Medium Speed Diesel	Tier 0	≤1999		0.189	0.174	0.189	13.80	0.424	1.10	0.40	0.42	696	0.008	0.029
High Speed Diesel	Tier 1	2000-2010		0.189	0.174	0.189	9.80	0.424	0.90	0.40	0.42	696	0.008	0.029
Medium Speed Diesel	Tier 1	2000-2010		0.189	0.174	0.189	12.20	0.424	1.10	0.40	0.42	696	0.008	0.029
High Speed Diesel	Tier 2	2011-2015		0.189	0.174	0.189	7.70	0.424	0.90	0.40	0.42	696	0.008	0.029
Medium Speed Diesel	Tier 2	2011-2015		0.189	0.174	0.189	10.50	0.424	1.10	0.40	0.42	696	0.008	0.029
High Speed Diesel	Tier 3	≥2016		0.189	0.174	0.189	2.00	0.424	0.90	0.40	0.42	696	0.008	0.029
Medium Speed Diesel	Tier 3	≥2016		0.189	0.174	0.189	2.60	0.424	1.10	0.40	0.42	696	0.008	0.029

Notes:

[1] Bulk auxiliary engines are medium speed.

[2] Calculations assume that auxiliary and propulsion engines are the same model year.

Source:

[1] San Pedro Bay Ports Emission Inventory Methodology Report Version 2-2021, Tables 2.9 and 2.10. September 2021.

OGV Emission Factor Adjustment (EFA) for Propulsion Engines - For all scenarios

Vessel Category	PM	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Vessels without Slide Valves	1.0	1.0	1.0	1.0	1.0	0.44	1.0	1.0	1.0	1.0	1.0
Vessels with Slide Valves	1.0	1.0	1.0	1.0	1.0	0.59	0.43	0.4	1.0	1.0	1.0

Notes:

[1] Factors apply to pollutants for which test results were significantly different in magnitude than the base emission factors used in the SP Bay Inventory.

Source:

[1] San Pedro Bay Ports Emission Inventory Methodology Report Version 2-2021, pg 22. September 2021.

OGV Emission Factor Adjustments (LAF*EFA) for MAN 2-Stroke Propulsion Engines without Slide Valves - For all scenarios

Load	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
1%	0.84	0.84	0.84	1.91	1.10	0.61	2.53	2.53	1.10	2.53	1.91
2%	0.83	0.83	0.83	1.86	1.10	0.60	2.45	2.45	1.10	2.45	1.86
3%	0.83	0.83	0.83	1.82	1.09	0.59	2.37	2.37	1.09	2.37	1.82
4%	0.82	0.82	0.82	1.77	1.09	0.59	2.30	2.30	1.09	2.30	1.77
5%	0.82	0.82	0.82	1.72	1.09	0.58	2.23	2.23	1.09	2.23	1.72
6%	0.81	0.81	0.81	1.68	1.08	0.57	2.16	2.16	1.08	2.16	1.68
7%	0.81	0.81	0.81	1.64	1.08	0.56	2.10	2.10	1.08	2.10	1.64
8%	0.80	0.80	0.80	1.60	1.08	0.55	2.03	2.03	1.08	2.03	1.60
9%	0.80	0.80	0.80	1.56	1.07	0.55	1.97	1.97	1.07	1.97	1.56
10%	0.79	0.79	0.79	1.52	1.07	0.55	1.91	1.91	1.07	1.91	1.52
11%	0.79	0.79	0.79	1.49	1.07	0.54	1.86	1.86	1.07	1.86	1.49
12%	0.78	0.78	0.78	1.45	1.07	0.53	1.80	1.80	1.07	1.80	1.45
13%	0.78	0.78	0.78	1.42	1.06	0.53	1.75	1.75	1.06	1.75	1.42
14%	0.78	0.78	0.78	1.39	1.06	0.52	1.70	1.70	1.06	1.70	1.39
15%	0.77	0.77	0.77	1.36	1.06	0.52	1.65	1.65	1.06	1.65	1.36
16%	0.77	0.77	0.77	1.33	1.06	0.51	1.61	1.61	1.06	1.61	1.33
17%	0.77	0.77	0.77	1.30	1.05	0.51	1.56	1.56	1.05	1.56	1.30
18%	0.77	0.77	0.77	1.28	1.05	0.51	1.52	1.52	1.05	1.52	1.28
19%	0.76	0.76	0.76	1.25	1.05	0.50	1.48	1.48	1.05	1.48	1.25
20%	0.76	0.76	0.76	1.23	1.05	0.50	1.44	1.44	1.05	1.44	1.23
21%	0.76	0.76	0.76	1.20	1.04	0.50	1.41	1.41	1.04	1.41	1.20
22%	0.76	0.76	0.76	1.18	1.04	0.49	1.37	1.37	1.04	1.37	1.18
23%	0.76	0.76	0.76	1.16	1.04	0.49	1.34	1.34	1.04	1.34	1.16
24%	0.75	0.75	0.75	1.14	1.04	0.48	1.31	1.31	1.04	1.31	1.14
25%	0.75	0.75	0.75	1.12	1.03	0.48	1.28	1.28	1.03	1.28	1.12
26%	0.75	0.75	0.75	1.11	1.03	0.48	1.25	1.25	1.03	1.25	1.11
27%	0.75	0.75	0.75	1.09	1.03	0.48	1.22	1.22	1.03	1.22	1.09
28%	0.75	0.75	0.75	1.07	1.03	0.48	1.20	1.20	1.03	1.20	1.07
29%	0.75	0.75	0.75	1.06	1.03	0.47	1.17	1.17	1.03	1.17	1.06
30%	0.75	0.75	0.75	1.05	1.02	0.47	1.15	1.15	1.02	1.15	1.05
31%	0.75	0.75	0.75	1.03	1.02	0.47	1.13	1.13	1.02	1.13	1.03
32%	0.75	0.75	0.75	1.02	1.02	0.47	1.11	1.11	1.02	1.11	1.02
33%	0.75	0.75	0.75	1.01	1.02	0.46	1.09	1.09	1.02	1.09	1.01
34%	0.75	0.75	0.75	1.00	1.02	0.46	1.08	1.08	1.02	1.08	1.00
35%	0.76	0.76	0.76	0.99	1.02	0.46	1.06	1.06	1.02	1.06	0.99
36%	0.76	0.76	0.76	0.98	1.01	0.46	1.05	1.05	1.01	1.05	0.98
37%	0.76	0.76	0.76	0.98	1.01	0.45	1.04	1.04	1.01	1.04	0.98
38%	0.76	0.76	0.76	0.97	1.01	0.45	1.02	1.02	1.01	1.02	0.97
39%	0.76	0.76	0.76	0.96	1.01	0.45	1.01	1.01	1.01	1.01	0.96
40%	0.76	0.76	0.76	0.96	1.01	0.45	1.00	1.00	1.01	1.00	0.96
41%	0.77	0.77	0.77	0.95	1.01	0.44	0.99	0.99	1.01	0.99	0.95
42%	0.77	0.77	0.77	0.95	1.01	0.44	0.99	0.99	1.01	0.99	0.95
43%	0.77	0.77	0.77	0.94	1.01	0.44	0.98	0.98	1.01	0.98	0.94
44%	0.78	0.78	0.78	0.94	1.00	0.44	0.97	0.97	1.00	0.97	0.94
45%	0.78	0.78	0.78	0.94	1.00	0.44	0.97	0.97	1.00	0.97	0.94

OGV Emission Factor Adjustments (LAF*EFA) for MAN 2-Stroke Propulsion Engines without Slide Valves - For all scenarios

Load	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
46%	0.78	0.78	0.78	0.94	1.00	0.44	0.96	0.96	1.00	0.96	0.94
47%	0.79	0.79	0.79	0.94	1.00	0.44	0.96	0.96	1.00	0.96	0.94
48%	0.79	0.79	0.79	0.93	1.00	0.43	0.96	0.96	1.00	0.96	0.93
49%	0.79	0.79	0.79	0.93	1.00	0.43	0.96	0.96	1.00	0.96	0.93
50%	0.80	0.80	0.80	0.93	1.00	0.43	0.96	0.96	1.00	0.96	0.93
51%	0.80	0.80	0.80	0.94	1.00	0.43	0.95	0.95	1.00	0.95	0.94
52%	0.81	0.81	0.81	0.94	1.00	0.43	0.95	0.95	1.00	0.95	0.94
53%	0.81	0.81	0.81	0.94	1.00	0.42	0.95	0.95	1.00	0.95	0.94
54%	0.82	0.82	0.82	0.94	1.00	0.42	0.95	0.95	1.00	0.95	0.94
55%	0.82	0.82	0.82	0.94	0.99	0.42	0.96	0.96	0.99	0.96	0.94
56%	0.83	0.83	0.83	0.94	0.99	0.42	0.96	0.96	0.99	0.96	0.94
57%	0.84	0.84	0.84	0.95	0.99	0.42	0.96	0.96	0.99	0.96	0.95
58%	0.84	0.84	0.84	0.95	0.99	0.42	0.96	0.96	0.99	0.96	0.95
59%	0.85	0.85	0.85	0.95	0.99	0.41	0.96	0.96	0.99	0.96	0.95
60%	0.86	0.86	0.86	0.95	0.99	0.41	0.97	0.97	0.99	0.97	0.95
61%	0.86	0.86	0.86	0.96	0.99	0.41	0.97	0.97	0.99	0.97	0.96
62%	0.87	0.87	0.87	0.96	0.99	0.41	0.97	0.97	0.99	0.97	0.96
63%	0.88	0.88	0.88	0.96	0.99	0.41	0.98	0.98	0.99	0.98	0.96
64%	0.89	0.89	0.89	0.97	0.99	0.41	0.98	0.98	0.99	0.98	0.97
65%	0.89	0.89	0.89	0.97	0.99	0.40	0.98	0.98	0.99	0.98	0.97
66%	0.90	0.90	0.90	0.98	0.99	0.40	0.99	0.99	0.99	0.99	0.98
67%	0.91	0.91	0.91	0.98	0.99	0.40	0.99	0.99	0.99	0.99	0.98
68%	0.92	0.92	0.92	0.98	0.99	0.40	0.99	0.99	0.99	0.99	0.98
69%	0.93	0.93	0.93	0.99	0.99	0.40	1.00	1.00	0.99	1.00	0.99
70%	0.94	0.94	0.94	0.99	0.99	0.40	1.00	1.00	0.99	1.00	0.99
71%	0.94	0.94	0.94	0.99	0.99	0.40	1.00	1.00	0.99	1.00	0.99
72%	0.95	0.95	0.95	1.00	0.99	0.40	1.01	1.01	0.99	1.01	1.00
73%	0.96	0.96	0.96	1.00	0.99	0.40	1.01	1.01	0.99	1.01	1.00
74%	0.97	0.97	0.97	1.00	0.99	0.40	1.01	1.01	0.99	1.01	1.00
75%	0.98	0.98	0.98	1.01	0.99	0.40	1.01	1.01	0.99	1.01	1.01
76%	0.99	0.99	0.99	1.01	0.99	0.40	1.01	1.01	0.99	1.01	1.01
77%	1.00	1.00	1.00	1.01	0.99	0.40	1.01	1.01	0.99	1.01	1.01
78%	1.01	1.01	1.01	1.01	0.99	0.40	1.01	1.01	0.99	1.01	1.01
79%	1.03	1.03	1.03	1.02	0.99	0.40	1.01	1.01	0.99	1.01	1.02
80%	1.04	1.04	1.04	1.02	0.99	0.40	1.01	1.01	0.99	1.01	1.02
81%	1.05	1.05	1.05	1.02	0.99	0.40	1.01	1.01	0.99	1.01	1.02
82%	1.06	1.06	1.06	1.02	0.99	0.40	1.01	1.01	0.99	1.01	1.02
83%	1.07	1.07	1.07	1.02	0.99	0.40	1.01	1.01	0.99	1.01	1.02
84%	1.08	1.08	1.08	1.02	0.99	0.40	1.00	1.00	0.99	1.00	1.02
85%	1.10	1.10	1.10	1.02	0.99	0.40	1.00	1.00	0.99	1.00	1.02
86%	1.11	1.11	1.11	1.02	0.99	0.41	0.99	0.99	0.99	0.99	1.02
87%	1.12	1.12	1.12	1.02	0.99	0.41	0.99	0.99	0.99	0.99	1.02
88%	1.13	1.13	1.13	1.02	0.99	0.41	0.98	0.98	0.99	0.98	1.02
89%	1.15	1.15	1.15	1.01	0.99	0.42	0.97	0.97	0.99	0.97	1.01
90%	1.16	1.16	1.16	1.01	0.99	0.42	0.97	0.97	0.99	0.97	1.01
91%	1.17	1.17	1.17	1.01	1.00	0.42	0.96	0.96	1.00	0.96	1.01
92%	1.19	1.19	1.19	1.00	1.00	0.43	0.94	0.94	1.00	0.94	1.00
93%	1.20	1.20	1.20	1.00	1.00	0.43	0.93	0.93	1.00	0.93	1.00
94%	1.22	1.22	1.22	0.99	1.00	0.44	0.92	0.92	1.00	0.92	0.99
95%	1.23	1.23	1.23	0.99	1.00	0.44	0.91	0.91	1.00	0.91	0.99
96%	1.24	1.24	1.24	0.98	1.00	0.45	0.89	0.89	1.00	0.89	0.98
97%	1.26	1.26	1.26	0.97	1.00	0.45	0.87	0.87	1.00	0.87	0.97
98%	1.28	1.28	1.28	0.97	1.00	0.46	0.86	0.86	1.00	0.86	0.97
99%	1.29	1.29	1.29	0.96	1.00	0.47	0.84	0.84	1.00	0.84	0.96
100%	1.31	1.31	1.31	0.95	1.00	0.48	0.82	0.82	1.00	0.82	0.95

Notes:

[1] Emission factor adjustments are used to adjust standard emission factors, for MAN engines without slide valves. EF = fuel corrected EF*LAF*EFA.

[2] Emission factor adjustments are used in peak day calculations, where the type of engine has been identified or can be assumed.

Table 10. OGV Emission Factor Adjustments (LAF*EFA) for MAN 2-Stroke Propulsion Engines with Slide Valves - For all scenarios

Load	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
1%	0.36	0.36	0.36	1.90	1.10	0.07	0.58	0.58	1.10	1.36	1.90
2%	0.37	0.37	0.37	1.86	1.10	0.07	0.57	0.57	1.10	1.32	1.86
3%	0.38	0.38	0.38	1.82	1.09	0.07	0.55	0.55	1.09	1.28	1.82
4%	0.38	0.38	0.38	1.78	1.09	0.07	0.53	0.53	1.09	1.24	1.78
5%	0.39	0.39	0.39	1.74	1.09	0.07	0.52	0.52	1.09	1.20	1.74
6%	0.40	0.40	0.40	1.70	1.08	0.07	0.50	0.50	1.08	1.17	1.70
7%	0.41	0.41	0.41	1.67	1.08	0.07	0.49	0.49	1.08	1.14	1.67
8%	0.41	0.41	0.41	1.63	1.08	0.07	0.48	0.48	1.08	1.11	1.63
9%	0.42	0.42	0.42	1.60	1.07	0.07	0.46	0.46	1.07	1.08	1.60
10%	0.43	0.43	0.43	1.57	1.07	0.07	0.45	0.45	1.07	1.05	1.57
11%	0.44	0.44	0.44	1.53	1.07	0.15	0.44	0.44	1.07	1.02	1.53
12%	0.45	0.45	0.45	1.50	1.07	0.23	0.43	0.43	1.07	0.99	1.50
13%	0.45	0.45	0.45	1.47	1.06	0.31	0.42	0.42	1.06	0.97	1.47
14%	0.46	0.46	0.46	1.45	1.06	0.38	0.40	0.40	1.06	0.94	1.45
15%	0.47	0.47	0.47	1.42	1.06	0.44	0.40	0.40	1.06	0.92	1.42
16%	0.48	0.48	0.48	1.39	1.06	0.50	0.39	0.39	1.06	0.90	1.39
17%	0.49	0.49	0.49	1.37	1.05	0.56	0.38	0.38	1.05	0.88	1.37
18%	0.49	0.49	0.49	1.34	1.05	0.61	0.37	0.37	1.05	0.86	1.34
19%	0.50	0.50	0.50	1.32	1.05	0.66	0.36	0.36	1.05	0.84	1.32
20%	0.51	0.51	0.51	1.30	1.05	0.71	0.35	0.35	1.05	0.82	1.30
21%	0.52	0.52	0.52	1.28	1.04	0.75	0.35	0.35	1.04	0.81	1.28
22%	0.53	0.53	0.53	1.26	1.04	0.79	0.34	0.34	1.04	0.79	1.26
23%	0.54	0.54	0.54	1.24	1.04	0.83	0.34	0.34	1.04	0.78	1.24
24%	0.54	0.54	0.54	1.22	1.04	0.86	0.33	0.33	1.04	0.76	1.22
25%	0.55	0.55	0.55	1.20	1.03	0.89	0.32	0.32	1.03	0.75	1.20
26%	0.56	0.56	0.56	1.19	1.03	0.91	0.32	0.32	1.03	0.74	1.19
27%	0.57	0.57	0.57	1.17	1.03	0.94	0.31	0.31	1.03	0.73	1.17
28%	0.58	0.58	0.58	1.16	1.03	0.96	0.31	0.31	1.03	0.72	1.16
29%	0.59	0.59	0.59	1.14	1.03	0.98	0.31	0.31	1.03	0.71	1.14
30%	0.60	0.60	0.60	1.13	1.02	0.99	0.30	0.30	1.02	0.70	1.13
31%	0.60	0.60	0.60	1.12	1.02	1.00	0.30	0.30	1.02	0.70	1.12
32%	0.61	0.61	0.61	1.10	1.02	1.01	0.30	0.30	1.02	0.69	1.10
33%	0.62	0.62	0.62	1.09	1.02	1.03	0.30	0.30	1.02	0.69	1.09
34%	0.63	0.63	0.63	1.08	1.02	1.03	0.29	0.29	1.02	0.68	1.08
35%	0.64	0.64	0.64	1.07	1.02	1.03	0.29	0.29	1.02	0.68	1.07
36%	0.65	0.65	0.65	1.06	1.01	1.03	0.29	0.29	1.01	0.68	1.06
37%	0.66	0.66	0.66	1.05	1.01	1.03	0.29	0.29	1.01	0.67	1.05
38%	0.67	0.67	0.67	1.05	1.01	1.03	0.29	0.29	1.01	0.67	1.05
39%	0.68	0.68	0.68	1.04	1.01	1.03	0.29	0.29	1.01	0.67	1.04
40%	0.69	0.69	0.69	1.03	1.01	1.02	0.29	0.29	1.01	0.67	1.03
41%	0.70	0.70	0.70	1.03	1.01	1.01	0.29	0.29	1.01	0.67	1.03
42%	0.70	0.70	0.70	1.02	1.01	1.01	0.29	0.29	1.01	0.68	1.02
43%	0.71	0.71	0.71	1.02	1.01	1.00	0.29	0.29	1.01	0.68	1.02
44%	0.72	0.72	0.72	1.01	1.00	0.99	0.29	0.29	1.00	0.68	1.01
45%	0.73	0.73	0.73	1.01	1.00	0.97	0.30	0.30	1.00	0.69	1.01
46%	0.74	0.74	0.74	1.00	1.00	0.96	0.30	0.30	1.00	0.69	1.00
47%	0.75	0.75	0.75	1.00	1.00	0.94	0.30	0.30	1.00	0.70	1.00
48%	0.76	0.76	0.76	1.00	1.00	0.93	0.30	0.30	1.00	0.70	1.00
49%	0.77	0.77	0.77	0.99	1.00	0.91	0.31	0.31	1.00	0.71	0.99
50%	0.78	0.78	0.78	0.99	1.00	0.89	0.31	0.31	1.00	0.71	0.99
51%	0.79	0.79	0.79	0.99	1.00	0.87	0.31	0.31	1.00	0.72	0.99
52%	0.80	0.80	0.80	0.99	1.00	0.86	0.31	0.31	1.00	0.73	0.99
53%	0.81	0.81	0.81	0.99	1.00	0.83	0.32	0.32	1.00	0.74	0.99
54%	0.82	0.82	0.82	0.99	1.00	0.81	0.32	0.32	1.00	0.75	0.99
55%	0.83	0.83	0.83	0.98	0.99	0.80	0.32	0.32	0.99	0.75	0.98
56%	0.84	0.84	0.84	0.98	0.99	0.77	0.33	0.33	0.99	0.76	0.98
57%	0.85	0.85	0.85	0.98	0.99	0.75	0.33	0.33	0.99	0.77	0.98
58%	0.86	0.86	0.86	0.98	0.99	0.73	0.34	0.34	0.99	0.78	0.98
59%	0.87	0.87	0.87	0.98	0.99	0.71	0.34	0.34	0.99	0.80	0.98
60%	0.88	0.88	0.88	0.98	0.99	0.68	0.35	0.35	0.99	0.81	0.98
61%	0.89	0.89	0.89	0.98	0.99	0.67	0.35	0.35	0.99	0.82	0.98
62%	0.90	0.90	0.90	0.98	0.99	0.64	0.36	0.36	0.99	0.83	0.98
63%	0.91	0.91	0.91	0.99	0.99	0.63	0.36	0.36	0.99	0.84	0.99
64%	0.92	0.92	0.92	0.99	0.99	0.60	0.37	0.37	0.99	0.85	0.99
65%	0.93	0.93	0.93	0.99	0.99	0.58	0.37	0.37	0.99	0.87	0.99
66%	0.94	0.94	0.94	0.99	0.99	0.56	0.38	0.38	0.99	0.88	0.99
67%	0.95	0.95	0.95	0.99	0.99	0.54	0.38	0.38	0.99	0.89	0.99
68%	0.97	0.97	0.97	0.99	0.99	0.52	0.39	0.39	0.99	0.91	0.99
69%	0.98	0.98	0.98	0.99	0.99	0.50	0.40	0.40	0.99	0.92	0.99
70%	0.99	0.99	0.99	0.99	0.99	0.48	0.40	0.40	0.99	0.93	0.99
71%	1.00	1.00	1.00	0.99	0.99	0.47	0.41	0.41	0.99	0.95	0.99

Table 10. OGV Emission Factor Adjustments (LAF*EFA) for MAN 2-Stroke Propulsion Engines with Slide Valves - For all scenarios

Load	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
72%	1.01	1.01	1.01	0.99	0.99	0.45	0.41	0.41	0.99	0.96	0.99
73%	1.02	1.02	1.02	0.99	0.99	0.44	0.42	0.42	0.99	0.98	0.99
74%	1.03	1.03	1.03	0.99	0.99	0.42	0.43	0.43	0.99	0.99	0.99
75%	1.04	1.04	1.04	0.99	0.99	0.41	0.43	0.43	0.99	1.00	0.99
76%	1.05	1.05	1.05	0.99	0.99	0.39	0.44	0.44	0.99	1.02	0.99
77%	1.06	1.06	1.06	0.99	0.99	0.38	0.44	0.44	0.99	1.03	0.99
78%	1.07	1.07	1.07	0.99	0.99	0.37	0.45	0.45	0.99	1.05	0.99
79%	1.09	1.09	1.09	0.99	0.99	0.36	0.46	0.46	0.99	1.06	0.99
80%	1.10	1.10	1.10	0.99	0.99	0.35	0.46	0.46	0.99	1.08	0.99
81%	1.11	1.11	1.11	0.99	0.99	0.34	0.47	0.47	0.99	1.09	0.99
82%	1.12	1.12	1.12	0.99	0.99	0.34	0.47	0.47	0.99	1.10	0.99
83%	1.13	1.13	1.13	0.98	0.99	0.34	0.48	0.48	0.99	1.12	0.98
84%	1.14	1.14	1.14	0.98	0.99	0.33	0.49	0.49	0.99	1.13	0.98
85%	1.15	1.15	1.15	0.98	0.99	0.33	0.49	0.49	0.99	1.15	0.98
86%	1.16	1.16	1.16	0.98	0.99	0.33	0.50	0.50	0.99	1.16	0.98
87%	1.18	1.18	1.18	0.97	0.99	0.33	0.51	0.51	0.99	1.18	0.97
88%	1.19	1.19	1.19	0.97	0.99	0.34	0.51	0.51	0.99	1.19	0.97
89%	1.20	1.20	1.20	0.96	0.99	0.34	0.52	0.52	0.99	1.20	0.96
90%	1.21	1.21	1.21	0.96	0.99	0.35	0.52	0.52	0.99	1.22	0.96
91%	1.22	1.22	1.22	0.95	1.00	0.36	0.53	0.53	1.00	1.23	0.95
92%	1.23	1.23	1.23	0.95	1.00	0.37	0.53	0.53	1.00	1.24	0.95
93%	1.25	1.25	1.25	0.94	1.00	0.38	0.54	0.54	1.00	1.25	0.94
94%	1.26	1.26	1.26	0.93	1.00	0.40	0.55	0.55	1.00	1.27	0.93
95%	1.27	1.27	1.27	0.93	1.00	0.41	0.55	0.55	1.00	1.28	0.93
96%	1.28	1.28	1.28	0.92	1.00	0.43	0.55	0.55	1.00	1.29	0.92
97%	1.29	1.29	1.29	0.91	1.00	0.45	0.56	0.56	1.00	1.30	0.91
98%	1.31	1.31	1.31	0.90	1.00	0.48	0.56	0.56	1.00	1.31	0.90
99%	1.32	1.32	1.32	0.89	1.00	0.50	0.57	0.57	1.00	1.32	0.89
100%	1.33	1.33	1.33	0.88	1.00	0.53	0.58	0.58	1.00	1.34	0.88

Notes:

[1] Emission factor adjustments are used to adjust standard emission factors, for MAN engines with slide valves. EF = fuel corrected EF*LAF*EFA.

[2] Emission factor adjustments are used in peak day calculations, where the type of engine has been identified or can be assumed.

Proposed Project OGV Main Engines (Propulsion Engine) Characteristics

Type	Year	Zone #	Zone Description	Vessel Type	Engine Rating (kW)	Max Rated Speed (mph)	Speed (mph)	Distance (nm)	Oper. Time (hr/trip or call)	Oper. Energy (kW-hr/trip or call)	Load Factor	MAN Engine with Slide Valve	Engines with no Slide Valves
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	7686	14.5	14	130	9.29	64233	90%	100%	0%
Transit	2025	4	40 to 20 Nautical Miles	Bulk	7686	14.5	12	24	1.99	8857	58%	100%	0%
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	7686	14.5	12	16	1.31	5751	57%	100%	0%
Transit	2025	2	Precautionary Area	Bulk	7686	14.5	9	8	0.91	1614	23%	100%	0%
Transit	2025	1	Maneuvering	Bulk	7686	14.5	6	4	0.68	365	7%	100%	0%
Berthing	2025	Berthing	Berthing	Bulk	7686	14.5	0	0	120.00	0	0%	100%	0%
Anchorage	2025	Anchorage	Anchorage	Bulk	7686	14.5	0	0	24.00	0	0%	0%	0%
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	7686	14.5	14	130	9.29	64233	90%	100%	0%
Transit	2027	4	40 to 20 Nautical Miles	Bulk	7686	14.5	12	24	1.99	8857	58%	100%	0%
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	7686	14.5	12	16	1.31	5751	57%	100%	0%
Transit	2027	2	Precautionary Area	Bulk	7686	14.5	9	8	0.91	1614	23%	100%	0%
Transit	2027	1	Maneuvering	Bulk	7686	14.5	6	4	0.68	365	7%	100%	0%
Berthing	2027	Berthing	Berthing	Bulk	7686	14.5	0	0	120.00	0	0%	100%	0%
Anchorage	2027	Anchorage	Anchorage	Bulk	7686	14.5	0	0	24.00	0	0%	0%	0%
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	7686	14.5	14	130	9.29	64233	90%	100%	0%
Transit	2049	4	40 to 20 Nautical Miles	Bulk	7686	14.5	12	24	1.99	8857	58%	100%	0%
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	7686	14.5	12	16	1.31	5751	57%	100%	0%
Transit	2049	2	Precautionary Area	Bulk	7686	14.5	9	8	0.91	1614	23%	100%	0%
Transit	2049	1	Maneuvering	Bulk	7686	14.5	6	4	0.68	365	7%	100%	0%
Berthing	2049	Berthing	Berthing	Bulk	7686	14.5	0	0	120.00	0	0%	100%	0%
Anchorage	2049	Anchorage	Anchorage	Bulk	7686	14.5	0	0	24.00	0	0%	0%	0%

Proposed Project OGV Emissions Factors - Main Engines (Propulsion Engine)

				Emission Factors (g/kW-hr)										
Type	Year	Zone #	Zone Description	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	4	40 to 20 Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	3	20-Nautical Miles to Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	2	Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	1	Maneuvering	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Berthing	2025	Berthing	Berthing	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Anchorage	2025	Anchorage	Anchorage	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	5	State Boundary to 40-Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	4	40 to 20 Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	3	20-Nautical Miles to Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	2	Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	1	Maneuvering	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Berthing	2027	Berthing	Berthing	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Anchorage	2027	Anchorage	Anchorage	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	5	State Boundary to 40-Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	4	40 to 20 Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	3	20-Nautical Miles to Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	2	Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	1	Maneuvering	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Berthing	2049	Berthing	Berthing	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Anchorage	2049	Anchorage	Anchorage	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029

Proposed Project Adjusted Emission Factors - Main Engines (Propulsion Engine)

				Load Adjustment Factor										
Type	Year	Zone #	Zone Description	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	1.2	1.2	1.2	1.0	1.0	0.3	0.5	0.5	1.0	1.2	1.0
Transit	2025	4	40 to 20 Nautical Miles	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2025	3	20-Nautical Miles to Precautionary Area	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2025	2	Precautionary Area	0.5	0.5	0.5	1.2	1.0	0.8	0.3	0.3	1.0	0.8	1.2
Transit	2025	1	Maneuvering	0.4	0.4	0.4	1.7	1.1	0.1	0.5	0.5	1.1	1.1	1.7
Berthing	2025	Berthing	Berthing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anchorage	2025	Anchorage	Anchorage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transit	2027	5	State Boundary to 40-Nautical Miles	1.2	1.2	1.2	1.0	1.0	0.3	0.5	0.5	1.0	1.2	1.0
Transit	2027	4	40 to 20 Nautical Miles	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2027	3	20-Nautical Miles to Precautionary Area	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2027	2	Precautionary Area	0.5	0.5	0.5	1.2	1.0	0.8	0.3	0.3	1.0	0.8	1.2
Transit	2027	1	Maneuvering	0.4	0.4	0.4	1.7	1.1	0.1	0.5	0.5	1.1	1.1	1.7
Berthing	2027	Berthing	Berthing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anchorage	2027	Anchorage	Anchorage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transit	2049	5	State Boundary to 40-Nautical Miles	1.2	1.2	1.2	1.0	1.0	0.3	0.5	0.5	1.0	1.2	1.0
Transit	2049	4	40 to 20 Nautical Miles	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2049	3	20-Nautical Miles to Precautionary Area	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2049	2	Precautionary Area	0.5	0.5	0.5	1.2	1.0	0.8	0.3	0.3	1.0	0.8	1.2
Transit	2049	1	Maneuvering	0.4	0.4	0.4	1.7	1.1	0.1	0.5	0.5	1.1	1.1	1.7
Berthing	2049	Berthing	Berthing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anchorage	2049	Anchorage	Anchorage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Proposed Project OGV Auxiliary Engines Characteristics

Type	Year	Zone #	Zone Description	Vessel Type	Load (kW)	Max Rated Speed (mph)	Speed (mph)	Distance (miles)	Oper. Time (hr/trip or call)	Oper. Energy (kW-hr/trip or call)
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	249.1	14.5	14	130	9.29	2313
Transit	2025	4	40 to 20 Nautical Miles	Bulk	249.1	14.5	12	24	1.99	495
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	249.1	14.5	12	16	1.31	327
Transit	2025	2	Precautionary Area	Bulk	249.1	14.5	9	8	0.91	227
Transit	2025	1	Maneuvering	Bulk	249.1	14.5	6	4	0.68	169
Berthing	2025	Berthing	Berthing	Bulk	343.3808333	14.5	0	0	120.00	41206
Anchorage	2025	Anchorage	Anchorage	Bulk	130.1	14.5	0	0	24.00	3122
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	249.1	14.5	14	130	9.29	2313
Transit	2027	4	40 to 20 Nautical Miles	Bulk	249.1	14.5	12	24	1.99	495
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	249.1	14.5	12	16	1.31	327
Transit	2027	2	Precautionary Area	Bulk	249.1	14.5	9	8	0.91	227
Transit	2027	1	Maneuvering	Bulk	249.1	14.5	6	4	0.68	169
Berthing	2027	Berthing	Berthing	Bulk	343.3808333	14.5	0	0	120.00	41206
Anchorage	2027	Anchorage	Anchorage	Bulk	130.1	14.5	0	0	24.00	3122
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	249.1	14.5	14	130	9.29	2313
Transit	2049	4	40 to 20 Nautical Miles	Bulk	249.1	14.5	12	24	1.99	495
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	249.1	14.5	12	16	1.31	327
Transit	2049	2	Precautionary Area	Bulk	249.1	14.5	9	8	0.91	227
Transit	2049	1	Maneuvering	Bulk	249.1	14.5	6	4	0.68	169
Berthing	2049	Berthing	Berthing	Bulk	343.3808333	14.5	0	0	120.00	41206
Anchorage	2049	Anchorage	Anchorage	Bulk	130.1	14.5	0	0	24.00	3122

Proposed Project OGV Emission Factors - Auxiliary Engines

					Emission Factors (g/kW-hr)										
Type	Year	Zone #	Zone Description	Vessel Type	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	4	40 to 20 Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	2	Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	1	Maneuvering	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Berthing	2025	Berthing	Berthing	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Anchorage	2025	Anchorage	Anchorage	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	4	40 to 20 Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	2	Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	1	Maneuvering	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Berthing	2027	Berthing	Berthing	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Anchorage	2027	Anchorage	Anchorage	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	4	40 to 20 Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	2	Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	1	Maneuvering	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Berthing	2049	Berthing	Berthing	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Anchorage	2049	Anchorage	Anchorage	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029

Proposed Project OGV Auxiliary Boiler Characteristics

Type	Year	Zone #	Zone Description	Vessel Type	Load (kW)	Max Rated Speed (mph)	Speed (mph)	Distance (miles)	Oper. Time (hr/trip or call)	Oper. Energy (kW-hr/trip or call)
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	0	14.5	14	130	9.29	0
Transit	2025	4	40 to 20 Nautical Miles	Bulk	0	14.5	12	24	1.99	0
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	0	14.5	12	16	1.31	0
Transit	2025	2	Precautionary Area	Bulk	0	14.5	9	8	0.91	0
Transit	2025	1	Maneuvering	Bulk	0	14.5	6	4	0.68	0
Berthing	2025	Berthing	Berthing	Bulk	0	14.5	0	0	120.00	0
Anchorage	2025	Anchorage	Anchorage	Bulk	0	14.5	0	0	24.00	0
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	0	14.5	14	130	9.29	0
Transit	2027	4	40 to 20 Nautical Miles	Bulk	0	14.5	12	24	1.99	0
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	0	14.5	12	16	1.31	0
Transit	2027	2	Precautionary Area	Bulk	0	14.5	9	8	0.91	0
Transit	2027	1	Maneuvering	Bulk	0	14.5	6	4	0.68	0
Berthing	2027	Berthing	Berthing	Bulk	0	14.5	0	0	120.00	0
Anchorage	2027	Anchorage	Anchorage	Bulk	0	14.5	0	0	24.00	0
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	0	14.5	14	130	9.29	0
Transit	2049	4	40 to 20 Nautical Miles	Bulk	0	14.5	12	24	1.99	0
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	0	14.5	12	16	1.31	0
Transit	2049	2	Precautionary Area	Bulk	0	14.5	9	8	0.91	0
Transit	2049	1	Maneuvering	Bulk	0	14.5	6	4	0.68	0
Berthing	2049	Berthing	Berthing	Bulk	0	14.5	0	0	120.00	0
Anchorage	2049	Anchorage	Anchorage	Bulk	0	14.5	0	0	24.00	0

Proposed Project OGV Emission Factors - Auxiliary Boiler

					Emission Factors (g/kW-hr)										
Type	Year	Zone #	Zone Description	Vessel Type	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	4	40 to 20 Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	2	Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	1	Maneuvering	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Berthing	2025	Berthing	Berthing	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Anchorage	2025	Anchorage	Anchorage	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	4	40 to 20 Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	2	Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	1	Maneuvering	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Berthing	2027	Berthing	Berthing	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Anchorage	2027	Anchorage	Anchorage	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	4	40 to 20 Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	2	Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	1	Maneuvering	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Berthing	2049	Berthing	Berthing	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Anchorage	2049	Anchorage	Anchorage	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075

Reduced Project OGV Main Engines (Propulsion Engine) Characteristics

Type	Year	Zone #	Zone Description	Vessel Type	Engine Rating (kW)	Max Rated Speed (mph)	Speed (mph)	Distance (miles)	Oper. Time (hr/trip or call)	Oper. Energy (kW-hr/trip or call)	Load Factor	MAN Engine with Slide Valve	Engines with no Slide Valves
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	7686	14.5	14	130	9.29	64233	90%	100%	0%
Transit	2025	4	40 to 20 Nautical Miles	Bulk	7686	14.5	12	24	1.99	8857	58%	100%	0%
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	7686	14.5	12	16	1.31	5751	57%	100%	0%
Transit	2025	2	Precautionary Area	Bulk	7686	14.5	9	8	0.91	1614	23%	100%	0%
Transit	2025	1	Maneuvering	Bulk	7686	14.5	6	4	0.68	365	7%	100%	0%
Berthing	2025	Berthing	Berthing	Bulk	7686	14.5	0	0	120.00	0	0%	100%	0%
Anchorage	2025	Anchorage	Anchorage	Bulk	7686	14.5	0	0	24.00	0	0%	0%	0%
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	7686	14.5	14	130	9.29	64233	90%	100%	0%
Transit	2027	4	40 to 20 Nautical Miles	Bulk	7686	14.5	12	24	1.99	8857	58%	100%	0%
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	7686	14.5	12	16	1.31	5751	57%	100%	0%
Transit	2027	2	Precautionary Area	Bulk	7686	14.5	9	8	0.91	1614	23%	100%	0%
Transit	2027	1	Maneuvering	Bulk	7686	14.5	6	4	0.68	365	7%	100%	0%
Berthing	2027	Berthing	Berthing	Bulk	7686	14.5	0	0	120.00	0	0%	100%	0%
Anchorage	2027	Anchorage	Anchorage	Bulk	7686	14.5	0	0	24.00	0	0%	0%	0%
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	7686	14.5	14	130	9.29	64233	90%	100%	0%
Transit	2049	4	40 to 20 Nautical Miles	Bulk	7686	14.5	12	24	1.99	8857	58%	100%	0%
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	7686	14.5	12	16	1.31	5751	57%	100%	0%
Transit	2049	2	Precautionary Area	Bulk	7686	14.5	9	8	0.91	1614	23%	100%	0%
Transit	2049	1	Maneuvering	Bulk	7686	14.5	6	4	0.68	365	7%	100%	0%
Berthing	2049	Berthing	Berthing	Bulk	7686	14.5	0	0	120.00	0	0%	100%	0%
Anchorage	2049	Anchorage	Anchorage	Bulk	7686	14.5	0	0	24.00	0	0%	0%	0%

Reduced Project OGV Emissions Factors - Main Engines (Propulsion Engine)

				Emission Factors (g/kW-hr)										
Type	Year	Zone #	Zone Description	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	4	40 to 20 Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	3	20-Nautical Miles to Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	2	Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	1	Maneuvering	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Berthing	2025	Berthing	Berthing	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Anchorage	2025	Anchorage	Anchorage	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	5	State Boundary to 40-Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	4	40 to 20 Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	3	20-Nautical Miles to Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	2	Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	1	Maneuvering	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Berthing	2027	Berthing	Berthing	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Anchorage	2027	Anchorage	Anchorage	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	5	State Boundary to 40-Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	4	40 to 20 Nautical Miles	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	3	20-Nautical Miles to Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	2	Precautionary Area	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	1	Maneuvering	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Berthing	2049	Berthing	Berthing	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029
Anchorage	2049	Anchorage	Anchorage	0.184	0.169	0.184	8.9	0.362	1.4	0.6	0.6318	593	0.012	0.029

Reduced Project Adjusted Emission Factors - Main Engines (Propulsion Engine)

				Load Adjustment Factor										
Type	Year	Zone #	Zone Description	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	1.2	1.2	1.2	1.0	1.0	0.3	0.5	0.5	1.0	1.2	1.0
Transit	2025	4	40 to 20 Nautical Miles	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2025	3	20-Nautical Miles to Precautionary Area	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2025	2	Precautionary Area	0.5	0.5	0.5	1.2	1.0	0.8	0.3	0.3	1.0	0.8	1.2
Transit	2025	1	Maneuvering	0.4	0.4	0.4	1.7	1.1	0.1	0.5	0.5	1.1	1.1	1.7
Berthing	2025	Berthing	Berthing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anchorage	2025	Anchorage	Anchorage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transit	2027	5	State Boundary to 40-Nautical Miles	1.2	1.2	1.2	1.0	1.0	0.3	0.5	0.5	1.0	1.2	1.0
Transit	2027	4	40 to 20 Nautical Miles	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2027	3	20-Nautical Miles to Precautionary Area	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2027	2	Precautionary Area	0.5	0.5	0.5	1.2	1.0	0.8	0.3	0.3	1.0	0.8	1.2
Transit	2027	1	Maneuvering	0.4	0.4	0.4	1.7	1.1	0.1	0.5	0.5	1.1	1.1	1.7
Berthing	2027	Berthing	Berthing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anchorage	2027	Anchorage	Anchorage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transit	2049	5	State Boundary to 40-Nautical Miles	1.2	1.2	1.2	1.0	1.0	0.3	0.5	0.5	1.0	1.2	1.0
Transit	2049	4	40 to 20 Nautical Miles	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2049	3	20-Nautical Miles to Precautionary Area	0.9	0.9	0.9	1.0	1.0	0.7	0.3	0.3	1.0	0.8	1.0
Transit	2049	2	Precautionary Area	0.5	0.5	0.5	1.2	1.0	0.8	0.3	0.3	1.0	0.8	1.2
Transit	2049	1	Maneuvering	0.4	0.4	0.4	1.7	1.1	0.1	0.5	0.5	1.1	1.1	1.7
Berthing	2049	Berthing	Berthing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anchorage	2049	Anchorage	Anchorage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Reduced Project OGV Auxiliary Engines Characteristics

Type	Year	Zone #	Zone Description	Vessel Type	Load (kW)	Max Rated Speed (mph)	Speed (mph)	Distance (miles)	Oper. Time (hr/trip or call)	Oper. Energy (kW-hr/trip or call)
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	249.1	14.5	14	130	9.29	2313
Transit	2025	4	40 to 20 Nautical Miles	Bulk	249.1	14.5	12	24	1.99	495
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	249.1	14.5	12	16	1.31	327
Transit	2025	2	Precautionary Area	Bulk	249.1	14.5	9	8	0.91	227
Transit	2025	1	Maneuvering	Bulk	249.1	14.5	6	4	0.68	169
Berthing	2025	Berthing	Berthing	Bulk	343.3808333	14.5	0	0	120.00	41206
Anchorage	2025	Anchorage	Anchorage	Bulk	130.1	14.5	0	0	24.00	3122
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	249.1	14.5	14	130	9.29	2313
Transit	2027	4	40 to 20 Nautical Miles	Bulk	249.1	14.5	12	24	1.99	495
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	249.1	14.5	12	16	1.31	327
Transit	2027	2	Precautionary Area	Bulk	249.1	14.5	9	8	0.91	227
Transit	2027	1	Maneuvering	Bulk	249.1	14.5	6	4	0.68	169
Berthing	2027	Berthing	Berthing	Bulk	343.3808333	14.5	0	0	120.00	41206
Anchorage	2027	Anchorage	Anchorage	Bulk	130.1	14.5	0	0	24.00	3122
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	249.1	14.5	14	130	9.29	2313
Transit	2049	4	40 to 20 Nautical Miles	Bulk	249.1	14.5	12	24	1.99	495
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	249.1	14.5	12	16	1.31	327
Transit	2049	2	Precautionary Area	Bulk	249.1	14.5	9	8	0.91	227
Transit	2049	1	Maneuvering	Bulk	249.1	14.5	6	4	0.68	169
Berthing	2049	Berthing	Berthing	Bulk	343.3808333	14.5	0	0	120.00	41206
Anchorage	2049	Anchorage	Anchorage	Bulk	130.1	14.5	0	0	24.00	3122

Reduced Project OGV Emission Factors - Auxiliary Engines

					Emission Factors (g/kW-hr)										
Type	Year	Zone #	Zone Description	Vessel Type	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	4	40 to 20 Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	2	Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	1	Maneuvering	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Berthing	2025	Berthing	Berthing	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Anchorage	2025	Anchorage	Anchorage	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	4	40 to 20 Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	2	Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	1	Maneuvering	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Berthing	2027	Berthing	Berthing	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Anchorage	2027	Anchorage	Anchorage	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	4	40 to 20 Nautical Miles	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	2	Precautionary Area	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	1	Maneuvering	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Berthing	2049	Berthing	Berthing	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029
Anchorage	2049	Anchorage	Anchorage	Bulk	0.189	0.174	0.189	6.55	0.424	1.1	0.4	0.4212	696	0.008	0.029

Reduced Project OGV Auxiliary Boiler Characteristics

Type	Year	Zone #	Zone Description	Vessel Type	Load (kW)	Max Rated Speed (mph)	Speed (mph)	Distance (miles)	Oper. Time (hr/trip or call)	Oper. Energy (kW-hr/trip or call)
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	0	14.5	14	130	9.29	0
Transit	2025	4	40 to 20 Nautical Miles	Bulk	0	14.5	12	24	1.99	0
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	0	14.5	12	16	1.31	0
Transit	2025	2	Precautionary Area	Bulk	0	14.5	9	8	0.91	0
Transit	2025	1	Maneuvering	Bulk	0	14.5	6	4	0.68	0
Berthing	2025	Berthing	Berthing	Bulk	0	14.5	0	0	120.00	0
Anchorage	2025	Anchorage	Anchorage	Bulk	0	14.5	0	0	24.00	0
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	0	14.5	14	130	9.29	0
Transit	2027	4	40 to 20 Nautical Miles	Bulk	0	14.5	12	24	1.99	0
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	0	14.5	12	16	1.31	0
Transit	2027	2	Precautionary Area	Bulk	0	14.5	9	8	0.91	0
Transit	2027	1	Maneuvering	Bulk	0	14.5	6	4	0.68	0
Berthing	2027	Berthing	Berthing	Bulk	0	14.5	0	0	120.00	0
Anchorage	2027	Anchorage	Anchorage	Bulk	0	14.5	0	0	24.00	0
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	0	14.5	14	130	9.29	0
Transit	2049	4	40 to 20 Nautical Miles	Bulk	0	14.5	12	24	1.99	0
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	0	14.5	12	16	1.31	0
Transit	2049	2	Precautionary Area	Bulk	0	14.5	9	8	0.91	0
Transit	2049	1	Maneuvering	Bulk	0	14.5	6	4	0.68	0
Berthing	2049	Berthing	Berthing	Bulk	0	14.5	0	0	120.00	0
Anchorage	2049	Anchorage	Anchorage	Bulk	0	14.5	0	0	24.00	0

Reduced Project OGV Emission Factors - Auxiliary Boiler

					Emission Factors (g/kW-hr)										
Type	Year	Zone #	Zone Description	Vessel Type	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	4	40 to 20 Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	2	Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	1	Maneuvering	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Berthing	2025	Berthing	Berthing	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Anchorage	2025	Anchorage	Anchorage	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	4	40 to 20 Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	2	Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	1	Maneuvering	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Berthing	2027	Berthing	Berthing	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Anchorage	2027	Anchorage	Anchorage	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	4	40 to 20 Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	2	Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	1	Maneuvering	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Berthing	2049	Berthing	Berthing	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Anchorage	2049	Anchorage	Anchorage	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075

Proposed Project and Reduced Project Annual Ocean Going Vessel Hotelling and Anchorage Duration in Hours per Call

Year	Vessel Type	Annual Average - Uncontrolled[1]		
		Hotelling Time at Berth (hr/call)	Time at Anchorage (hr/call)[2]	
2025	Bulk	120	24	
2027	Bulk	120	24	
2049	Bulk	120	24	

Source:
[1] Hotelling time was obtained from information provided by ORCEM in March 2023.
[2] Assumed 24 hours of anchorage time, one event a year
[3] Assuming emissions at berth are uncontrolled
[4] Data provided by Orcem based on Project design.

OGV Main Engine Rated Power

Year	Vessel Type	Annual Average[2]
		Main Eng Avg (kW)
2025	Bulk	7,686
2027	Bulk	7,686
2049	Bulk	7,686

Source:
[1] Power based on MCO main engine rating from vessel specification sheet provided by ORCEM (GA_MV NIKKEI DRAGON.pdf).
[2] Power based on MCO main engine rating from vessel specification sheet provided by ORCEM (GA_MV NIKKEI DRAGON.pdf).

OGV Average Aux Engine & Aux Boiler Loads

Vessel Type	Engine Type	Average Loads (kW)			
		Transit	Maneuvering	Berthing	Anchorage
Bulk	Auxiliary Engine	249	558	343	130
Bulk	Auxiliary Boiler	0	0	0	0

Source:
[1] Auxiliary engine load provided by ORCEM. Auxiliary load assumed equivalent to Continuous Load provided in Dragon Electric Power Consumption Table-4.pdf
[2] Auxiliary boilers for these type of vessels are typically electric. Communication with Orcem, Feb, 2023.

OGV Maximum Rated Vessel Speed

Category	Speed (knots)
Bulk	14.5

Source:
[1] Vessel specification sheet provided by ORCEM (GA_MV NIKKEI DRAGON.pdf).

OGV Transit Speed (knots)

Year	Vessel Type	Anchorage	Berthing	Maneuvering	Precautionary Area	20-Nautical Miles to Precautionary Area	40 to 20 Nautical Miles	State Boundary to 40-Nautical Miles
any	Bulk	0	0	6	9	12.06	12.12	14.00

Note:
[1] 2021 speed at 20nm and 40 nm mark (12.06 and 12.12 knots respectively) based on 2021 VSRP compliance rates reports from Port of Los Angeles.

OGV Transit Distance (nm)

Year	Vessel Type	Anchorage	Berthing	Maneuvering	Precautionary Area	20-Nautical Miles to Precautionary Area	40 to 20 Nautical Miles	State Boundary to 40-Nautical Miles
any	Bulk	0	0	4	8	16	24	130

[1] Maneuvering distance based on actual Google Earth measurements.

Product Terminal OGV Main Engines (Propulsion Engine) Characteristics

Type	Year	Zone #	Zone Description	Vessel Type	Engine Rating (kW)	Max Rated Speed (mph)	Speed (mph)	Distance (miles)	Oper. Time (hr/trip or call)	Oper. Energy (kW-hr/trip or call)	Load Factor	MAN Engine with Slide Valve	Engines with no Slide Valves
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	7613	14.7	14	130	9.29	60795	86%	100%	0%
Transit	2025	4	40 to 20 Nautical Miles	Bulk	7613	14.7	12	24	1.99	8471	56%	100%	0%
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	7613	14.7	12	16	1.31	5497	55%	100%	0%
Transit	2025	2	Precautionary Area	Bulk	7613	14.7	9	8	0.91	1529	22%	100%	0%
Transit	2025	1	Maneuvering	Bulk	7613	14.7	6	4	0.68	310	6%	100%	0%
Berthing	2025	Berthing	Berthing	Bulk	7613	14.7	0	0	120.00	0	0%	100%	0%
Anchorage	2025	Anchorage	Anchorage	Bulk	7613	14.7	0	0	24.00	0	0%	0%	0%
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	7613	14.7	14	130	9.29	60795	86%	100%	0%
Transit	2027	4	40 to 20 Nautical Miles	Bulk	7613	14.7	12	24	1.99	8471	56%	100%	0%
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	7613	14.7	12	16	1.31	5497	55%	100%	0%
Transit	2027	2	Precautionary Area	Bulk	7613	14.7	9	8	0.91	1529	22%	100%	0%
Transit	2027	1	Maneuvering	Bulk	7613	14.7	6	4	0.68	310	6%	100%	0%
Berthing	2027	Berthing	Berthing	Bulk	7613	14.7	0	0	120.00	0	0%	100%	0%
Anchorage	2027	Anchorage	Anchorage	Bulk	7613	14.7	0	0	24.00	0	0%	0%	0%
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	7613	14.7	14	130	9.29	60795	86%	100%	0%
Transit	2049	4	40 to 20 Nautical Miles	Bulk	7613	14.7	12	24	1.99	8471	56%	100%	0%
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	7613	14.7	12	16	1.31	5497	55%	100%	0%
Transit	2049	2	Precautionary Area	Bulk	7613	14.7	9	8	0.91	1529	22%	100%	0%
Transit	2049	1	Maneuvering	Bulk	7613	14.7	6	4	0.68	310	6%	100%	0%
Berthing	2049	Berthing	Berthing	Bulk	7613	14.7	0	0	120.00	0	0%	100%	0%
Anchorage	2049	Anchorage	Anchorage	Bulk	7613	14.7	0	0	24.00	0	0%	0%	0%

Product Terminal OGV Emissions Factors - Main Engines (Propulsion Engine)

				Emission Factors (g/kW-hr)										
Type	Year	Zone #	Zone Description	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	4	40 to 20 Nautical Miles	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	3	20-Nautical Miles to Precautionary Area	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	2	Precautionary Area	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2025	1	Maneuvering	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Berthing	2025	Berthing	Berthing	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Anchorage	2025	Anchorage	Anchorage	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	5	State Boundary to 40-Nautical Miles	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	4	40 to 20 Nautical Miles	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	3	20-Nautical Miles to Precautionary Area	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	2	Precautionary Area	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2027	1	Maneuvering	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Berthing	2027	Berthing	Berthing	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Anchorage	2027	Anchorage	Anchorage	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	5	State Boundary to 40-Nautical Miles	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	4	40 to 20 Nautical Miles	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	3	20-Nautical Miles to Precautionary Area	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	2	Precautionary Area	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Transit	2049	1	Maneuvering	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Berthing	2049	Berthing	Berthing	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029
Anchorage	2049	Anchorage	Anchorage	0.184	0.169	0.184	15.056	0.362	1.4	0.6	0.6318	593	0.012	0.029

Product Terminal Adjusted Emission Factors - Main Engines (Propulsion Engine)

				Load Adjustment Factor										
Type	Year	Zone #	Zone Description	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	1.2	1.2	1.2	1.0	1.0	0.3	0.5	0.5	1.0	1.2	1.0
Transit	2025	4	40 to 20 Nautical Miles	0.8	0.8	0.8	1.0	1.0	0.8	0.3	0.3	1.0	0.8	1.0
Transit	2025	3	20-Nautical Miles to Precautionary Area	0.8	0.8	0.8	1.0	1.0	0.8	0.3	0.3	1.0	0.8	1.0
Transit	2025	2	Precautionary Area	0.5	0.5	0.5	1.3	1.0	0.8	0.3	0.3	1.0	0.8	1.3
Transit	2025	1	Maneuvering	0.4	0.4	0.4	1.7	1.1	0.1	0.5	0.5	1.1	1.2	1.7
Berthing	2025	Berthing	Berthing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anchorage	2025	Anchorage	Anchorage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transit	2027	5	State Boundary to 40-Nautical Miles	1.2	1.2	1.2	1.0	1.0	0.3	0.5	0.5	1.0	1.2	1.0
Transit	2027	4	40 to 20 Nautical Miles	0.8	0.8	0.8	1.0	1.0	0.8	0.3	0.3	1.0	0.8	1.0
Transit	2027	3	20-Nautical Miles to Precautionary Area	0.8	0.8	0.8	1.0	1.0	0.8	0.3	0.3	1.0	0.8	1.0
Transit	2027	2	Precautionary Area	0.5	0.5	0.5	1.3	1.0	0.8	0.3	0.3	1.0	0.8	1.3
Transit	2027	1	Maneuvering	0.4	0.4	0.4	1.7	1.1	0.1	0.5	0.5	1.1	1.2	1.7
Berthing	2027	Berthing	Berthing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anchorage	2027	Anchorage	Anchorage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transit	2049	5	State Boundary to 40-Nautical Miles	1.2	1.2	1.2	1.0	1.0	0.3	0.5	0.5	1.0	1.2	1.0
Transit	2049	4	40 to 20 Nautical Miles	0.8	0.8	0.8	1.0	1.0	0.8	0.3	0.3	1.0	0.8	1.0
Transit	2049	3	20-Nautical Miles to Precautionary Area	0.8	0.8	0.8	1.0	1.0	0.8	0.3	0.3	1.0	0.8	1.0
Transit	2049	2	Precautionary Area	0.5	0.5	0.5	1.3	1.0	0.8	0.3	0.3	1.0	0.8	1.3
Transit	2049	1	Maneuvering	0.4	0.4	0.4	1.7	1.1	0.1	0.5	0.5	1.1	1.2	1.7
Berthing	2049	Berthing	Berthing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Anchorage	2049	Anchorage	Anchorage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Product Terminal OGV Auxiliary Engines Characteristics

Type	Year	Zone #	Zone Description	Vessel Type	Load (kW)	Max Rated Speed (mph)	Speed (mph)	Distance (miles)	Oper. Time (hr/trip or call)	Oper. Energy (kW-hr/trip or call)
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	222	14.7	14	130	9.29	2061
Transit	2025	4	40 to 20 Nautical Miles	Bulk	222	14.7	12	24	1.99	441
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	222	14.7	12	16	1.31	291
Transit	2025	2	Precautionary Area	Bulk	222	14.7	9	8	0.91	203
Transit	2025	1	Maneuvering	Bulk	222	14.7	6	4	0.68	151
Berthing	2025	Berthing	Berthing	Bulk	544	14.7	0	0	120.00	65280
Anchorage	2025	Anchorage	Anchorage	Bulk	250	14.7	0	0	24.00	6000
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	222	14.7	14	130	9.29	2061
Transit	2027	4	40 to 20 Nautical Miles	Bulk	222	14.7	12	24	1.99	441
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	222	14.7	12	16	1.31	291
Transit	2027	2	Precautionary Area	Bulk	222	14.7	9	8	0.91	203
Transit	2027	1	Maneuvering	Bulk	222	14.7	6	4	0.68	151
Berthing	2027	Berthing	Berthing	Bulk	544	14.7	0	0	120.00	65280
Anchorage	2027	Anchorage	Anchorage	Bulk	250	14.7	0	0	24.00	6000
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	222	14.7	14	130	9.29	2061
Transit	2049	4	40 to 20 Nautical Miles	Bulk	222	14.7	12	24	1.99	441
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	222	14.7	12	16	1.31	291
Transit	2049	2	Precautionary Area	Bulk	222	14.7	9	8	0.91	203
Transit	2049	1	Maneuvering	Bulk	222	14.7	6	4	0.68	151
Berthing	2049	Berthing	Berthing	Bulk	544	14.7	0	0	120.00	65280
Anchorage	2049	Anchorage	Anchorage	Bulk	250	14.7	0	0	24.00	6000

Product Terminal OGV Emission Factors - Auxiliary Engines

					Emission Factors (g/kW-hr)										
Type	Year	Zone #	Zone Description	Vessel Type	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	4	40 to 20 Nautical Miles	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	2	Precautionary Area	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2025	1	Maneuvering	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Berthing	2025	Berthing	Berthing	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Anchorage	2025	Anchorage	Anchorage	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	4	40 to 20 Nautical Miles	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	2	Precautionary Area	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2027	1	Maneuvering	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Berthing	2027	Berthing	Berthing	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Anchorage	2027	Anchorage	Anchorage	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	4	40 to 20 Nautical Miles	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	2	Precautionary Area	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Transit	2049	1	Maneuvering	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Berthing	2049	Berthing	Berthing	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029
Anchorage	2049	Anchorage	Anchorage	Bulk	0.189	0.174	0.189	11.197	0.424	1.1	0.4	0.4212	696	0.008	0.029

Product Terminal OGV Auxiliary Boiler Characteristics

Type	Year	Zone #	Zone Description	Vessel Type	Load (kW)	Max Rated Speed (mph)	Speed (mph)	Distance (miles)	Oper. Time (hr/trip or call)	Oper. Energy (kW-hr/trip or call)
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	0	14.7	14	130	9.29	0
Transit	2025	4	40 to 20 Nautical Miles	Bulk	0	14.7	12	24	1.99	0
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	0	14.7	12	16	1.31	0
Transit	2025	2	Precautionary Area	Bulk	0	14.7	9	8	0.91	0
Transit	2025	1	Maneuvering	Bulk	0	14.7	6	4	0.68	0
Berthing	2025	Berthing	Berthing	Bulk	0	14.7	0	0	120.00	0
Anchorage	2025	Anchorage	Anchorage	Bulk	0	14.7	0	0	24.00	0
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	0	14.7	14	130	9.29	0
Transit	2027	4	40 to 20 Nautical Miles	Bulk	0	14.7	12	24	1.99	0
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	0	14.7	12	16	1.31	0
Transit	2027	2	Precautionary Area	Bulk	0	14.7	9	8	0.91	0
Transit	2027	1	Maneuvering	Bulk	0	14.7	6	4	0.68	0
Berthing	2027	Berthing	Berthing	Bulk	0	14.7	0	0	120.00	0
Anchorage	2027	Anchorage	Anchorage	Bulk	0	14.7	0	0	24.00	0
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	0	14.7	14	130	9.29	0
Transit	2049	4	40 to 20 Nautical Miles	Bulk	0	14.7	12	24	1.99	0
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	0	14.7	12	16	1.31	0
Transit	2049	2	Precautionary Area	Bulk	0	14.7	9	8	0.91	0
Transit	2049	1	Maneuvering	Bulk	0	14.7	6	4	0.68	0
Berthing	2049	Berthing	Berthing	Bulk	0	14.7	0	0	120.00	0
Anchorage	2049	Anchorage	Anchorage	Bulk	0	14.7	0	0	24.00	0

Product Terminal OGV Emission Factors - Auxiliary Boiler

					Emission Factors (g/kW-hr)										
Type	Year	Zone #	Zone Description	Vessel Type	PM10	PM2.5	DPM	NOx	SOx	CO	HC	VOC	CO2	CH4	N2O
Transit	2025	5	State Boundary to 40-Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	4	40 to 20 Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	3	20-Nautical Miles to Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	2	Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2025	1	Maneuvering	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Berthing	2025	Berthing	Berthing	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Anchorage	2025	Anchorage	Anchorage	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	5	State Boundary to 40-Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	4	40 to 20 Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	3	20-Nautical Miles to Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	2	Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2027	1	Maneuvering	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Berthing	2027	Berthing	Berthing	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Anchorage	2027	Anchorage	Anchorage	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	5	State Boundary to 40-Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	4	40 to 20 Nautical Miles	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	3	20-Nautical Miles to Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	2	Precautionary Area	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Transit	2049	1	Maneuvering	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Berthing	2049	Berthing	Berthing	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075
Anchorage	2049	Anchorage	Anchorage	Bulk	0.202	0.186	0	2	0.587	0.2	0.1	0.1053	962	0.002	0.075

Product Import Terminal Annual Ocean Going Vessel Hotelling and Anchorage Duration in Hours per Call

Year	Vessel Type	Annual Average - Uncontrolled[1]		Peak Day - Uncontrolled[1]		Annual - Uncontrolled to Bonnet [3]	
		Hotelling Time at Berth (hr/call)	Time at Anchorage (hr/call) [2]	Hotelling Time at Berth (hr/call)	Time at Anchorage (hr/day)	Hotelling Time at Berth (hr/call)	Time at Anchorage (hr/day)
2025	Bulk	120	24	120	0	0	0
2027	Bulk	120	24	120	0	0	0
2049	Bulk	120	24	120	0	0	0

Source:

[1] Hotelling time was obtained from information provided by ORCEM in March 2023.
[2] Assumed 24 hours of anchorage time, one event a year
[3] Assuming emissions at berth are uncontrolled
[4] Data provided by Orcem based on Project design.

OGV Main Engine Rated Power

Year	Vessel Type	Annual Average
		Main Eng Avg (kW)
2025	Bulk	7,613
2027	Bulk	7,613
2049	Bulk	7,613

Source:
[1] Power based on POLA 2021 Table 3.9: 2021 Vessel Type Characteristics

OGV Average Aux Engine & Aux Boiler Loads

Vessel Type	Engine Type	Average Loads (kW)			
		Transit	Maneuvering	Berthing	Anchorage
Bulk	Auxiliary Engine	222	235	544	250
Bulk	Auxiliary Boiler	0	0	0	0

Source:
[1] Auxiliary engine load POLA 2021 Table 3.2: Average Auxiliary Engine Load Defaults, kW
[2] Auxiliary boilers for these type of vessels are typically electric. Communication with Orcem, Feb, 2023.

OGV Maximum Rated Vessel Speed

Category	Speed (knots)
Bulk	14.7

Source:
[1] Max speed (knots) based on POLA 2021 Table 3.9: 2021 Vessel Type Characteristics

OGV Transit Speed (knots)

Year	Vessel Type	Anchorage	Berthing	Maneuvering	Precautionary Area	20-Nautical Miles to Precautionary Area	40 to 20 Nautical Miles	State Boundary to 40-Nautical Miles
any	Bulk	0	0	6	9	12.06	12.12	14.00

Note:
[1] 2021 speed at 20nm and 40 nm mark (12.06 and 12.12 knots respectively) based on 2021 VSRP compliance rates reports from Port of Los Angeles.

Table 5. OGV Transit Distance (nm)

Year	Vessel Type	Anchorage	Berthing	Maneuvering	Precautionary Area	20-Nautical Miles to Precautionary Area	40 to 20 Nautical Miles	State Boundary to 40-Nautical Miles
any	Bulk	0	0	4	8	16	24	130

[1] Maneuvering distance based on actual Google Earth measurements.

Harbor Craft

Harbor Craft Data - For all Scenarios

Year	Vessel Type	HC Classification	Engine Type	Engine Count per HC	HC Average MY	HC Average HP[2]	HC Average kW	Load Factor	Berthing	Maneuvering	Precautionary Area
									(hr)	(hr/one-way trip)	(hr/one-way trip)
2025	Bulk Assist	Assist Tugboat	Propulsion	2	2012	2,675	1,996	0.16	0.0	1.8	1.8
2025	Bulk Assist	Assist Tugboat	Auxiliary	2	2015	206	154	0.34	0.0	1.8	1.8
2025	Yokahama Tug	Crew Boat	Propulsion	2	2012	575	429	0.26	0.0	3.0	
2025	Yokahama Tug	Crew Boat	Auxiliary	2	2013	62	46	0.40	0.0	3.0	
2025 Total											
2027	Bulk Assist	Assist Tugboat	Propulsion	2	2013	2,675	1,996	0.16	0.0	1.8	1.8
2027	Bulk Assist	Assist Tugboat	Auxiliary	2	2014	206	154	0.34	0.0	1.8	1.8
2027	Yokahama Tug	Crew Boat	Propulsion	2	2012	575	429	0.26	0.0	3.0	
2027	Yokahama Tug	Crew Boat	Auxiliary	2	2013	62	46	0.40	0.0	3.0	
2027 Total											
2049	Bulk Assist	Assist Tugboat	Propulsion	2	2026	2,675	1,996	0.16	0.0	1.8	1.8
2049	Bulk Assist	Assist Tugboat	Auxiliary	2	2031	206	154	0.34	0.0	1.8	1.8
2049	Yokahama Tug	Crew Boat	Propulsion	2	2025	575	429	0.26	0.0	3.0	
2049	Yokahama Tug	Crew Boat	Auxiliary	2	2030	62	46	0.40	0.0	3.0	
2049 Total											

Notes/Sources:

Useful life from San Pedro Bay Ports Emission Inventory Methodology Report Version 3a-2022, Table 3.3. August 2022.

[1] Tugboats are used to assist OGVs during maneuvering and transit across harbor. In general, two tugboats are needed in Zone 1 and one tugboat is needed in Zone 2 for bulk vessels.

[2] Yokahama tugs are used to place and remove Yokahama fenders - information sourced from ORCEM and supplemented by 2021 Inventory of Air Emissions Technical Report | Port of Los Angeles (as crew boats)

[3] Bulk assist tug and Yokahama Tug (crewboats) engine characteristics (engine count, average model year, and horsepower rating) are from the 2021 Port Emissions Inventory, Tables 4.1 and 4.2.

Emission Factors:

[4] SOx emission factor is based on 15 ppm fuel sulfur content.

[5] PM2.5 is 92% of PM10, per CARB's offroad model.

[6] CO2 and N20 emission factors are from IVL: Methodology for Calculating Emissions from Ships: Update on Emission Factors, 2004, also summarized in POLA 2019 Emissions Inventory, Appendix B. CH4 is 2% of HC, per IVL study.

HC Activity: Time required to assist vessel (hr/one-way trip)

Engine	Berthing	Maneuvering[3]	Precautionary Area	20-Nautical Miles to Precautionary Area	40 to 20 Nautical Miles	State Boundary to 40-Nautical Miles
Propulsion	0	0.88	0.91	0.00	0.00	0.00
Auxiliary	0	0.88	0.91	0.00	0.00	0.00
Propulsion - Yokahama		1.50	0.00	0.00	0.00	0.00
Auxiliary - Yokahama		1.50	0.00	0.00	0.00	0.00

[1] Zone 1: Transit time is the transit distance in Zone 1 (harbor transit) divided by the speed in Zone 1, times 1.3 to account for tug movement and assist time (2011 APL EIR/EIS, Appendix E, Table 1.3-221 or *Draft - Emission Factor Assumptions.docx 7/20/17*).

[2] Tugs do not transit outside PZ.

[3] Yokahama Tug maneuvering time based on duration of operation during transit, working, and return to storage location. Data provided by Orcem, Feb 2023

Yokahama Fender Tug Activity	% total
At berths 191-192	67%
In Transit	33%

[1] information sourced from Orcem in 3/9/2023 email

Harbor Craft Emission Factors - For all Scenarios

Year	Vessel Type	Engine Type	Average MY	Average HP	HP Bin	Age in Project Year	Useful Life	Zero Hour Efs (g/hp-hr) ROG	CO	NOx	PM	Deterioration Factor (g/hp-hr) HC	CO	NOx	PM
2025	Bulk Assist	Propulsion	2012	2,675	9999	13	14	0.18	0.75	5.08	0.09	0.03	0.02	0.02	0.05
2025	Bulk Assist	Auxiliary	2015	206	300	10	16	0.12	0.78	3.22	0.07	0.02	0.01	0.01	0.03
2025	Yokahama Tug	Propulsion	2012	575	600	13	13	0.18	0.71	4.76	0.09	0.03	0.02	0.02	0.05
2025	Yokahama Tug	Auxiliary	2013	62	75	12	17	0.15	0.82	3.75	0.12	0.02	0.01	0.01	0.03
2027	Bulk Assist	Propulsion	2013	2,675	9999	14	14	0.17	0.74	3.69	0.05	0.03	0.02	0.02	0.05
2027	Bulk Assist	Auxiliary	2014	206	300	13	16	0.12	0.78	3.22	0.07	0.02	0.01	0.01	0.03
2027	Yokahama Tug	Propulsion	2012	575	600	15	13	0.18	0.71	4.76	0.09	0.03	0.02	0.02	0.05
2027	Yokahama Tug	Auxiliary	2013	62	75	14	17	0.15	0.82	3.75	0.12	0.02	0.01	0.01	0.03
2049	Bulk Assist	Propulsion	2026	2,675	9999	23	14	0.04	0.50	1.04	0.03	0.03	0.02	0.02	0.05
2049	Bulk Assist	Auxiliary	2031	206	300	18	16	0.12	0.78	3.22	0.07	0.02	0.01	0.01	0.03
2049	Yokahama Tug	Propulsion	2025	575	600	24	13	0.13	0.56	3.73	0.05	0.03	0.02	0.02	0.05
2049	Yokahama Tug	Auxiliary	2030	62	75	19	17	0.15	0.82	3.75	0.12	0.02	0.01	0.01	0.03

Year	Vessel Type	Engine Type	Emission Factors (g/hp-hr) VOC	CO	NOx	PM10	PM2.5	Base Tier
2025	Bulk Assist	Propulsion	0.1	0.8	4.9	0.1	0.1	Tier 2
2025	Bulk Assist	Auxiliary	0.1	0.8	3.1	0.1	0.1	Tier 3
2025	Yokahama Tug	Propulsion	0.1	0.7	4.6	0.1	0.1	Tier 2
2025	Yokahama Tug	Auxiliary	0.1	0.8	3.6	0.1	0.1	Tier 3
2027	Bulk Assist	Propulsion	0.1	0.7	3.6	0.0	0.0	Tier 2
2027	Bulk Assist	Auxiliary	0.1	0.8	3.1	0.1	0.1	Tier 3
2027	Yokahama Tug	Propulsion	0.1	0.7	4.6	0.1	0.1	Tier 2
2027	Yokahama Tug	Auxiliary	0.1	0.8	3.6	0.1	0.1	Tier 3
2049	Bulk Assist	Propulsion	0.0	0.5	1.0	0.0	0.0	Tier 4
2049	Bulk Assist	Auxiliary	0.1	0.8	3.1	0.1	0.1	Tier 4
2049	Yokahama Tug	Propulsion	0.1	0.6	3.6	0.0	0.0	Tier 4
2049	Yokahama Tug	Auxiliary	0.1	0.8	3.6	0.1	0.1	Tier 4

Notes:

[1] ROG = VOC

[2] Average engine HP and MY for bulk assist tugs pulled from 2021 Port Emissions Inventory, Propulsion Engines Table 4.1 and Auxiliary Engine Table 4.2.

[3] Average engine MY for Yokahama Tugs from POLA 2021. Average HP from 2021 port Emissions Inventory, Propulsion Engines Table 4.1 and auxiliary engines table 4.2

[4] Useful life from San Pedro Bay Ports Emission Inventory Methodology Report Version 3a-2022 Table 3.3. August 2022

[5] Zero hour and Deterioration factors are from CARB Appendix B: Emissions Estimation for Commercial Harbor Craft Operating in California. p.34. Available at https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2007/chc07/appb.pdf

Correction Factors

Type	Value	Description
HC	0.72	Fuel Correction Factor for ULSD
NOx	0.948	Fuel Correction Factor for ULSD
PM10	0.8	Fuel Correction Factor for ULSD - MY older than 2011
PM10	0.852	Fuel Correction Factor for ULSD - MY 2011 or newer
PM2.5/PM10	0.92	Offroad model

Source:

[1] https://www.arb.ca.gov/regact/2007/chc07/appb.pdf

SOx Emission Factor

Harbor Craft	0.00552	g/hp-hr	0.00740	g/kw-hr
Dredging Equipment	use OFFROAD BSCF and convert to g SOx /hp-hr			
SOx (gms/hp-hr) = (S content in X/1,000,000) x (MW SO2/ MW S) x BSF =				
Where:				
X = S content in parts per million (ppm)				
S MW = Molecular Weight				
SO2 MW = Molecular Weight				
BSFC for harbor craft = Brake Specific Fuel Consumption (per CARB 2007 Harbor Craft Methodology)				

Habor Craft Load Factor

Type		Main Engine	Auxiliary Engine
ATB		0.5	0.5
Assist tugboat		0.16	0.34
Barge		na	0.31
Commercial fishing		0.27	0.44
Crew boat		0.26	0.4
Excursion		0.27	0.4
Ferry		0.33	0.39
Government		0.33	0.32
Ocean tug		0.5	0.5
Tugboat		0.16	0.34
Work boat		0.33	0.32

Source:

San Pedro Bay Ports Emission Inventory Methodology Report Version 3a-2022, Table 3.1. August 2022.

Stationary Sources

Emissions Summary- Annual

Source Category [1]	Source Type	Annual Average						
		VOC	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_x	CO_2e
		lb/yr	lb/yr	lb/yr	lb/yr	lb/yr	lb/yr	MT/year
Dryer Combustion	Point	624.46	1,873.37	3,122.28	--	--	53.52	4,974
Mill	Point	--	--	--	1,188.01	1,188.01	--	--
Storage silos/ loading silos	Point	--	--	--	1,183.82	1,183.82	--	--
Material handling	Fugitive	--	--	--	400.04	64.13	--	--
GBFS Storage Pile	Fugitive	--	--	--	51.08	7.66	--	--
Gypsum Storage Pile	Fugitive	--	--	--	2.02	0.30	--	--
Unpaved roads - Excavator	Fugitive	--	--	--	30.94	3.09	--	--
GBFS Paved roads - FEL	Fugitive	--	--	--	214.77	52.72	--	--
Gypsum Paved roads - FEL	Fugitive	--	--	--	4.49	1.10	--	--
Paved roads - Forklift	Fugitive	--	--	--	0.22	0.06	--	--
Paved roads - GGBFS Trucks	Fugitive	--	--	--	269.09	66.05	--	--
Paved roads - Gypsum Trucks	Fugitive	--	--	--	48.39	11.88	--	--

Emissions Summary - Daily

Source Category [1]	Source Type	Maximum Daily Controlled					
		VOC	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_x
		lb/day	lb/day	lb/day	lb/day	lb/day	lb/day
Dryer Combustion	Point	5.76	17.28	28.80	--	--	0.49
Mill	Point	--	--	--	6.44	6.44	--
Storage silos/ loading silos	Point	--	--	--	4.24	4.24	--
Material handling	Fugitive	--	--	--	6.10	0.92	--
GBFS Storage Pile	Fugitive	--	--	--	0.09	0.01	--
Gypsum Storage Pile	Fugitive	--	--	--	0.00	0.00	--
Unpaved roads - Excavator	Fugitive	--	--	--	0.26	0.03	--
GBFS Paved roads - FEL	Fugitive	--	--	--	0.77	0.19	--
Gypsum Paved roads - FEL	Fugitive	--	--	--	0.20	0.05	--
Paved roads - Forklift	Fugitive	--	--	--	0.00	0.00	--
Paved roads - GGBFS Trucks	Fugitive	--	--	--	0.87	0.21	--
Paved roads - Gypsum Trucks	Fugitive	--	--	--	0.03	0.01	--

Notes:

1 CO, SOx, and VOC emission factors were referenced from SCAQMD's AER Default Emission Factors for Natural Gas/Other Equipment dated January 2022 Accessed at https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/default-combustion-emission-factors.pdf?sfvrsn=12.

2 NOx guarantee from manufacturer provided via phone correspondence with Ecocem, Coen, Thyssenkrupp, and Bay City Boilers on October 4, 2022.

3 The PM emissions from the dryer fed through the mill so the emissions are included with the PM emissions from the mill

Abbreviations

30DA - 30 days daily average
AA - annual average
AHC - average hourly controlled
AHU - average hourly uncontrolled
CEQA- California Environmental Quality Act
CH4 - Methane
CO2 - Carbon Dioxide
dscf - dry standard cubic feet
ft - feet
GBFS - granulated blast furnace slag
GHG - greenhouse gas
GWP - global warming potential
hr - hour
lb - pound
HHV- higher heating value
m - meter
MAC- maximum annual controlled
MDC - maximum daily controlled
MDU - maximum daily uncontrolled
mg - 10-3 gram
MHC - maximum hourly controlled
MHU - maximum hourly uncontrolled
MMBTU - 106 British thermal unit
MMscf - 106 standard cubic feet
Nm3 - normal cubic meter
N2O - nitrous oxide
NOx - nitrogen oxides
PAHs - polycyclic aromatic hydrocarbons
ppm- parts per million
PTE - potential to emit
SCAQMD - South Coast Air Quality Management District
scf - standard cubic feet
SOx - oxides of sulfur
TAC - toxic air contaminant
tpy - tons per year
VOC - volatile organic compounds
yr - year

Emissions from Storage and Loading Silos - Summary

Emission Source	Pollutant	Concentration [1,2] (mg/Nm^3)	Concentration [1,2] (gr/dscf)	Exhaust Flow Rate [3] (scfm)	Operating Schedule Dependence	Overall Control Efficiency [4] (%)
Transport to storage silo	PM_{10}	2.5	0.0010	1,447	Dryer/mill intake	99.70%
Large silo top	PM_{10}	2.5	0.0010	1,447	Dryer/mill intake	99.85%
Transport to outload	PM_{10}	2.5	0.0010	1,447	GGBFS Dispatch	99.93%
Outload silo top	PM_{10}	2.5	0.0010	2,412	Outload	99.76%
Outload silo top	PM_{10}	2.5	0.0010	2,412	Outload	99.76%
Outload silo top	PM_{10}	2.5	0.0010	2,412	Outload	99.76%
Loading chute	PM_{10}	2.5	0.0010	1,447	GGBFS Dispatch	99.52%
Loading chute	PM_{10}	2.5	0.0010	1,447	GGBFS Dispatch	99.52%
Loading chute	PM_{10}	2.5	0.0010	1,447	GGBFS Dispatch	99.52%
Loading chute	PM_{10}	2.5	0.0010	1,447	GGBFS Dispatch	99.52%
Loading chute	PM_{10}	2.5	0.0010	1,447	GGBFS Dispatch	99.52%
Loading chute	PM_{10}	2.5	0.0010	1,447	GGBFS Dispatch	99.52%
Transport to storage silo	$PM_{2.5}$	2.5	0.0010	1,447	Dryer/mill intake	98.04%
Large silo top	$PM_{2.5}$	2.5	0.0010	1,447	Dryer/mill intake	99.02%
Transport to outload	$PM_{2.5}$	2.5	0.0010	1,447	GGBFS Dispatch	99.53%
Outload silo top	$PM_{2.5}$	2.5	0.0010	2,412	Outload	98.43%
Outload silo top	$PM_{2.5}$	2.5	0.0010	2,412	Outload	98.43%
Outload silo top	$PM_{2.5}$	2.5	0.0010	2,412	Outload	98.43%
Loading chute	$PM_{2.5}$	2.5	0.0010	1,447	GGBFS Dispatch	96.86%
Loading chute	$PM_{2.5}$	2.5	0.0010	1,447	GGBFS Dispatch	96.86%
Loading chute	$PM_{2.5}$	2.5	0.0010	1,447	GGBFS Dispatch	96.86%
Loading chute	$PM_{2.5}$	2.5	0.0010	1,447	GGBFS Dispatch	96.86%
Loading chute	$PM_{2.5}$	2.5	0.0010	1,447	GGBFS Dispatch	96.86%
Loading chute	$PM_{2.5}$	2.5	0.0010	1,447	GGBFS Dispatch	96.86%

Conversion Factors and Constants:

Parameter	Value	UOM	Notes
Conversion factor	7,000	gr/lb	--
Conversion factor	35.3147	ft^3/m^3	--
Conversion factor	60	min/hr	--
Conversion factor	64.7989	mg = grain	--
Temperature	32	degrees F	Normal
	68	degrees F	Standard
	212	degrees F	Actual temperature was based on information received from Ecocem on May 20, 2022.
Normal Operating Schedule for Mill (Transport to storage silo, large silo top)	24	hours/day	Ecocem email correspondence received on March 2, 2023.
	7	days/week	Correspondence via phone with Ecocem team on September 29, 2022.
	45	weeks/year	Ecocem email correspondence received on March 2, 2023.
Maximum Operating Schedule for Mill (Transport to storage silo, large silo top)	24	hours/day	Email correspondence with Ecocem team on November 8, 2022
	7	days/week	Correspondence via phone with Ecocem team on September 27, 2022.
	52	weeks/year	Ecocem correspondence received on May 26, 2022.
Normal Operating Schedule for GGBFS Truck Dispatch (Transport to outload, outload silo top, loading chute)	21	hours/day	Ecocem email correspondence received on March 2, 2023.
	6	days/week	Ecocem correspondence received on May 20, 2022.
	52	weeks/year	Ecocem correspondence received on May 26, 2022.
Maximum Operating Schedule for GGBFS Truck Dispatch (Transport to outload, outload silo top, loading chute)	24	hours/day	Ecocem written correspondence received on November 8, 2022.
	7	days/week	Ecocem written correspondence received on November 8, 2022.
	52	weeks/year	Ecocem correspondence received on May 26, 2022.

Notes:

[1] PM outlet concentration of the filter was provided in was from Ecocem written correspondence received on November 8, 2022. PM was assumed to be equal to PM_{10} and $PM_{2.5}$.

[2] PM_{10} concentration was converted from mg/Nm^3 to gr/dscf. Normal cubic meter was assumed to be based on 32 degrees Fahrenheit, 101.3 kPa, and on a dry basis. Standard cubic foot was assumed to be 68 degrees Fahrenheit, 101.3 kPa, and on a dry basis.

[3] Exhaust flow rate and control efficiencies were based from information provided by Ecocem on June 14, 2022.

[4] Overall control efficiency was calculated as the uncontrolled emissions minus the controlled emissions divided by the uncontrolled emissions.

5 AHU and MHU were calculated in Table 5-EF.b.ii. Emissions from Storage and Loading Silos.

[6] AHC and MHC were calculated as the concentration multiplied by the exhaust flow rate.

[7] MDU and MDC were calculated as the MHU and MHC, respectively, multiplied by the maximum daily operating schedule for mill and GGBFS dispatch, as applicable.

[8] Annual PTE was calculated as 30DA multiplied by the maximum operating schedule.

[9] 30DA was calculated as the MDC multiplied by the ratio of the maximum days per week multiplied by 4.3 weeks per month rounded to whole number over 30 days per month.

[10] AA was calculated as the AHC multiplied by the normal annual operating schedule.

[11] GGBFS will enter the silo with a moisture content of 0%, based on Ecocem email correspondence received on June 15, 2022.

Abbreviations

30DA - 30 days daily average
AA - annual average
AHC - average hourly controlled
AHU - average hourly uncontrolled
F - Fahrenheit
ft - feet
GGBFS - ground granulated blast furnace slag
hr - hour
lb - pound
m - meter
MDC - maximum daily controlled
MDU - maximum daily uncontrolled
MHC - maximum hourly controlled
MHU - maximum hourly uncontrolled
mg - 10^{-3} gram
min - minute
PTE - potential to emit
kPa - kilopascal
gr - grain
Nm^3 - normal cubic meter
dscf - dry standard cubic feet
scfm - standard cubic feet per minute
PM_{10} - particulate matter with aerodynamic diameter less than 10 micrometer
$PM_{2.5}$ - particulate matter with aerodynamic diameter less than 2.5 micrometer
UOM - unit of measurement
yr - year

Emissions from Fuel Combustion at the Dryer

Pollutant	Emission Factors (lb/MMBTU)	(lb/MMscf)
Carbon Monoxide (CO) [1]	0.033	35
Oxides of Sulfur (SOx) [1]	0.00057	0.60
Oxides of Nitrogen (NOx) [2]	0.020	21
VOC [1]	0.0067	7.0
Toxic Air Contaminants		
Benzene [3]	5.52E-06	5.80E-03
Formaldehyde [3]	1.17E-05	1.23E-02
PAHs [3,4]	3.81E-07	4.00E-04
Ammonia [3,5]	3.05E-03	3.20E+00
Greenhouse Gases		
Carbon Dioxide (CO_2) [6]	1.17E+02	1.23E+05
Methane (CH_4) [6]	2.20E-03	2.31E+00
Nitrous Oxide (N_2O) [6]	2.20E-04	2.31E-01
Carbon dioxide equivalent (CO_2e) [7]	1.17E+02	1.23E+05

Conversion Factors and Constants:

Parameter	Value	Unit of Measure	Notes
Maximum rated heat input capacity	36	MMBTU/hr	Based on Ecocem correspondence in 2018
Natural Gas HHV	1050	MMBtu/MMscf	SCAQMD Rule 2012 Appendix A Chapter 3 Table 3-D
Average heat input	12.39	MMBTU/hr	8% moisture content; correspondence with the Ecocem on March 2, 2023.
Maximum heat input	28.09	MMBTU/hr	12% moisture content; correspondence with the Ecocem on March 2, 2023.
K	1.195E-07	ppm NOx per lb/scf	40 CFR 60 Appendix A Method 19 (SCAQMD Rule 2012 Appendix A Chapter 4 Equation 28a)
O_2	3	%	Standard
F	8710	dscf/MMBtu	40 CFR 60 App A Method 19
Conversion factor	35.3147	ft^3/m^3	--
Conversion factor	453,592	mg/lb	--
Conversion factor	453.592	g/lb	--
Normal Operating Schedule for Dryer	24	hours/day	Correspondence with Ecocem on March 2, 2023.
	7	days/week	Correspondence with Ecocem on March 2, 2023.
	45	weeks/year	Correspondence with Ecocem on March 2, 2023.
Maximum Operating Schedule for Dryer	24	hours/day	Email correspondence with Ecocem team on November 8, 2022
	7	days/week	Correspondence via phone with Ecocem team, on September 29, 2022.
	52	weeks/year	Ecocem correspondence received on May 26, 2022.
Monthly heat input limit (proposed)	11,000	MMBtu/month	Correspondence with Ecocem on March 2, 2023.
Annual heat input limit (proposed)	195,000	MMBtu/year	Correspondence with Ecocem on March 2, 2023.
Carbon Dioxide (CO_2) GWP	1	--	See note 7
Methane (CH_4) GWP	25	--	See note 7
Nitrous Oxide (N_2O) GWP	298	--	See note 7

Notes:

[1] CO, SOx, and VOC emission factors were referenced from SCAQMD's AER Default Emission Factors for Natural Gas/Other Equipment dated January 2022 Accessed at https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/default-combustion-emission-factors.pdf?sfvrsn=12.
[2] NOx guarantee from manufacturer provided via phone correspondence with Ecocem, Coen, Thyssenkrupp, and Bay City Boilers on October 4, 2022.
[3] TAC emissions were estimated using the AER Reporting Tool Default Combustion Emission Factors for Toxic Air Contaminants. Available online at: http://www3.aqmd.gov/webappl/help/newaer/index.html
[4] The emission factor for PAHs represents a combined default emission factor for toxic compounds within the PAH family.
[5] The ammonia emission factor corresponds to equipment without Selective Non Catalytic Reduction (SNCR).
[6] CO_2, CH_4, and N_2O emission factors were estimated using SCAQMD's 400-CEQA Greenhouse Gas Estimator. Available online at: https://www.aqmd.gov/docs/default-source/permitting/ceqa-2017/ghg-estimator-(2017-11).xlsx?sfvrsn=8
[7] GHG emissions in CO_2e were estimated using GWP values as referenced from the SCAQMD Greenhouse Gas Estimator.
[8] AHU and AHC were calculated as the average rated heat input capacity multiplied by the emissions factor. MHU and MHC were calculated as the maximum rated heat input capacity multiplied by the emission factor. The emissions were uncontrolled.
[9] MDU and MDC were calculated as MHU and MHC multiplied by the maximum operating schedule, respectively. The emissions were uncontrolled.
[10] Annual PTE and MAC were calculated as the proposed annual fuel consumption multiplied by the emission factor.
[11] 30DA was calculated as the proposed monthly heat input limit multiplied by the emission factor divided by 4.3 weeks per month multiplied by the maximum operating schedule.
[12] AA was calculated as the AHC multiplied by the normal operating schedule.
[13] GBFS entered the dryer with a moisture content of 12%, based on Ecocem written correspondence received on November 8, 2022.
[14] Gypsum entered the dryer with a moisture content of 2.5%, based on the technical specification provided by Ecocem correspondence on May 20, 2022.
15 PM emissions are included with the mill exhaust.

Abbreviations

30DA - 30 days daily average
AA - annual average
AHC - average hourly controlled
AHU - average hourly uncontrolled
CEQA- California Environmental Quality Act
dscf - dry standard cubic feet
ft - feet
GBFS - granulated blast furnace slag
GHG - greenhouse gas
GWP - global warming potential
lb - pound
HHV- higher heating value
m - meter
MAC- maximum annual controlled
MDC - maximum daily controlled
MDU - maximum daily uncontrolled
mg - 10^{-3} gram
MHC - maximum hourly controlled
MHU - maximum hourly uncontrolled
MMBTU - 10^6 British thermal unit
MMscf - 10^6 standard cubic feet
Nm^3 - normal cubic meter
N_2O - nitrous oxide
NOx - nitrogen oxides
PAHs - polycyclic aromatic hydrocarbons
ppm- parts per million
PTE - potential to emit
SCAQMD - South Coast Air Quality Management District
scf - standard cubic feet
SOx - oxides of sulfur
TAC - toxic air contaminant
tpy - tons per year
VOC - volatile organic compounds
yr - year

Emissions from Grinding Mill

Pollutant	Concentration [1,2]		Exhaust Flow Rate [3] Average	Exhaust Flow Rate [3] Maximum	Overall Control Efficiency [4]
	(mg/ Nm^3)	(gr/dscf)	(scfm)	(scfm)	(%)
PM_{10}	2.5	0.0010	18,010	30,750	99.95%
$PM_{2.5}$	2.5	0.0010	18,010	30,750	99.91%

Conversion Factors and Constants:

Parameter	Value	UOM	Notes
Conversion factor	7000	gr/lb	--
Conversion factor	35.3147	ft^3/m^3	--
Conversion factor	60	min/hr	--
Conversion factor	64.7989	gr/mg	--
Moisture content	12%	%v/v	Ecocem email correspondence received on March 2, 2023.
Temperature	32	degrees F	Normal
	68	degrees F	Standard
	194	degrees F	Actual, see Note 3
Normal Operating Schedule for Mill	24	hours/day	Ecocem email correspondence received on March 2, 2023.
	7	days/week	Correspondence via phone with Ecocem team on September 29, 2022.
	45	weeks/year	Ecocem email correspondence received on March 2, 2023.
Maximum Operating Schedule for Mill	24	hours/day	Email correspondence with Ecocem team on November 8, 2022
	7	days/week	Correspondence via phone with Ecocem team on September 27, 2022.
	52	weeks/year	Ecocem correspondence received on May 26, 2022.

Notes:

[1] PM outlet concentration from the filter was referenced from manufacturer guarantee for the filter specification (2.5 mg/Nm^3 on dry basis, VDI 2066 or EN 13284-1, provided by Ecocem on June 15, 2022. PM_{10} and $PM_{2.5}$ concentrations were assumed to be equal to PM.

[2] PM_{10} and $PM_{2.5}$ concentrations were converted from mg/Nm^3 to gr/dscf. Normal cubic meter was assumed to be based on 32 degrees Fahrenheit, 101.3 kPa, and on a dry basis. Standard cubic foot was assumed to be 68 degrees Fahrenheit, 101.3 kPa, and on a dry basis.

[3] The average exhaust flow rate and maximum exhaust flow rate at moisture levels of 8% and 12% respectively were referenced from "Polysius Data" worksheet in "Mill emissions Rev10_01.03.2023.xlsx" received from Ecocem on March 2, 2023 and converted to dry basis based on a moisture content of 12%v/v from same reference. Temperature was referenced from the mill circuit data provided by Ecocem on June 15, 2022.

[4] Overall control efficiency was calculated as the uncontrolled emissions minus the controlled emissions divided by the uncontrolled emissions (maximum).

5 AHU and MHU were calculated as the total of the uncontrolled emissions from dryer combustion, dryer non-combustion, mill, and drop emissions (i.e., referenced from Table 3-EF.b. Emissions from Fuel Combustion at the Dryer - PM - Combustion - Based on emission factor, Table 3-Pnt.c. Emissions from Fuel Combustion at the Dryer - PM - Noncombustion - Based on emission factor, Table 4-EF2.b. Emissions from Grinding Mill - Based on emission factor,Table 4-EF2.c.ii. Emission from Drop Points within Mill Building, respectively).

[6] AHC and MHC were calculated as the total of the uncontrolled emissions concentration multiplied by the exhaust flow rate.

[7] MDU and MDC were calculated as the MHU and MHC, respectively, multiplied by the maximum daily operating schedule.

[8] Annual PTE was calculated as 30DA multiplied by the maximum operating schedule.

[9] 30DA was calculated as the MDC multiplied by the ratio of the maximum days per week multiplied by 4.3 weeks per month rounded to whole number over 30 days per month.

[10] AA was calculated as the AHC multiplied by the normal annual operating schedule.

[11] GBFS and gypsum will enter the grinding mill with a moisture content of 0%, based on Ecocem email correspondence received on June 15, 2022.

Abbreviations

30DA - 30 days daily average
AA - annual average
AHC - average hourly controlled
AHU - average hourly uncontrolled
F - Fahrenheit
ft - feet
hr - hour
lb - pound
m - meter
MDC - maximum daily controlled
MDU - maximum daily uncontrolled
MHC - maximum hourly controlled
MHU - maximum hourly uncontrolled
mg - 10^{-3} gram
min - minute
gr - grain
Nm^3 - normal cubic meter
dscf - dry standard cubic feet
scfm - standard cubic feet per minute
kPa - kilopascal
PM_{10} - particulate matter with aerodynamic diameter less than 10 micrometer
$PM_{2.5}$ - particulate matter with aerodynamic diameter less than 2.5 micrometer
PTE - potential to emit
UOM - unit of measurement
GBFS - granulated blast furnace slag

Emissions from Material Handling of GBFS and Gypsum - Emission Factors

Emission Factors [1]	Value	UOM
Uncontrolled PM_{10} Emission Factor - GBFS	9.66E-05	lb/ton
Uncontrolled $PM_{2.5}$ Emission Factor - GBFS	1.46E-05	lb/ton
Uncontrolled PM_{10} Emission Factor - Gypsum	8.69E-04	lb/ton
Uncontrolled $PM_{2.5}$ Emission Factor - Gypsum	1.32E-04	lb/ton

Emissions from Material Handling of GBFS and Gypsum - Summary

Transfer Point Description	Control Type	Pollutant	Process Rate Dependency	Average Process Rate (ton/hr)	Maximum Process Rate (ton/hr)
Deck crane 1 with clamshell bucket to portable electric GBFS intake hopper 1	Water Spray (Application Point)	PM_{10}	GBFS Import	276	331
Deck crane 2 with clamshell bucket to portable electric GBFS intake hopper 2	Water Spray (Application Point)	PM_{10}	GBFS Import	276	331
Deck crane 3 with clamshell bucket to portable electric GBFS intake hopper 3	Water Spray (Application Point)	PM_{10}	GBFS Import	276	331
Portable electric GBFS intake hopper 1 to portable electric GBFS hopper conveyor 1	Conveyor with Full Cover	PM_{10}	GBFS Import	276	331
Portable electric GBFS intake hopper 2 to portable electric GBFS hopper conveyor 2	Conveyor with Full Cover	PM_{10}	GBFS Import	276	331
Portable electric GBFS intake hopper 3 to portable electric GBFS hopper conveyor 3	Conveyor with Full Cover	PM_{10}	GBFS Import	276	331
Portable electric GBFS hopper conveyor 1 to portable electric GBFS intake conveyor 1	Conveyor with Full Cover	PM_{10}	GBFS Import	276	331
Portable electric GBFS hopper conveyor 2 to portable electric GBFS intake conveyor 1	Conveyor with Full Cover	PM_{10}	GBFS Import	276	331
Portable electric GBFS hopper conveyor 3 to portable electric GBFS intake conveyor 1	Conveyor with Full Cover	PM_{10}	GBFS Import	276	331
Portable electric GBFS intake conveyor 1 to portable electric GBFS intake conveyor 2	Conveyor with Full Cover	PM_{10}	GBFS Import	827	992
Portable electric GBFS intake conveyor 2 to portable electric GBFS intake conveyor 3	Conveyor with Full Cover	PM_{10}	GBFS Import	827	992
Portable electric GBFS intake conveyor 3 to portable electric GBFS intake conveyor 4	Conveyor with Full Cover	PM_{10}	GBFS Import	827	992
Portable electric GBFS intake conveyor 4 to portable electric GBFS intake conveyor 5	Conveyor with Full Cover	PM_{10}	GBFS Import	827	992
Portable electric GBFS intake conveyor 5 to portable electric GBFS intake conveyor 6	Conveyor with Full Cover	PM_{10}	GBFS Import	827	992
Portable electric GBFS intake conveyor 6 to fixed intake hopper	Conveyor with Full Cover	PM_{10}	GBFS Import	827	992
Fixed intake hopper to fixed electric GBFS conveyor 1	Conveyor with Full Cover	PM_{10}	GBFS Import	827	992
Fixed electric GBFS conveyor 1 to radial stacker conveyor	Conveyor with Full Cover	PM_{10}	GBFS Import	827	992
Radial stacker conveyor to GBFS stockpile	Water Spray (Downstream Effect, n=10)	PM_{10}	GBFS Import	827	992
Excavator on GBFS stockpile to front end loader at GBFS stockpile	Water Spray (Application Point)	PM_{10}	GBFS Intake	116	127
Front end loader at GBFS stockpile to portable electric GBFS intake hopper	Water Spray (Downstream Effect, n=1)	PM_{10}	GBFS Intake	116	127
Portable electric GBFS intake hopper to portable electric GBFS intake conveyor	Water Spray (Downstream Effect, n=2)	PM_{10}	GBFS Intake	116	127
Portable electric GBFS intake conveyor to Stamler hopper (GBFS intake conveyor to gypsum intake conveyor)	Water Spray (Downstream Effect, n=3)	PM_{10}	GBFS Intake	116	127
Stamler hopper (GBFS intake conveyor to gypsum intake conveyor) to the gypsum intake conveyor	Water Spray (Downstream Effect, n=4)	PM_{10}	GBFS Intake	116	127
Unloading from gypsum truck to gypsum stockpile	Water Spray (Application Point)	PM_{10}	Gypsum Import	22.0	66
Front end loader at gypsum stockpile to portable electric gypsum mill building intake hopper	Water Spray (Application Point)	PM_{10}	Gypsum Intake	4.8	5.3
Portable electric gypsum mill building intake hopper to portable electric gypsum mill building intake conveyor	Water Spray (Downstream Effect, n=1)	PM_{10}	Gypsum Intake	4.8	5.3
Portable electric gypsum mill building intake conveyor to fixed electric GBFS and gypsum intake conveyor 1	Water Spray (Downstream Effect, n=2)	PM_{10}	Gypsum Intake	4.8	5.3
Deck crane 1 with clamshell bucket to portable electric GBFS intake hopper 1	Water Spray (Application Point)	$PM_{2.5}$	GBFS Import	276	331
Deck crane 2 with clamshell bucket to portable electric GBFS intake hopper 2	Water Spray (Application Point)	$PM_{2.5}$	GBFS Import	276	331
Deck crane 3 with clamshell bucket to portable electric GBFS intake hopper 3	Water Spray (Application Point)	$PM_{2.5}$	GBFS Import	276	331
Portable electric GBFS intake hopper 1 to portable electric GBFS hopper conveyor 1	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	276	331
Portable electric GBFS intake hopper 2 to portable electric GBFS hopper conveyor 2	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	276	331
Portable electric GBFS intake hopper 3 to portable electric GBFS hopper conveyor 3	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	276	331
Portable electric GBFS hopper conveyor 1 to portable electric GBFS intake conveyor 1	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	276	331
Portable electric GBFS hopper conveyor 2 to portable electric GBFS intake conveyor 1	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	276	331
Portable electric GBFS hopper conveyor 3 to portable electric GBFS intake conveyor 1	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	276	331
Portable electric GBFS intake conveyor 1 to portable electric GBFS intake conveyor 2	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	827	992
Portable electric GBFS intake conveyor 2 to portable electric GBFS intake conveyor 3	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	827	992
Portable electric GBFS intake conveyor 3 to portable electric GBFS intake conveyor 4	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	827	992
Portable electric GBFS intake conveyor 4 to portable electric GBFS intake conveyor 5	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	827	992
Portable electric GBFS intake conveyor 5 to portable electric GBFS intake conveyor 6	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	827	992
Portable electric GBFS intake conveyor 6 to fixed intake hopper	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	827	992
Fixed intake hopper to fixed electric GBFS conveyor 1	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	827	992
Fixed electric GBFS conveyor 1 to radial stacker conveyor	Conveyor with Full Cover	$PM_{2.5}$	GBFS Import	827	992
Radial stacker conveyor to GBFS stockpile	Water Spray (Downstream Effect, n=10)	$PM_{2.5}$	GBFS Import	827	992
Excavator on GBFS stockpile to front end loader at GBFS stockpile	Water Spray (Application Point)	$PM_{2.5}$	GBFS Intake	116	127
Front end loader at GBFS stockpile to portable electric GBFS intake hopper	Water Spray (Downstream Effect, n=1)	$PM_{2.5}$	GBFS Intake	116	127
Portable electric GBFS intake hopper to portable electric GBFS intake conveyor	Water Spray (Downstream Effect, n=2)	$PM_{2.5}$	GBFS Intake	116	127
Portable electric GBFS intake conveyor to Stamler hopper (GBFS intake conveyor to gypsum intake conveyor)	Water Spray (Downstream Effect, n=3)	$PM_{2.5}$	GBFS Intake	116	127
Stamler hopper (GBFS intake conveyor to gypsum intake conveyor) to the gypsum intake conveyor	Water Spray (Downstream Effect, n=4)	$PM_{2.5}$	GBFS Intake	116	127
Unloading from gypsum truck to gypsum stockpile	Water Spray (Application Point)	$PM_{2.5}$	Gypsum Import	22.0	66.1
Front end loader at gypsum stockpile to portable electric gypsum mill building intake hopper	Water Spray (Application Point)	$PM_{2.5}$	Gypsum Intake	4.8	5.3
Portable electric gypsum mill building intake hopper to portable electric gypsum mill building intake conveyor	Water Spray (Downstream Effect, n=1)	$PM_{2.5}$	Gypsum Intake	4.8	5.3
Portable electric gypsum mill building intake conveyor to fixed electric GBFS and gypsum intake conveyor 1	Water Spray (Downstream Effect, n=2)	$PM_{2.5}$	Gypsum Intake	4.8	5.3

Notes:

[1] Emission factors were calculated based on equation 1 as referenced from United States Environmental Protection Agency (USEPA). 2006. AP-42, Chapter 13.2.4: Aggregated Handling and Storage Piles. November. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/AP-42-fifth-edition-volume-i-chapter-13-

[2] AHU and MHU were calculated as the emission factor for the applicable particle size and material type multiplied by the average and maximum process rate, as applicable.

[3] AHC and MHC were calculated as AHU and MHU, respectively, multiplied by 100% minus the applicable control efficiency.

[4] MDU and MDC were calculated as MHU and MHC multiplied by the operating schedule.

[5] Annual PTE was calculated as the proposed annual limit of the material throughput for GBFS import, GBFS mill intake, gypsum import, or gypsum mill intake multiplied by the applicable emission factor and 100% minus the applicable control efficiency.

[6] 30DA was calculated as the proposed monthly limit of the material throughput for GBFS import, GBFS mill intake, gypsum import, or gypsum mill intake multiplied by the applicable emission factor and 100% minus the applicable control efficiency; 100% minus the control efficiencies; and then divided by the maximum days per week

[7] AA was calculated as the AHC multiplied by the normal annual operating schedule, or based on proposed limit (i.e., equal to Annual PTE).

[8] The maximum wind speed was calculated as the average daily wind speed from January 1, 2021 - December 31, 2021 for Long Beach Daugherty Airport, California (Station ID WBAN 23129) was referenced from National Oceanic & Atmospheric Administration. 2022. Local Climate Data. Accessed at https://www.ncei.noaa.gov/products/land-based-station/local-climatological-data in June 2022. The maximum daily peak wind speed was selected for each day of the month (1st to 31st).

[9] Control efficiency was referenced from Material Handling Table 5 of Mojave Desert AQMD/Antelope Valley APCD. 2013. Emission Inventory Guidance. Mineral Handling and Processing Industries. Accessed at https://www.mdaqmd.ca.gov/home/showpublisheddocument/768/636305689272570000.

Abbreviations

30DA - 30 days daily average
AA - annual average
AHC - average hourly controlled
AHU - average hourly uncontrolled
APCD - Air Pollution Control District
AQMD - Air Quality Management District
GGBFS - ground granulated blast furnace slag
GBFS - granulated blast furnace slag
hr - hour
lb - pound
MDC - maximum daily controlled
MDU - maximum daily uncontrolled
MHC - maximum hourly controlled
MHU - maximum hourly uncontrolled
mph - miles per hour
OGV - ocean going vessel
PM_{10} - particulate matter with aerodynamic diameter less than 10 micrometer
$PM_{2.5}$ - particulate matter with aerodynamic diameter less than 2.5 micrometer
PTE - potential to emit
UOM - unit of measurement

Conversion Factors and Constants:

Parameter		Value	UOM	Reference
Average rate of GBFS import		827	tons/hour	Correspondence with Ecocem on March 2, 2023.
Maximum rate of GBFS import		992	tons/hour	Correspondence with Ecocem on March 2, 2023.
Maximum rate of GBFS import		88,160	tons/month	Correspondence with Ecocem on March 2, 2023.
Maximum rate of GBFS import		881,600	tons/year	Correspondence with Ecocem on March 2, 2023.
Normal Operating Schedule for GBFS Import		16	hours/day	Ecocem written correspondence received on November 8, 2022.
		5	days/week	Ecocem written correspondence received on November 8, 2022.
		20	weeks/year	Correspondence with Ecocem on March 2, 2023.
Maximum Operating Schedule for GBFS Import		24	hours/day	Ecocem written correspondence received on November 8, 2022.
		7	days/week	Correspondence with Ecocem on March 2, 2023.
		24	weeks/year	Correspondence with Ecocem on March 2, 2023.
Gypsum truck capacity		28.5	tons/truck	Ecocem information emailed on February 28, 2022
Average rate of gypsum import		22	tons per hour	Correspondence with Ecocem on March 2, 2023.
Maximum rate of gypsum import		66	tons per hour	Correspondence with Ecocem on March 2, 2023.
Maximum rate of gypsum import		4,408	tons per month	Correspondence with Ecocem on March 2, 2023.
Maximum rate of gypsum import		44,080	tons/year	Correspondence with Ecocem on March 2, 2023.
Maximum Truck trips (Gypsum)		2	trips/hour	Correspondence via phone with Ecocem team on September 27, 2022.
		10.85	trips/day	Calculated based on maxmium operating schedule
		3950	trips/year	Correspondence via email with Steve Bryan, Orcem, on December 21, 2022.
Normal Operating Schedule for Gypsum Trucks		24	hours/day	Corresondence with Ecocem on March 2, 2023.
		7	days/week	Corresondence with Ecocem on March 2, 2023.
		52	weeks/year	Ecocem correspondence received on May 26, 2022.
Maximum Operating Schedule for Gypsum Trucks		24	hours/day	Written correspondence received on November 8, 2022
		7	days/week	Written correspondence received on November 8, 2022
		52	weeks/year	Ecocem correspondence received on May 26, 2022.
Normal Operating Schedule for Mill		24	hours/day	Correspondence with Ecocem on March 2, 2023.
		7	days/week	Correspondence via phone with Ecocem team on September 29, 2022.
		45	weeks/year	Correspondence with Ecocem on March 2, 2023.
Maximum Operating Schedule for Mill		24	hours/day	Email correspondence with Ecocem team on November 8, 2022
		7	days/week	Correspondence via phone with Ecocem team on September 27, 2022.
		52	weeks/year	Ecocem correspondence received on May 26, 2022.
Average rate of conveyor to dryer/mill		121	tons per hour	Correspondence with Ecocem on March 2, 2023.
Maximum rate of conveyor to dryer/mill		132	tons per hour	Ecocem information emailed on June 15, 2022
Proportion of GBFS Mill Intake		96%	%	Based on Ecocem written correspondence received on November 8, 2022.
Proportion of Gypsum Mill Intake		4%	%	Based on Ecocem written correspondence received on November 8, 2022.
Average GBFS Mill Intake		116	tons/hour	Correspondence with Ecocem on March 2, 2023.
Maximum GBFS Mill Intake		127	tons/hour	Correspondence with Ecocem on March 2, 2023.
Maximum GBFS Mill Intake		86,749	tons/month	Correspondence with Ecocem on March 2, 2023.
Maximum GBFS Mill Intake		888,653	tons/year	Correspondence with Ecocem on March 2, 2023.
Average Gypsum Mill Intake		4.8	tons/hour	Correspondence with Ecocem on March 2, 2023.
Maximum Gypsum Mill Intake		5.3	tons/hour	Correspondence with Ecocem on March 2, 2023.
Maximum Gypsum Mill Intake		3,615	tons/month	Correspondence with Ecocem on March 2, 2023.
Maximum Gypsum Mill Intake		37,027	tons/year	Correspondence with Ecocem on March 2, 2023.
PM_{10} Particle Size Multiplier (k)		0.35	dimensionless	AP-42 Chapter 13.2.4, Table: Aerodynamic Particle Size Multiplier (k) For Equation 1
$PM_{2.5}$ Particle Size Multiplier (k)		0.053	dimensionless	AP-42 Chapter 13.2.4, Table: Aerodynamic Particle Size Multiplier (k) For Equation 1
Mean Wind Speed, U		5.23	mph	See Note 8
GBFS Material Moisture Content, M		12.00	%	GBFS will have a moisture content of 12%, based on Ecocem email correspondence received on November 8, 2022.
Gypsum Material Moisture Content, M		2.50	%	Gypsum will have a maximum moisture content of 2.5%, based on the technical specification provided by Ecocem correspondence on May 20, 2022.
Control Efficiencies	Water Spray (Application Point)	75%	%	See Note 9
	Water Spray (Downstream Effect, n=1)	70%	%	See Note 9
	Water Spray (Downstream Effect, n=2)	65%	%	See Note 9
	Water Spray (Downstream Effect, n=3)	60%	%	See Note 9
	Water Spray (Downstream Effect, n=4)	55%	%	See Note 9
	Water Spray (Downstream Effect, n=10)	25%	%	See Note 9
	Conveyor with Full Cover	85%	%	See Note 9
Conversion factor		1.102	ton/metric ton	--

Notes:

1 Emission factors were calculated based on equation 1 as referenced from United States Environmental Protection Agency (USEPA). 2006. AP-42, Chapter 13.2.4: Aggregated Handling and Storage Piles. November. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/AP-42-fifth-edition-volume-i-chapter-13-

2 AHU and MHU were calculated as the emission factor for the applicable particle size and material type multiplied by the average and maximum process rate, as applicable.

3 AHC and MHC were calculated as AHU and MHU, respectively, multiplied by 100% minus the applicable control efficiency.

4 MDU and MDC were calculated as MHU and MHC multiplied by the operating schedule.

5 Annual PTE was calculated as the proposed annual limit of the material throughput for GBFS import, GBFS mill intake, gypsum import, or gypsum mill intake multiplied by the applicable emission factor and 100% minus the applicable control efficiency.

6 30DA was calculated as the proposed monthly limit of the material throughput for GBFS import, GBFS mill intake, gypsum import, or gypsum mill intake multiplied by the applicable emission factor and 100% minus the applicable control efficiency; 100% minus the control efficiencies; and then divided by the maximum days per week

7 AA was calculated as the AHC multiplied by the normal annual operating schedule, or based on proposed limit (i.e., equal to Annual PTE).

8 The maximum wind speed was calculated as the average daily wind speed from January 1, 2021 - December 31, 2021 for Long Beach Daugherty Airport, California (Station ID WBAN 23129) was referenced from National Oceanic & Atmospheric Administration. 2022. Local Climate Data. Accessed at https://www.ncei.noaa.gov/products/land-based-station/local-climatological-data in June 2022. The maximum daily peak wind speed was selected for each day of the month (1st to 31st).

9 Control efficiency was referenced from Material Handling Table 5 of Mojave Desert AQMD/Antelope Valley APCD. 2013. Emission Inventory Guidance. Mineral Handling and Processing Industries. Accessed at https://www.mdaqmd.ca.gov/home/showpublisheddocument/768/636305689272570000.

Abbreviations

30DA - 30 days daily average	APCD - Air Pollution Control District	hr - hour	MHC - maximum hourly controlled	PM_{10} - particulate matter with aerodynamic diameter less than 10 micrometer
AA - annual average	AQMD - Air Quality Management District	lb - pound	MHU - maximum hourly uncontrolled	$PM_{2.5}$ - particulate matter with aerodynamic diameter less than 2.5 micrometer
AHC - average hourly controlled	GGBFS - ground granulated blast furnace slag	MDC - maximum daily controlled	mph - miles per hour	PTE - potential to emit
AHU - average hourly uncontrolled	GBFS - granulated blast furnace slag	MDU - maximum daily uncontrolled	OGV - ocean going vessel	UOM - unit of measurement

Emissions from Wind Erosion of Storage Piles - Detail

GBFS Pile												
Period	u+ [1]		u_{10}+ [2]	u* [3]	P [4]	S [5]	PM_{10} EF [6]	$PM_{2.5}$ EF [6]	PM_{10} Emissions [7]		$PM_{2.5}$ Emissions [7]	
day	mph	m/s	m/s	m/s	(g/m^2)	(m^2)	(g/m^2)	(g/m^2)	(g)	(lbs/day)	(g)	(lbs/day)
1	25	11.18	11.25	0.60	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
2	24	10.73	10.80	0.57	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
3	23	10.28	10.35	0.55	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
4	40	17.88	18.01	0.95	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
5	23	10.28	10.35	0.55	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
6	21	9.39	9.45	0.50	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
7	19	8.49	8.55	0.45	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
8	22	9.83	9.90	0.52	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
9	30	13.41	13.51	0.72	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
10	26	11.62	11.70	0.62	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
11	41	18.33	18.46	0.98	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
12	34	15.20	15.31	0.81	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
13	24	10.73	10.80	0.57	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
14	38	16.99	17.11	0.91	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
15	40	17.88	18.01	0.95	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
16	29	12.96	13.06	0.69	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
17	24	10.73	10.80	0.57	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
18	33	14.75	14.86	0.79	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
19	43	19.22	19.36	1.03	0.15	5422.58	0.08	0.01	411.06	0.91	61.66	0.14
20	37	16.54	16.66	0.88	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
21	24	10.73	10.80	0.57	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
22	27	12.07	12.16	0.64	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
23	36	16.09	16.21	0.86	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
24	32	14.31	14.41	0.76	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
25	43	19.22	19.36	1.03	0.15	5422.58	0.08	0.01	411.06	0.91	61.66	0.14
26	24	10.73	10.80	0.57	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
27	23	10.28	10.35	0.55	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
28	33	14.75	14.86	0.79	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
29	27	12.07	12.16	0.64	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
30	23	10.28	10.35	0.55	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00
31	25	11.18	11.25	0.60	0.00	5422.58	0.00	0.00	0.00	0.00	0.00	0.00

Gypsum Pile												
Period	u+ [1]		u_{10}+ [2]	u* [3]	P [4]	S [5]	PM_{10} EF [6]	$PM_{2.5}$ EF [6]	PM_{10} Emissions [7]		$PM_{2.5}$ Emissions [7]	
day	mph	m/s	m/s	m/s	(g/m^2)	(m^2)	(g/m^2)	(g/m^2)	(g)	(lbs/day)	(g)	(lbs/day)
1	25	11.2	11.3	0.60	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
2	24	10.7	10.8	0.57	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
3	23	10.3	10.4	0.55	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
4	40	17.9	18.0	0.95	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
5	23	10.3	10.4	0.55	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
6	21	9.4	9.5	0.50	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
7	19	8.5	8.6	0.45	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
8	22	9.8	9.9	0.52	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
9	30	13.4	13.5	0.72	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
10	26	11.6	11.7	0.62	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
11	41	18.3	18.5	0.98	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
12	34	15.2	15.3	0.81	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
13	24	10.7	10.8	0.57	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
14	38	17.0	17.1	0.91	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
15	40	17.9	18.0	0.95	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
16	29	13.0	13.1	0.69	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
17	24	10.7	10.8	0.57	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
18	33	14.8	14.9	0.79	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
19	43	19.2	19.4	1.03	0.2	214.7	0.08	0.01	16.28	0.04	2.44	0.01
20	37	16.5	16.7	0.88	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
21	24	10.7	10.8	0.57	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
22	27	12.1	12.2	0.64	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
23	36	16.1	16.2	0.86	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
24	32	14.3	14.4	0.76	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
25	43	19.2	19.4	1.03	0.2	214.7	0.08	0.01	16.28	0.04	2.44	0.01
26	24	10.7	10.8	0.57	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
27	23	10.3	10.4	0.55	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
28	33	14.8	14.9	0.79	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
29	27	12.1	12.2	0.64	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
30	23	10.3	10.4	0.55	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00
31	25	11.2	11.3	0.60	0.0	214.7	0.00	0.00	0.00	0.00	0.00	0.00

Conversion Factors and Constants:

Parameter	Value	UOM	Reference
Conversion factor	0.44704	m/s = 1 mph	--
Conversion factor	453.59	g/lb	--
Anemometer height (z)	9.45	m	See Note 2
Roughness height	0.003	m	Overburden, Table 13.2.5-2
Threshold friction velocity (u_t*)	1.02	m/s	Overburden, Table 13.2.5-2
k for Aerodynamic Particle Size <10 µm	0.5	dimensionless	Page 13.2.5-3 of AP-42 Chapter 13.2.5
k for Aerodynamic Particle Size <2.5 µm	0.075	dimensionless	Page 13.2.5-3 of AP-42 Chapter 13.2.5
Water spray control efficiency	90%	%	See Note 8
Operational schedule for stockpiles	24	hours/day	Ecocem correspondence received on May 20, 2022.
	7	days/week	Ecocem correspondence received on May 20, 2022.
	52	weeks/year	Ecocem correspondence received on May 26, 2022.
GBFS Storage Pile Constants			
Diameter of the pile	80	m	See Note 7
Height of the pile	16	m	See Note 7
Height to base ratio	0.20	dimensionless	Calculated
Storage pile surface area	5423	m^2	See Note 5
Gypsum Storage Pile Constants			
Diameter of the pile	16	m	See Note 7
Height of the pile	3	m	See Note 7
Height to base ratio	0.19	dimensionless	Calculated
Storage pile surface area	215	m^2	See Note 5

Notes:

[1] Daily peak wind speed from January 1, 2021 - December 31, 2021 for Long Beach Daugherty Airport, California (Station ID WBAN 23129) was referenced from National Oceanic & Atmospheric Administration. 2022. Local Climate Data. Accessed at https://www.ncei.noaa.gov/products/land-based-station/local-climatological-data in June 2022. The maximum daily peak wind speed was selected for each day of the month (1st to 31st). The units were converted from mph to m/s.

[2] The fastest mile at a reference height of 10 meters (u_{10}^+) was calculated based on equation 5 of AP-42 Chapter 13.2.5: Industrial Wind Erosion. Available at: https://www.epa.gov/sites/default/files/2020-10/documents/13.2.5_industrial_wind_erosion.pdf. Accessed on: June 2022. The anemometer height was referenced from Samson Surface Met Data, Accessed at http://www.webmet.com/State_pages/SAMSON/23129_sam.htm. The roughness height for overburden was referenced from Table 13.2.5-2.

[3] Friction velocity (u*) was calculated based on equation 4 as referenced from EPA AP-42, Chapter 13.2.5. Equation 4 is restricted to large relatively flat piles or exposed areas with little penetration into the surface wind layer (height to base ratio less than or equal to 0.2.

[4] Erosion potential (P) was calculated based on the equation 3 as referenced from EPA AP-42 Chapter 13.2.5 for each disturbance period (i.e., u* > u_t*). Equation 3 only applies to dry, exposed materials with limited erosion potential.

[5] The surface area was calculated based on the equation from the introduction paragraph in Example from as referenced from EPA AP-42 Chapter 13.2.5. The surface area of the GBFS and gypsum stockpiles were based on the Ecocem Port of LA Site Layout received on June 8, 2022.

[6] Emissions factor for each disturbance period was calculated based on equation 2 as referenced from EPA AP-42 Chapter 13.2.5.

[7] The height of the gypsum stockpile was based on the correspondence via phone with Ecocem team on September 27, 2022. The height and diameter of the GBFS stockpile and the diameter of the gypsum stockpile were based on the site layout provided by Ecocem on March 2, 2023.

[8] Control efficiency was referenced from Table XI-E of South Coast Air Quality Management District. 2007. Fugitive Dust Mitigation Measure Tables. April. Accessed at https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies/fugitive-dust. Water the storage pile by hand or apply cover when wind events are declared.

Abbreviations:

30DA - 30 days daily average
AA - annual average
AHC - average hourly controlled
AHU - average hourly uncontrolled
g - gram
GBFS - granulated blast furnace slag
EF - emission factor
EPA- Environmental Protection Agency
hr - hour
lb - pound
m - meter
m/s - meters per second
m^2 - square meter
MDC - maximum daily controlled
MDU - maximum daily uncontrolled
MHC - maximum hourly controlled
MHU - maximum hourly uncontrolled
mph - miles per hour
P - erosion potential
$PM_{2.5}$ - particulate matter with aerodynamic diameter less than 2.5 micrometer
PM_{10} - particulate matter with aerodynamic diameter smaller than 10 micrometer
S - exposed surface aera
u* - friction velocity
u_{10}^+ - fastest mile of wind at the reference anemometer height of 10 meters
u_s/u_r - ratios of surface wind speed to approach wind speed
u_t* - threshold friction velocity
PTE - potential to emit
UOM - unit of measure

Emissions from Onsite Excavator on Unpaved Roads

Emissions from Onsite Excavator on Unpaved Roads - Emission Factors

Emission Factors [1]	Value	UOM
Uncontrolled PM_{10} Emission Factor	2.32	lb/VMT
Uncontrolled $PM_{2.5}$ Emission Factor	0.23	lb/VMT

Conversion Factors and Constants:

Parameter	Value	UOM	Reference
Operating Weight	41.01	tons	Operating weight was based on specifications for CAT 336 in an email received on June 7, 2022. Operating weight includes 90% fuel tank and 165 lb operator, as referenced from Technical Specifications for 336 Hydraulic Excavator from the Caterpillar website.
Bucket capacity	2.46	m^3	Email correspondence with Ecocem team received on November 8, 2022
Bucket fill accounting for full and empty trips	50%	%	Bucket fill estimate accounted for travel with filled bucket and empty bucket.
GBFS density	80	$lbs./ft^3$	Bulk density for GBFS was referenced from Appendix I-09 from Project Draft Environmental Impact Report (DEIR) - September 2015.
Bucket weight accounting for full and empty trips	1.74	tons	See Note 8
Vehicle Weight with bucket weight	42.74	tons	See Note 8
PM_{10} Particle Size Multiplier (k)	1.5	lb/VMT	AP-42 Table 13.2.2-2
$PM_{2.5}$ Particle Size Multiplier (k)	0.15	lb/VMT	AP-42 Table 13.2.2-2
Constant a	0.9	unitless	AP-42 Table 13.2.2-2
Constant, b	0.45	unitless	AP-42 Table 13.2.2-2
Silt Loading (sL)	6	--	AP-42 Table 13.2.2-1, Iron and steel production, Mean
Wet Days per Year (P)	46	Days	See Note 9
Normal VMT	0.37	miles/hour	600 meters to ascend pile travelled within one hour, Correspondence via phone with Ecocem team on July 21, 2022.
	1.49	miles/day	Calculated based on operating schedule
	543	miles/year	Calculated based on operating schedule
Maximum VMT	0.37	miles/hour	Correspondence via phone with Ecocem team on July 21, 2022.
	4.47	miles/day	Calculated based on operating schedule
	1,629	miles/year	Calculated based on operating schedule
Normal Operating Schedule for Excavator	4	hours/day	Email correspondence from Ecocem team on June 23, 2022.
	7	days/week	Correspondence via phone with Ecocem team on September 29, 2022.
	52	weeks/year	Ecocem correspondence received on June 23, 2022.
Maximum Operating Schedule for Excavator	12	hours/day	Email correspondence from Ecocem team on March 2, 2023.
	7	days/week	Correspondence via phone with Ecocem team on September 29, 2022.
	52	weeks/year	Ecocem correspondence received on June 23, 2022.
Control Efficiency from water flushing	98%	%	See Note 10
Conversion factor	907.185	kg/ton	--
Conversion factor	16.0185	kg/m^3 = lbs/ft^3	--
Conversion factor	1,609	meter/mile	--

Notes:

[1] Emission factors were calculated based on equation 1a and 2 as referenced from United States Environmental Protection Agency (USEPA). 2006. AP-42, Chapter 13.2.2: Unpaved Roads. November. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/AP-42-fifth-edition-volume-i-chapter-13-miscellaneous-0. The excavator movement occurs on the GBFS stockpile. Excavator weight is "Vehicle weight with bucket weight" in the conversion factors and constants table. The vehicle weight is taken into account for the emission factor derivation.

[2] AHU and MHU were calculated as the applicable emission factor by the normal or maximum VMT, respectively.

[3] AHC and MHC were calculated as the uncontrolled emissions multiplied by 100% minus the control efficiency.

[4] MDU and MDC were calculated as the MHU and MHC multiplied by the maximum operating schedule, respectively.

[5] Annual PTE was calculated as the annual VMT multiplied by the applicable emission factor and 100% minus the control efficiency

[6] 30DA was calculated as the MDC multiplied by the ratio of the product of the maximum operating schedule (days per week) and 4.3 weeks per month (rounded to a whole number) over 30 days per month.

[7] AA was calculated as the AHC multiplied by the normal annual operating schedule.

[8] The bucket weight accounting for full and empty trips is calculated as the bucket capacity converted into cubic feet then multiplied by the density of GBFS multiplied by 50%. This accounts for full and empty trips by assuming the bucket is full 50% of the time, or for one of every two trips. The vehicle weight with bucket weight is the operating weight plus the bucket weight accounting for full and empty trips.

[9] Annual rainfall days for South Coast Air District, Los Angeles, were referenced Table 5 of CARB's *Miscellaneous Process Methodology 7.9. Entrained Road Travel, Paved Road Dust* .. Available at: https://ww2.arb.ca.gov/carb-miscellaneous-process-methodologies-paved-road-dust.

[10] Control efficiency was referenced from Section K, Dust Entrainment from Unpaved Roads, Control Technique Section, Mojave Desert AQMD/Antelope Valley APCD. 2013. Emission Inventory Guidance. Mineral Handling and Processing Industries. Accessed at https://www.mdaqmd.ca.gov/home/showpublisheddocument/768/636305689272570000. Defaults for A, T, and I were assumed. D was assumed to be 1 trip per hour

Emissions from Onsite Front-End Loader on Paved Roads (GBFS) - Emission Factors

Emission Factors [1]	Value	UOM
Hourly Uncontrolled PM_{10} Emission Factor	0.019	lb/VMT
Daily Uncontrolled PM_{10} Emission Factor	0.022	lb/VMT
Hourly Uncontrolled $PM_{2.5}$ Emission Factor	0.0048	lb/VMT
Daily Uncontrolled $PM_{2.5}$ Emission Factor	0.0054	lb/VMT

Conversion Factors and Constants:

Parameter	Value	UOM	Reference
Operating Weight	27.44	tons	Operating weight was based on specifications for CAT 972M in an email received on June 7, 2022. Operating weight includes tires, full fluids, operator, standard counterweight, ride control, cold start, fenders, axles, power train guard, secondary steering, sound suppression and 4.8 m^3 bucket, as referenced from Technical Specifications for 336 Hydraulic Excavator from the Caterpillar website.
Bucket capacity	4.8	m^3	Email correspondence with Ecocem team on November 8, 2022
Bucket fill accounting for full and empty trips	50%	%	Bucket fill estimate accounted for travel with filled bucket and empty bucket.
GBFS density	80	lbs/ft^3	Bulk density for GBFS was referenced from Appendix I-09 from Project Draft Environmental Impact Report (DEIR) - September 2015.
Bucket weight accounting for full and empty trips	3.39	tons	See Note 8
Vehicle Weight with bucket weight	30.83	tons	See Note 8
PM_{10} Particle Size Multiplier (k)	0.0022	lb/VMT	Referenced from AP-42 Table 13.2.1-1
$PM_{2.5}$ Particle Size Multiplier (k)	0.00054	lb/VMT	Referenced from AP-42 Table 13.2.1-1
Constant a	0.91	unitless	Referenced from AP-42 Chapter 13.2.1 Equation 2
Constant, b	1.02	unitless	Referenced from AP-42 Chapter 13.2.1 Equation 2
Silt Loading (sL)	0.32	g/m2	See Note 9
Wet Days per Year (P)	46	days	See Note 10
Days in the Averaging Period (N)	365	days	See Note 10
Maximum distance from GBFS stockpile to GBFS intake hopper	0.055	miles per FEL transport, one-way	Based on the Ecocem Port of LA Site Layout received on March 2, 2023.
Average GBFS Mill Intake	116	tons/hour	Correspondence with Ecocem on March 2, 2023.
Maximum GBFS Mill Intake	127	tons/hour	Correspondence with Ecocem on March 2, 2023.
Maximum rate of GBFS import	881,600	tons/year	Correspondence with Ecocem on March 2, 2023.
Normal VMT	2.70	miles/hour	See Note 11
	56.7	miles/day	See Note 11
	18,676	miles/year	See Note 11
Maximum VMT	2.70	miles/hour	See Note 11
	64.8	miles/day	See Note 11
	18,748	miles/year	See Note 11
Normal Operating Schedule for Front End Loader	21	hours/day	Correspondence with Ecocem on March 2, 2023.
	7	days/week	Correspondence with Ecocem on March 2, 2023.
	52	weeks/year	Correspondence with Ecocem on March 2, 2023.
Maximum Operating Schedule for Front End Loader	24	hours/day	Based on Mill schedule.
	7	days/week	Correspondence via phone with Ecocem team on September 27, 2022.
	52	weeks/year	Ecocem correspondence received on June 23, 2022.
Control Efficiency from water flushing	46%	%	See Note 12
Conversion factor	907.185	kg/ton	--
Conversion factor	16.0185	$kg/m^3 = lbs/ft^3$	--
Conversion factor	1,609	meter/mile	--

Notes:

[1] Hourly emission factors were calculated based on equation 3 and daily emission factors were calculated based on equation 2 as referenced from AP-42 guidance. United States Environmental Protection Agency (USEPA). 2011. AP-42, Chapter 13.2.1: Paved Roads. January. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/AP-42-fifth-edition-volume-i-chapter-13-miscellaneous-0.

[2] AHU and MHU were calculated as the applicable emission factor by the normal or maximum VMT, respectively.

[3] AHC, MHC, and MDC were calculated as AHU, MHU, and MDU, respectively, multiplied by 100% minus the control efficiency.

[4] MDU was calculated as the applicable emission factor by the maximum VMT.

[5] Annual PTE was calculated as the annual VMT multiplied by the applicable emission factor and 100% minus the control efficiency

[6] 30DA was calculated as the MDC multiplied by the ratio of the product of the maximum operating schedule (days per week) and 4.3 weeks per month (rounded to a whole number) over 30 days per month.

[7] AA was calculated as the AHC multiplied by the normal annual operating schedule.

[8] The bucket weight accounting for full and empty trips is calculated as the bucket capacity converted into cubic feet then multiplied by the density of GBFS multiplied by 50%. This accounts for full and empty trips by assuming the bucket is full 50% of the time, or for one of every two trips. The vehicle weight with bucket weight is the operating weight plus the bucket weight accounting for full and empty trips.

[9] Silt loading calculations for local road type for California reference Table 3.c.3. of California Air Resources Board (CARB). 2021. Miscellaneous Process Methodology 7.9. Entrained Road Travel, Paved Road Dust. March. Available at: https://ww2.arb.ca.gov/carb-miscellaneous-process-methodologies-paved-road-dust.

[10] Annual rainfall days for South Coast Air District, Los Angeles, were referenced Table 5 of CARB's *Miscellaneous Process Methodology 7.9. Entrained Road Travel, Paved Road Dust* .. Available at: https://ww2.arb.ca.gov/carb-miscellaneous-process-methodologies-paved-road-dust.

[11] The hourly and annual vehicle miles traveled were referenced from "Orcem_AQ_Assumptions_Summary_asof_02.15.23_David_1.xlsx" received from Ecocem on March 2, 2023 . Daily trips are based on the annual miles and the operating schedule.

[12] Control efficiency was referenced from Paved Roads Table 6 - Water Flushing in Mojave Desert AQMD/Antelope Valley APCD. 2013. Emission Inventory Guidance. Mineral Handling and Processing Industries. Accessed at https://www.mdaqmd.ca.gov/home/showpublisheddocument/768/636305689272570000. Water flushing 8 times per 8 hour shift was assumed.

Emissions from Onsite Front-End Loader on Paved Roads (Gypsum) - Emission Factors

Emission Factors [1]	Value	UOM
Hourly Uncontrolled PM_{10} Emission Factor	0.019	lb/VMT
Daily Uncontrolled PM_{10} Emission Factor	0.022	lb/VMT
Hourly Uncontrolled $PM_{2.5}$ Emission Factor	0.0048	lb/VMT
Daily Uncontrolled $PM_{2.5}$ Emission Factor	0.0054	lb/VMT

Conversion Factors and Constants:

Parameter	Value	UOM	Reference
Operating Weight	27.44	tons	Operating weight was based on specifications for CAT 972M in an email received on June 7, 2022. Operating weight includes tires, full fluids, operator, standard counterweight, ride control, cold start, fenders, axles, power train guard, secondary steering, sound suppression and 4.8 m^3 bucket, as referenced from Technical Specifications for 336 Hydraulic Excavator from the Caterpillar website.
Bucket capacity	4.8	m^3	Email correspondence with Ecocem team on November 8, 2022
Bucket fill estimate	50%	%	Bucket fill estimate accounted for travel with filled bucket and empty bucket.
Gypsum density	85	lbs/ft^3	Email correspondence with Ecocem team on December 1, 2022
Bucket weight accounting for full and empty trips	3.60	tons	See Note 8
Vehicle Weight with bucket weight	31.05	tons	See Note 8
PM_{10} Particle Size Multiplier (k)	0.0022	lb/VMT	Referenced from AP-42 Table 13.2.1-1
$PM_{2.5}$ Particle Size Multiplier (k)	0.00054	lb/VMT	Referenced from AP-42 Table 13.2.1-1
Constant a	0.91	unitless	Referenced from AP-42 Chapter 13.2.1 Equation 2
Constant, b	1.02	unitless	Referenced from AP-42 Chapter 13.2.1 Equation 2
Silt Loading (sL)	0.32	g/m2	See Note 9
Wet Days per Year (P)	46	days	See Note 10
Days in the Averaging Period (N)	365	days	See Note 10
Maximum distance from Gypsum stockpile to Gypsum intake hopper	0.080	miles per FEL transport, one-way	Based on the Ecocem Port of LA Site Layout received on March 2, 2023.
Average rate of gypsum import	22	tons per hour	Correspondence with Ecocem on March 2, 2023.
Maximum rate of gypsum import	66	tons per hour	Correspondence with Ecocem on March 2, 2023.
Maximum rate of gypsum import	44,080	tons/year	Correspondence with Ecocem on March 2, 2023.
Normal VMT	0.43	miles/hour	See Note 11
	1.7	miles/day	See Note 11
	631	miles/year	See Note 11
Maximum VMT	1.03	miles/hour	See Note 11
	24.7	miles/day	See Note 11
	789	miles/year	See Note 11
Normal Operating Schedule for Front End Loader	4	hours/day	Correspondence with Ecocem on March 2, 2023.
	7	days/week	Correspondence with Ecocem on March 2, 2023.
	52	weeks/year	Correspondence with Ecocem on March 2, 2023.
Maximum Operating Schedule for Front End Loader	24	hours/day	Ecocem correspondence received on June 23, 2022.
	7	days/week	Correspondence via phone with Ecocem team on September 27, 2022.
	52	weeks/year	Ecocem correspondence received on June 23, 2022.
Control Efficiency from water flushing	63%	%	See Note 12
Conversion factor	907.185	kg/ton	--
Conversion factor	16.0185	$kg/m^3 = lbs/ft^3$	--
Conversion factor	1,609	meter/mile	--

Notes:

[1] Hourly emission factors were calculated based on equation 3 and daily emission factors were calculated based on equation 2 as referenced from AP-42 guidance. United States Environmental Protection Agency (USEPA). 2011. AP-42, Chapter 13.2.1: Paved Roads. January. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/AP-42-fifth-edition-volume-i-chapter-13-miscellaneous-0.

[2] AHU and MHU were calculated as the applicable emission factor by the normal or maximum VMT, respectively.

[3] AHC, MHC, and MDC were calculated as AHU, MHU, and MDU, respectively, multiplied by 100% minus the control efficiency.

[4] MDU was calculated as the applicable emission factor by the maximum VMT.

[5] Annual PTE was calculated as the annual VMT multiplied by the applicable emission factor and 100% minus the control efficiency

[6] 30DA was calculated as the MDC multiplied by the ratio of the product of the maximum operating schedule (days per week) and 4.3 weeks per month (rounded to a whole number) over 30 days per month.

[7] AA was calculated as the AHC multiplied by the normal annual operating schedule.

[8] The bucket weight accounting for full and empty trips is calculated as the bucket capacity converted into cubic feet then multiplied by the density of GBFS multiplied by 50%. This accounts for full and empty trips by assuming the bucket is full 50% of the time, or for one of every two trips. The vehicle weight with bucket weight is the operating weight plus the bucket weight accounting for full and empty trips.

[9] Silt loading calculations for local road type for California reference Table 3.c.3. of California Air Resources Board (CARB). 2021. Miscellaneous Process Methodology 7.9. Entrained Road Travel, Paved Road Dust. March. Available at: https://ww2.arb.ca.gov/carb-miscellaneous-process-methodologies-paved-road-dust.

[10] Annual rainfall days for South Coast Air District, Los Angeles, were referenced Table 5 of CARB's *Miscellaneous Process Methodology 7.9. Entrained Road Travel, Paved Road Dust* .. Available at: https://ww2.arb.ca.gov/carb-miscellaneous-process-methodologies-paved-road-dust.

11 The hourly and annual vehicle miles traveled were referenced from "Orcem_AQ_Assumptions_Summary_asof_02.15.23_David_1.xlsx" received from Ecocem on March 2, 2023 . Daily trips are based on the annual miles and the operating schedule.

[12] Control efficiency was referenced from Paved Roads Table 6 - Water Flushing in Mojave Desert AQMD/Antelope Valley APCD. 2013. Emission Inventory Guidance. Mineral Handling and Processing Industries. Accessed at https://www.mdaqmd.ca.gov/home/showpublisheddocument/768/636305689272570000. Water flushing 8 times per 8 hour shift was assumed.

Abbreviations

30DA - 30 days daily average
AA - annual average
AHC - average hourly controlled
AHU - average hourly uncontrolled
CARB - California Air Resources Board
GBFS - granulated blast furnace slag
ft - feet
kg - kilogram
hr - hour
lb - pound
m - meter
MDC - maximum daily controlled
MDU - maximum daily uncontrolled
MHC - maximum hourly controlled
MHU - maximum hourly uncontrolled
PM_{10} - particulate matter with aerodynamic diameter less than 10 micrometer
$PM_{2.5}$ - particulate matter with aerodynamic diameter less than 2.5 micrometer
PTE - potential to emit
UOM - unit of measurement
VMT - vehicle miles traveled

Emissions from Onsite Forklift on Paved Roads - Emission Factors

Emission Factors [1]	Value	UOM
Hourly Uncontrolled PM10 Emission Factor	0.013	lb/VMT
Daily Uncontrolled PM10 Emission Factor	0.015	lb/VMT
Hourly Uncontrolled PM2.5 Emission Factor	0.0032	lb/VMT
Daily Uncontrolled PM2.5 Emission Factor	0.0037	lb/VMT

Conversion Factors and Constants:

Parameter	Value	UOM	Reference
Mean Vehicle Weight	18.75	tons	See Note 8
Maximum Load	10.00	tons	See Note 8
maximum Vehicle Weight with load weight	23.75	tons	See Note 8
PM_{10} Particle Size Multiplier (k)	0.0022	lb/VMT	Referenced from AP-42 Table 13.2.1-1
$PM_{2.5}$ Particle Size Multiplier (k)	0.00054	lb/VMT	Referenced from AP-42 Table 13.2.1-1
Constant a	0.91	unitless	Referenced from AP-42 Chapter 13.2.1 Equation 2
Constant, b	1.02	unitless	Referenced from AP-42 Chapter 13.2.1 Equation 2
Silt Loading (sL)	0.32	g/m2	See Note 9
Wet Days per Year (P)	46	Days	See Note 10
Days in the Averaging Period (N)	365	days	See Note 10
Normal and maximum VMT for forklift	0.5	miles/hour	Correspondence via phone with Ecocem team on September 27, 2022.
	0.50	miles/day	Calculated based on operating schedule
	52	miles/year	Correspondence via phone with Ecocem team on September 27, 2022.
Normal and Maximum Operating Schedule for Forklift	1	hours/day	Correspondence via phone with Ecocem team on September 27, 2022.
	2	days/week	Correspondence via phone with Ecocem team on July 21, 2022.
	52	weeks/year	Ecocem correspondence received on May 26, 2022.
Control Efficiency from water flushing	67%	%	See Note 11

Notes:

[1] Hourly emission factors were calculated based on equation 3 and daily emission factors were calculated based on equation 2 as referenced from AP-42 guidance. United States Environmental Protection Agency (USEPA). 2011. AP-42, Chapter 13.2.1: Paved Roads. January. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/AP-42-fifth-edition-volume-i-chapter-13-miscellaneous-0.

[2] AHU and MHU were calculated as the applicable emission factor by the normal or maximum VMT, respectively.

[3] AHC, MHC, and MDC were calculated as AHU, MHU, and MDU, respectively, multiplied by 100% minus the control efficiency.

[4] MDU was calculated as the applicable emission factor by the maximum VMT.

[5] Annual PTE was calculated as the annual VMT multiplied by the applicable emission factor and 100% minus the control efficiency

[6] 30DA was calculated as the MDC multiplied by the ratio of the product of the maximum operating schedule (days per week) and 4.3 weeks per month (rounded to a whole number) over 30 days per month.

[7] AA was calculated as the AHC multiplied by the normal annual operating schedule.

[8] Vehicle weight was assumed to be equal to Toyota 80V electric pneumatic forklift with up to 17,500 lb. capacity. The weight of the forklift was assumed to be 20,000 lbs. The weight accounts for travel with load and no load.

[9] Silt loading calculations for local road type for California reference Table 3.c.3. of California Air Resources Board (CARB). 2021. Miscellaneous Process Methodology 7.9. Entrained Road Travel, Paved Road Dust. March. Available at: https://ww2.arb.ca.gov/carb-miscellaneous-process-methodologies-paved-road-dust.

[10] Annual rainfall days for South Coast Air District, Los Angeles, were referenced Table 5 of CARB's *Miscellaneous Process Methodology 7.9. Entrained Road Travel, Paved Road Dust* .. Available at: https://ww2.arb.ca.gov/carb-miscellaneous-process-methodologies-paved-road-dust.

[11] Control efficiency was referenced from Paved Roads Table 6 - Water Flushing in Mojave Desert AQMD/Antelope Valley APCD. 2013. Emission Inventory Guidance. Mineral Handling and Processing Industries. Accessed at https://www.mdaqmd.ca.gov/home/showpublisheddocument/768/636305689272570000. Water flushing once per 8 hour shift was assumed. Assumed 1 trip per hour.

Abbreviations

30DA - 30 days daily average
AA - annual average
AHC - average hourly controlled
AHU - average hourly uncontrolled
CARB - California Air Resources Board
hr - hour
lb - pound
MDC - maximum daily controlled
MDU - maximum daily uncontrolled
MHC - maximum hourly controlled
MHU - maximum hourly uncontrolled
PM_{10} - particulate matter with aerodynamic diameter less than 10 micrometer
$PM_{2.5}$ - particulate matter with aerodynamic diameter less than 2.5 micrometer
PTE - potential to emit
UOM - unit of measurement
VMT - vehicle miles traveled

Emissions from Onsite Gypsum Trucks on Paved Roads (Gypsum) - Emission Factors

Emission Factors [1]	Value	UOM
Hourly Uncontrolled PM_{10} Emission Factor	0.029	lb/VMT
Daily Uncontrolled PM_{10} Emission Factor	0.033	lb/VMT
Hourly Uncontrolled $PM_{2.5}$ Emission Factor	0.0070	lb/VMT
Daily Uncontrolled $PM_{2.5}$ Emission Factor	0.0080	lb/VMT

Conversion Factors and Constants:

Parameter	Value	UOM	Reference
Maximum Vehicle Weight (W)	40	tons	Based on Ecocem correspondence received February 28, 2022, with load.
PM_{10} Particle Size Multiplier (k)	0.0022	lb/VMT	Referenced from AP-42 Table 13.2.1-1
$PM_{2.5}$ Particle Size Multiplier (k)	0.00054	lb/VMT	Referenced from AP-42 Table 13.2.1-1
Constant (a)	0.91	unitless	Referenced from AP-42 Chapter 13.2.1 Equation 2
Constant (b)	1.02	unitless	Referenced from AP-42 Chapter 13.2.1 Equation 2
Silt Loading (sL)	0.32	g/m^2	See Note 8
Wet Days per Year (P)	46	days	See Note 9
Days in the Averaging Period (N)	365	days	See Note 9
Normal Truck trips (Gypsum)	2	trips/hour	Correspondence via phone with Ecocem team on September 27, 2022.
	11	trips/day	Corresondence with Ecocem on March 2, 2023.
	3,950	trips/year	Corresondence with Ecocem on March 2, 2023.
Maximum Truck trips (Gypsum)	2	trips/hour	Correspondence via phone with Ecocem team on September 27, 2022.
	11	trips/day	Calculated based on maxmium operating schedule
	3,950	trips/year	Correspondence via email with Steve Bryan, Orcem, on December 21, 2022.
Paved trip distances	0.28	miles/trip	See Note 10
Normal Operating Schedule for Gypsum Trucks	24	hours/day	Corresondence with Ecocem on March 2, 2023.
	7	days/week	Corresondence with Ecocem on March 2, 2023.
	52	weeks/year	Ecocem correspondence received on May 26, 2022.
Maximum Operating Schedule for Gypsum Trucks	24	hours/day	Written correspondence received on November 8, 2022
	7	days/week	Written correspondence received on November 8, 2022
	52	weeks/year	Ecocem correspondence received on May 26, 2022.
Control Efficiency from water flushing	65%	%	See Note 11

Notes:

[1] Hourly emission factors were calculated based on equation 3 and daily emission factors were calculated based on equation 2 as referenced from United States Environmental Protection Agency (USEPA). 2011. AP-42, Chapter 13.2.1: Paved Roads. January. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/AP-42-fifth-edition-volume-i-chapter-13-miscellaneous-0.

[2] AHU and MHU were calculated as the applicable emission factor by the normal or maximum VMT, respectively.

[3] AHC, MHC, and MDC were calculated as AHU, MHU, and MDU, respectively, multiplied by 100% minus the control efficiency.

[4] MDU was calculated as the applicable emission factor by the maximum VMT.

[5] Annual PTE was calculated as the annual VMT multiplied by the applicable emission factor and 100% minus the control efficiency

[6] 30DA was calculated as the MDC multiplied by the ratio of the product of the maximum operating schedule (days per week) and 4.3 weeks per month (rounded to a whole number) over 30 days per month.

[7] AA was calculated as the AHC multiplied by the normal annual operating schedule.

[8] Silt loading calculations for local road type for California reference Table 3.c.3. of California Air Resources Board (CARB). 2021. Miscellaneous Process Methodology 7.9. Entrained Road Travel, Paved Road Dust. March. Available at: https://ww2.arb.ca.gov/carb-miscellaneous-process-methodologies-paved-road-dust.

[9] Annual rainfall days for South Coast Air District, Los Angeles, were referenced Table 5 of CARB's *Miscellaneous Process Methodology 7.9. Entrained Road Travel,*

[10] The distance for each truck trip was estimated based on the Ecocem Port of LA Site Layout received on October 21, 2022.

[11] Control efficiency was referenced from Paved Roads Table 6 - Water Flushing in Mojave Desert AQMD/Antelope Valley APCD. 2013. Emission Inventory Guidance. Mineral Handling and Processing Industries. Accessed at https://www.mdaqmd.ca.gov/home/showpublisheddocument/768/636305689272570000. Water flushing once per 8 hour shift was assumed.

Abbreviations

30DA - 30 days daily average
AA - annual average
AHC - average hourly controlled
AHU - average hourly uncontrolled
GGBFS - ground granulated blast furnace slag
g - gram
hr - hour
lb - pound
m - meter
MDC - maximum daily controlled
MDU - maximum daily uncontrolled
MHC - maximum hourly controlled
MHU - maximum hourly uncontrolled
NOP - notice of preparation
PM_{10} - particulate matter with aerodynamic diameter less than 10 micrometer
$PM_{2.5}$ - particulate matter with aerodynamic diameter less than 2.5 micrometer
PTE - potential to emit
UOM - unit of measurement
VMT - vehicle miles traveled
yr - year

Emissions from Onsite GGBFS Trucks on Paved Roads (GGBFS) - Emission Factors

Emission Factors [1]	Value	UOM
Hourly Uncontrolled PM_{10} Emission Factor	0.029	lb/VMT
Daily Uncontrolled PM_{10} Emission Factor	0.033	lb/VMT
Hourly Uncontrolled $PM_{2.5}$ Emission Factor	0.0070	lb/VMT
Daily Uncontrolled $PM_{2.5}$ Emission Factor	0.0080	lb/VMT

Conversion Factors and Constants:

Parameter	Value	UOM	Reference
Maximum Vehicle Weight (W)	40	tons	Based on Ecocem correspondence received February 28, 2022, with load.
PM_{10} Particle Size Multiplier (k)	0.0022	lb/VMT	Referenced from AP-42 Table 13.2.1-1
$PM_{2.5}$ Particle Size Multiplier (k)	0.00054	lb/VMT	Referenced from AP-42 Table 13.2.1-1
Constant (a)	0.91	unitless	Referenced from AP-42 Chapter 13.2.1 Equation 2
Constant (b)	1.02	unitless	Referenced from AP-42 Chapter 13.2.1 Equation 2
Silt Loading (sL)	0.32	g/m^2	See Note 8
Wet Days per Year (P)	46	days	See Note 9
Days in the Averaging Period (N)	365	days	See Note 9
Normal Truck trips (GGBFS)	19	trips/hour	Correspondence with Ecocem March 10, 2023.
	238	trips/day	Correspondence with Ecocem March 10, 2023.
	62,000	trips/year	Correspondence with Ecocem March 10, 2023.
Maximum Truck trips (GGBFS)	19	trips/hour	Correspondence with Ecocem March 10, 2023.
	238	trips/day	Correspondence with Ecocem March 10, 2023.
	62,000	trips/year	Correspondence via email with Steve Bryan, Orcem, on December 21, 2022.
Trip distances	0.17	miles/trip	See Note 10
Normal Operating Schedule for GGBFS Trucks	17	hours/day	Correspondence with Ecocem March 10, 2023.
	5	days/week	Correspondence with Ecocem March 10, 2023.
	52	weeks/year	Ecocem correspondence received on May 26, 2022.
Maximum Operating Schedule for GGBFS Trucks	17	hours/day	Correspondence with Ecocem March 10, 2023.
	7	days/week	Written correspondence received on November 8, 2022
	52	weeks/year	Ecocem correspondence received on May 26, 2022.
Control Efficiency from water flushing	34%	%	See Note 11

Notes:

[1] Hourly emission factors were calculated based on equation 3 and daily emission factors were calculated based on equation 2 as referenced from United States Environmental Protection Agency (USEPA). 2011. AP-42, Chapter 13.2.1: Paved Roads. January. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/AP-42-fifth-edition-volume-i-chapter-13-miscellaneous-0.

[2] AHU and MHU were calculated as the applicable emission factor by the normal or maximum VMT, respectively.

[3] AHC, MHC, and MDC were calculated as AHU, MHU, and MDU, respectively, multiplied by 100% minus the control efficiency.

[4] MDU was calculated as the applicable emission factor by the maximum VMT.

[5] Annual PTE was calculated as the annual VMT multiplied by the applicable emission factor and 100% minus the control efficiency

[6] 30DA was calculated as the MDC multiplied by the ratio of the product of the maximum operating schedule (days per week) and 4.3 weeks per month (rounded to a whole number) over 30 days per month.

[7] AA was calculated as the AHC multiplied by the normal annual operating schedule.

[8] Silt loading for local road type for California was referenced Table 3.c.3. of California Air Resources Board (CARB). 2021. Miscellaneous Process Methodology 7.9. Entrained Road Travel, Paved Road Dust. March. Available at: https://ww2.arb.ca.gov/carb-miscellaneous-process-methodologies-paved-road-dust.

[9] Annual rainfall days for South Coast Air District, Los Angeles, were referenced Table 5 of CARB's *Miscellaneous Process Methodology 7.9. Entrained Road Travel,*

[10] The distance for each truck trip was estimated based on the Ecocem Port of LA Site Layout received on March 2, 2023.

[11] Control efficiency was referenced from Paved Roads Table 6 - Water Flushing in Mojave Desert AQMD/Antelope Valley APCD. 2013. Emission Inventory Guidance. Mineral Handling and Processing Industries. Accessed at https://www.mdaqmd.ca.gov/home/showpublisheddocument/768/636305689272570000. Water flushing once per 8 hour shift was assumed.

Abbreviations

30DA - 30 days daily average
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AHC - average hourly controlled
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hr - hour
lb - pound
m - meter
MDC - maximum daily controlled
MDU - maximum daily uncontrolled
MHC - maximum hourly controlled
MHU - maximum hourly uncontrolled
NOP - notice of preparation
PM_{10} - particulate matter with aerodynamic diameter less than 10 micrometer
$PM_{2.5}$ - particulate matter with aerodynamic diameter less than 2.5 micrometer
PTE - potential to emit
UOM - unit of measurement
VMT - vehicle miles traveled
yr - year

Operational Emissions Summary

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	1.53	0.01	0.07	0.01	0.02	0.04	0.08	0.02	0.01	0.03	1,570.94	0.00	0.25	0.05	0.01	0.19	0.15	2.43E-02
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.03	0.00	0.03	0.00	0.00	0	0	0.00	0	0	5.12	0.00	0	0	0	0.00	0.00	1.01E-05
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.67	0.00	0.00			0.00	0.00	2.57E-05
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.03	0.00	0.00	0.01	0.00	0.01	0.00	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.00	0.00			0.00	0.00	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	2.93	0.03	0.13	0.03	0.05	0.07	0.16	0.05	0.02	0.06	3,081.38	0.00	0.49	0.11	0.03	0.39	0.31	4.90E-02
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.05	0.00	0.06	0.00	0.00	0	0	0.00	0	0	10.02	0.00	0	0	0	0.00	0.00	1.94E-05
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.27	0.00	0.00			0.00	0.00	5.20E-05
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	40.00	0.00	0.00	0.01	0.00	0.01	0.00	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00			0.00	0.00	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	2.25	0.02	0.08	0.02	0.05	0.07	0.17	0.04	0.02	0.06	2,590.60	0.00	0.41	0.11	0.03	0.40	0.32	4.68E-02
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.05	0.00	0.06	0.00	0.00	0	0	0.00	0	0	9.20	0.00	0	0	0	0.00	0.00	1.83E-05
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.75	0.00	0.00			0.00	0.00	4.96E-05
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.12	0.00	0.00	0.01	0.00	0.01	0.00	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00			0.00	0.00	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.77	0.01	0.04	0.01	0.01	0.02	0.04	0.01	0.00	0.01	793.66	0.00	0.13	0.03	0.01	0.10	0.08	1.23E-02
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.01	0.00	0.02	0.00	0.00	0	0	0.00	0	0	2.89	0.00	0	0	0	0.00	0.00	5.70E-06
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00			0.00	0.00	1.46E-05
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.25	0.01	0.17	0.00	0.00	0.00	0.01	0.00	0.00	0.00	151.20	0.00	0.00	0.01	0.00	0.03	0.02	5.14E-03
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.00	0.00	0.00	0.00	0.00	0	0	0.00	0	0	0	0.00	0	0	0	0.00	0.00	3.84E-05
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00			0.00	0.00	4.53E-06
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	1.48	0.01	0.06	0.01	0.02	0.04	0.08	0.02	0.01	0.03	1,556.76	0.00	0.25	0.05	0.01	0.20	0.16	2.48E-02
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.03	0.00	0.04	0.00	0.00	0	0	0.00	0	0	5.66	0.00	0	0	0	0.00	0.00	1.10E-05
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85	0.00	0.00			0.00	0.00	2.94E-05
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.46	0.02	0.33	0.00	0.01	0.01	0.02	0.01	0.00	0.00	292.28	0.00	0.00	0.02	0.00	0.05	0.04	8.40E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.00	0.00	0.00	0.00	0.00	0	0	0.00	0	0	0	0.00	0	0	0	0.00	0.00	6.06E-05
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00			0.00	0.00	7.72E-06
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	1.14	0.01	0.04	0.01	0.02	0.04	0.09	0.02	0.01	0.03	1,308.81	0.00	0.21	0.05	0.01	0.20	0.16	2.36E-02
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.03	0.00	0.04	0.00	0.00	0	0	0.00	0	0	5.20	0.00	0	0	0	0.00	0.00	1.04E-05
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	0.00	0.00			0.00	0.00	2.80E-05
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.34	0.01	0.30	0.00	0.00	0.01	0.02	0.00	0.00	0.00	257.56	0.00	0.00	0.02	0.00	0.05	0.03	1.39E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.00	0.00	0.00	0.00	0.00	0	0	0.00	0	0	0	0.00	0	0	0	0.00	0.00	4.09E-06
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00			0.00	0.00	2.73E-06
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	12.27	0.11	0.57	0.12	0.19	0.30	0.64	0.19	0.07	0.22	12,567.51	0.01	1.98	0.42	0.10	1.56	1.23	1.94E-01
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.21	0.02	0.25	0.00	0.00	0	0	0.00	0	0	40.95	0.00	0	0	0	0.00	0.00	8.06E-05
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.33	0.00	0.00			0.00	0.00	2.06E-04
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.03	0.01	0.69	0.00	0.00	0.01	0.01	0.00	0.00	0.00	256.27	0.00	0.00	0.05	0.01	0.06	0.03	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.01	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.39	0.00	0.00			0.00	0.00	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	23.42	0.21	1.02	0.23	0.39	0.59	1.29	0.38	0.15	0.45	24,651.01	0.01	3.88	0.85	0.21	3.13	2.47	3.92E-01
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.41	0.03	0.51	0.00	0.00	0	0	0.00	0	0	80.12	0.00	0	0	0	0.00	0.00	1.55E-04
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.15	0.00	0.00			0.00	0.00	4.16E-04
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.04	0.01	0.81	0.00	0.00	0.01	0.01	0.00	0.00	0.00	320.01	0.00	0.00	0.06	0.02	0.08	0.04	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.01	0.02	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.47	0.00	0.00			0.00	0.00	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	17.99	0.16	0.64	0.20	0.37	0.59	1.40	0.36	0.15	0.49	20,724.81	0.01	3.27	0.85	0.21	3.21	2.56	3.74E-01
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.41	0.03	0.51	0.00	0.00	0	0	0.00	0	0	73.57	0.00	0	0	0	0.00	0.00	1.47E-04
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.98	0.00	0.00			0.00	0.00	3.97E-04
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.02	0.00	0.59	0.00	0.00	0.01	0.01	0.00	0.00	0.00	272.97	0.00	0.00	0.06	0.02	0.08	0.04	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.01	0.01	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.53	0.00	0.00			0.00	0.00	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	6.20	0.06	0.29	0.06	0.10	0.15	0.32	0.09	0.04	0.11	6,349.30	0.00	1.00	0.21	0.05	0.79	0.62	9.81E-02
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.12	0.01	0.14	0.00	0.00	0	0	0.00	0	0	23.16	0.00	0	0	0	0.00	0.00	4.56E-05
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.54	0.00	0.00			0.00	0.00	1.16E-04
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	1.98	0.09	1.38	0.00	0.04	0.02	0.09	0.04	0.00	0.01	1,209.60	0.01	0.00	0.07	0.02	0.22	0.17	4.11E-02
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.02	0.00	0.01	0.00	0.00	0	0	0.00	0	0	0	0.00	0	0	0	0.00	0.00	3.07E-04
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00			0.00	0.00	3.62E-05
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	11.83	0.10	0.52	0.12	0.20	0.30	0.65	0.19	0.07	0.23	12,454.07	0.00	1.96	0.43	0.11	1.58	1.25	1.98E-01
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.23	0.02	0.29	0.00	0.00	0	0	0.00	0	0	45.31	0.00	0	0	0	0.00	0.00	8.78E-05
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.79	0.00	0.00			0.00	0.00	2.35E-04
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	3.71	0.15	2.68	0.01	0.07	0.04	0.19	0.06	0.01	0.02	2,338.22	0.03	0.01	0.14	0.03	0.44	0.33	6.72E-02
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.03	0.00	0.02	0.00	0.00	0	0	0.00	0	0	0	0.00	0	0	0	0.00	0.00	4.85E-04
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.11	0.00	0.00			0.00	0.00	6.18E-05
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	9.09	0.08	0.32	0.10	0.19	0.30	0.71	0.18	0.07	0.25	10,470.50	0.00	1.65	0.43	0.11	1.62	1.29	1.89E-01
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.23	0.02	0.29	0.00	0.00	0	0	0.00	0	0	41.60	0.00	0	0	0	0.00	0.00	8.29E-05
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.43	0.00	0.00			0.00	0.00	2.24E-04
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	2.76	0.05	2.41	0.01	0.01	0.04	0.19	0.01	0.01	0.02	2,060.45	0.02	0.01	0.14	0.03	0.38	0.28	1.11E-02
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.03	0.00	0.02	0.00	0.00	0	0	0.00	0	0	0	0.00	0	0	0	0.00	0.00	3.27E-05
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.00	0.00			0.00	0.00	2.18E-05
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	463.27	0.00	0.07	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	1.28	0.00	0	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	325.44	0.00	0.00	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.04	0.00	0.00	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0			0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0			0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0			0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	908.69	0.00	0.14	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	2.51	0.00	0	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	629.09	0.01	0.00	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.07	0.00	0.00	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	763.97	0.00	0.12	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	2.31	0.00	0	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	554.36	0.01	0.00	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.07	0.00	0.00	--	--	0	0	--
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	3,706.14	0.00	0.58	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	10.27	0.00	0	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	2,603.52	0.03	0.01	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.30	0.00	0.00	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	7,269.55	0.00	1.15	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	20.09	0.00	0	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	5,032.73	0.06	0.02	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.59	0.00	0.00	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	6,111.72	0.00	0.96	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	18.45	0.00	0	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	4,434.88	0.05	0.02	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.58	0.00	0.00	--	--	0	0	--
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-Site	0.01	0.00	0.09	0.00	0.00	--	--	0.00	--	--	52.48	0.00	0.00	--	--	0.00	0.00	8.32E-04
Annual	tpy	Proposed Project	Uncontrolled	2025	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-Site	0.07	0.01	0.07	0.00	0.00	--	--	0.00	--	--	256.80	0.01	0.00	--	--	0.00	0.00	3.27E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-Site	0.03	0.02	0.19	0.00	0.00	--	--	0.00	--	--	105.37	0.00	0.00	--	--	0.00	0.00	1.84E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-Site	0.15	0.09	0.17	0.00	0.01	--	--	0.01	--	--	514.12	0.02	0.00	--	--	0.01	0.01	9.02E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-Site	0.03	0.04	0.24	0.00	0.00	--	--	0.00	--	--	104.83	0.00	0.00	--	--	0.00	0.00	2.56E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-Site	0.15	0.09	0.17	0.00	0.01	--	--	0.01	--	--	514.12	0.02	0.00	--	--	0.01	0.01	9.02E-03
Daily	lbd	Proposed Project	Uncontrolled	2025	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-Site	0.21	0.08	1.51	0.01	0.01	--	--	0.01	--	--	865.06	0.04	0.01	--	--	0.01	0.01	1.37E-02
Daily	lbd	Proposed Project	Uncontrolled	2025	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-Site	0.41	0.08	0.46	0.01	0.02	--	--	0.02	--	--	1,612.54	0.07	0.01	--	--	0.02	0.02	2.05E-02
Daily	lbd	Proposed Project	Uncontrolled	2027	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-Site	0.43	0.26	3.19	0.02	0.03	--	--	0.03	--	--	1,736.94	0.07	0.01	--	--	0.03	0.03	3.04E-02
Daily	lbd	Proposed Project	Uncontrolled	2027	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-Site	0.93	0.56	1.10	0.03	0.06	--	--	0.05	--	--	3,228.41	0.13	0.03	--	--	0.06	0.05	5.66E-02
Daily	lbd	Proposed Project	Uncontrolled	2049	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-Site	0.49	0.68	3.89	0.02	0.04	--	--	0.04	--	--	1,728.00	0.07	0.01	--	--	0.04	0.04	4.22E-02
Daily	lbd	Proposed Project	Uncontrolled	2049	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-Site	0.93	0.56	1.10	0.03	0.06	--	--	0.05	--	--	3,228.41	0.13	0.03	--	--	0.06	0.05	5.66E-02
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	14.52	0.56	0.83	0.61	0.38	--	--	0.35	--	--	997.62	0.02	0.05			0.38	0.35	3.78E-01
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	2.04	0.05	0.24	0.08	0.04	--	--	0.03	--	--	137.56	0.00	0.01			0.04	0.03	3.71E-02
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	1.33	0.03	0.16	0.05	0.02	--	--	0.02	--	--	89.32	0.00	0.00			0.02	0.02	2.38E-02
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.47	0.01	0.05	0.02	0.00	--	--	0.00	--	--	26.33	0.00	0.00			0.00	0.00	4.24E-03
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.14	0.00	0.00	0.00	0.00	--	--	0.00	--	--	6.18	0.00	0.00			0.00	0.00	7.28E-04
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0			0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0			0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	29.04	1.13	1.66	1.22	0.76	--	--	0.69	--	--	1,995.23	0.05	0.09			0.76	0.69	7.57E-01
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	4.09	0.10	0.48	0.17	0.07	--	--	0.07	--	--	275.12	0.00	0.01			0.07	0.07	7.42E-02
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	2.65	0.06	0.32	0.11	0.05	--	--	0.04	--	--	178.65	0.00	0.01			0.05	0.04	4.76E-02
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.94	0.02	0.10	0.03	0.01	--	--	0.01	--	--	52.66	0.00	0.00			0.01	0.01	8.48E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.29	0.01	0.00	0.01	0.00	--	--	0.00	--	--	12.37	0.00	0.00			0.00	0.00	1.46E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0			0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0			0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	29.04	1.13	1.66	1.22	0.76	--	--	0.69	--	--	1,995.23	0.05	0.09			0.76	0.69	7.57E-01
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	4.09	0.10	0.48	0.17	0.07	--	--	0.07	--	--	275.12	0.00	0.01			0.07	0.07	7.42E-02
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	2.65	0.06	0.32	0.11	0.05	--	--	0.04	--	--	178.65	0.00	0.01			0.05	0.04	4.76E-02
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.94	0.02	0.10	0.03	0.01	--	--	0.01	--	--	52.66	0.00	0.00			0.01	0.01	8.48E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.29	0.01	0.00	0.01	0.00	--	--	0.00	--	--	12.37	0.00	0.00			0.00	0.00	1.46E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0			0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.40	0.03	0.07	0.03	0.01	--	--	0.01	--	--	42.59	0.00	0.00	--	--	0.01	0.01	1.16E-02
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.09	0.01	0.01	0.01	0.00	--	--	0.00	--	--	9.11	0.00	0.00	--	--	0.00	0.00	2.47E-03
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.06	0.00	0.01	0.00	0.00	--	--	0.00	--	--	6.02	0.00	0.00	--	--	0.00	0.00	1.64E-03
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.04	0.00	0.01	0.00	0.00	--	--	0.00	--	--	4.19	0.00	0.00	--	--	0.00	0.00	1.14E-03
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.03	0.00	0.00	0.00	0.00	--	--	0.00	--	--	3.11	0.00	0.00	--	--	0.00	0.00	8.45E-04
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	3.57	0.23	0.60	0.23	0.10	--	--	0.09	--	--	379.36	0.00	0.02	--	--	0.10	0.09	1.03E-01
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.40	0.00	0.00	--	--	0.00	0.00	6.51E-04
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.80	0.05	0.13	0.05	0.02	--	--	0.02	--	--	85.18	0.00	0.00	--	--	0.02	0.02	2.31E-02
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.17	0.01	0.03	0.01	0.00	--	--	0.00	--	--	18.23	0.00	0.00	--	--	0.00	0.00	4.95E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.11	0.01	0.02	0.01	0.00	--	--	0.00	--	--	12.04	0.00	0.00	--	--	0.00	0.00	3.27E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.08	0.01	0.01	0.01	0.00	--	--	0.00	--	--	8.37	0.00	0.00	--	--	0.00	0.00	2.27E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.06	0.00	0.01	0.00	0.00	--	--	0.00	--	--	6.22	0.00	0.00	--	--	0.00	0.00	1.69E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	7.14	0.46	1.20	0.46	0.21	--	--	0.19	--	--	758.72	0.01	0.03	--	--	0.21	0.19	2.06E-01
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.40	0.00	0.00	--	--	0.00	0.00	6.51E-04
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.80	0.05	0.13	0.05	0.02	--	--	0.02	--	--	85.18	0.00	0.00	--	--	0.02	0.02	2.31E-02
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.17	0.01	0.03	0.01	0.00	--	--	0.00	--	--	18.23	0.00	0.00	--	--	0.00	0.00	4.95E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.11	0.01	0.02	0.01	0.00	--	--	0.00	--	--	12.04	0.00	0.00	--	--	0.00	0.00	3.27E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.08	0.01	0.01	0.01	0.00	--	--	0.00	--	--	8.37	0.00	0.00	--	--	0.00	0.00	2.27E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.06	0.00	0.01	0.00	0.00	--	--	0.00	--	--	6.22	0.00	0.00	--	--	0.00	0.00	1.69E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	7.14	0.46	1.20	0.46	0.21	--	--	0.19	--	--	758.72	0.01	0.03	--	--	0.21	0.19	2.06E-01
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.40	0.00	0.00	--	--	0.00	0.00	6.51E-04
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0

Operational Master Summary for Modeling

(orange shading) manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.30	0.01	0.05	0.00	0.00	--	--	0.00	--	--	29.48	0.00	0.00	--	--	0.00	0.00	4.94E-03
Annual	tpy	Proposed Project	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.03	0.00	0.01	0.00	0.00	--	--	0.00	--	--	4.82	0.00	0.00	--	--	0.00	0.00	6.24E-04
Annual	tpy	Proposed Project	Uncontrolled	2025	HC	Yokahama Tug Propulsion	FENDER	Berthing	Marine Distilate	Berthing	0.07	0.00	0.01	0.00	0.00	--	--	0.00	--	--	7.73	0.00	0.00	--	--	0.00	0.00	1.26E-03
Annual	tpy	Proposed Project	Uncontrolled	2025	HC	Yokahama Tug Auxiliary	FENDER	Berthing	Marine Distilate	Berthing	0.01	0.00	0.00	0.00	0.00	--	--	0.00	--	--	1.28	0.00	0.00	--	--	0.00	0.00	2.65E-04
Annual	tpy	Proposed Project	Uncontrolled	2025	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.04	0.00	0.01	0.00	0.00	--	--	0.00	--	--	3.81	0.00	0.00	--	--	0.00	0.00	6.19E-04
Annual	tpy	Proposed Project	Uncontrolled	2025	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.63	0.00	0.00	--	--	0.00	0.00	1.30E-04
Annual	tpy	Proposed Project	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.43	0.02	0.09	0.00	0.01	--	--	0.01	--	--	58.96	0.00	0.00	--	--	0.01	0.01	5.66E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.06	0.00	0.02	0.00	0.00	--	--	0.00	--	--	9.65	0.00	0.00	--	--	0.00	0.00	1.25E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	HC	Yokahama Tug Propulsion	FENDER	Berthing	Marine Distilate	Berthing	0.15	0.00	0.02	0.00	0.00	--	--	0.00	--	--	15.47	0.00	0.00	--	--	0.00	0.00	2.53E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	HC	Yokahama Tug Auxiliary	FENDER	Berthing	Marine Distilate	Berthing	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.57	0.00	0.00	--	--	0.00	0.00	5.32E-04
Annual	tpy	Proposed Project	Uncontrolled	2027	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.07	0.00	0.01	0.00	0.00	--	--	0.00	--	--	7.62	0.00	0.00	--	--	0.00	0.00	1.25E-03
Annual	tpy	Proposed Project	Uncontrolled	2027	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.01	0.00	0.00	0.00	0.00	--	--	0.00	--	--	1.26	0.00	0.00	--	--	0.00	0.00	2.62E-04
Annual	tpy	Proposed Project	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.12	0.00	0.06	0.00	0.00	--	--	0.00	--	--	58.96	0.00	0.00	--	--	0.00	0.00	2.96E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.06	0.00	0.02	0.00	0.00	--	--	0.00	--	--	9.65	0.00	0.00	--	--	0.00	0.00	1.26E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	HC	Yokahama Tug Propulsion	FENDER	Berthing	Marine Distilate	Berthing	0.12	0.00	0.02	0.00	0.00	--	--	0.00	--	--	15.47	0.00	0.00	--	--	0.00	0.00	1.51E-03
Annual	tpy	Proposed Project	Uncontrolled	2049	HC	Yokahama Tug Auxiliary	FENDER	Berthing	Marine Distilate	Berthing	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.57	0.00	0.00	--	--	0.00	0.00	5.36E-04
Annual	tpy	Proposed Project	Uncontrolled	2049	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.06	0.00	0.01	0.00	0.00	--	--	0.00	--	--	7.62	0.00	0.00	--	--	0.00	0.00	7.44E-04
Annual	tpy	Proposed Project	Uncontrolled	2049	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.01	0.00	0.00	0.00	0.00	--	--	0.00	--	--	1.26	0.00	0.00	--	--	0.00	0.00	2.64E-04
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0			0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	275.56	4.14	20.00	7.00	3.09	--	--	2.84	--	--	11,463.53	0.18	0.55			3.09	2.84	3.09E+00
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	178.93	2.65	13.30	4.54	1.98	--	--	1.82	--	--	7,443.58	0.12	0.36			1.98	1.82	1.98E+00
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	63.53	0.75	4.11	1.34	0.35	--	--	0.32	--	--	2,194.34	0.03	0.13	--	--	0.35	0.32	3.54E-01
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	19.35	0.25	0.08	0.31	0.06	--	--	0.06	--	--	515.29	0.01	0.04	--	--	0.06	0.06	6.07E-02
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	275.56	4.14	20.00	7.00	3.09	--	--	2.84	--	--	11,463.53	0.18	0.55	--	--	3.09	2.84	3.09E+00
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	178.93	2.65	13.30	4.54	1.98	--	--	1.82	--	--	7,443.58	0.12	0.36	--	--	1.98	1.82	1.98E+00
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	63.53	0.75	4.11	1.34	0.35	--	--	0.32	--	--	2,194.34	0.03	0.13	--	--	0.35	0.32	3.54E-01
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	19.35	0.25	0.08	0.31	0.06	--	--	0.06	--	--	515.29	0.01	0.04	--	--	0.06	0.06	6.07E-02
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	275.56	4.14	20.00	7.00	3.09	--	--	2.84	--	--	11,463.53	0.18	0.55	--	--	3.09	2.84	3.09E+00
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	178.93	2.65	13.30	4.54	1.98	--	--	1.82	--	--	7,443.58	0.12	0.36	--	--	1.98	1.82	1.98E+00
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	63.53	0.75	4.11	1.34	0.35	--	--	0.32	--	--	2,194.34	0.03	0.13	--	--	0.35	0.32	3.54E-01
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	19.35	0.25	0.08	0.31	0.06	--	--	0.06	--	--	515.29	0.01	0.04	--	--	0.06	0.06	6.07E-02
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	11.46	0.46	1.20	0.46	0.21	--	--	0.19	--	--	759.42	0.01	0.03	--	--	0.21	0.19	2.06E-01
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	7.57	0.30	0.79	0.31	0.14	--	--	0.13	--	--	501.76	0.01	0.02	--	--	0.14	0.13	1.36E-01
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	5.26	0.21	0.55	0.21	0.09	--	--	0.09	--	--	348.96	0.00	0.01	--	--	0.09	0.09	9.48E-02
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	3.91	0.16	0.41	0.16	0.07	--	--	0.06	--	--	259.28	0.00	0.01	--	--	0.07	0.06	7.04E-02
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	151.89	6.09	15.91	6.13	2.73	--	--	2.52	--	--	10,068.39	0.12	0.42	--	--	2.73	2.52	2.73E+00
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	11.46	0.46	1.20	0.46	0.21	--	--	0.19	--	--	759.42	0.01	0.03	--	--	0.21	0.19	2.06E-01
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	7.57	0.30	0.79	0.31	0.14	--	--	0.13	--	--	501.76	0.01	0.02	--	--	0.14	0.13	1.36E-01
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	5.26	0.21	0.55	0.21	0.09	--	--	0.09	--	--	348.96	0.00	0.01	--	--	0.09	0.09	9.48E-02
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	3.91	0.16	0.41	0.16	0.07	--	--	0.06	--	--	259.28	0.00	0.01	--	--	0.07	0.06	7.04E-02
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	151.89	6.09	15.91	6.13	2.73	--	--	2.52	--	--	10,068.39	0.12	0.42	--	--	2.73	2.52	2.73E+00
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	11.46	0.46	1.20	0.46	0.21	--	--	0.19	--	--	759.42	0.01	0.03	--	--	0.21	0.19	2.06E-01
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	7.57	0.30	0.79	0.31	0.14	--	--	0.13	--	--	501.76	0.01	0.02	--	--	0.14	0.13	1.36E-01
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	5.26	0.21	0.55	0.21	0.09	--	--	0.09	--	--	348.96	0.00	0.01	--	--	0.09	0.09	9.48E-02
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	3.91	0.16	0.41	0.16	0.07	--	--	0.06	--	--	259.28	0.00	0.01	--	--	0.07	0.06	7.04E-02
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	151.89	6.09	15.91	6.13	2.73	--	--	2.52	--	--	10,068.39	0.12	0.42	--	--	2.73	2.52	2.73E+00
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0	0	0	0	0	--	--	0	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	1.034868589	0.009346114	0.047850663	0.01003784	0.016377974	0.024995692	0.05413008	0.01566947	0.006248923	0.018945528	1060.028933	0.000434103	0.16700799	0.035838124	0.00879663	0.13134187	0.103591872	1.64E-02
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.017306022	0.001456232	0.021348726	3.29527E-05	6.79627E-06	0	0	6.50226E-06	0	0	3.453991185	6.76382E-05	0	0	0	6.79627E-06	6.50226E-06	6.80E-06
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.030188896	9.91311E-06	5.07536E-05	1.06468E-05	1.73716E-05	2.65121E-05	5.74139E-05	1.66201E-05	6.62802E-06	2.00949E-05	1.124336696	4.60438E-07	0.00017714			0.000101298	0.000100546	1.74E-05
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Operational Master Summary for Modeling

(orange shading) manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.001945561	0.000466569	0.038637136	0.000142508	7.25806E-05	0.000412705	0.000431336	6.67351E-05	0.000103176	0.000150968	14.41512859	0.00012523	0.000228546	0.002652264	0.00065101	0.003568886	0.001561787	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.000608759	0.000739052	0.007441237	2.44258E-06	5.67137E-06	2.06353E-06	2.15668E-06	5.21462E-06	5.15882E-07	7.54838E-07	0.247073805	0.000165949	8.19467E-05			9.89158E-06	9.43483E-06	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	1.975746038	0.01738209	0.086216364	0.019689094	0.033091928	0.049991384	0.108985034	0.031660386	0.012497846	0.038144762	2079.233122	0.000807353	0.327584025	0.071676248	0.017593261	0.263744594	0.208230065	3.31E-02
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.034537145	0.002910017	0.042761811	6.44756E-05	1.30925E-05	0	0	1.25262E-05	0	0	6.758117801	0.000135163	0	0	0	1.30925E-05	1.25262E-05	1.31E-05
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.060155524	1.84366E-05	9.14468E-05	2.08836E-05	3.50995E-05	5.30242E-05	0.000115597	3.35811E-05	1.3256E-05	4.04589E-05	2.205371973	8.56332E-07	0.000347457			0.00020372	0.000202202	3.51E-05
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.003340719	0.00077029	0.070210282	0.000273777	0.000133643	0.000825411	0.000859657	0.00012288	0.000206353	0.00030088	27.69340145	0.00021318	0.00042058	0.005304527	0.00130202	0.007123238	0.003109968	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.001124254	0.001306225	0.013460336	4.68286E-06	1.0615E-05	4.12705E-06	4.29829E-06	9.7601E-06	1.03176E-06	1.5044E-06	0.473684826	0.000298338	0.000155977			1.90403E-05	1.81854E-05	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	1.517020451	0.01354531	0.053947889	0.016553189	0.031555755	0.049991384	0.117802094	0.030190667	0.012497846	0.041230733	1748.071217	0.000629145	0.275409332	0.071676248	0.017593261	0.271025481	0.215577406	3.16E-02
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.034348594	0.002906569	0.042944744	5.92013E-05	1.23702E-05	0	0	1.18351E-05	0	0	6.205280227	0.000135003	0	0	0	1.23702E-05	1.18351E-05	1.24E-05
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.050241587	1.43671E-05	5.72207E-05	1.75574E-05	3.34701E-05	5.30242E-05	0.000124949	3.20222E-05	1.3256E-05	4.3732E-05	1.854119785	6.67312E-07	0.000292117			0.000211443	0.000209995	3.35E-05
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.00194927	0.000315322	0.051176136	0.000233528	5.47995E-05	0.000825411	0.000853971	5.03861E-05	0.000206353	0.00029889	23.62207356	0.000109562	0.000323562	0.005304527	0.00130202	0.007038709	0.003031789	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.00079063	0.000575937	0.00800381	3.87745E-06	4.3365E-06	4.12705E-06	4.26986E-06	3.98725E-06	1.03176E-06	1.49445E-06	0.39221546	0.000154514	0.000127152			1.27334E-05	1.23842E-05	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.52283166	0.004721802	0.024174897	0.005071272	0.008274406	0.012628211	0.027347356	0.007916459	0.003157053	0.009571574	535.5430562	0.000219315	0.084375027	0.018103682	0.004443631	0.066353655	0.052335657	8.27E-03
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.009786564	0.0008235	0.012072715	1.86348E-05	3.84329E-06	0	0	3.67703E-06	0	0	1.953233679	3.82494E-05	0	0	0	3.84329E-06	3.67703E-06	3.84E-06
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.017071835	5.60587E-06	2.87012E-05	6.02077E-06	9.82363E-06	1.49926E-05	3.24676E-05	9.39866E-06	3.74815E-06	1.13637E-05	0.635812943	2.60378E-07	0.000100173			5.72838E-05	5.68589E-05	9.82E-06
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.16740008	0.007655447	0.116295353	0.000342069	0.003473855	0.001787446	0.007880894	0.003195936	0.000268116	0.000985112	102.2037012	0.00123925	0.000341894	0.005828548	0.001430644	0.018970743	0.01429492	3.47E-03
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.001463137	9.81993E-05	0.000795978	1.08673E-06	2.59465E-05	0	0	2.56369E-05	0	0	0	0	0	0	0	2.59465E-05	2.56369E-05	2.59E-05
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000517294	9.81531E-05	0.000310438	3.06448E-07	3.06214E-06	1.16517E-06	5.13725E-06	2.81716E-06	1.74774E-07	6.42157E-07	0.09157259	5.62661E-05	3.9462E-06			9.36456E-06	9.11958E-06	3.06E-06
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.998177539	0.008781702	0.043557844	0.009947236	0.016718555	0.025256423	0.05506093	0.015995318	0.006314106	0.019271325	1050.460819	0.000407887	0.16550053	0.036207364	0.008887262	0.133243271	0.105199932	1.67E-02
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.019530772	0.001645616	0.024181824	3.6461E-05	7.40384E-06	0	0	7.08355E-06	0	0	3.821718872	7.64346E-05	0	0	0	7.40384E-06	7.08355E-06	7.40E-06
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.034017978	1.04259E-05	5.17132E-05	1.18097E-05	1.98488E-05	2.99852E-05	6.537E-05	1.89901E-05	7.4963E-06	2.28795E-05	1.247138913	4.84256E-07	0.000196487			0.000115204	0.000114345	1.98E-05
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.313632576	0.01277332	0.226439436	0.000660821	0.005681081	0.003587603	0.015911306	0.005226579	0.000538138	0.001988914	197.5645665	0.002336209	0.000683882	0.011657096	0.002861287	0.036837086	0.027586776	5.68E-03
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.002834199	0.00017479	0.0015284	2.10187E-06	4.09461E-05	0	0	5.04888E-05	0	0	0	0	0	0	0	4.09461E-05	5.04888E-05	4.09E-05
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.001016354	0.000193219	0.000605664	5.96501E-07	5.22036E-06	2.33862E-06	1.0372E-05	4.80272E-06	3.50792E-07	1.2965E-06	0.178359586	0.000113172	7.89349E-06			1.7931E-05	1.75133E-05	5.22E-06
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.766422258	0.006843301	0.02725531	0.008362928	0.015942457	0.025256423	0.059515445	0.015252793	0.006314106	0.020830406	883.1526886	0.000317854	0.139141066	0.036207364	0.008887262	0.136921688	0.108911923	1.59E-02
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.019424146	0.001643666	0.024285274	3.34783E-05	6.99536E-06	0	0	6.69274E-06	0	0	3.509088958	7.6344E-05	0	0	0	6.99536E-06	6.69274E-06	7.00E-06
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.028411641	8.12457E-06	3.23583E-05	9.92872E-06	1.89274E-05	2.99852E-05	7.06585E-05	1.81086E-05	7.4963E-06	2.47305E-05	1.048505632	3.77365E-07	0.000165192			0.000119571	0.000118752	1.89E-05
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.233054812	0.004016559	0.203411146	0.000580581	0.000941236	0.00359447	0.016073836	0.000865935	0.000539168	0.002009229	174.0952714	0.002041907	0.000683882	0.011657096	0.002861287	0.032266639	0.023395529	9.41E-04
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.0025103	9.82773E-05	0.001349111	1.84967E-06	2.76571E-06	0	0	4.72251E-05	0	0	0	0	0	0	0	2.76571E-06	4.72251E-05	2.77E-06
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000962551	0.000182435	0.000527725	5.4148E-07	1.84353E-06	2.3431E-06	1.04779E-05	1.69604E-06	3.51463E-07	1.30974E-06	0.162370226	0.000115538	7.89349E-06			1.46645E-05	1.45171E-05	1.84E-06
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	8.278948708	0.074768914	0.382805304	0.080302721	0.131023791	0.199965537	0.433040636	0.12535576	0.049991384	0.151564223	8480.231465	0.003472822	1.336063921	0.286704992	0.070373044	1.050734957	0.828734977	1.31E-01
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.138448177	0.011649859	0.170789808	0.000263622	5.43701E-05	0	0	5.20181E-05	0	0	27.63192948	0.000541106	0	0	0	5.43701E-05	5.20181E-05	5.44E-05
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.241511172	7.93048E-05	0.000406029	8.51744E-05	0.000138972	0.000212097	0.000459311	0.000132961	5.30242E-05	0.000160759	8.994693572	3.6835E-06	0.001417118			0.000810381	0.000804369	1.39E-04
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.015564485	0.003732549	0.30909709	0.001140066	0.000580644	0.003301643	0.003450688	0.000533881	0.000825411	0.001207741	115.3210287	0.001001838	0.001828364	0.021218109	0.005208081	0.028551085	0.012494294	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.004870071	0.005912418	0.059529896	1.95406E-05	4.5371E-05	1.65082E-05	1.72534E-05	4.17169E-05	4.12705E-06	6.0387E-06	1.976590436	0.001327589	0.000655574			7.91326E-05	7.54786E-05	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	15.80596831	0.139056724	0.689730913	0.157512754	0.264735421	0.399931075	0.871880275	0.253283084	0.099982769	0.305158096	16633.86498	0.006458825	2.620672201	0.573409984	0.140746087	2.109956756	1.665840521	2.65E-01
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.276297161	0.023280138	0.342094484	0.000515805	0.00010474	0	0	0.000100209	0	0	54.06494241	0.001081302	0	0	0	0.00010474	0.000100209	1.05E-04
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.481244191	0.000147493	0.000731574	0.000167068	0.000280796	0.000424193	0.000924774	0.000268649	0.000106048	0.000323671	17.64297579	6.85066E-06	0.002779658			0.001629763	0.001617616	2.81E-04
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.026725756	0.006162316	0.561682258	0.00219022	0.001069143	0.006603286	0.006877258	0.000983037	0.001650821	0.00240704	221.5472116	0.001705436	0.003364639	0.042436218	0.010416162	0.056985904	0.024879743	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.008994032	0.010449798	0.107682689	3.74629E-05	8.492E-05	3.30164E-05	3.43863E-05	7.80808E-05	8.25411E-06	1.20352E-05	3.789478609	0.002386706	0.001247816			0.000152323	0.000145484	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	12.13616361	0.108362483	0.431583108	0.132425513	0.25244604	0.399931075	0.94241675	0.241525336	0.099982769	0.329845862	13984.56974	0.005033157	2.203274658	0.573409984	0.140746087	2.168203849	1.724619248	2.52E-01
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.274788751	0.023252554	0.343557954	0.00047361	9.89616E-05	0	0	9.46806E-05	0	0	49.64224182	0.001080021	0	0	0	9.89616E-05	9.46806E-05	9.90E-05
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.401932692	0.000114936	0.000457766	0.000140459	0.000267761	0.000424193	0.000999589	0.000256178	0.000106048	0.000349856	14.83295828	5.3385E-06	0.002336939			0.001691544	0.00167996	2.68E-04
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.015594157	0.002522577	0.409409085	0.001868226	0.000438396	0.006603286	0.006831772	0.000403089	0.001650821	0.00239112	188.9765885	0.000876493	0.002588499	0.042436218	0.010416162	0.056309671	0.024254309	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.006325042	0.004607496	0.064030479	3.10196E-05	3.4692E-05	3.30164E-05	3.41589E-05	3.1898E-05	8.25411E-06	1.19556E-05	3.13772368	0.001236115	0.001017215			0.000101867	9.90733E-05	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	4.18265328	0.037774415	0.193399176	0.04057018	0.066195251	0.101025691	0.218778845	0.063331674	0.025256423	0.076572596	4284.34445	0.001754524	0.675000213	0.144829456	0.035549048	0.530829243	0.418685258	6.62E-02
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.078292511	0.006588001	0.096581719	0.000149078	3.07463E-05	0	0	2.94163E-05	0	0	15.62586943	0.000305996	0	0	0	3.07463E-05	2.94163E-05	3.07E-05
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.136574684	4.48469E-05	0.000229609	4.81661E-05	7.8589E-05	0.000119941	0.000259741	7.51893E-05	2.99852E-05	9.09093E-05	5.086503548	2.08302E-06	0.000801381			0.000458271	0.000454871	7.86E-05
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	1.339200639	0.06124358	0.930362822	0.002736552	0.027790838	0.01429957	0.063047151	0.025567489	0.002144924	0.007880894	817.6296099	0.009914001	0.002735152	0.046628384	0.011445149	0.151765943	0.114359359	2.78E-02
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.011705093	0.000785594	0.006367824	8.69382E-06	0.000207572	0	0	0.000205095	0	0	0	0	0	0	0	0.000207572	0.000205095	2.08E-04
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.004138353	0.000785225	0.002483501	2.45158E-06	2.44971E-05	9.32134E-06	4.1098E-05	2.25373E-05	1.39819E-06	5.13725E-06	0.732580724	0.000450129	3.15696E-05			7.49165E-05	7.29566E-05	2.45E-05
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	7.985420312	0.070253613	0.348462754	0.079577886	0.13374844	0.202051381	0.440487436	0.127962542	0.050512845	0.154170603	8403.68655	0.003263098	1.324004238	0.289658913	0.071098097	1.065946171	0.841599456	1.34E-01
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.156246178	0.013164929	0.193454596	0.000291688	5.92307E-05	0	0	5.66684E-05	0	0	30.57375098	0.000611477	0	0	0	5.92307E-05	5.66684E-05	5.92E-05
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.272143822	8.34072E-05	0.000413706	9.44773E-05	0.00015879	0.000239882	0.00052296	0.000151921	5.99704E-05	0.000183036	9.977111307	3.87405E-06	0.001571898			0.000921632	0.000914763	1.59E-04
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	2.509060604	0.102186562	1.811515489	0.005286566	0.045448645	0.028700826	0.12729045	0.041812632	0.004305104	0.015911313	1580.516532	0.018689672	0.005471052	0.093256767	0.022890297	0.294696689	0.220694205	4.54E-02
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.022673596	0.001398317	0.012227201	1.6815E-05	0.000327569	0	0	0.00040391	0	0	0	0	0	0	0	0.000327569	0.00040391	3.28E-04
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.008130836	0.001545749	0.004845314	4.77201E-06	4.17629E-05	1.8709E-05	8.29758E-05	3.84218E-05	2.80633E-06	1.0372E-05	1.426876688	0.000905378	6.31479E-05			0.000143448	0.000140106	4.18E-05
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	6.131378067	0.054746407	0.218042479	0.066903423	0.127539654	0.202051381	0.476123557	0.122022345	0.050512845	0.166643245	7065.221509	0.002542829	1.113128526	0.289658913	0.071098097	1.095373505	0.871295381	1.28E-01
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.155393171	0.01314933	0.194282189	0.000267827	5.59629E-05	0	0	5.35419E-05	0	0	28.07271166	0.000610752	0	0	0	5.59629E-05	5.35419E-05	5.60E-05
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.227293131	6.49966E-05	0.000258867	7.94298E-05	0.000151419	0.000239882	0.000565268	0.000144869	5.99704E-05	0.000197844	8.388045054	3.01892E-06	0.00132154			0.000956569	0.000950018	1.51E-04
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	1.864438497	0.03213247	1.627289166	0.004644651	0.007529891	0.028755763	0.128590691	0.006927477	0.004313346	0.016073834	1392.762171	0.016335256	0.005471055	0.093256767	0.022890297	0.258133113	0.187164229	7.53E-03
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.020082403	0.000786218	0.01079289	1.47974E-05	2.21257E-05	0	0	0.000377801	0	0	0	0	0	0	0	2.21257E-05	0.000377801	2.21E-05
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.007700411	0.001459477	0.004221804	4.33184E-06	1.47482E-05	1.87448E-05	8.38233E-05	1.35683E-05	2.81171E-06	1.04779E-05	1.298961806	0.000924306	6.31479E-05			0.000117316	0.000116136	1.47E-05
Annual	tpy	Reduced Project	Uncontrolled	2025	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-site	0.01	0.00	0.06	0.00	0.00	--	--	0.00	--	--	35.41	0.00	0.00	--	--	0.000561271	0.000516369	5.61E-04
Annual	tpy	Reduced Project	Uncontrolled	2025	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-site	0.04	0.01	0.05	0.00	0.00	--	--	0.00	--	--	173.28	0.01	0.00	--	--	0.002206222	0.002029724	2.21E-03
Annual	tpy	Reduced Project	Uncontrolled	2027	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-site	0.02	0.01	0.13	0.00	0.00	--	--	0.00	--	--	71.10	0.00	0.00	--	--	0.001204195	0.00110786	1.20E-03
Annual	tpy	Reduced Project	Uncontrolled	2027	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-site	0.10	0.06	0.12	0.00	0.01	--	--	0.01	--	--	346.92	0.01	0.00	--	--	0.006086838	0.005599891	6.09E-03
Annual	tpy	Reduced Project	Uncontrolled	2049	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-site	0.02	0.02	0.15	0.00	0.00	--	--	0.00	--	--	70.74	0.00	0.00	--	--	0.001530809	0.001408345	1.53E-03
Annual	tpy	Reduced Project	Uncontrolled	2049	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-site	0.10	0.06	0.12	0.00	0.01	--	--	0.01	--	--	346.92	0.01	0.00	--	--	0.006086838	0.005599891	6.09E-03
Daily	lbd	Reduced Project	Uncontrolled	2025	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-site	0.21	0.08	1.51	0.01	0.01	--	--	0.01	--	--	865.06	0.04	0.01	--	--	0.013710835	0.012613968	1.37E-02
Daily	lbd	Reduced Project	Uncontrolled	2025	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-site	0.41	0.08	0.46	0.01	0.02	--	--	0.02	--	--	1,612.54	0.07	0.01	--	--	0.020531054	0.018888569	2.05E-02
Daily	lbd	Reduced Project	Uncontrolled	2027	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-site	0.42	0.23	3.13	0.02	0.03	--	--	0.03	--	--	1,736.94	0.07	0.01	--	--	0.029416319	0.027063014	2.94E-02
Daily	lbd	Reduced Project	Uncontrolled	2027	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-site	0.93	0.56	1.10	0.03	0.06	--	--	0.05	--	--	3,228.41	0.13	0.03	--	--	0.056643988	0.052112469	5.66E-02
Daily	lbd	Reduced Project	Uncontrolled	2049	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-site	0.47	0.51	3.60	0.02	0.04	--	--	0.03	--	--	1,728.00	0.07	0.01	--	--	0.037394914	0.034403321	3.74E-02
Daily	lbd	Reduced Project	Uncontrolled	2049	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-site	0.93	0.56	1.10	0.03	0.06	--	--	0.05	--	--	3,228.41	0.13	0.03	--	--	0.056643988	0.052112469	5.66E-02
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nautic	9.68	0.38	0.55	0.41	0.25	--	--	0.23	--	--	665.08	0.02	0.03	--	--	0.252223763	0.231662043	2.52E-01
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	1.36	0.03	0.16	0.06	0.02	--	--	0.02	--	--	91.71	0.00	0.00	--	--	0.024719214	0.022704061	2.47E-02
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.88	0.02	0.11	0.04	0.02	--	--	0.01	--	--	59.55	0.00	0.00	--	--	0.015864209	0.014570931	1.59E-02
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.31	0.01	0.03	0.01	0.00	--	--	0.00	--	--	17.55	0.00	0.00	--	--	0.002828248	0.002597685	2.83E-03
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.10	0.00	0.00	0.00	0.00	--	--	0.00	--	--	4.12	0.00	0.00	--	--	0.000485588	0.000446002	4.86E-04
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nautic	19.36	0.75	1.10	0.81	0.50	--	--	0.46	--	--	1330.16	0.03	0.06	--	--	0.504447525	0.463324086	5.04E-01
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	2.72	0.07	0.32	0.11	0.05	--	--	0.05	--	--	183.42	0.00	0.01	--	--	0.049438428	0.045408122	4.94E-02
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	1.77	0.04	0.21	0.07	0.03	--	--	0.03	--	--	119.10	0.00	0.01	--	--	0.031728418	0.029141862	3.17E-02
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.63	0.01	0.07	0.02	0.01	--	--	0.01	--	--	35.11	0.00	0.00	--	--	0.005656497	0.005195369	5.66E-03

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.19	0.00	0.00	0.01	0.00	--	--	0.00	--	--	8.24	0.00	0.00	--	--	0.000971176	0.000892004	9.71E-04
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	19.36	0.75	1.10	0.81	0.50	--	--	0.46	--	--	1330.16	0.03	0.06	--	--	0.504447525	0.463324086	5.04E-01
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	2.72	0.07	0.32	0.11	0.05	--	--	0.05	--	--	183.42	0.00	0.01	--	--	0.049438428	0.045408122	4.94E-02
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	1.77	0.04	0.21	0.07	0.03	--	--	0.03	--	--	119.10	0.00	0.01	--	--	0.031728418	0.029141862	3.17E-02
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.63	0.01	0.07	0.02	0.01	--	--	0.01	--	--	35.11	0.00	0.00	--	--	0.005656497	0.005195369	5.66E-03
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.19	0.00	0.00	0.01	0.00	--	--	0.00	--	--	8.24	0.00	0.00	--	--	0.000971176	0.000892004	9.71E-04
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.27	0.02	0.04	0.02	0.01	--	--	0.01	--	--	28.39	0.00	0.00	--	--	0.007710374	0.00709844	7.71E-03
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.06	0.00	0.01	0.00	0.00	--	--	0.00	--	--	6.08	0.00	0.00	--	--	0.001649778	0.001518843	1.65E-03
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.04	0.00	0.01	0.00	0.00	--	--	0.00	--	--	4.01	0.00	0.00	--	--	0.001090039	0.001003528	1.09E-03
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.03	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.79	0.00	0.00	--	--	0.000758077	0.000697912	7.58E-04
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.07	0.00	0.00	--	--	0.000563253	0.00051855	5.63E-04
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	2.38	0.15	0.40	0.15	0.07	--	--	0.06	--	--	252.91	0.00	0.01	--	--	0.068677378	0.063226792	6.87E-02
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.40	0.00	0.00	--	--	0.000650511	0.000598884	6.51E-04
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.53	0.03	0.09	0.03	0.02	--	--	0.01	--	--	56.79	0.00	0.00	--	--	0.015420748	0.014196879	1.54E-02
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.11	0.01	0.02	0.01	0.00	--	--	0.00	--	--	12.15	0.00	0.00	--	--	0.003299556	0.003037687	3.30E-03
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.08	0.00	0.01	0.00	0.00	--	--	0.00	--	--	8.03	0.00	0.00	--	--	0.002180078	0.002007056	2.18E-03
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.05	0.00	0.01	0.00	0.00	--	--	0.00	--	--	5.58	0.00	0.00	--	--	0.001516154	0.001395824	1.52E-03
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.04	0.00	0.01	0.00	0.00	--	--	0.00	--	--	4.15	0.00	0.00	--	--	0.001126505	0.0010371	1.13E-03
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	4.76	0.31	0.80	0.31	0.14	--	--	0.13	--	--	505.81	0.01	0.02	--	--	0.137354756	0.126453585	1.37E-01
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.40	0.00	0.00	--	--	0.000650511	0.000598884	6.51E-04
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.53	0.03	0.09	0.03	0.02	--	--	0.01	--	--	56.79	0.00	0.00	--	--	0.015420748	0.014196879	1.54E-02
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.11	0.01	0.02	0.01	0.00	--	--	0.00	--	--	12.15	0.00	0.00	--	--	0.003299556	0.003037687	3.30E-03
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.08	0.00	0.01	0.00	0.00	--	--	0.00	--	--	8.03	0.00	0.00	--	--	0.002180078	0.002007056	2.18E-03
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.05	0.00	0.01	0.00	0.00	--	--	0.00	--	--	5.58	0.00	0.00	--	--	0.001516154	0.001395824	1.52E-03
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.04	0.00	0.01	0.00	0.00	--	--	0.00	--	--	4.15	0.00	0.00	--	--	0.001126505	0.0010371	1.13E-03
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	4.76	0.31	0.80	0.31	0.14	--	--	0.13	--	--	505.81	0.01	0.02	--	--	0.137354756	0.126453585	1.37E-01
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.40	0.00	0.00	--	--	0.000650511	0.000598884	6.51E-04
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.20	0.01	0.03	0.00	0.00	--	--	0.00	--	--	19.65	0.00	0.00	--	--	0.0032941	0.003030572	3.29E-03
Annual	tpy	Reduced Project	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.02	0.00	0.01	0.00	0.00	--	--	0.00	--	--	3.22	0.00	0.00	--	--	0.000415899	0.000382627	4.16E-04
Annual	tpy	Reduced Project	Uncontrolled	2025	HC	Yokahama Tug Propulsion	FENDER	Berthing	Marine Distilate	Berthing	0.05	0.00	0.01	0.00	0.00	--	--	0.00	--	--	5.16	0.00	0.00	--	--	0.000837941	0.000770906	8.38E-04
Annual	tpy	Reduced Project	Uncontrolled	2025	HC	Yokahama Tug Auxiliary	FENDER	Berthing	Marine Distilate	Berthing	0.01	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.86	0.00	0.00	--	--	0.000176633	0.000162502	1.77E-04
Annual	tpy	Reduced Project	Uncontrolled	2025	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.54	0.00	0.00	--	--	0.000412717	0.0003797	4.13E-04
Annual	tpy	Reduced Project	Uncontrolled	2025	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.42	0.00	0.00	--	--	8.69984E-05	8.00385E-05	8.70E-05
Annual	tpy	Reduced Project	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.29	0.01	0.06	0.00	0.00	--	--	0.00	--	--	39.31	0.00	0.00	--	--	0.003773899	0.003471987	3.77E-03
Annual	tpy	Reduced Project	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.04	0.00	0.01	0.00	0.00	--	--	0.00	--	--	6.43	0.00	0.00	--	--	0.000836014	0.000769133	8.36E-04
Annual	tpy	Reduced Project	Uncontrolled	2027	HC	Yokahama Tug Propulsion	FENDER	Berthing	Marine Distilate	Berthing	0.10	0.00	0.02	0.00	0.00	--	--	0.00	--	--	10.31	0.00	0.00	--	--	0.001687658	0.001552646	1.69E-03
Annual	tpy	Reduced Project	Uncontrolled	2027	HC	Yokahama Tug Auxiliary	FENDER	Berthing	Marine Distilate	Berthing	0.01	0.00	0.00	0.00	0.00	--	--	0.00	--	--	1.71	0.00	0.00	--	--	0.000354387	0.000326036	3.54E-04
Annual	tpy	Reduced Project	Uncontrolled	2027	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.05	0.00	0.01	0.00	0.00	--	--	0.00	--	--	5.08	0.00	0.00	--	--	0.000831235	0.000764736	8.31E-04
Annual	tpy	Reduced Project	Uncontrolled	2027	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.01	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.84	0.00	0.00	--	--	0.000174549	0.000160585	1.75E-04
Annual	tpy	Reduced Project	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.08	0.00	0.04	0.00	0.00	--	--	0.00	--	--	39.31	0.00	0.00	--	--	0.001971586	0.00181386	1.97E-03
Annual	tpy	Reduced Project	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.04	0.00	0.01	0.00	0.00	--	--	0.00	--	--	6.43	0.00	0.00	--	--	0.000843042	0.000775598	8.43E-04
Annual	tpy	Reduced Project	Uncontrolled	2049	HC	Yokahama Tug Propulsion	FENDER	Berthing	Marine Distilate	Berthing	0.08	0.00	0.01	0.00	0.00	--	--	0.00	--	--	10.31	0.00	0.00	--	--	0.001007668	0.000927055	1.01E-03
Annual	tpy	Reduced Project	Uncontrolled	2049	HC	Yokahama Tug Auxiliary	FENDER	Berthing	Marine Distilate	Berthing	0.01	0.00	0.00	0.00	0.00	--	--	0.00	--	--	1.71	0.00	0.00	--	--	0.00035719	0.000328615	3.57E-04
Annual	tpy	Reduced Project	Uncontrolled	2049	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.04	0.00	0.01	0.00	0.00	--	--	0.00	--	--	5.08	0.00	0.00	--	--	0.000496314	0.000456609	4.96E-04
Annual	tpy	Reduced Project	Uncontrolled	2049	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.01	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.84	0.00	0.00	--	--	0.000175929	0.000161855	1.76E-04
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	1.534	0.014	0.071	0.015	0.024	0.037	0.080	0.023	0.009	0.028	1570.939	0.001	0.248	0.053	0.013	0.194645662	0.153520797	2.43E-02
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.026	0.002	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.119	0.000	0.000	0.000	0.000	1.00719E-05	9.63621E-06	1.01E-05
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	4.474E-02	1.469E-05	7.522E-05	1.578E-05	2.574E-05	0.000E+00	0.000E+00	2.463E-05	0.000E+00	0.000E+00	1.666E+00	6.824E-07	2.625E-04			2.57443E-05	2.46306E-05	2.57E-05
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.001	0.000	0.026	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.610	0.000	0.000	0.002	0.000	0.002379257	0.001041191	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.165	0.000	0.000			3.78092E-06	3.47641E-06	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	2.928	0.026	0.128	0.029	0.049	0.074	0.162	0.047	0.019	0.057	3081.376	0.001	0.485	0.106	0.026	0.390863487	0.308592218	4.90E-02
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.051	0.004	0.063	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.015	0.000	0.000	0.000	0.000	1.94029E-05	1.85635E-05	1.94E-05
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	8.915E-02	2.732E-05	1.355E-04	3.095E-05	5.202E-05	0.000E+00	0.000E+00	4.977E-05	0.000E+00	0.000E+00	3.268E+00	1.269E-06	5.149E-04			5.20166E-05	4.97664E-05	5.20E-05
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.002	0.001	0.047	0.000	0.000	0.001	0.001	0.000	0.000	0.000	18.462	0.000	0.000	0.004	0.001	0.004748825	0.002073312	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.001	0.001	0.009	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.316	0.000	0.000			7.07667E-06	6.50673E-06	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	2.248	0.020	0.080	0.025	0.047	0.074	0.175	0.045	0.019	0.061	2590.602	0.001	0.408	0.106	0.026	0.401653596	0.31948081	4.68E-02
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.051	0.004	0.064	0.000	0.000	0.000	0.000	0.000	0.000	0.000	9.196	0.000	0.000	0.000	0.000	1.83324E-05	1.75393E-05	1.83E-05
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	7.446E-02	2.129E-05	8.480E-05	2.602E-05	4.960E-05	0.000E+00	0.000E+00	4.746E-05	0.000E+00	0.000E+00	2.748E+00	9.889E-07	4.329E-04			4.9602E-05	4.74562E-05	4.96E-05
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.001	0.000	0.034	0.000	0.000	0.001	0.001	0.000	0.000	0.000	15.748	0.000	0.000	0.004	0.001	0.004692473	0.002021192	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.001	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.261	0.000	0.000			2.891E-06	2.65817E-06	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.775	0.007	0.036	0.008	0.012	0.019	0.041	0.012	0.005	0.014	793.663	0.000	0.125	0.027	0.007	0.098334607	0.077560253	1.23E-02

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.015	0.001	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.895	0.000	0.000	0.000	0.000	5.69567E-06	5.44928E-06	5.70E-06
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	2.530E-02	8.308E-06	4.253E-05	8.923E-06	1.456E-05	0.000E+00	0.000E+00	1.393E-05	0.000E+00	0.000E+00	9.423E-01	3.859E-07	1.485E-04			1.45584E-05	1.39286E-05	1.46E-05
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	1.479	0.013	0.065	0.015	0.025	0.037	0.082	0.024	0.009	0.029	1556.759	0.001	0.245	0.054	0.013	0.197463496	0.155903905	2.48E-02
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.029	0.002	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.664	0.000	0.000	0.000	0.000	1.09723E-05	1.04977E-05	1.10E-05
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	5.041E-02	1.545E-05	7.664E-05	1.750E-05	2.942E-05	0.000E+00	0.000E+00	2.814E-05	0.000E+00	0.000E+00	1.848E+00	7.177E-07	2.912E-04			2.94154E-05	2.81429E-05	2.94E-05
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	1.136	0.010	0.040	0.012	0.024	0.037	0.088	0.023	0.009	0.031	1308.812	0.000	0.206	0.054	0.013	0.202914826	0.161404991	2.36E-02
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.029	0.002	0.036	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.200	0.000	0.000	0.000	0.000	1.0367E-05	9.91849E-06	1.04E-05
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	4.211E-02	1.204E-05	4.795E-05	1.471E-05	2.805E-05	0.000E+00	0.000E+00	2.684E-05	0.000E+00	0.000E+00	1.554E+00	5.592E-07	2.448E-04			2.80499E-05	2.68365E-05	2.80E-05
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	12.269	0.111	0.567	0.119	0.194	0.296	0.642	0.186	0.074	0.225	12567.510	0.005	1.980	0.425	0.104	1.557165296	1.228166378	0.194174277
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.205	0.017	0.253	0.000	0.000	0.000	0.000	0.000	0.000	0.000	40.950	0.001	0.000	0.000	0.000	8.05753E-05	7.70897E-05	8.05753E-05
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	3.579E-01	1.175E-04	6.017E-04	1.262E-04	2.060E-04	0.000E+00	0.000E+00	1.970E-04	0.000E+00	0.000E+00	1.333E+01	5.459E-06	2.100E-03			0.000205954	0.000197045	0.000205954
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.010	0.002	0.206	0.001	0.000	0.002	0.002	0.000	0.001	0.001	76.881	0.001	0.001	0.014	0.003	0.019034056	0.008329529	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.003	0.004	0.040	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.318	0.001	0.000			3.02473E-05	2.78113E-05	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	23.424	0.206	1.022	0.233	0.392	0.593	1.292	0.375	0.148	0.452	24651.009	0.010	3.884	0.850	0.209	3.126907899	2.468737745	0.39233187
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.409	0.035	0.507	0.001	0.000	0.000	0.000	0.000	0.000	0.000	80.123	0.002	0.000	0.000	0.000	0.000155223	0.000148508	0.000155223
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	7.132E-01	2.186E-04	1.084E-03	2.476E-04	4.161E-04	0.000E+00	0.000E+00	3.981E-04	0.000E+00	0.000E+00	2.615E+01	1.015E-05	4.119E-03			0.000416133	0.000398131	0.000416133
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.018	0.004	0.374	0.001	0.001	0.004	0.005	0.001	0.001	0.002	147.698	0.001	0.002	0.028	0.007	0.037990603	0.016586495	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.006	0.007	0.072	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.526	0.002	0.001			5.66133E-05	5.20539E-05	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	17.986	0.161	0.640	0.196	0.374	0.593	1.397	0.358	0.148	0.489	20724.814	0.007	3.265	0.850	0.209	3.213228765	2.55584648	0.374119287
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.407	0.034	0.509	0.001	0.000	0.000	0.000	0.000	0.000	0.000	73.569	0.002	0.000	0.000	0.000	0.000146659	0.000140314	0.000146659
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	5.957E-01	1.703E-04	6.784E-04	2.082E-04	3.968E-04	0.000E+00	0.000E+00	3.796E-04	0.000E+00	0.000E+00	2.198E+01	7.912E-06	3.463E-03			0.000396816	0.00037965	0.000396816
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.010	0.002	0.273	0.001	0.000	0.004	0.005	0.000	0.001	0.002	125.984	0.001	0.002	0.028	0.007	0.037539781	0.016169539	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.004	0.003	0.043	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.092	0.001	0.001			2.3128E-05	2.12653E-05	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	6.199	0.056	0.287	0.060	0.098	0.150	0.324	0.094	0.037	0.113	6349.301	0.003	1.000	0.215	0.053	0.786676859	0.620482025	0.098099856
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.116	0.010	0.143	0.000	0.000	0.000	0.000	0.000	0.000	0.000	23.157	0.001	0.000	0.000	0.000	4.55654E-05	4.35942E-05	4.55654E-05
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	2.024E-01	6.646E-05	3.403E-04	7.138E-05	1.165E-04	0.000E+00	0.000E+00	1.114E-04	0.000E+00	0.000E+00	7.538E+00	3.087E-06	1.188E-03			0.000116467	0.000111429	0.000116467
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	11.834	0.104	0.516	0.118	0.198	0.299	0.653	0.190	0.075	0.228	12454.072	0.005	1.962	0.429	0.105	1.579707969	1.247231243	0.198212145
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.232	0.020	0.287	0.000	0.000	0.000	0.000	0.000	0.000	0.000	45.310	0.001	0.000	0.000	0.000	8.77786E-05	8.39813E-05	8.77786E-05
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	4.033E-01	1.236E-04	6.131E-04	1.400E-04	2.353E-04	0.000E+00	0.000E+00	2.251E-04	0.000E+00	0.000E+00	1.479E+01	5.741E-06	2.330E-03			0.000235323	0.000225143	0.000235323
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	9.087	0.081	0.323	0.099	0.189	0.299	0.706	0.181	0.075	0.247	10470.498	0.004	1.650	0.429	0.105	1.623318609	1.291239927	0.189010866
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.230	0.019	0.288	0.000	0.000	0.000	0.000	0.000	0.000	0.000	41.603	0.001	0.000	0.000	0.000	8.29357E-05	7.93479E-05	8.29357E-05
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	3.368E-01	9.632E-05	3.836E-04	1.177E-04	2.244E-04	0.000E+00	0.000E+00	2.147E-04	0.000E+00	0.000E+00	1.243E+01	4.474E-06	1.958E-03			0.000224399	0.000214692	0.000224399
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	463.268	0.000	0.073	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	1.284	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	908.694	0.000	0.143	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	2.512	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	763.965	0.000	0.120	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	2.306	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	3706.142	0.002	0.584	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	10.270	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	7269.550	0.003	1.145	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	20.094	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	6111.720	0.002	0.963	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	18.450	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	--
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.000	0.000	0.000	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	312.6011407	0.000128016	0.049250437	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.866214929	1.69628E-05	0	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	219.981155	0.002667337	0.000735886	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.024949914	5.54583E-05	3.72334E-06	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	613.1631181	0.000238087	0.096604099	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	1.694845822	3.3897E-05	0	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	425.23393	0.005028408	0.001471973	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.049574815	0.000111649	7.44769E-06	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	515.5039071	0.000185534	0.08121785	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	1.556201531	3.38569E-05	0	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	374.7190994	0.004394959	0.001471973	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.048884189	0.000114207	7.4477E-06	--	--	0	0	--
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	2500.809126	0.001024131	0.394003496	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	6.929719429	0.000135702	0	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	1759.84924	0.021338693	0.005887086	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.19959931	0.000443666	2.97867E-05	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	4905.304945	0.001904699	0.772832792	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	13.55876657	0.000271176	0	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	3401.87144	0.040227268	0.01177578	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.39659852	0.000893195	5.95815E-05	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	4124.031257	0.001484271	0.649742804	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	12.44961225	0.000270855	0	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	2997.752795	0.03515967	0.011775787	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.391073512	0.000913658	5.95816E-05	--	--	0	0	--
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	23.73	0.51	0.74	0.58	0.34	--	--	0.32	--	--	944.22	0.02	0.05	--	--	0.343290092	0.315304487	3.43E-01
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	3.31	0.05	0.24	0.08	0.03	--	--	0.03	--	--	131.56	0.00	0.01	--	--	0.034635562	0.031812011	3.46E-02
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	2.15	0.03	0.16	0.05	0.02	--	--	0.02	--	--	85.37	0.00	0.00	--	--	0.022208137	0.020397691	2.22E-02
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.77	0.01	0.04	0.02	0.00	--	--	0.00	--	--	24.95	0.00	0.00	--	--	0.003944947	0.003623348	3.94E-03
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.21	0.00	0.00	0.00	0.00	--	--	0.00	--	--	5.25	0.00	0.00	--	--	0.000603315	0.000554131	6.03E-04
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	45.48	0.97	1.43	1.10	0.66	--	--	0.60	--	--	1809.76	0.04	0.09	--	--	0.657972677	0.6043336	6.58E-01
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	6.34	0.09	0.46	0.15	0.07	--	--	0.06	--	--	252.15	0.00	0.01	--	--	0.066384827	0.06097302	6.64E-02
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	4.11	0.06	0.31	0.10	0.04	--	--	0.04	--	--	163.63	0.00	0.01	--	--	0.042565596	0.039095575	4.26E-02
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	1.47	0.02	0.09	0.03	0.01	--	--	0.01	--	--	47.82	0.00	0.00	--	--	0.007561149	0.006944751	7.56E-03
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.40	0.00	0.00	0.01	0.00	--	--	0.00	--	--	10.06	0.00	0.00	--	--	0.001156353	0.001062085	1.16E-03
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	45.48	0.97	1.43	1.10	0.66	--	--	0.60	--	--	1809.76	0.04	0.09	--	--	0.657972677	0.6043336	6.58E-01
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	6.34	0.09	0.46	0.15	0.07	--	--	0.06	--	--	252.15	0.00	0.01	--	--	0.066384827	0.06097302	6.64E-02
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	4.11	0.06	0.31	0.10	0.04	--	--	0.04	--	--	163.63	0.00	0.01	--	--	0.042565596	0.039095575	4.26E-02
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	1.47	0.02	0.09	0.03	0.01	--	--	0.01	--	--	47.82	0.00	0.00	--	--	0.007561149	0.006944751	7.56E-03
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.40	0.00	0.00	0.01	0.00	--	--	0.00	--	--	10.06	0.00	0.00	--	--	0.001156353	0.001062085	1.16E-03
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.61	0.02	0.06	0.02	0.01	--	--	0.01	--	--	37.96	0.00	0.00	--	--	0.010307325	0.009489283	1.03E-02
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.13	0.00	0.01	0.00	0.00	--	--	0.00	--	--	8.12	0.00	0.00	--	--	0.002205444	0.002030409	2.21E-03
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.09	0.00	0.01	0.00	0.00	--	--	0.00	--	--	5.37	0.00	0.00	--	--	0.001457178	0.001341529	1.46E-03
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.06	0.00	0.01	0.00	0.00	--	--	0.00	--	--	3.73	0.00	0.00	--	--	0.001013407	0.000932978	1.01E-03
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.04	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.77	0.00	0.00	--	--	0.000752963	0.000693204	7.53E-04
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	9.67	0.36	0.95	0.37	0.16	--	--	0.15	--	--	601.00	0.01	0.03	--	--	0.163202878	0.150250269	1.63E-01
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.07	0.00	0.01	0.00	0.00	--	--	0.00	--	--	4.60	0.00	0.00	--	--	0.001250022	0.001150814	1.25E-03
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	1.17	0.04	0.11	0.04	0.02	--	--	0.02	--	--	72.75	0.00	0.00	--	--	0.019755706	0.018187792	1.98E-02
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.25	0.01	0.02	0.01	0.00	--	--	0.00	--	--	15.57	0.00	0.00	--	--	0.004227101	0.003891617	4.23E-03
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.17	0.01	0.02	0.01	0.00	--	--	0.00	--	--	10.29	0.00	0.00	--	--	0.002792924	0.002571263	2.79E-03
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.12	0.00	0.01	0.00	0.00	--	--	0.00	--	--	7.15	0.00	0.00	--	--	0.001942363	0.001788207	1.94E-03
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.09	0.00	0.01	0.00	0.00	--	--	0.00	--	--	5.31	0.00	0.00	--	--	0.00144318	0.001328642	1.44E-03
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	18.53	0.70	1.82	0.70	0.31	--	--	0.29	--	--	1151.92	0.01	0.05	--	--	0.312805517	0.287979682	3.13E-01
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.07	0.00	0.01	0.00	0.00	--	--	0.00	--	--	4.60	0.00	0.00	--	--	0.001250022	0.001150814	1.25E-03
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	1.17	0.04	0.11	0.04	0.02	--	--	0.02	--	--	72.75	0.00	0.00	--	--	0.019755706	0.018187792	1.98E-02
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.25	0.01	0.02	0.01	0.00	--	--	0.00	--	--	15.57	0.00	0.00	--	--	0.004227101	0.003891617	4.23E-03
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.17	0.01	0.02	0.01	0.00	--	--	0.00	--	--	10.29	0.00	0.00	--	--	0.002792924	0.002571263	2.79E-03
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.12	0.00	0.01	0.00	0.00	--	--	0.00	--	--	7.15	0.00	0.00	--	--	0.001942363	0.001788207	1.94E-03
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.09	0.00	0.01	0.00	0.00	--	--	0.00	--	--	5.31	0.00	0.00	--	--	0.00144318	0.001328642	1.44E-03
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	18.53	0.70	1.82	0.70	0.31	--	--	0.29	--	--	1151.92	0.01	0.05	--	--	0.312805517	0.287979682	3.13E-01
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.07	0.00	0.01	0.00	0.00	--	--	0.00	--	--	4.60	0.00	0.00	--	--	0.001250022	0.001150814	1.25E-03
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.30	0.01	0.05	0.00	0.00	--	--	0.00	--	--	29.48	0.00	0.00	--	--	0.004941149	0.004545858	4.94E-03
Annual	tpy	Product Terminal	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.03	0.00	0.01	0.00	0.00	--	--	0.00	--	--	4.82	0.00	0.00	--	--	0.000623848	0.00057394	6.24E-04
Annual	tpy	Product Terminal	Uncontrolled	2025	HC	Yokahama Tug Propulsion	FENDER	Berthing	Marine Distilate	Berthing	0.07	0.00	0.01	0.00	0.00	--	--	0.00	--	--	7.73	0.00	0.00	--	--	0.001256912	0.001156359	1.26E-03
Annual	tpy	Product Terminal	Uncontrolled	2025	HC	Yokahama Tug Auxiliary	FENDER	Berthing	Marine Distilate	Berthing	0.01	0.00	0.00	0.00	0.00	--	--	0.00	--	--	1.28	0.00	0.00	--	--	0.00026495	0.000243754	2.65E-04
Annual	tpy	Product Terminal	Uncontrolled	2025	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.04	0.00	0.01	0.00	0.00	--	--	0.00	--	--	3.81	0.00	0.00	--	--	0.000619076	0.00056955	6.19E-04
Annual	tpy	Product Terminal	Uncontrolled	2025	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.63	0.00	0.00	--	--	0.000130498	0.000120058	1.30E-04
Annual	tpy	Product Terminal	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.41	0.01	0.09	0.00	0.01	--	--	0.00	--	--	56.51	0.00	0.00	--	--	0.00542498	0.004990981	5.42E-03
Annual	tpy	Product Terminal	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.06	0.00	0.01	0.00	0.00	--	--	0.00	--	--	9.25	0.00	0.00	--	--	0.00120177	0.001105629	1.20E-03
Annual	tpy	Product Terminal	Uncontrolled	2027	HC	Yokahama Tug Propulsion	FENDER	Berthing	Marine Distilate	Berthing	0.14	0.00	0.02	0.00	0.00	--	--	0.00	--	--	14.82	0.00	0.00	--	--	0.002426009	0.002231928	2.43E-03
Annual	tpy	Product Terminal	Uncontrolled	2027	HC	Yokahama Tug Auxiliary	FENDER	Berthing	Marine Distilate	Berthing	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.46	0.00	0.00	--	--	0.000509432	0.000468677	5.09E-04
Annual	tpy	Product Terminal	Uncontrolled	2027	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.07	0.00	0.01	0.00	0.00	--	--	0.00	--	--	7.30	0.00	0.00	--	--	0.0011949	0.001099308	1.19E-03
Annual	tpy	Product Terminal	Uncontrolled	2027	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.01	0.00	0.00	0.00	0.00	--	--	0.00	--	--	1.21	0.00	0.00	--	--	0.000250914	0.000230841	2.51E-04
Annual	tpy	Product Terminal	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.12	0.00	0.06	0.00	0.00	--	--	0.00	--	--	56.51	0.00	0.00	--	--	0.002834155	0.002607423	2.83E-03
Annual	tpy	Product Terminal	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.06	0.00	0.01	0.00	0.00	--	--	0.00	--	--	9.25	0.00	0.00	--	--	0.001211872	0.001114923	1.21E-03
Annual	tpy	Product Terminal	Uncontrolled	2049	HC	Yokahama Tug Propulsion	FENDER	Berthing	Marine Distilate	Berthing	0.11	0.00	0.02	0.00	0.00	--	--	0.00	--	--	14.82	0.00	0.00	--	--	0.001448523	0.001332642	1.45E-03
Annual	tpy	Product Terminal	Uncontrolled	2049	HC	Yokahama Tug Auxiliary	FENDER	Berthing	Marine Distilate	Berthing	0.02	0.00	0.00	0.00	0.00	--	--	0.00	--	--	2.46	0.00	0.00	--	--	0.000513461	0.000472384	5.13E-04
Annual	tpy	Product Terminal	Uncontrolled	2049	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.05	0.00	0.01	0.00	0.00	--	--	0.00	--	--	7.30	0.00	0.00	--	--	0.000713452	0.000656376	7.13E-04
Annual	tpy	Product Terminal	Uncontrolled	2049	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control T	Transit	Marine Distilate	All Zones	0.01	0.00	0.00	0.00	0.00	--	--	0.00	--	--	1.21	0.00	0.00	--	--	0.000252899	0.000232667	2.53E-04
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	275.56	4.14	20.00	7.00	3.09	--	--	2.84	--	--	11463.53	0.18	0.55	--	--	3.089901773	2.838007607	3.09E+00
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	178.93	2.65	13.30	4.54	1.98	--	--	1.82	--	--	7443.58	0.12	0.36	--	--	1.983026117	1.821366379	1.98E+00
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	63.53	0.75	4.11	1.34	0.35	--	--	0.32	--	--	2194.34	0.03	0.13	--	--	0.353531057	0.324710591	3.54E-01
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	19.35	0.25	0.08	0.31	0.06	--	--	0.06	--	--	515.29	0.01	0.04	--	--	0.060698488	0.055750242	6.07E-02
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	275.56	4.14	20.00	7.00	3.09	--	--	2.84	--	--	11463.53	0.18	0.55	--	--	3.089901773	2.838007607	3.09E+00
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	178.93	2.65	13.30	4.54	1.98	--	--	1.82	--	--	7443.58	0.12	0.36	--	--	1.983026117	1.821366379	1.98E+00
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	63.53	0.75	4.11	1.34	0.35	--	--	0.32	--	--	2194.34	0.03	0.13	--	--	0.353531057	0.324710591	3.54E-01
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	19.35	0.25	0.08	0.31	0.06	--	--	0.06	--	--	515.29	0.01	0.04	--	--	0.060698488	0.055750242	6.07E-02
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	275.56	4.14	20.00	7.00	3.09	--	--	2.84	--	--	11463.53	0.18	0.55	--	--	3.089901773	2.838007607	3.09E+00
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	178.93	2.65	13.30	4.54	1.98	--	--	1.82	--	--	7443.58	0.12	0.36	--	--	1.983026117	1.821366379	1.98E+00
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	63.53	0.75	4.11	1.34	0.35	--	--	0.32	--	--	2194.34	0.03	0.13	--	--	0.353531057	0.324710591	3.54E-01
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	19.35	0.25	0.08	0.31	0.06	--	--	0.06	--	--	515.29	0.01	0.04	--	--	0.060698488	0.055750242	6.07E-02
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	11.46	0.46	1.20	0.46	0.21	--	--	0.19	--	--	759.42	0.01	0.03	--	--	0.206222267	0.189855421	2.06E-01
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	7.57	0.30	0.79	0.31	0.14	--	--	0.13	--	--	501.76	0.01	0.02	--	--	0.136254854	0.125440976	1.36E-01
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	5.26	0.21	0.55	0.21	0.09	--	--	0.09	--	--	348.96	0.00	0.01	--	--	0.094759619	0.087239014	9.48E-02
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	3.91	0.16	0.41	0.16	0.07	--	--	0.06	--	--	259.28	0.00	0.01	--	--	0.070406589	0.064818764	7.04E-02
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	151.89	6.09	15.91	6.13	2.73	--	--	2.52	--	--	10068.39	0.12	0.42	--	--	2.734089734	2.517098485	2.73E+00
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	11.46	0.46	1.20	0.46	0.21	--	--	0.19	--	--	759.42	0.01	0.03	--	--	0.206222267	0.189855421	2.06E-01
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	7.57	0.30	0.79	0.31	0.14	--	--	0.13	--	--	501.76	0.01	0.02	--	--	0.136254854	0.125440976	1.36E-01
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	5.26	0.21	0.55	0.21	0.09	--	--	0.09	--	--	348.96	0.00	0.01	--	--	0.094759619	0.087239014	9.48E-02
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	3.91	0.16	0.41	0.16	0.07	--	--	0.06	--	--	259.28	0.00	0.01	--	--	0.070406589	0.064818764	7.04E-02
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	151.89	6.09	15.91	6.13	2.73	--	--	2.52	--	--	10068.39	0.12	0.42	--	--	2.734089734	2.517098485	2.73E+00
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	11.46	0.46	1.20	0.46	0.21	--	--	0.19	--	--	759.42	0.01	0.03	--	--	0.206222267	0.189855421	2.06E-01
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	7.57	0.30	0.79	0.31	0.14	--	--	0.13	--	--	501.76	0.01	0.02	--	--	0.136254854	0.125440976	1.36E-01
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	5.26	0.21	0.55	0.21	0.09	--	--	0.09	--	--	348.96	0.00	0.01	--	--	0.094759619	0.087239014	9.48E-02
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	3.91	0.16	0.41	0.16	0.07	--	--	0.06	--	--	259.28	0.00	0.01	--	--	0.070406589	0.064818764	7.04E-02
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	151.89	6.09	15.91	6.13	2.73	--	--	2.52	--	--	10068.39	0.12	0.42	--	--	2.734089734	2.517098485	2.73E+00
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	292.81	3.86	20.21	6.69	2.89	--	--	2.65	--	--	10963.11	0.17	0.53	--	--	2.886296824	2.651000888	2.886296824
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	190.01	2.47	13.51	4.34	1.85	--	--	1.70	--	--	7114.18	0.11	0.34	--	--	1.850678093	1.699807597	1.850678093
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	67.96	0.72	3.73	1.27	0.33	--	--	0.30	--	--	2079.00	0.03	0.12	--	--	0.328745621	0.301945706	0.328745621
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	18.58	0.22	0.07	0.27	0.05	--	--	0.05	--	--	437.49	0.01	0.03	--	--	0.050276226	0.04617762	0.050276226
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	292.81	3.86	20.21	6.69	2.89	--	--	2.65	--	--	10963.11	0.17	0.53	--	--	2.886296824	2.651000888	2.886296824
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	190.01	2.47	13.51	4.34	1.85	--	--	1.70	--	--	7114.18	0.11	0.34	--	--	1.850678093	1.699807597	1.850678093
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	67.96	0.72	3.73	1.27	0.33	--	--	0.30	--	--	2079.00	0.03	0.12	--	--	0.328745621	0.301945706	0.328745621
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	18.58	0.22	0.07	0.27	0.05	--	--	0.05	--	--	437.49	0.01	0.03	--	--	0.050276226	0.04617762	0.050276226
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	292.81	3.86	20.21	6.69	2.89	--	--	2.65	--	--	10963.11	0.17	0.53	--	--	2.886296824	2.651000888	2.886296824
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	190.01	2.47	13.51	4.34	1.85	--	--	1.70	--	--	7114.18	0.11	0.34	--	--	1.850678093	1.699807597	1.850678093
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	67.96	0.72	3.73	1.27	0.33	--	--	0.30	--	--	2079.00	0.03	0.12	--	--	0.328745621	0.301945706	0.328745621
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	18.58	0.22	0.07	0.27	0.05	--	--	0.05	--	--	437.49	0.01	0.03	--	--	0.050276226	0.04617762	0.050276226
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	11.86	0.41	1.07	0.41	0.18	--	--	0.17	--	--	676.80	0.01	0.03	--	--	0.183787007	0.169200736	0.183787007
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	7.84	0.27	0.71	0.27	0.12	--	--	0.11	--	--	447.18	0.01	0.02	--	--	0.121431463	0.111794046	0.121431463
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	5.45	0.19	0.49	0.19	0.08	--	--	0.08	--	--	310.99	0.00	0.01	--	--	0.084450564	0.077748138	0.084450564
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	4.05	0.14	0.37	0.14	0.06	--	--	0.06	--	--	231.07	0.00	0.01	--	--	0.06274694	0.057767024	0.06274694
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	279.60	9.65	25.21	9.72	4.33	--	--	3.99	--	--	15950.82	0.18	0.66	--	--	4.33147302	3.98770532	4.33147302
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	11.86	0.41	1.07	0.41	0.18	--	--	0.17	--	--	676.80	0.01	0.03	--	--	0.183787007	0.169200736	0.183787007
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	7.84	0.27	0.71	0.27	0.12	--	--	0.11	--	--	447.18	0.01	0.02	--	--	0.121431463	0.111794046	0.121431463
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	5.45	0.19	0.49	0.19	0.08	--	--	0.08	--	--	310.99	0.00	0.01	--	--	0.084450564	0.077748138	0.084450564
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	4.05	0.14	0.37	0.14	0.06	--	--	0.06	--	--	231.07	0.00	0.01	--	--	0.06274694	0.057767024	0.06274694
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	279.60	9.65	25.21	9.72	4.33	--	--	3.99	--	--	15950.82	0.18	0.66	--	--	4.33147302	3.98770532	4.33147302
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	11.86	0.41	1.07	0.41	0.18	--	--	0.17	--	--	676.80	0.01	0.03	--	--	0.183787007	0.169200736	0.183787007
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	7.84	0.27	0.71	0.27	0.12	--	--	0.11	--	--	447.18	0.01	0.02	--	--	0.121431463	0.111794046	0.121431463
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	5.45	0.19	0.49	0.19	0.08	--	--	0.08	--	--	310.99	0.00	0.01	--	--	0.084450564	0.077748138	0.084450564
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	4.05	0.14	0.37	0.14	0.06	--	--	0.06	--	--	231.07	0.00	0.01	--	--	0.06274694	0.057767024	0.06274694
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	279.60	9.65	25.21	9.72	4.33	--	--	3.99	--	--	15950.82	0.18	0.66	--	--	4.33147302	3.98770532	4.33147302
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control Tu	Berthing	ULSD	Berthing	0.000	0.000	0.000	0.000	0.000	--	--	0.000	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control Tu	Berthing	ULSD	Berthing	0.000	0.000	0.000	0.000	0.000	--	--	0.000	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	49.344	1.336	7.743	0.056	0.824	--	--	0.758	--	--	4913.684	0.041	0.234	--	--	0.823524914	0.757642921	0
Daily	lbd	Proposed Project	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	5.076	0.142	1.295	0.009	0.104	--	--	0.096	--	--	804.099	0.007	0.038	--	--	0.103974715	0.095656738	0
Daily	lbd	Proposed Project	Uncontrolled	2025	HC	Yokahama Tug Propulsion	FENDER	Berthing	ULSD	Berthing	12.139	0.350	1.923	0.015	0.209	--	--	0.193	--	--	1288.880	0.011	0.061	--	--	0.209485347	0.19272652	0
Daily	lbd	Proposed Project	Uncontrolled	2025	HC	Yokahama Tug Auxiliary	FENDER	Berthing	ULSD	Berthing	1.571	0.048	0.363	0.002	0.044	--	--	0.041	--	--	213.808	0.002	0.010	--	--	0.044158256	0.040625596	0
Daily	lbd	Proposed Project	Uncontrolled	2025	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	5.979	0.173	0.947	0.007	0.103	--	--	0.095	--	--	634.821	0.005	0.030	--	--	0.10317935	0.094925002	0
Daily	lbd	Proposed Project	Uncontrolled	2025	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	0.774	0.023	0.179	0.001	0.022	--	--	0.020	--	--	105.308	0.001	0.005	--	--	0.021749589	0.020009622	0
Daily	lbd	Proposed Project	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control Tu	Berthing	ULSD	Berthing	0.000	0.000	0.000	0.000	0.000	--	--	0.000	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control Tu	Berthing	ULSD	Berthing	0.000	0.000	0.000	0.000	0.000	--	--	0.000	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	35.877	1.263	7.566	0.056	0.472	--	--	0.434	--	--	4913.684	0.041	0.234	--	--	0.47173735	0.433998362	0
Daily	lbd	Proposed Project	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	5.084	0.142	1.297	0.009	0.105	--	--	0.096	--	--	804.099	0.007	0.038	--	--	0.104501776	0.096141634	0
Daily	lbd	Proposed Project	Uncontrolled	2027	HC	Yokahama Tug Propulsion	FENDER	Berthing	ULSD	Berthing	12.166	0.352	1.929	0.015	0.211	--	--	0.194	--	--	1288.880	0.011	0.061	--	--	0.21095727	0.194080689	0
Daily	lbd	Proposed Project	Uncontrolled	2027	HC	Yokahama Tug Auxiliary	FENDER	Berthing	ULSD	Berthing	1.573	0.048	0.363	0.002	0.044	--	--	0.041	--	--	213.808	0.002	0.010	--	--	0.044298401	0.040754529	0
Daily	lbd	Proposed Project	Uncontrolled	2027	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	5.992	0.173	0.950	0.007	0.104	--	--	0.096	--	--	634.821	0.005	0.030	--	--	0.103904327	0.095591981	0
Daily	lbd	Proposed Project	Uncontrolled	2027	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	0.775	0.023	0.179	0.001	0.022	--	--	0.020	--	--	105.308	0.001	0.005	--	--	0.021818615	0.020073126	0
Daily	lbd	Proposed Project	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control Tu	Berthing	ULSD	Berthing	0.000	0.000	0.000	0.000	0.000	--	--	0.000	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control Tu	Berthing	ULSD	Berthing	0.000	0.000	0.000	0.000	0.000	--	--	0.000	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	10.223	0.281	5.239	0.056	0.246	--	--	0.227	--	--	4913.684	0.029	0.234	--	--	0.246448304	0.226732439	0
Daily	lbd	Proposed Project	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	5.098	0.143	1.301	0.009	0.105	--	--	0.097	--	--	804.099	0.007	0.038	--	--	0.10538021	0.096949794	0
Daily	lbd	Proposed Project	Uncontrolled	2049	HC	Yokahama Tug Propulsion	FENDER	Berthing	ULSD	Berthing	9.620	0.266	1.542	0.015	0.126	--	--	0.116	--	--	1288.880	0.008	0.061	--	--	0.12595856	0.115881875	0
Daily	lbd	Proposed Project	Uncontrolled	2049	HC	Yokahama Tug Auxiliary	FENDER	Berthing	ULSD	Berthing	1.577	0.048	0.364	0.002	0.045	--	--	0.041	--	--	213.808	0.002	0.010	--	--	0.044648762	0.041076861	0
Daily	lbd	Proposed Project	Uncontrolled	2049	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	4.738	0.131	0.759	0.007	0.062	--	--	0.057	--	--	634.821	0.004	0.030	--	--	0.062039291	0.057076148	0
Daily	lbd	Proposed Project	Uncontrolled	2049	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	0.777	0.024	0.180	0.001	0.022	--	--	0.020	--	--	105.308	0.001	0.005	--	--	0.021991181	0.020231887	0
Daily	lbd	Reduced Project	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control Tu	Berthing	ULSD	Berthing	0.000	0.000	0.000	0.000	0.000	--	--	0.000	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control Tu	Berthing	ULSD	Berthing	0.000	0.000	0.000	0.000	0.000	--	--	0.000	--	--	0.000	0.000	0.000	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	49.344	1.336	7.743	0.056	0.824	--	--	0.758	--	--	4913.684	0.041	0.234	--	--	0.823524914	0.757642921	0
Daily	lbd	Reduced Project	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	5.076	0.142	1.295	0.009	0.104	--	--	0.096	--	--	804.099	0.007	0.038	--	--	0.103974715	0.095656738	0
Daily	lbd	Reduced Project	Uncontrolled	2025	HC	Yokahama Tug Propulsion	FENDER	Berthing	ULSD	Berthing	12.139	0.350	1.923	0.015	0.209	--	--	0.193	--	--	1288.880	0.011	0.061	--	--	0.209485347	0.19272652	0
Daily	lbd	Reduced Project	Uncontrolled	2025	HC	Yokahama Tug Auxiliary	FENDER	Berthing	ULSD	Berthing	1.571	0.048	0.363	0.002	0.044	--	--	0.041	--	--	213.808	0.002	0.010	--	--	0.044158256	0.040625596	0
Daily	lbd	Reduced Project	Uncontrolled	2025	HC	Yokahama Tug Propulsion	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	5.98	0.17	0.95	0.01	0.10	--	--	0.09	--	--	634.82	0.01	0.03	--	--	0.10317935	0.094925002	0
Daily	lbd	Reduced Project	Uncontrolled	2025	HC	Yokahama Tug Auxiliary	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	0.77	0.02	0.18	0.00	0.02	--	--	0.02	--	--	105.31	0.00	0.01	--	--	0.021749589	0.020009622	0
Daily	lbd	Reduced Project	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control Tu	Berthing	ULSD	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control Tu	Berthing	ULSD	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	35.88	1.26	7.57	0.06	0.47	--	--	0.43	--	--	4913.68	0.04	0.23	--	--	0.47173735	0.433998362	0
Daily	lbd	Reduced Project	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control Tu	Transit	ULSD	All Zones	5.08	0.14	1.30	0.01	0.10	--	--	0.10	--	--	804.10	0.01	0.04	--	--	0.104501776	0.096141634	0

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Daily	lbd	Reduced Project	Uncontrolled	2027	HC	Yokohama Tug Propulsion	FENDER	Berthing	ULSD	Berthing	12.17	0.35	1.93	0.01	0.21	--	--	0.19	--	--	1288.88	0.01	0.06	--	--	0.21095727	0.194080689	0
Daily	lbd	Reduced Project	Uncontrolled	2027	HC	Yokohama Tug Auxiliary	FENDER	Berthing	ULSD	Berthing	1.57	0.05	0.36	0.00	0.04	--	--	0.04	--	--	213.81	0.00	0.01	--	--	0.044298401	0.040754529	0
Daily	lbd	Reduced Project	Uncontrolled	2027	HC	Yokohama Tug Propulsion	HC1 and HC2 for Control T	Transit	ULSD	All Zones	5.99	0.17	0.95	0.01	0.10	--	--	0.10	--	--	634.82	0.01	0.03	--	--	0.103904327	0.095591981	0
Daily	lbd	Reduced Project	Uncontrolled	2027	HC	Yokohama Tug Auxiliary	HC1 and HC2 for Control T	Transit	ULSD	All Zones	0.77	0.02	0.18	0.00	0.02	--	--	0.02	--	--	105.31	0.00	0.01	--	--	0.021818615	0.020073126	0
Daily	lbd	Reduced Project	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	ULSD	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	ULSD	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	ULSD	All Zones	10.22	0.28	5.24	0.06	0.25	--	--	0.23	--	--	4913.68	0.03	0.23	--	--	0.246448304	0.226732439	0
Daily	lbd	Reduced Project	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	ULSD	All Zones	5.10	0.14	1.30	0.01	0.11	--	--	0.10	--	--	804.10	0.01	0.04	--	--	0.10538021	0.096949794	0
Daily	lbd	Reduced Project	Uncontrolled	2049	HC	Yokohama Tug Propulsion	FENDER	Berthing	ULSD	Berthing	9.62	0.27	1.54	0.01	0.13	--	--	0.12	--	--	1288.88	0.01	0.06	--	--	0.12595856	0.115881875	0
Daily	lbd	Reduced Project	Uncontrolled	2049	HC	Yokohama Tug Auxiliary	FENDER	Berthing	ULSD	Berthing	1.58	0.05	0.36	0.00	0.04	--	--	0.04	--	--	213.81	0.00	0.01	--	--	0.044648762	0.041076861	0
Daily	lbd	Reduced Project	Uncontrolled	2049	HC	Yokohama Tug Propulsion	HC1 and HC2 for Control T	Transit	ULSD	All Zones	4.74	0.13	0.76	0.01	0.06	--	--	0.06	--	--	634.82	0.00	0.03	--	--	0.062039291	0.057076148	0
Daily	lbd	Reduced Project	Uncontrolled	2049	HC	Yokohama Tug Auxiliary	HC1 and HC2 for Control T	Transit	ULSD	All Zones	0.78	0.02	0.18	0.00	0.02	--	--	0.02	--	--	105.31	0.00	0.01	--	--	0.021991181	0.020231887	0
Daily	lbd	Product Terminal	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	ULSD	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	ULSD	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	ULSD	All Zones	49.34	1.34	7.74	0.06	0.82	--	--	0.76	--	--	4913.68	0.04	0.23	--	--	0.823524914	0.757642921	0
Daily	lbd	Product Terminal	Uncontrolled	2025	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	ULSD	All Zones	5.08	0.14	1.29	0.01	0.10	--	--	0.10	--	--	804.10	0.01	0.04	--	--	0.103974715	0.095656738	0
Daily	lbd	Product Terminal	Uncontrolled	2025	HC	Yokohama Tug Propulsion	FENDER	Berthing	ULSD	Berthing	12.14	0.35	1.92	0.01	0.21	--	--	0.19	--	--	1288.88	0.01	0.06	--	--	0.209485347	0.19272652	0
Daily	lbd	Product Terminal	Uncontrolled	2025	HC	Yokohama Tug Auxiliary	FENDER	Berthing	ULSD	Berthing	1.57	0.05	0.36	0.00	0.04	--	--	0.04	--	--	213.81	0.00	0.01	--	--	0.044158256	0.040625596	0
Daily	lbd	Product Terminal	Uncontrolled	2025	HC	Yokohama Tug Propulsion	HC1 and HC2 for Control T	Transit	ULSD	All Zones	5.98	0.17	0.95	0.01	0.10	--	--	0.09	--	--	634.82	0.01	0.03	--	--	0.10317935	0.094925002	0
Daily	lbd	Product Terminal	Uncontrolled	2025	HC	Yokohama Tug Auxiliary	HC1 and HC2 for Control T	Transit	ULSD	All Zones	0.77	0.02	0.18	0.00	0.02	--	--	0.02	--	--	105.31	0.00	0.01	--	--	0.021749589	0.020009622	0
Daily	lbd	Product Terminal	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	ULSD	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	ULSD	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	ULSD	All Zones	35.88	1.26	7.57	0.06	0.47	--	--	0.43	--	--	4913.68	0.04	0.23	--	--	0.47173735	0.433998362	0
Daily	lbd	Product Terminal	Uncontrolled	2027	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	ULSD	All Zones	5.08	0.14	1.30	0.01	0.10	--	--	0.10	--	--	804.10	0.01	0.04	--	--	0.104501776	0.096141634	0
Daily	lbd	Product Terminal	Uncontrolled	2027	HC	Yokohama Tug Propulsion	FENDER	Berthing	ULSD	Berthing	12.17	0.35	1.93	0.01	0.21	--	--	0.19	--	--	1288.88	0.01	0.06	--	--	0.21095727	0.194080689	0
Daily	lbd	Product Terminal	Uncontrolled	2027	HC	Yokohama Tug Auxiliary	FENDER	Berthing	ULSD	Berthing	1.57	0.05	0.36	0.00	0.04	--	--	0.04	--	--	213.81	0.00	0.01	--	--	0.044298401	0.040754529	0
Daily	lbd	Product Terminal	Uncontrolled	2027	HC	Yokohama Tug Propulsion	HC1 and HC2 for Control T	Transit	ULSD	All Zones	5.99	0.17	0.95	0.01	0.10	--	--	0.10	--	--	634.82	0.01	0.03	--	--	0.103904327	0.095591981	0
Daily	lbd	Product Terminal	Uncontrolled	2027	HC	Yokohama Tug Auxiliary	HC1 and HC2 for Control T	Transit	ULSD	All Zones	0.77	0.02	0.18	0.00	0.02	--	--	0.02	--	--	105.31	0.00	0.01	--	--	0.021818615	0.020073126	0
Daily	lbd	Product Terminal	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Berthing	ULSD	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Berthing	ULSD	Berthing	0.00	0.00	0.00	0.00	0.00	--	--	0.00	--	--	0.00	0.00	0.00	--	--	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	HC	Bulk Assist Propulsion	HC1 and HC2 for Control T	Transit	ULSD	All Zones	10.22	0.28	5.24	0.06	0.25	--	--	0.23	--	--	4913.68	0.03	0.23	--	--	0.246448304	0.226732439	0
Daily	lbd	Product Terminal	Uncontrolled	2049	HC	Bulk Assist Auxiliary	HC1 and HC2 for Control T	Transit	ULSD	All Zones	5.10	0.14	1.30	0.01	0.11	--	--	0.10	--	--	804.10	0.01	0.04	--	--	0.10538021	0.096949794	0
Daily	lbd	Product Terminal	Uncontrolled	2049	HC	Yokohama Tug Propulsion	FENDER	Berthing	ULSD	Berthing	9.62	0.27	1.54	0.01	0.13	--	--	0.12	--	--	1288.88	0.01	0.06	--	--	0.12595856	0.115881875	0
Daily	lbd	Product Terminal	Uncontrolled	2049	HC	Yokohama Tug Auxiliary	FENDER	Berthing	ULSD	Berthing	1.58	0.05	0.36	0.00	0.04	--	--	0.04	--	--	213.81	0.00	0.01	--	--	0.044648762	0.041076861	0
Daily	lbd	Product Terminal	Uncontrolled	2049	HC	Yokohama Tug Propulsion	HC1 and HC2 for Control T	Transit	ULSD	All Zones	4.74	0.13	0.76	0.01	0.06	--	--	0.06	--	--	634.82	0.00	0.03	--	--	0.062039291	0.057076148	0
Daily	lbd	Product Terminal	Uncontrolled	2049	HC	Yokohama Tug Auxiliary	HC1 and HC2 for Control T	Transit	ULSD	All Zones	0.78	0.02	0.18	0.00	0.02	--	--	0.02	--	--	105.31	0.00	0.01	--	--	0.021991181	0.020231887	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.936684	0.312228	1.56114	0.0267624	0	0	0	0	0	0	5476.791348	0.10303524	0.010303524	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.594004567	0.594004567	0.594004567	0.594004567	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading si	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.591907541	0.591907541	0.591907541	0.591907541	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.200019549	0.03206272	0.200019549	0.03206272	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.025538642	0.003830796	0.025538642	0.003830796	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00101133	0.0001517	0.00101133	0.0001517	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excava	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.015472002	0.0015472	0.015472002	0.0015472	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.107382506	0.026357524	0.107382506	0.026357524	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002245492	0.000551166	0.002245492	0.000551166	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000112419	2.75939E-05	0.000112419	2.75939E-05	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tr	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.134546992	0.033025171	0.134546992	0.033025171	0
Annual	tpy	Proposed Project	Uncontrolled	2027	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0241963	0.005939092	0.0241963	0.005939092	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	17.28	5.76	28.8	0.493714286	0	0	0	0	0	0	101036.16	1.9008	0.19008	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	6.439200883	6.439200883	6.439200883	6.439200883	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading si	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	4.243064807	4.243064807	4.243064807	4.243064807	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	6.101286196	0.923909052	6.101286196	0.923909052	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.090624761	0.013593714	0.090624761	0.013593714	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00358874	0.000538311	0.00358874	0.000538311	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excava	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.255032997	0.0255033	0.255032997	0.0255033	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.769417567	0.188857039	0.769417567	0.188857039	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.202333706	0.049663728	0.202333706	0.049663728	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002466868	0.000605504	0.002466868	0.000605504	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tr	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.87018798	0.213591595	0.87018798	0.213591595	0
Daily	lbd	Proposed Project	Uncontrolled	2027	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.034295731	0.008418043	0.034295731	0.008418043	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.468342	0.156114	0.78057	0.0133812	0	0	0	0	0	0	2738.395674	0.05151762	0.005151762	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.297002284	0.297002284	0.297002284	0.297002284	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading si	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.29595377	0.29595377	0.29595377	0.29595377	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.100009775	0.01603136	0.100009775	0.01603136	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.012769321	0.001915398	0.012769321	0.001915398	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000505665	7.58498E-05	0.000505665	7.58498E-05	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excava	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.007736001	0.0007736	0.007736001	0.0007736	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.053691253	0.013178762	0.053691253	0.013178762	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001122746	0.000275583	0.001122746	0.000275583	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	5.62097E-05	1.37969E-05	5.62097E-05	1.37969E-05	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tr	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.067273496	0.016512585	0.067273496	0.016512585	0
Annual	tpy	Proposed Project	Uncontrolled	2025	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01209815	0.002969546	0.01209815	0.002969546	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	8.64	2.88	14.4	0.246857143	0	0	0	0	0	0	50518.08	0.9504	0.09504	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	3.219600441	3.219600441	3.219600441	3.219600441	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading si	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	2.121532403	2.121532403	2.121532403	2.121532403	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	3.050643098	0.461954526	3.050643098	0.461954526	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04531238	0.006796857	0.04531238	0.006796857	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00179437	0.000269155	0.00179437	0.000269155	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excava	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.127516499	0.01275165	0.127516499	0.01275165	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.384708783	0.09442852	0.384708783	0.09442852	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.101166853	0.024831864	0.101166853	0.024831864	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001233434	0.000302752	0.001233434	0.000302752	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tr	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.43509399	0.106795798	0.43509399	0.106795798	0
Daily	lbd	Proposed Project	Uncontrolled	2025	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.017147865	0.004209021	0.017147865	0.004209021	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.936684	0.312228	1.56114	0.0267624	0	0	0	0	0	0	5476.791348	0.10303524	0.010303524	0	0	0	0	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.594004567	0.594004567	0.594004567	0.594004567	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading si	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.591907541	0.591907541	0.591907541	0.591907541	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.200019549	0.03206272	0.200019549	0.03206272	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.025538642	0.003830796	0.025538642	0.003830796	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00101133	0.0001517	0.00101133	0.0001517	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excava	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.015472002	0.0015472	0.015472002	0.0015472	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.107382506	0.026357524	0.107382506	0.026357524	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002245492	0.000551166	0.002245492	0.000551166	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000112419	2.75939E-05	0.000112419	2.75939E-05	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tr	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.134546992	0.033025171	0.134546992	0.033025171	0
Annual	tpy	Proposed Project	Uncontrolled	2049	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0241963	0.005939092	0.0241963	0.005939092	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	17.28	5.76	28.8	0.493714286	0	0	0	0	0	0	101036.16	1.9008	0.19008	0	0	0	0	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	6.439200883	6.439200883	6.439200883	6.439200883	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading si	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	4.243064807	4.243064807	4.243064807	4.243064807	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	6.101286196	0.923909052	6.101286196	0.923909052	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.090624761	0.013593714	0.090624761	0.013593714	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00358874	0.000538311	0.00358874	0.000538311	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excava	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.255032997	0.0255033	0.255032997	0.0255033	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.769417567	0.188857039	0.769417567	0.188857039	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.202333706	0.049663728	0.202333706	0.049663728	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002466868	0.000605504	0.002466868	0.000605504	0
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tr	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.87018798	0.213591595	0.87018798	0.213591595	0

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Daily	lbd	Proposed Project	Uncontrolled	2049	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.034295731	0.008418043	0.034295731	0.008418043	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.632050191	0.210683397	1.053416985	0.018058577	0	0	0	0	0	0	3695.597465	0.069525521	0.006952552	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.400818953	0.400818953	0.400818953	0.400818953	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.399403933	0.399403933	0.399403933	0.399403933	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.13496803	0.021635096	0.13496803	0.021635096	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.017232817	0.002584923	0.017232817	0.002584923	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000682419	0.000102363	0.000682419	0.000102363	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.010440108	0.001044011	0.010440108	0.001044011	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.072458944	0.017785377	0.072458944	0.017785377	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0015152	0.000371913	0.0015152	0.000371913	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	7.58577E-05	1.86196E-05	7.58577E-05	1.86196E-05	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.090788838	0.022284533	0.090788838	0.022284533	0
Annual	tpy	Reduced Project	Uncontrolled	2027	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016327039	0.004007546	0.016327039	0.004007546	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	11.66009806	3.886699355	19.43349677	0.333145659	0	0	0	0	0	0	68176.59338	1.282610787	0.128261079	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	4.345006583	4.345006583	4.345006583	4.345006583	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	2.863110633	2.863110633	2.863110633	2.863110633	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	4.116990472	0.623429986	4.116990472	0.623429986	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.06115125	0.009172687	0.06115125	0.009172687	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002421589	0.000363238	0.002421589	0.000363238	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.172089685	0.017208968	0.172089685	0.017208968	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.519183118	0.127435856	0.519183118	0.127435856	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.136529563	0.033511802	0.136529563	0.033511802	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001664579	0.000408578	0.001664579	0.000408578	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.587180392	0.144126096	0.587180392	0.144126096	0
Daily	lbd	Reduced Project	Uncontrolled	2027	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.023141874	0.005680278	0.023141874	0.005680278	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.316025095	0.105341698	0.526708492	0.009029288	0	0	0	0	0	0	1847.798733	0.03476276	0.003476276	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.200409476	0.200409476	0.200409476	0.200409476	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.199701967	0.199701967	0.199701967	0.199701967	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.067484015	0.010817548	0.067484015	0.010817548	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.008616408	0.001292461	0.008616408	0.001292461	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00034121	5.11815E-05	0.00034121	5.11815E-05	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.005220054	0.000522005	0.005220054	0.000522005	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.036229472	0.008892689	0.036229472	0.008892689	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0007576	0.000185956	0.0007576	0.000185956	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	3.79289E-05	9.30981E-06	3.79289E-05	9.30981E-06	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.045394419	0.011142266	0.045394419	0.011142266	0
Annual	tpy	Reduced Project	Uncontrolled	2025	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00816352	0.002003773	0.00816352	0.002003773	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	5.830049032	1.943349677	9.716748387	0.166572829	0	0	0	0	0	0	34088.29669	0.641305394	0.064130539	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	2.172503291	2.172503291	2.172503291	2.172503291	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	1.431555317	1.431555317	1.431555317	1.431555317	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	2.058495236	0.311714993	2.058495236	0.311714993	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.030575625	0.004586344	0.030575625	0.004586344	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001210795	0.000181619	0.001210795	0.000181619	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.086044842	0.008604484	0.086044842	0.008604484	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.259591559	0.063717928	0.259591559	0.063717928	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.068264782	0.016755901	0.068264782	0.016755901	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00083229	0.000204289	0.00083229	0.000204289	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.293590196	0.072063048	0.293590196	0.072063048	0
Daily	lbd	Reduced Project	Uncontrolled	2025	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.011570937	0.002840139	0.011570937	0.002840139	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.632050191	0.210683397	1.053416985	0.018058577	0	0	0	0	0	0	3695.597465	0.069525521	0.006952552	0	0	0	0	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.400818953	0.400818953	0.400818953	0.400818953	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.399403933	0.399403933	0.399403933	0.399403933	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.13496803	0.021635096	0.13496803	0.021635096	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.017232817	0.002584923	0.017232817	0.002584923	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000682419	0.000102363	0.000682419	0.000102363	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.010440108	0.001044011	0.010440108	0.001044011	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.072458944	0.017785377	0.072458944	0.017785377	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0015152	0.000371913	0.0015152	0.000371913	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	7.58577E-05	1.86196E-05	7.58577E-05	1.86196E-05	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.090788838	0.022284533	0.090788838	0.022284533	0
Annual	tpy	Reduced Project	Uncontrolled	2049	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.016327039	0.004007546	0.016327039	0.004007546	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	11.66009806	3.886699355	19.43349677	0.333145659	0	0	0	0	0	0	68176.59338	1.282610787	0.128261079	0	0	0	0	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	4.345006583	4.345006583	4.345006583	4.345006583	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	2.863110633	2.863110633	2.863110633	2.863110633	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	4.116990472	0.623429986	4.116990472	0.623429986	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.06115125	0.009172687	0.06115125	0.009172687	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002421589	0.000363238	0.002421589	0.000363238	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.172089685	0.017208968	0.172089685	0.017208968	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.519183118	0.127435856	0.519183118	0.127435856	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.136529563	0.033511802	0.136529563	0.033511802	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001664579	0.000408578	0.001664579	0.000408578	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.587180392	0.144126096	0.587180392	0.144126096	0
Daily	lbd	Reduced Project	Uncontrolled	2049	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.023141874	0.005680278	0.023141874	0.005680278	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.250819226	0.250819226	0.250819226	0.250819226	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.413698819	0.413698819	0.413698819	0.413698819	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000112419	2.75939E-05	0.000112419	2.75939E-05	0
Annual	tpy	Product Terminal	Uncontrolled	2027	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.134546992	0.033025171	0.134546992	0.033025171	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	1.378127616	1.378127616	1.378127616	1.378127616	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	3.636912692	3.636912692	3.636912692	3.636912692	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002466868	0.000605504	0.002466868	0.000605504	0
Daily	lbd	Product Terminal	Uncontrolled	2027	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.87018798	0.213591595	0.87018798	0.213591595	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.125409613	0.125409613	0.125409613	0.125409613	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.206849409	0.206849409	0.206849409	0.206849409	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	5.62097E-05	1.37969E-05	5.62097E-05	1.37969E-05	0
Annual	tpy	Product Terminal	Uncontrolled	2025	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.067273496	0.016512585	0.067273496	0.016512585	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.689063808	0.689063808	0.689063808	0.689063808	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	1.818456346	1.818456346	1.818456346	1.818456346	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001233434	0.000302752	0.001233434	0.000302752	0
Daily	lbd	Product Terminal	Uncontrolled	2025	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.43509399	0.106795798	0.43509399	0.106795798	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.250819226	0.250819226	0.250819226	0.250819226	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.413698819	0.413698819	0.413698819	0.413698819	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000112419	2.75939E-05	0.000112419	2.75939E-05	0
Annual	tpy	Product Terminal	Uncontrolled	2049	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.134546992	0.033025171	0.134546992	0.033025171	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	1.378127616	1.378127616	1.378127616	1.378127616	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	3.636912692	3.636912692	3.636912692	3.636912692	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002466868	0.000605504	0.002466868	0.000605504	0
Daily	lbd	Product Terminal	Uncontrolled	2049	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.87018798	0.213591595	0.87018798	0.213591595	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.981537088	0.008864466	0.0453847	0.009520544	0.015533942	0.02370755	0.05134051	0.014861951	0.005926888	0.017969178	1005.400805	0.000411731	0.158401306	0.033991222	0.0083433	0.124573224	0.09825331	1.55E-02
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.016414164	0.001381186	0.020248529	3.12545E-05	6.44603E-06	0	0	6.16717E-06	0	0	3.275991257	6.41525E-05	0	0	0	6.44603E-06	6.16717E-06	6.45E-06
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.028633125	9.40224E-06	4.8138E-05	1.00981E-05	1.64763E-05	2.51458E-05	5.44551E-05	1.57636E-05	6.28645E-06	1.90593E-05	1.066394496	4.3671E-07	0.000168011	0	0	9.60773E-05	9.53645E-05	1.65E-05
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.00276702	0.000663564	0.054950594	0.000202678	0.000103226	0.000586959	0.000613456	9.49122E-05	0.00014674	0.00021471	20.50151621	0.000178104	0.000325043	0.003772108	0.000925881	0.005075748	0.002221208	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.00086579	0.001051097	0.010583093	3.47389E-06	8.06595E-06	2.93479E-06	3.06728E-06	7.41635E-06	7.33698E-07	1.07355E-06	0.351393855	0.000236016	0.000116546			1.4068E-05	1.34184E-05	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	1.873926829	0.016486312	0.081773241	0.018674425	0.03138655	0.0474151	0.103368538	0.030028781	0.011853775	0.036178988	1972.080751	0.000765746	0.310702125	0.067982444	0.0166866	0.250152632	0.19749902	3.14E-02
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.032757288	0.002760051	0.040558099	6.11529E-05	1.24178E-05	0	0	1.18806E-05	0	0	6.40984115	0.000128197	0	0	0	1.24178E-05	1.18806E-05	1.24E-05
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.057055435	1.74865E-05	8.67341E-05	1.98073E-05	3.32906E-05	5.02916E-05	0.000109639	3.18505E-05	1.25729E-05	3.83738E-05	2.091719091	8.12201E-07	0.000329551			0.000193222	0.000191782	3.33E-05
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.00308831	0.00071209	0.064905505	0.000253092	0.000123545	0.000763046	0.000794705	0.000113595	0.000190762	0.000278147	25.60101112	0.000197073	0.000388803	0.004903741	0.001203645	0.006585038	0.002874993	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.00103931	0.001207532	0.012443333	4.32904E-06	9.81298E-06	3.81523E-06	3.97353E-06	9.02267E-06	9.53808E-07	1.39073E-06	0.437895306	0.000275797	0.000144192			1.76017E-05	1.68114E-05	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	1.438841465	0.012847259	0.051167708	0.015700128	0.029929543	0.0474151	0.111731214	0.028634804	0.011853775	0.039105925	1657.98513	0.000596722	0.261216232	0.067982444	0.0166866	0.257058301	0.204467718	2.99E-02
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.032578454	0.00275678	0.040731606	5.61504E-05	1.17327E-05	0	0	1.12252E-05	0	0	5.885493819	0.000128045	0	0	0	1.17327E-05	1.12252E-05	1.17E-05
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.047652408	1.36267E-05	5.42719E-05	1.66526E-05	3.17452E-05	5.02916E-05	0.00011851	3.0372E-05	1.25729E-05	4.14783E-05	1.758568531	6.32923E-07	0.000277063			0.000200546	0.000199173	3.17E-05
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.001801991	0.000291498	0.047309494	0.000215884	5.06591E-05	0.000763046	0.000789449	4.65792E-05	0.000190762	0.000276307	21.83729467	0.000101284	0.000299115	0.004903741	0.001203645	0.006506895	0.00280272	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.000730894	0.000532422	0.007399078	3.58449E-06	4.00885E-06	3.81523E-06	3.94725E-06	3.68599E-06	9.53808E-07	1.38154E-06	0.362581403	0.00014284	0.000117545			1.17713E-05	1.14485E-05	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.495887759	0.004478466	0.022929054	0.004809927	0.007847988	0.011977422	0.025938022	0.007508488	0.002994355	0.009078308	507.9440786	0.000208013	0.080026796	0.017170717	0.00421463	0.062934149	0.049638562	7.85E-03
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.009282218	0.000781061	0.011450553	1.76744E-05	3.64523E-06	0	0	3.48754E-06	0	0	1.852574634	3.62783E-05	0	0	0	3.64523E-06	3.48754E-06	3.65E-06
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.016192046	5.31697E-06	2.72221E-05	5.71049E-06	9.31737E-06	1.422E-05	3.07944E-05	8.9143E-06	3.55499E-06	1.0778E-05	0.603046601	2.4696E-07	9.50102E-05			5.43317E-05	5.39287E-05	9.32E-06
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.158497154	0.007248304	0.110110356	0.000323877	0.003289103	0.001692384	0.00746176	0.003025965	0.000253856	0.00093272	96.76814859	0.001173342	0.000323711	0.005518565	0.001354557	0.017961812	0.013534666	3.29E-03
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.001385322	9.29767E-05	0.000753645	1.02893E-06	2.45666E-05	0	0	2.42735E-05	0	0	0	0	0	0	0	2.45666E-05	2.42735E-05	2.46E-05
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000489783	9.29329E-05	0.000293927	2.9015E-07	2.89928E-06	1.1032E-06	4.86404E-06	2.66733E-06	1.65479E-07	6.08004E-07	0.086702438	5.32737E-05	3.73633E-06			8.86652E-06	8.63457E-06	2.90E-06
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.946736895	0.008329141	0.04131311	0.009434609	0.015856972	0.023954844	0.052223389	0.015171006	0.005988711	0.018278186	996.3257789	0.000386867	0.156971532	0.034341433	0.008429261	0.126376638	0.099778499	1.59E-02
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.018524262	0.00156081	0.022935625	3.4582E-05	7.02229E-06	0	0	6.71851E-06	0	0	3.624768258	7.24956E-05	0	0	0	7.02229E-06	6.71851E-06	7.02E-06
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.032264876	9.88861E-06	4.90482E-05	1.12011E-05	1.88259E-05	2.84399E-05	6.20012E-05	1.80115E-05	7.10998E-06	2.17004E-05	1.182868154	4.5593E-07	0.000186361			0.000109267	0.000108453	1.88E-05
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.296952491	0.01209399	0.21439659	0.000625676	0.005378941	0.003396802	0.015065087	0.004948611	0.000509518	0.001883137	187.0573873	0.002211961	0.00064751	0.011037131	0.002709114	0.03487796	0.026119614	5.38E-03
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.002683467	0.000165494	0.001447114	1.99009E-06	3.87685E-05	0	0	4.78036E-05	0	0	0	0	0	0	0	3.87685E-05	4.78036E-05	3.88E-05
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000962301	0.000182943	0.000573453	5.64777E-07	4.94273E-06	2.21424E-06	9.82035E-06	4.54729E-06	3.32135E-07	1.22754E-06	0.168873795	0.000107153	7.47368E-06			1.69773E-05	1.65819E-05	4.94E-06
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.726925022	0.006490634	0.025850719	0.007931948	0.015120869	0.023954844	0.056448342	0.014466747	0.005988711	0.01975692	837.6398003	0.000301473	0.131970492	0.034341433	0.008429261	0.129865489	0.103299194	1.51E-02
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.018423131	0.001558961	0.023033743	3.17531E-05	6.63485E-06	0	0	6.34783E-06	0	0	3.32824959	7.24097E-05	0	0	0	6.63485E-06	6.34783E-06	6.63E-06
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.02694746	7.70588E-06	3.06908E-05	9.41705E-06	1.7952E-05	2.84399E-05	6.70172E-05	1.71754E-05	7.10998E-06	2.3456E-05	0.994471352	3.57918E-07	0.000156679			0.000113409	0.000112632	1.80E-05
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.220660137	0.003802944	0.192593025	0.000549704	0.000891178	0.003403304	0.015218973	0.000819881	0.000510493	0.001902371	164.8362719	0.001933311	0.000647511	0.011037131	0.002709114	0.030550586	0.022151272	8.91E-04
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.002376794	9.30506E-05	0.001277361	1.7513E-06	2.61862E-06	0	0	4.47135E-05	0	0	0	0	0	0	0	2.61862E-06	4.47135E-05	2.62E-06
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000911359	0.000172732	0.000499659	5.12682E-07	1.74548E-06	2.21848E-06	9.92067E-06	1.60584E-06	3.32771E-07	1.24008E-06	0.153734805	0.000109394	7.47369E-06			1.38846E-05	1.3745E-05	1.75E-06
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.662315897	0.005981513	0.030624424	0.006424218	0.010481903	0.015997243	0.034643251	0.010028461	0.003999311	0.012125138	678.4185172	0.000277826	0.106885114	0.022936399	0.005629843	0.084058797	0.066298798	1.05E-02
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.011075854	0.000931989	0.013663185	2.10897E-05	4.34961E-06	0	0	4.16145E-06	0	0	2.210554359	4.32885E-05	0	0	0	4.34961E-06	4.16145E-06	4.35E-06
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.019320894	6.34439E-06	3.24823E-05	6.81395E-06	1.11178E-05	1.69677E-05	3.67449E-05	1.06368E-05	4.24193E-06	1.28607E-05	0.719575486	2.9468E-07	0.000113369			6.48305E-05	6.43495E-05	1.11E-05
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.001245159	0.000298604	0.024727767	9.12053E-05	4.64516E-05	0.000264131	0.000276055	4.27105E-05	6.60329E-05	9.66193E-05	9.225682294	8.0147E-05	0.000146269	0.001697449	0.000416646	0.002284087	0.000999543	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.000389606	0.000472993	0.004762392	1.56325E-06	3.62968E-06	1.32066E-06	1.38028E-06	3.33736E-06	3.30164E-07	4.83096E-07	0.158127235	0.000106207	5.24459E-05			6.33061E-06	6.03829E-06	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	1.264477465	0.011124538	0.055178473	0.01260102	0.021178834	0.031994486	0.069750422	0.020262647	0.007998621	0.024412648	1330.709198	0.000516706	0.209653776	0.045872799	0.011259687	0.16879654	0.133267242	2.12E-02
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.022103773	0.001862411	0.027367559	4.12644E-05	8.37923E-06	0	0	8.01675E-06	0	0	4.325195393	8.65042E-05	0	0	0	8.37923E-06	8.01675E-06	8.38E-06
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.038499535	1.17994E-05	5.85259E-05	1.33655E-05	2.24637E-05	3.39355E-05	7.39819E-05	2.14919E-05	8.48387E-06	2.58937E-05	1.411438063	5.48052E-07	0.000222373			0.000130381	0.000129409	2.25E-05
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.00213806	0.000492985	0.044934581	0.000175218	8.55314E-05	0.000528263	0.000550181	7.8643E-05	0.000132066	0.000192563	17.72377693	0.000136435	0.000269171	0.003394897	0.000833293	0.004558872	0.001990379	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.000719523	0.000835984	0.008614615	2.99703E-06	6.7936E-06	2.64131E-06	2.7509E-06	6.24647E-06	6.60329E-07	9.62816E-07	0.303158289	0.000190936	9.98253E-05			1.21858E-05	1.16387E-05	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.970893089	0.008668999	0.034526649	0.010594041	0.020195683	0.031994486	0.07539334	0.019322027	0.007998621	0.026387669	1118.765579	0.000402653	0.176261973	0.045872799	0.011259687	0.173456308	0.13796954	2.02E-02
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.0219831	0.001860204	0.027484636	3.78888E-05	7.91693E-06	0	0	7.57445E-06	0	0	3.971379345	8.64017E-05	0	0	0	7.91693E-06	7.57445E-06	7.92E-06
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.032154615	9.19491E-06	3.66212E-05	1.12367E-05	2.14209E-05	3.39355E-05	7.99672E-05	2.04942E-05	8.48387E-06	2.79885E-05	1.186636663	4.2708E-07	0.000186955			0.000135323	0.000134397	2.14E-05
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.001247533	0.000201806	0.032752727	0.000149458	3.50717E-05	0.000528263	0.000546542	3.22471E-05	0.000132066	0.00019129	15.11812708	7.01194E-05	0.00020708	0.003394897	0.000833293	0.004504774	0.001940345	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.000506003	0.0003686	0.005122438	2.48157E-06	2.77536E-06	2.64131E-06	2.73271E-06	2.55184E-06	6.60329E-07	9.56448E-07	0.251017894	9.88892E-05	8.13772E-05			8.14938E-06	7.92586E-06	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.334612262	0.003021953	0.015471934	0.003245614	0.00529562	0.008082055	0.017502308	0.005066534	0.002020514	0.006125808	342.747556	0.000140362	0.054000017	0.011586357	0.002843924	0.042466339	0.033494821	5.30E-03
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.006263401	0.00052704	0.007726538	1.19262E-05	2.45971E-06	0	0	2.3533E-06	0	0	1.250069555	2.44796E-05	0	0	0	2.45971E-06	2.3533E-06	2.46E-06
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.010925975	3.58775E-06	1.83687E-05	3.85329E-06	6.28712E-06	9.59526E-06	2.07793E-05	6.01514E-06	2.39882E-06	7.27274E-06	0.406920284	1.66642E-07	6.41105E-05			3.66617E-05	3.63897E-05	6.29E-06
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.107136051	0.004899486	0.074429026	0.000218924	0.002223267	0.001143966	0.005043772	0.002045399	0.000171594	0.000630472	65.41036879	0.00079312	0.000218812	0.003730271	0.000915612	0.012141275	0.009148749	2.22E-03
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.000936407	6.28476E-05	0.000509426	6.95506E-07	1.66058E-05	0	0	1.64076E-05	0	0	0	0	0	0	0	1.66058E-05	1.64076E-05	1.66E-05
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000331068	6.2818E-05	0.00019868	1.96127E-07	1.95977E-06	7.45707E-07	3.28784E-06	1.80298E-06	1.11856E-07	4.1098E-07	0.058606458	3.60103E-05	2.52557E-06			5.99332E-06	5.83653E-06	1.96E-06
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.638833625	0.005620289	0.02787702	0.006366231	0.010699875	0.01616411	0.035238995	0.010237003	0.004041028	0.012333648	672.294924	0.000261048	0.105920339	0.023172713	0.005687848	0.085275694	0.067327957	1.07E-02
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.012499694	0.001053194	0.015476368	2.3335E-05	4.73846E-06	0	0	4.53347E-06	0	0	2.445900078	4.89181E-05	0	0	0	4.73846E-06	4.53347E-06	4.74E-06
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.021771506	6.67258E-06	3.30964E-05	7.55818E-06	1.27032E-05	1.91905E-05	4.18368E-05	1.21537E-05	4.79763E-06	1.46429E-05	0.798168905	3.09924E-07	0.000125752			7.37305E-05	7.3181E-05	1.27E-05
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.200724848	0.008174925	0.144921239	0.000422925	0.003635892	0.002296066	0.010183236	0.003345011	0.000344408	0.001272905	126.4413226	0.001495174	0.000437684	0.007460541	0.001831224	0.023575735	0.017655536	3.64E-03
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.001813888	0.000111865	0.000978176	1.3452E-06	2.62055E-05	0	0	3.23128E-05	0	0	0	0	0	0	0	2.62055E-05	3.23128E-05	2.62E-05
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000650467	0.00012366	0.000387625	3.81761E-07	3.34103E-06	1.49672E-06	6.63806E-06	3.07374E-06	2.24507E-07	8.29758E-07	0.114150135	7.24302E-05	5.05183E-06			1.14758E-05	1.12085E-05	3.34E-06
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.490510245	0.004379713	0.017443398	0.005352274	0.010203172	0.01616411	0.038089885	0.009761788	0.004041028	0.01333146	565.2177207	0.000203426	0.089050282	0.023172713	0.005687848	0.08762988	0.06970363	1.02E-02
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.012431454	0.001051946	0.015542575	2.14261E-05	4.47703E-06	0	0	4.28335E-06	0	0	2.245816933	4.88602E-05	0	0	0	4.47703E-06	4.28335E-06	4.48E-06
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.01818345	5.19973E-06	2.07093E-05	6.35438E-06	1.21135E-05	1.91905E-05	4.52215E-05	1.15895E-05	4.79763E-06	1.58275E-05	0.671043604	2.41514E-07	0.000105723			7.65255E-05	7.60015E-05	1.21E-05
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 110	0.14915508	0.002570598	0.130183133	0.000371572	0.000602391	0.002300461	0.010287255	0.000554198	0.000345068	0.001285907	111.4209737	0.00130682	0.000437684	0.007460541	0.001831224	0.020650649	0.014973138	6.02E-04
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.001606592	6.28975E-05	0.000863431	1.18379E-06	1.77005E-06	0	0	3.02241E-05	0	0	0	0	0	0	0	1.77005E-06	3.02241E-05	1.77E-06
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000616033	0.000116758	0.000337744	3.46547E-07	1.17986E-06	1.49958E-06	6.70587E-06	1.08547E-06	2.24936E-07	8.38233E-07	0.103916944	7.39445E-05	5.05184E-06			9.38531E-06	9.29092E-06	1.18E-06
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.982	0.009	0.045	0.010	0.016	0.024	0.051	0.015	0.006	0.018	1005.401	0.000	0.158	0.034	0.008	0.125	0.098	0.015533942
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.016	0.001	0.020	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.276	0.000	0.000	0.000	0.000	0.000	0.000	6.44603E-06
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	2.863E-02	9.402E-06	4.814E-05	1.010E-05	1.648E-05	0.000E+00	0.000E+00	1.576E-05	0.000E+00	0.000E+00	1.066E+00	4.367E-07	1.680E-04			0.000	0.000	1.64763E-05
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.001	0.000	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.150	0.000	0.000	0.001	0.000	0.002	0.001	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.105	0.000	0.000			0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	1.874	0.016	0.082	0.019	0.031	0.047	0.103	0.030	0.012	0.036	1972.081	0.001	0.311	0.068	0.017	0.250	0.197	0.03138655
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.033	0.003	0.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.410	0.000	0.000	0.000	0.000	0.000	0.000	1.24178E-05
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	5.706E-02	1.749E-05	8.673E-05	1.981E-05	3.329E-05	0.000E+00	0.000E+00	3.185E-05	0.000E+00	0.000E+00	2.092E+00	8.122E-07	3.296E-04			0.000	0.000	3.32906E-05
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.001	0.000	0.030	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.816	0.000	0.000	0.002	0.001	0.003	0.001	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.000	0.001	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.202	0.000	0.000			0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sour	Running Offsite	Diesel	Within SCAB - 710	1.439	0.013	0.051	0.016	0.030	0.047	0.112	0.029	0.012	0.039	1657.985	0.001	0.261	0.068	0.017	0.257	0.204	0.029929543
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 710	0.033	0.003	0.041	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.885	0.000	0.000	0.000	0.000	0.000	0.000	1.17327E-05
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 710	4.765E-02	1.363E-05	5.427E-05	1.665E-05	3.175E-05	0.000E+00	0.000E+00	3.037E-05	0.000E+00	0.000E+00	1.759E+00	6.329E-07	2.771E-04			0.000	0.000	3.17452E-05

Operational Master Summary for Modeling

(orange) manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sourc	Running Offsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 710	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Within SCAB	0.001	0.000	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.079	0.000	0.000	0.002	0.001	0.003	0.001	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Within SCAB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Within SCAB	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.167	0.000	0.000			0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	See Rodway Segment Sourc	Running Offsite	Diesel	Within SCAB - 110	0.496	0.004	0.023	0.005	0.008	0.012	0.026	0.008	0.003	0.009	507.944	0.000	0.080	0.017	0.004	0.063	0.050	0.007847988
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.009	0.001	0.011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.853	0.000	0.000	0.000	0.000	0.000	0.000	3.64523E-06
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	1.619E-02	5.317E-06	2.722E-05	5.710E-06	9.317E-06	0.000E+00	0.000E+00	8.914E-06	0.000E+00	0.000E+00	6.030E-01	2.470E-07	9.501E-05			0.000	0.000	9.31737E-06
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	See Rodway Segment Sourc	Running Offsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	See Rodway Segment Sourc	Running Offsite	Diesel	Within SCAB - 110	0.947	0.008	0.041	0.009	0.016	0.024	0.052	0.015	0.006	0.018	996.326	0.000	0.157	0.034	0.008	0.126	0.100	0.015856972
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.019	0.002	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.625	0.000	0.000	0.000	0.000	0.000	0.000	7.02229E-06
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	3.226E-02	9.889E-06	4.905E-05	1.120E-05	1.883E-05	0.000E+00	0.000E+00	1.801E-05	0.000E+00	0.000E+00	1.183E+00	4.593E-07	1.864E-04			0.000	0.000	1.88259E-05
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	See Rodway Segment Sourc	Running Offsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	See Rodway Segment Sourc	Running Offsite	Diesel	Within SCAB - 110	0.727	0.006	0.026	0.008	0.015	0.024	0.056	0.014	0.006	0.020	837.640	0.000	0.132	0.034	0.008	0.130	0.103	0.015120869
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFSIDLE	Idling	Diesel	Within SCAB - 110	0.018	0.002	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.328	0.000	0.000	0.000	0.000	0.000	0.000	6.63485E-06
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	GBFS_RUN	Running Onsite	Diesel	Within SCAB - 110	2.695E-02	7.706E-06	3.069E-05	9.417E-06	1.795E-05	0.000E+00	0.000E+00	1.718E-05	0.000E+00	0.000E+00	9.945E-01	3.579E-07	1.567E-04			0.000	0.000	1.7952E-05
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	See Rodway Segment Sourc	Running Offsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPSIDLE	Idling	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	GYPS_RUN	Running Onsite	Diesel	Within SCAB - 110	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			0.000	0.000	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	296.49	0.00	0.05	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.82	0.00	0	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	208.28	0.00	0.00	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.02	0.00	0.00	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	581.56	0.00	0.09	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	1.61	0.00	0	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	402.62	0.00	0.00	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.05	0.00	0.00	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	488.94	0.00	0.08	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	1.48	0.00	0	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	354.79	0.00	0.00	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.05	0.00	0.00	--	--	0	0	--
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	200.0647301	8.19305E-05	0.03152028	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.554377554	1.08562E-05	0	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	140.7879392	0.001707095	0.000470967	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.015967945	3.54933E-05	2.38293E-06	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	392.4243956	0.000152376	0.061826623	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	1.084701326	2.16941E-05	0	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	272.1497152	0.003218181	0.000942062	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.031727882	7.14556E-05	4.76652E-06	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	329.9225005	0.000118742	0.051979424	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.99596898	2.16684E-05	0	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	239.8202236	0.002812774	0.000942063	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.031285881	7.30926E-05	4.76653E-06	--	--	0	0	--
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	296.4913774	0.000121419	0.046712337	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0.82157492	1.60886E-05	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	581.5640245	0.000225818	0.091625649	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	1.607502682	3.21502E-05	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	488.9376383	0.000175973	0.077032324	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	1.476003364	3.21121E-05	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	GGBFS trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Offsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Idling	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Gypsum Trucks	* N/A	Running Onsite	Diesel	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	--
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Offsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Idling	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Onroad	Worker Vehicles	* N/A	Running Onsite	Gasoline	Outside SCAB	--	--	--	--	--	--	--	--	--	--	0	0	0	--	--	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-Site	0.017215711	0.006473592	0.125687546	0.000667273	0.00114257			0.001051164			72.09	0.00	0.00			0.00	0.00	1.14E-03
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-Site	0.019607699	0.003910677	0.021725983	0.000711515	0.000977669			0.000899456			76.79	0.00	0.00			0.00	0.00	9.78E-04

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-Site	0.035754201	0.021769498	0.265856045	0.001334546	0.002531475			0.002328957			144.74	0.01	0.00			0.00	0.00	2.53E-03
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-Site	0.04451879	0.026582256	0.052263447	0.00142303	0.002697333			0.002481546			153.73	0.01	0.00			0.00	0.00	2.70E-03
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-Site	0.041045319	0.057058755	0.323779861	0.001334546	0.003516816			0.003235471			144.00	0.01	0.00			0.00	0.00	3.52E-03
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-Site	0.04451879	0.026582256	0.052263447	0.00142303	0.002697333			0.002481546			153.73	0.01	0.00			0.00	0.00	2.70E-03
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-site	0.017215711	0.006473592	0.125687546	0.000667273	0.00114257			0.001051164			72.09	0.00	0.00			0.00	0.00	1.14E-03
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-site	0.019607699	0.003910677	0.021725983	0.000711515	0.000977669			0.000899456			76.79	0.00	0.00			0.00	0.00	9.78E-04
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-site	0.035323999	0.018900253	0.261146466	0.001334546	0.00245136			0.002255251			144.74	0.01	0.00			0.00	0.00	2.45E-03
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-site	0.04451879	0.026582256	0.052263447	0.00142303	0.002697333			0.002481546			153.73	0.01	0.00			0.00	0.00	2.70E-03
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Offroad	Excavator	OFF-01-A	Offroad	Diesel	On-site	0.038894309	0.042712534	0.300231962	0.001334546	0.003116243			0.002866943			144.00	0.01	0.00			0.00	0.00	3.12E-03
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Offroad	Front End Loader	OFF-01-B	Offroad	Diesel	On-site	0.04451879	0.026582256	0.052263447	0.00142303	0.002697333			0.002481546			153.73	0.01	0.00			0.00	0.00	2.70E-03
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	7.95	0.32	0.83	0.32	0.14			0.13			526.89	0.01	0.02			0.14	0.13	1.43E-01
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	7.95	0.32	0.83	0.32	0.14			0.13			526.89	0.01	0.02			0.14	0.13	1.43E-01
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	7.95	0.32	0.83	0.32	0.14			0.13			526.89	0.01	0.02			0.14	0.13	1.43E-01
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00			0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	7.95	0.32	0.83	0.32	0.14	0.00	0.00	0.13	0.00	0.00	526.89	0.01	0.02	0.00	0.00	0.14	0.13	1.43E-01
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nauti	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	7.95	0.32	0.83	0.32	0.14	0.00	0.00	0.13	0.00	0.00	526.89	0.01	0.02	0.00	0.00	0.14	0.13	1.43E-01
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	7.95	0.32	0.83	0.32	0.14	0.00	0.00	0.13	0.00	0.00	526.89	0.01	0.02	0.00	0.00	0.14	0.13	1.43E-01
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	* N/A	Transit	Marine Distilate	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	OGVBERTH	Berthing	Marine Distilate	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Main	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	7.95	0.32	0.83	0.32	0.14	0.00	0.00	0.13	0.00	0.00	526.89	0.01	0.02	0.00	0.00	0.14	0.13	0.143077871
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	7.95	0.32	0.83	0.32	0.14	0.00	0.00	0.13	0.00	0.00	526.89	0.01	0.02	0.00	0.00	0.14	0.13	0.143077871
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	* N/A	Transit	Marine Distilate	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV5	Transit	Marine Distilate	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV4	Transit	Marine Distilate	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV3	Transit	Marine Distilate	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGV2	Transit	Marine Distilate	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	OGVBERTH	Berthing	Marine Distilate	Berthing	7.95	0.32	0.83	0.32	0.14	0.00	0.00	0.13	0.00	0.00	526.89	0.01	0.02	0.00	0.00	0.14	0.13	0.143077871
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Aux	ANCHOR	Anchorage	Marine Distilate	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	* N/A	Transit	Electric	State Boundary to 40-Nautic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV5	Transit	Electric	40 to 20 Nautical Miles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV4	Transit	Electric	20-Nautical Miles to Precau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV3	Transit	Electric	Precautionary Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGV2	Transit	Electric	Maneuvering	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	OGVBERTH	Berthing	Electric	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Boiler	ANCHOR	Anchorage	Electric	Anchorage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	OGVs	Bulk Generator	OGVBERTH	Berthing	Diesel	Berthing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.72	0.24	1.2	0.020571429	0	0	0	0	0	0	101036.16	1.9008	0.19008	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.268300037	0.268300037	0.268300037	0.268300037	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.176794367	0.176794367	0.176794367	0.176794367	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.279601547	0.042339663	0.279601547	0.042339663	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.090624761	0.013593714	0.090624761	0.013593714	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00358874	0.000538311	0.00358874	0.000538311	0

Operational Master Summary for Modeling

manually removed emissions to address double counting with stationary sources 3.23.23

Period	Unit	Scenario	Added Control	Calendar Year	Source Type	Source Category	AERMOD Source Group	Type	Fuel	Location	NOx	VOC	CO	SO2	PM10exh	PM10TW	PM10BW	PM2.5exh	PM2.5TW	PM2.5BW	CO2	CH4	N2O	PM10fug	PM2.5fug	PM10total	PM2.5total	DPM
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02125275	0.002125275	0.02125275	0.002125275	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.028095894	0.006896265	0.028095894	0.006896265	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.007388376	0.00181351	0.007388376	0.00181351	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002161912	0.000530651	0.002161912	0.000530651	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.060880992	0.014943516	0.060880992	0.014943516	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2027	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.005539446	0.001359682	0.005539446	0.001359682	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.36	0.12	0.6	0.010285714	0	0	0	0	0	0	50518.08	0.9504	0.09504	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.134150018	0.134150018	0.134150018	0.134150018	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.088397183	0.088397183	0.088397183	0.088397183	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.139800774	0.021169831	0.139800774	0.021169831	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04531238	0.006796857	0.04531238	0.006796857	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00179437	0.000269155	0.00179437	0.000269155	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.010626375	0.001062637	0.010626375	0.001062637	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.014047947	0.003448132	0.014047947	0.003448132	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003694188	0.000906755	0.003694188	0.000906755	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001080956	0.000265326	0.001080956	0.000265326	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.030440496	0.007471758	0.030440496	0.007471758	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2025	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002769723	0.000679841	0.002769723	0.000679841	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.72	0.24	1.2	0.020571429	0	0	0	0	0	0	101036.16	1.9008	0.19008	0	0	0	0	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.268300037	0.268300037	0.268300037	0.268300037	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.176794367	0.176794367	0.176794367	0.176794367	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.279601547	0.042339663	0.279601547	0.042339663	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.090624761	0.013593714	0.090624761	0.013593714	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00358874	0.000538311	0.00358874	0.000538311	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02125275	0.002125275	0.02125275	0.002125275	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.028095894	0.006896265	0.028095894	0.006896265	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.007388376	0.00181351	0.007388376	0.00181351	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002161912	0.000530651	0.002161912	0.000530651	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.060880992	0.014943516	0.060880992	0.014943516	0
Hourly	lb/hr	Proposed Project	Uncontrolled	2049	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.005539446	0.001359682	0.005539446	0.001359682	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.485837419	0.161945806	0.809729032	0.013881069	0	0	0	0	0	0	68176.59338	1.282610787	0.128261079	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.181041941	0.181041941	0.181041941	0.181041941	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.119296276	0.119296276	0.119296276	0.119296276	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.188667909	0.028569712	0.188667909	0.028569712	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.06115125	0.009172687	0.06115125	0.009172687	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002421589	0.000363238	0.002421589	0.000363238	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.014340807	0.001434081	0.014340807	0.001434081	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.018958384	0.004653422	0.018958384	0.004653422	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004985485	0.00122371	0.004985485	0.00122371	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001458802	0.00035807	0.001458802	0.00035807	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.041080922	0.010083499	0.041080922	0.010083499	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2027	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003737875	0.000917478	0.003737875	0.000917478	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.24291871	0.080972903	0.404864516	0.006940535	0	0	0	0	0	0	34088.29669	0.641305394	0.064130539	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.09052097	0.09052097	0.09052097	0.09052097	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.059648138	0.059648138	0.059648138	0.059648138	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.094333954	0.014284856	0.094333954	0.014284856	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.030575625	0.004586344	0.030575625	0.004586344	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001210795	0.000181619	0.001210795	0.000181619	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.007170404	0.00071704	0.007170404	0.00071704	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.009479192	0.002326711	0.009479192	0.002326711	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002492743	0.000611855	0.002492743	0.000611855	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.000729401	0.000179035	0.000729401	0.000179035	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.020540461	0.00504175	0.020540461	0.00504175	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2025	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001868938	0.000458739	0.001868938	0.000458739	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	Dryer Combustion	EP0102	Dryer Combustion	Natural Gas	On-site	0.485837419	0.161945806	0.809729032	0.013881069	0	0	0	0	0	0	68176.59338	1.282610787	0.128261079	0	0	0	0	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.181041941	0.181041941	0.181041941	0.181041941	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.119296276	0.119296276	0.119296276	0.119296276	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.188667909	0.028569712	0.188667909	0.028569712	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	GBFS Storage Pile	FUG02A	GBFS Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.06115125	0.009172687	0.06115125	0.009172687	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	Gypsum Storage Pile	FUG02B	Gypsum Storage Pile	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002421589	0.000363238	0.002421589	0.000363238	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	Unpaved roads - Excavator	FUG03A	Unpaved roads - Excavat	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.014340807	0.001434081	0.014340807	0.001434081	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	GBFS Paved roads - FEL	FUG03B	GBFS Paved roads - FEL	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.018958384	0.004653422	0.018958384	0.004653422	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	Gypsum Paved roads - FEL	FUG03B	Gypsum Paved roads - F	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.004985485	0.00122371	0.004985485	0.00122371	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001458802	0.00035807	0.001458802	0.00035807	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.041080922	0.010083499	0.041080922	0.010083499	0
Hourly	lb/hr	Reduced Project	Uncontrolled	2049	Stationary Sources	Paved roads - Gypsum Trucks	FUG03D	Paved roads - Gypsum T	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.003737875	0.000917478	0.003737875	0.000917478	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.057421984	0.057421984	0.057421984	0.057421984	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.151538029	0.151538029	0.151538029	0.151538029	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002161912	0.000530651	0.002161912	0.000530651	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2027	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.060880992	0.014943516	0.060880992	0.014943516	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2025	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Stationary Sources	Mill	EP0102	Mill	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Stationary Sources	Material handling	Fug01A to FUG01S	Material handling	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.057421984	0.057421984	0.057421984	0.057421984	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Stationary Sources	Storage silos/ loading silos	EP03 to EP15	Storage silos/ loading sil	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.151538029	0.151538029	0.151538029	0.151538029	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Stationary Sources	Paved roads - Forklift	FUG03C	Paved roads - Forklift	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.002161912	0.000530651	0.002161912	0.000530651	0
Hourly	lb/hr	Product Terminal	Uncontrolled	2049	Stationary Sources	Paved roads - GGBFS Trucks	FUG04	Paved roads - GGBFS Tru	0	On-site	0	0	0	0	0	0	0	0	0	0	0	0	0	0.060880992	0.014943516	0.060880992	0.014943516	0

Energy Calculations

Operational electricity consumption in 2027 - Proposed Project

Description	Installed power kW	Operation Loads kW	Operational Hours hours/year	Operational Energy kW-hr/year	Percentage of Electricity
Material conveying to mill					
Conveyor	37.0	37.0	7,560	279,720	0.4%
Magnetic separator	3.5	3.5	7,560	26,460	0.0%
Plate feeder	75.0	65.0	7,560	491,400	0.8%
Plate feeder	5.5	5.0	7,560	37,800	0.1%
Weigh feeder	3.7	3.0	7,560	22,680	0.0%
Grinding plant					
Dynamic separator	450.0	300.0	7,560	2,268,000	3.6%
Dynamic separator	1.0	1.0	7,560	7,560	0.0%
Bucket elevator	112.0	80.0	7,560	604,800	0.9%
Filter	15.0	12.0	7,560	90,720	0.1%
Vibrating screen	0.8	0.5	7,560	3,780	0.0%
Rotary valve	11.0	8.0	7,560	60,480	0.1%
Mill fan	900.0	800.0	7,560	6,048,000	9.5%
Hot gas generator	56.0	40.0	7,560	302,400	0.5%
Hot gas generator	30.0	20.0	7,560	151,200	0.2%
Drum separator	10.0	10.0	7,560	75,600	0.1%
Mill filter	3.7	3.0	7,560	22,680	0.0%
Mill filter	3.7	3.0	7,560	22,680	0.0%
Mill filter	1.5	1.0	7,560	7,560	0.0%
Mill	7000.0	6500.0	7,560	49,140,000	77.0%
Mill	9.2	8.0	7,560	60,480	0.1%
Mill	15.0	11.0	7,560	83,160	0.1%
Mill	22.0	20.0	7,560	151,200	0.2%
Mill	7.5	6.0	7,560	45,360	0.1%
Mill	2.2	2.0	7,560	15,120	0.0%
Reject airslide	9.2	9.0	7,560	68,040	0.1%
Mill discharge airslide	5.5	5.0	7,560	37,800	0.1%
Product transport					
Product airslide	7.5	7.0	7,560	52,920	0.1%
Product airslide	7.5	7.0	7,560	52,920	0.1%
Product airslide	7.5	7.0	7,560	52,920	0.1%
Product airslide	7.5	7.0	7,560	52,920	0.1%
Bag filter	7.5	7.0	7,560	52,920	0.1%
Bag filter	0.4	0.3	7,560	2,268	0.0%
Bag Filter	7.5	7.0	7,560	52,920	0.1%
Bag Filter	0.4	0.4	7,560	2,797	0.0%
Product sampler	0.3	0.3	300	90	0.0%
Compressor room					
Air dryer	5.0	5.0	7,560	37,800	0.1%
Compressor	55.0	50.0	7,560	378,000	0.6%
Services					
Offices	50.0	35.0	7,560	264,600	0.4%
MCC	10.0	10.0	7,560	75,600	0.1%
Outload	450.0	380.0	2,600	988,000	1.5%
Lighting	50.0	40.0	7,560	302,400	0.5%
Ship unloading	668.0	600.0	2,160	1,296,000	2%
Total				63,789,755	kWhr/year

Operational electricity consumption in 2027 - Product Import Terminal

Description	Installed power kW	Operation Loads kW	Operational Hours hours/year	Operational Energy kW-hr/year	Percentage of Electricity
Services					
Offices	50.0	35.0	7,560	264,600	7.4%
MCC	10.0	10.0	7,560	75,600	2.1%
Outload	450.0	380.0	2,600	988,000	27.6%
Ship unloading	1200.0	900.0	2,160	1,944,000	54.4%
Lighting	50.0	40.0	7,560	302,400	8.5%
Total				3,574,600	kWhr/year

2027 Electricity Consumption by Alternative

Scenarios	Electricity Consumption 2027 (kWh/year)	Throughput (MT GGBFS/year)	Ratio (kWh/ MT GGBFS)
Proposed Project (PP)	63,789,755	775000	82.30936155
Reduced Project (RP)	43,043,681	522950	82.30936155
Product Import Terminal (PT)	3,574,600	775000	4.612387097

Notes:

[1] Product Import Terminal scenario does not require on site processing of material, thus requires less energy use at the project site.

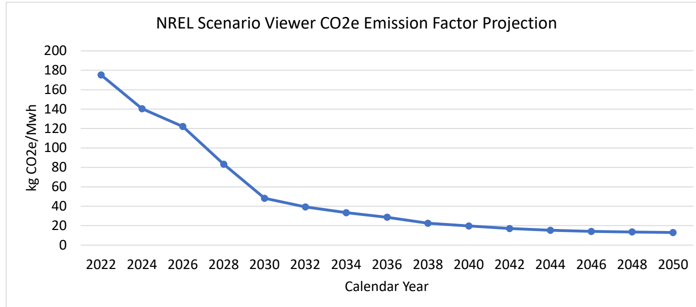
[2] Reduced Project scenario energy use is scaled down from the Proposed Project based on product throughput.

[3] Each row corresponds to one piece of equipment.

CALCULATION OF GHGs RELATED TO ELECTRICITY CONSUMPTION

Step 1. Source GHG EF Trend Reflecting Expected Increased Renewable Energy in California Grid per Current Policies

Row Labels	Combustion emissions rate (kg/MWh)	Annual Reduction
2022	175.23	0%
2024	140.44	-20%
2026	122.11	-13%
2028	83.35	-32%
2030	48.26	-42%
2032	39.36	-18%
2034	33.43	-15%
2036	28.67	-14%
2038	22.46	-22%
2040	19.69	-12%
2042	17.11	-13%
2044	15.25	-11%
2046	14.15	-7%
2048	13.55	-4%
2050	12.94	-5%



SOURCE: NREL Scenario Viewer https://scenarioviewer.nrel.gov

2022 Standard Scenarios Gagnon, Pieter, Maxwell Brown, Dan Steinberg, Patrick Brown, Sarah Awara, Vincent Carag, Stuart Cohen, Wesley Cole, Jonathan Ho, Sarah Inskeep, Nate Lee, Trieu Mai, Matthew Mowers, Caitlin Murphy, Brian Sergi (2022). 2022 Standard Scenarios Report: A U.S. Electricity Sector Outlook. National Renewable Energy Laboratory. NREL/TP-6A40-84327. https://www.nrel.gov/docs/fy23osti/84327.pdf

Selections in model:

Metric	*CO2 Emission Rate from Combustion [kg/MWh]*
Scenario	*Mid-case, nascent techs, current policies*
Base Year	*2022*
Location	*California*
Technologies	*All technologies*

Step 2. Application of EF projections to eGrid model EF for California

Year	NREL Projected Reduction in EF	EF (lb CO2e/MWh)	kg/MWh
2022	0%	531.70	241.17
2023	-10%	478.92	217.23
2024	-20%	383.83	174.10
2025	-16%	320.68	145.46
2026	-13%	278.83	126.47
2027	-22%	216.38	98.15
2028	-32%	147.70	66.99
2029	-37%	93.17	42.26
2030	-42%	53.94	24.47
2031	-30%	37.61	17.06
2032	-18%	30.68	13.92
2033	-17%	25.54	11.58
2034	-15%	21.69	9.84
2035	-15%	18.51	8.40
2036	-14%	15.88	7.20
2037	-18%	13.03	5.91
2038	-22%	10.20	4.63
2039	-17%	8.47	3.84
2040	-12%	7.43	3.37
2041	-13%	6.48	2.94
2042	-13%	5.63	2.55
2043	-12%	4.96	2.25
2044	-11%	4.42	2.00
2045	-9%	4.02	1.82
2046	-7%	3.73	1.69
2047	-6%	3.52	1.59
2048	-4%	3.37	1.53
2049	-4%	3.22	1.46
2050	-5%	3.07	1.39

(yellow) Base EF value for 2021, California (CAMX zone) in EPA's eGrid model, assumes the same for 2022. This values is more conservative than NREL estimate for CA in 2022.

https://www.epa.gov/egrid/power-profiler#/CAMX

(green) Electricity EFs used in the analysis

Step 3. Combination of emission factors with electricity consumption per scenario and year

GHG Emissions from Electricity Consumption

Scenarios	Years	Product Throughput (GGBFS - metric tons/year)	Electricity (MWhr)	Emission Factor (lb CO2e/MWh)	Annual Emissions MT CO2e / year
Proposed Project (PP)	2025	387,500	31,895	320.68	4,639
	2027	775,000	63,790	216.38	6,261
	2049	775,000	63,790	3.22	93
Reduced Project (RP)	2025	261,475	21,522	320.68	3,131
	2027	522,950	43,044	216.38	4,225
	2049	522,950	43,044	3.22	63
Product Import Terminal (PT)	2025	387,500	1,787	320.68	260
	2027	775,000	3,575	216.38	351
	2049	775,000	3,575	3.22	5