DRAFT
INITIAL STUDY

MCCULLOUGH–VICTORVILLE TRANSMISSION LINES 1 AND 2 UPGRADE PROJECT

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ACRONYMS AND ABBREVIATIONS

Acronym/ Abbreviation	Definition
AB	Assembly Bill
ACEC	Area of Critical Environmental Concern
BLM	U.S. Bureau of Land Management
BMP	best management practice
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDCA	California Desert Conservation Area
CDNCL	California Desert National Conservation Lands
CEQA	California Environmental Quality Act
CH_4	methane
CNEL	Community Noise Equivalent Level
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
dB	decibel
dBA	A-weighted decibel
DRECP	Desert Renewable Energy Conservation Plan
EIR	Environmental Impact Report
ERMA	Extensive Recreation Management Area
GHG	greenhouse gas
GHGRP	Greenhouse Gas Reduction Plan
GWP	global warming potential
I	Interstate
ips	inches per second
kV	kilovolt
LADWP	Los Angeles Department of Water and Power
L_{eq}	equivalent sound level
MCV1	McCullough–Victorville Transmission Line 1
MCV2	McCullough–Victorville Transmission Line 2
MM	Mitigation Measure
MT	metric ton
N_2O	nitrous oxide
NPDES	National Pollutant Discharge Elimination System
OHV	off-highway vehicle

Acronym/ Abbreviation	Definition
PPV	peak particle velocity
Project	McCullough–Victorville Transmission Lines 1 and 2 Upgrade Project
RPS	Renewable Portfolio Standard
RTP	Regional Transportation Plan
SB	Senate Bill
SCS	Sustainable Communities Strategy
SR	State Route
SRMA	Special Recreation Management Area
SWPPP	Stormwater Pollution Prevention Plan
USFWS	U.S. Fish and Wildlife Service
VMT	vehicle miles traveled

1 INTRODUCTION

1.1 Project Overview

The proposed McCullough–Victorville Transmission Lines 1 and 2 Upgrade Project (Project) is a transmission power line project proposed by the Los Angeles Department of Water and Power (LADWP). The Project would upgrade the McCullough–Victorville Transmission Lines 1 and 2 (MCV1 and MCV2) circuits to newly rate them at approximately 570 kilovolts (kV) at 2500 Amperes (A)/3000A from their current rating of 500 kV at 1600A/2400A (LADWP 2023). The upgrade of the existing McCullough-Victorville Transmission Lines, which run parallel to each other, would provide critical transmission capacity, and is required to accommodate incoming renewable energy resources along the West of the Colorado River Path 46 transmission corridor (LADWP 2023). The proposed Project would provide an additional 475 megawatts of electricity delivery capacity to the City of Los Angeles and would help to achieve the renewable energy objectives of the Los Angeles 100% Renewable Energy Study (LADWP 2021, 2023).

1.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et seq.) applies to proposed projects initiated by, funded by, and/or requiring discretionary approvals from state or local government agencies. The construction and operation of the proposed McCullough-Victorville Transmission Lines 1 and 2 Upgrade Project constitutes a project as defined by CEQA (California Public Resources Code Section 21065). Section 15367 of the CEQA Guidelines (14 California Code of Regulations 15000–15387) states that a CEQA lead agency is "the public agency which has the principal responsibility for carrying out or approving a project." Therefore, as a municipal utility that would fund, implement, and have discretionary approval authority for the proposed Project, LADWP is the lead agency responsible for compliance with CEQA.

As the CEQA lead agency, LADWP must complete an environmental review to determine if implementation of the proposed Project may result in significant adverse environmental impacts as defined under CEQA and to propose measures and/or alternatives, as feasible, to reduce or eliminate any such identified impacts. LADWP has prepared a CEQA Initial Study to help determine if the proposed Project could have the potential to cause significant adverse impacts. Based on the conclusions in the Initial Study (contained herein), LADWP has determined that the proposed Project may potentially create significant impacts related to various environmental factors considered under CEQA. Therefore, LADWP will prepare an Environmental Impact Report (EIR) for the proposed Project pursuant to CEQA. Environmental factors that were determined in the Initial Study to have less-than-significant impacts (with or without the incorporation of mitigation measures) will not be carried forward, in whole or in part, for further detailed evaluation in the EIR and, in accordance with Section 15063 of the CEQA Guidelines, the EIR analysis will focus on those environmental factors that may involve potentially significant impacts.

1.3 Project Location

The proposed Project is located in Clark County, Nevada and San Bernadino County, California and would upgrade 162 miles of transmission line (LADWP 2023; Psomas 2023). The general Project vicinity is shown in Figure 1-1, Project Location, and the Project alignment is shown in Figures 1-2.1–1-2.3, Project Alignment. MCV1 and MCV2 run northeast/southwest, parallel to each other, for 162 miles from Boulder City, Nevada, to Victorville, California (Psomas 2023). Approximately 138 miles of the Transmission Lines are in the state of California and the remaining 24 miles are located in the state of Nevada (Psomas 2023). Construction of the proposed Project would require establishing a temporary work area at each transmission structure along the entire length of the transmission lines (LADWP 2023). The work area at each transmission tower would be approximately 60 by 60 feet, the work area at each stringing site would be approximately 200 by 500 feet, the work area at each temporary guard structure[1] would be approximately 200 by 50 feet, and the work area at each Tower Crane Pad would be approximately 50 by 50 feet (LADWP 2023). The majority of the work shall occur within existing pre-disturbed areas along the McCullough-Victorville transmission line corridor, including existing tower sites, spur roads and main access roads. Most tower replacements are expected to be installed in place of the existing tower (LADWP 2023). Access to the Project site is available from various construction access routes along the McCullough-Victorville transmission line corridor.

1.4 Environmental Setting

The proposed Project would upgrade the transmission lines beginning in Searchlight, Nevada and ending in Victorville, California. Generally, as the transmission line corridor is mostly isolated away from development, the Project route largely crosses undeveloped state and federal lands, including lands under the jurisdiction of California State Lands Commission and the U.S. Bureau of Land Management (BLM), including Areas of Critical Environmental Concern (ACEC) (Aspen 2020). National Monuments, Wilderness Areas, California Desert Conservation Areas (CDCAs), and Desert Renewable Energy Conservation Plan (DRECP) areas are located within, the Project area (Aspen 2020). The Project also crosses rural and low-density residential land uses on non-federal land in San Bernardino County, California and Clark County, Nevada (Aspen 2020).

The transmission line corridor is entirely in the Mojave Desert, a hot, dry desert region south of the Sierra Nevada Mountains and east-northeast of the Transverse Ranges. Climate conditions are characterized by large fluctuations in daily temperature, high seasonal winds, and low humidity. Annual precipitation ranges from three to 6 inches and mainly occurs in the winter and spring months. Unique years can generate increased rainfall, when subtropical air from the south moves into the area and creates monsoonal thunderstorms. The region also receives periodic snowfall during cold winter storms. The terrain of the Mojave Desert includes broad desert plains, rocky mountain ranges, narrow ephemeral channels, broad sandy desert washes, and dry lake beds (Psomas 2023). The various mountain ranges that occur along the corridor (from west to east) include the Newberry Mountains, Soda Mountains, Silurian Hills, Clark Mountains, and

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1 For protection during wire installation, temporary guard structures would be built as required next to highways, railroads, power lines, structures, utility infrastructure, and other major obstacles. Guard structures would typically consist of H-frame poles placed on either side of an obstacle. These structures would prevent ground wire, conductor, or equipment from falling onto an obstacle.

McCullough Mountains (Psomas 2023). These ranges consist of granitic soils and volcanic sandstone intermixed with alluvial soils, and as such, these ranges largely consist of very rocky conditions with coarse sandy soils (Clary 1959; Cox et al. 1987; Grose 1959). Lower elevation areas consist of finer soil textures (e.g., sandy/gravelly loam) (Psomas 2023). The various desert washes generally consist of deep gravelly sand while the finer materials such as loam and clay loam are found in dry lake beds that are in the immediate vicinity of the transmission corridor (USDA NRCS 2022).

The hydrology of the area is characterized by steep drainages in the mountainous areas that convey surface water from rainfall events that are generally relegated to the winter months (though monsoonal moisture may come from the south and southeast causing potentially severe summer thunderstorms) (Psomas 2023). The western Mojave Desert is characterized by numerous small channels that convey surface water immediately after a rainfall event (USFWS 2022). While these channels in the western end of the alignment drain into the Mojave River, channels that occur along most of the transmission corridor drain toward one of several lakebeds that are typically dry (Psomas 2023). Such lakebeds that occur along the transmission corridor include Red Pass Lake, Silver Lake, Ivanpah Lake, and Roach Lake (Psomas 2023).

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2 PROJECT DESCRIPTION

2.1 Proposed Facilities

The proposed Project would upgrade the two existing single-circuit MCV1 and MCV2, which run parallel to each other, to increase their capacity to newly rate them at approximately 570 kV at 2500A/3000A (continuous/emergency) from their current rating of 500 kV at 1600A/2400A (LADWP 2023). The Project would require upgrading insulators and hardware on the 1,740 existing transmission towers that span 162 miles from Boulder City, Nevada to the Victorville Switching Station in Victorville, California. The Project is divided into the Nevada segment, which runs for 24 miles from the McCullough Substation to Line 1 Tower 27-5 (MCV1_27-5) and Line 2 Tower 26-7 (MCV2_26-7), and the California segment, which runs for 138 miles from MCV1_27-6 and MCV2_27-1 to the Victorville Switching Station (LADWP 2023; Psomas 2023). The tower numbering uses mileage from the source of the energy feed. For example, Tower 27-5 represents the fifth tower of the 27th mile of the transmission line. The Project would consist of modifications and/or replacement of existing insulators and hardware assemblies, raising existing transmission towers as needed to mitigate any ground clearance violations, replacing towers as needed within the footprints of existing tower sites, repairing or replacing damaged structural members, replacing conductors, ground wire, and re-tensioning conductors, repairing/retrofitting existing main access roads and spur roads, and replacing or reinforcing tower foundations where needed (LADWP 2023). The transmission line upgrade is required to accommodate incoming renewable energy resources along the West of the Colorado River Path 46 transmission corridor and to ensure the continued safe and reliable operation of the lines (LADWP 2023). The additional 475 megawatts would contribute over 15% toward LADWP's Renewable Portfolio Standard (RPS) as part of LADWP's commitment to be 100% carbon-free by 2035, 10 years ahead of the State's target (LADWP 2023).

The proposed Project would require establishing a temporary work area at each of the 1,740 transmission structures. Pre-construction activities at each work area would begin with surveying; installing tower center and adjacent right-of-way boundary offset monuments; setting mowing limits; installation of temporary fencing where required; staking, clearing, and grading for both existing and new transmission structure foundation locations, laydown areas, and soil stockpiles; and installation of best management practices (BMPs), which are specifically outlined in Section 2.4, below. The approximate work area at each transmission tower site location would be approximately 60 by 60 feet. The approximate work area at each stringing site (Conductor Pulling and Tensioning Sites) would be 200 by 500 feet. The approximate work area at each guard structure would be 200 by 50 feet. The approximate work area at each Tower Crane Pad would be 50 by 50 feet. All work areas would occur only within the existing tower sites and existing access road areas and rights-of-way. The pre-disturbed existing tower sites and access roads of the transmission line not being worked on would be used as much as possible while work is being done on the transmission line actively being upgraded. Table 2.1-1 summarizes the estimated disturbance areas for the Project. As shown therein, a total of 1,437 acres of land along the transmission corridor would be affected by the Project.

Table 2.1-1. Project Disturbance Areas

Type of Disturbance	Duration	Typical Disturbance Width (feet)	Typical Disturbance Length (feet)	Total Disturbance Area (acres)	Number of Sites	Total Disturbance Area (acres)
Existing Transmission Tower Footprint	Existing	60	60	0.1	1,740	143.8
Existing Access Roads	Existing	25	844,800	485	2	969.7
Conductor Pulling and Tensioning Sites	Temporary	200	500	2.3	91	208.9
Guard Structures	Temporary	200	50	0.2	276	63.4
Tower Crane Pads	Temporary	50	50	0.06	435	25.0
Laydown Areas (materials, steel for the Project)	Temporary	800	545	10	2	20.0
Staging Areas (equipment set up)	Temporary	50	100	0.115	16	1.8
Helicopter Fly Yards/Staging Area (includes two fuel stations)	Temporary	200	200	0.9	4	3.7
Helicopter Landing Area	Temporary	50	50	0.06	16	0.9
					Total Disturbance Area (acres)	**1,437**

The following equipment and activities would be associated with the Project.

2.1.1 Reinforcing/Replacing Structural Steel Members

Approximately 1,508 towers (86%) of the 1,740 towers are in critical need of repair and would be reinforced under the Project, and approximately 153 towers would need to be replaced entirely. This would constitute the majority of the work to occur under the Project. Most steel member activities are expected to occur within existing tower disturbance areas or laydown and staging areas. Construction equipment that may be used in tower reinforcement efforts are cranes, manlifts, water trucks, lowboy trailers, flatbed trucks, and hand tools.

For foundations which require complete replacement, the existing foundation would be demolished, excavated, and removed. Installation of rebar and concrete forms would be required prior to concrete pouring. Construction equipment that may be used are excavators, drill rigs, concrete mixing trucks, concrete pumping trucks, flatbed trucks, lowboy trailers, water trucks, and a backhoe loader.

2.1.2 Rehabilitation and Maintenance of Existing Access Roads

Access to Project sites would occur via existing access roads that provide vehicle access through the entire proposed alignment to each transmission structure. These access roads traverse lands managed by BLM. Typical pre-construction activities associated with rehabilitation of existing access roads may include light vegetation clearing, blading, grading and recompacting to fill potholes, removal of ruts, and repair of surface irregularities to provide a smooth surface capable of supporting trucks and heavy construction equipment. Existing access roads may also require upgrades such as protection for drainages and widening areas that are too narrow for safe vehicle operation. Repair and stabilization of slides, washouts, and other slope failures may be necessary to prevent future failures. Repair or replacement of existing drainage structures that are damaged or beyond repair may also be required. The type of rehabilitation activities required would be based on specific site conditions to be determined during final engineering.

The need for existing access road rehabilitation is expected to be greatest where topography creates the challenge for the movement of trucks and heavy construction equipment. The following typical construction activities for rehabilitation of existing access roads would occur:

- <u>Existing relatively flat terrain approximately 0% to 4% grade:</u> Construction activities may require activities such as grubbing and constructing drainage improvements (e.g., wet crossings, water bars, McCarthy drains, and/or culverts). Any new drains would be coordinated with the land manager and included in permit amendments.

- <u>Existing rolling terrain approximately 5% to 12% grade:</u> Construction activities generally include activities typical to flat terrain and may require activities such as cut and fill in excess of 2 feet in depth, benched grading, drainage improvements (e.g., v-ditches, down drains, and energy dissipaters), and slope stability improvements such as retaining walls and mechanically stabilized earth walls.

- <u>Existing mountainous terrain over 12% grade:</u> Construction activities may include similar activities as rolling terrain construction activities and could require significant cut and fill depths, benched grading, drainage improvements, and slope stability improvements.

Generally, all existing access roads require a minimum 14-foot width with 2 feet of shoulder on each side to accommodate required drainage features depending on the existing topography. Curves would generally have a minimum radius of curvature of 50 feet measured from the center line of the drivable road width. Along a curved section, the road width would be typically widened an additional 1 to 8 feet depending on the radius of the curvature to accommodate construction and maintenance vehicles. Access road gradients may be modified so that sustained grades do not generally exceed 12%. Grades greater than 12% would be permitted when such grades do not exceed 40 feet in length and are located more than 50 feet from any other excessive grade. In some instances, LADWP may deviate from mitigating grades greater than 12%.

2.1.3 Replacing Lattice Steel Structures

Approximately 153 tower structures may be completely replaced. Similar to the steel member replacements, tower replacements are expected to occur within existing tower disturbance areas. Construction equipment that may be used include cranes, manlifts, water trucks, lowboy trailers, flatbed trucks, and hand tools. In the event that replacing lattice steel structures requires a crane, a crane pad would be installed, taking care to minimize the disturbance area to the maximum extent.

2.1.4 Tower Site Clearing

Tower site and guard structure clearing would only be required under specific scenarios. Under these scenarios, preparation of individual tower structure sites would be required after access roads are rehabilitated. Vegetation would be mostly mowed, crushed, and cleared in the existing tower sites and grading would be required for new tower sites. Within the work areas, at some tower locations, a level cleared area, or pad, may be necessary to complete the construction of the towers. However, many tower sites would be considerably smaller depending on the size of the tower, the terrain, resource considerations, and whether helicopter construction would be used, among other factors. Cleared pads would be required for tower footings, assembly of the tower, installation of portable hydraulic lifts, and the necessary crane maneuvers. All pads not needed for normal transmission line maintenance would be graded to blend as near as possible with the natural contours and revegetated in accordance with the permits provided by each respective agency.

2.1.5 Laydown, Staging, and Helicopter Area

Laydown and staging areas would be required for materials storage, construction equipment, construction vehicles, and temporary construction offices. It is estimated that two laydown areas, approximately ten acres in size, would be and located centrally or near each end of the transmission line route. Approximately 16 staging areas, totaling about 1.8 acres in size, will be placed along the route as well. The laydown and staging areas would be located temporarily on previously disturbed private land and would be level and surfaced with crushed aggregate base. LADWP will negotiate with landowners to determine specific locations of the staging areas.

Helicopter use may be required where the terrain is steep or access is limited. The use of helicopters for the construction of transmission tower structures would eliminate the need for rehabilitating access roads to structure locations where terrain is steep and would therefore minimize land disturbance associated with crane pads, structure laydown areas, and the trucks and tractors used for delivery of structures to sites. However, the following site and ground disturbing construction activities would be required to upgrade the existing transmission line within the identified helicopter construction areas:

- Portable landing pads
- Helicopter fly yards/staging areas and associated temporary access roads
- Tower structure vegetation clearing

- Guard structures at major crossings
- Access road pullouts

Transmission line materials (e.g., tower steel, conductor reels, structure hardware) would be delivered by truck to the helicopter fly yards/staging areas serving as support yards for fueling and maintenance, as well as for the transport of materials and personnel. Vegetation clearing may be required at these sites to ensure safe working conditions. Towers may also be assembled in sections at these yards prior to delivery to the tower sites. In such cases, heavy lift helicopters would then fly the towers from the yards to the tower sites.

Construction equipment to be used for grading would include motor graders, bulldozers, excavators, compact skid-steer loaders, lawn mowers, weed whackers, dump trucks, water trucks, wheel/track loaders, backhoe loaders, jackhammers, and various small utility vehicles. The construction equipment would be staged within existing pre-disturbed areas along the transmission line corridor, including tower sites, spur roads and main access roads. The preparation of graded and compacted pads would be carried out as necessary to accommodate the cranes, forklifts, and man lifts required to raise the towers.

2.1.6 Replacing Conductors and Associated Hardware

A Conductor Useful Life Study will be prepared to identify what portions of the conductor and ground wires, along with the associated hardware, would be replaced for the transmission lines. Where required, removal of the existing conductor would be done using a pulling line which would then be used to pull in the new conductor as the old conductor wire is removed. The towers would then be rigged with insulator strings and stringing sheaves at each ground wire and conductor position. Sheaves are rollers that are temporarily attached to the lower end of the insulators to allow the conductor to be pulled, or "strung" along the line.

For protection during wire installation, temporary guard structures would be built as required next to highways, railroads, power lines, structures, utility infrastructure, and other major obstacles. Guard structures would typically consist of H-frame poles placed on either side of an obstacle. These structures would prevent ground wire, conductor, or equipment from falling onto an obstacle. Equipment for installing guard structures would include augers, line trucks, pole trailers, and cranes. The amount of disturbance per structure would typically be 200 feet by 50 feet. The guard structures would be left in place until conductors and ground wires were strung, tensioned, and clipped. Guard structures may not be necessary for small roads. In such cases, other safety measures, such as barriers, flagmen, or other traffic control, would be used. These guard structures would be temporary and would be removed after wire installation is complete.

2.1.7 Raising Lattice Steel Structures

Tower raising activities would begin with staging equipment at the tower location, which would accommodate the backhoe loaders, rubber tire loaders, large and small cranes, all terrain forklifts, portable hydraulic systems, and manlifts needed to raise the towers. Other equipment involved would include water trucks and various small utility vehicles. Tower raising may be accomplished by use of either cranes or a portable hydraulic lift system. In some cases, tower raising may be accomplished by repositioning towers onto reinforced existing footings that are necessary to accommodate the tower extension and by inserting vertical extensions at the base of the towers and/or within the body of the towers. Standard footings are approximately 4 feet in diameter and approximately 30 feet in depth. Reinforced or new tower footings may be installed at each tower raising site. Towers and tower footings would be installed on or slightly offset from the existing footprint of the tower prior to tower raising activities and would be on the centerline of the existing conductors. The actual tower raising would begin with the removal of conductors and ground wires, followed by the lifting of the tower body, which would be held in place by a portable hydraulic lift system or large crane, while vertical extensions are inserted. To achieve the required conductor-to-ground clearances, the existing free-standing lattice steel towers would be reinstalled in a manner that increases clearance distances. The majority of activities are expected to occur within existing tower disturbance areas. In the event that raising lattice steel structures requires a crane, a crane pad would be installed, taking care to minimize the disturbance area to the maximum extent. Tower raising utilizing a hydraulic lift system is expected to stay within the confines of the current disturbed areas.

2.1.8 Re-Tensioning Conductors

After a tower has been raised, conductor offset adjustments may be required and would entail small adjustments to the conductor lengths which would be carried out by technicians in manlifts. To the greatest extent practical, pulling and tensioning sites would be within the transmission right-of-way in the existing disturbed areas. However, some pulling and tensioning sites may occur outside the pre-disturbed areas. The tensioning and pulling sites could be as large as 200 feet by 500 feet, but they would be limited in size depending on each specific location and what is reasonable for safe construction practices at that location. The size of each site would be limited as much as possible and would be designed in coordination with the responsible property owner or land management agency. Depending on topography, some grading may be required at pulling and tensioning sites to create level pads for equipment. Tensioners, line trucks, wire trailers, and tractors needed for stringing and anchoring the ground wire or conductor would be stationed at tensioning sites. A puller, line trucks, sag caterpillar, and tractors would be needed for pulling and temporarily anchoring the ground wire and conductor.

2.1.9 Replacing Insulators and Hardware Assemblies

Insulators and hardware assemblies would be replaced on all towers. This would be done through use of manlifts, handheld power tools, and other hand tools. These activities would occur within existing tower disturbance areas.

2.1.10 Upgrading and Installing Additional Grounding

All towers would be grounded locally through the use of ground rods. These rods would be installed by using handheld power tools, and other hand tools. Rod installation activities would occur within existing tower disturbance areas.

2.1.11 Work Area Restoration

Upon completion of construction, site restoration activities would be undertaken to return construction areas to their original condition. To achieve this, a restoration plan would be prepared by a qualified restoration ecologist with experience restoring California and Nevada desert ecosystems. Restoration efforts would be performed by LADWP and/or its contractors with guidance from a qualified desert restoration specialist and would be monitored by a qualified biologist. The final grading plan would be prepared by a Qualified Stormwater Pollution Prevention Plan Developer.

Prior to grading or site disturbance, vegetation and topsoil (including desert crust/varnish) within the impact areas would be salvaged and the upper layer of desert varnish (cobble and soil crust), consisting of approximately 2 to 6 inches, would be stockpiled. Any excavated soils that would be stored in excess of 48 hours would be covered by an anchored tarp and/or watered down until the site is ready for the soil to be replaced. Native vegetation would be salvaged and stored. To minimize mortality, native plants would be stored by burying the root and lower stems of the salvaged plants in native soil and watering once per week, if feasible (e.g., by water truck).

Following construction, the desert varnish material and salvaged plant materials would be replanted within the impact areas. Prior to installing the top layer of desert crust, a commercially obtained native seed mix adapted to local site conditions may be applied using the imprinting method. Only native plant materials and a native seed mix would be used. Soil dominated by non-native plants would not be salvaged or re-applied. Water would be supplied as necessary for plant establishment only; desert vegetation would not require long-term irrigation. Note that initial restoration efforts, such as replacing the top layer of desert crust, would occur as part of the construction periods identified above at each work site. However, follow-up work may occur at each site after construction to complete any necessary restoration work.

2.2 Construction Schedule

Construction of the proposed Project is expected to commence in April 2025 with completion anticipated in January 2029. Construction activities would normally occur between sunrise and sunset up to six days per week (Monday through Saturday). Construction is expected to occur on Saturdays, as well as all normal business days, for the entire duration of the project. Nighttime work is not planned but may occur between sunset and sunrise during the summer and early fall months to limit daytime customer outages. Table 2.2-1 below shows the standard phasing for project construction and the duration for each phase, as it applies to the proposed Project. Typically, no construction work would occur on Sundays or national holidays. Temporary staging and laydown areas for construction materials and equipment and worker vehicle parking would be accommodated within each tower location until work at that location has been completed. Additional equipment would be staged at the designated staging areas and laydown yards on a day-to-day basis and would be driven to the work sites as required.

Table 2.2-1. Construction Phasing

Construction Activity	Duration (days)	Approximate Start	Approximate End
Pre-Construction			
Survey/LiDAR	56	04/16/2025	06/10/2025
Access Road Rehabilitation	504	04/16/2025	09/01/2026
Laydown/Staging/Site Grading	824	05/31/2026	09/01/2028
Stormwater Pollution Prevention Plan Preparation	1,378	04/16/2025	01/23/2029
Line 1			
Foundation Conductor Replacement Ground Wire Replacement Insulators Hardware Assemblies Structure Modification and Raising	364	09/01/2026	08/31/2027
Restoration, Recontouring, Revegetation, and Removal of BMPs	512	08/31/2027	01/23/2029
Line 2			
Foundation Conductor Replacement Ground Wire Replacement Insulators Hardware Assemblies Structure Modification and Raising Construction	367	09/01/2027	09/01/2028
Restoration, Recontouring, Revegetation, and Removal of BMPs	145	09/01/2028	01/23/2029
		Final Completion and Demobilization	**01/23/2029**

BMP = best management practice

As shown in Table 2.2-1, construction would involve several distinct phases that would generally occur in sequential order. These would include access road rehabilitation, site preparation and site grading. Additionally, survey and LiDAR analyses would begin in April 2025 and would end in June 2025, access road rehabilitation would occur from April 2025 and finish in September 2026, and site laydown, staging, and grading would begin in May 2026 and end in September 2028. Construction on MCV1 would begin in September 2026, ending in August 2027, with construction activities related to tower foundations, conductor and ground wire replacements, insulators, hardware assemblies, and structure modification and raising. Construction of the new tower foundations would include standard footings that are 4 feet wide and 30 feet deep. Another round of construction on MCV1, focused on restoration, recontouring, revegetation, and removal of BMPs, would begin in August 2027 and end in January 2029. Construction on MCV2 would begin in September 2027, ending in September 2028, and would include construction activities related to tower foundations, conductor and ground wire replacements, insulators, hardware assemblies, and structure modification and raising. The last round of construction on MCV2, focusing on restoration, recontouring, revegetation, and removal of BMPs would begin in September 2028 and would conclude in January 2029. Completion and demobilization of the proposed Project would occur in January 2029.

The construction process would require up to 276 on-site personnel every day, depending on the phase of work (LADWP 2023). Daily truck trips would be required for construction workers accessing the construction site(s) and to deliver construction materials and facility equipment and to haul off debris (LADWP 2023). Heavy equipment would be required throughout construction, including backhoe loaders, excavators, all-terrain forklifts, hydraulic tower lifting systems, large and small-sized cranes, manlifts, concrete mixing trucks, concrete pumping trucks, bulldozers, water trucks, and more (LADWP 2023). Construction equipment would be staged within the confines of existing pre-disturbed areas along the McCullough-Victorville Transmission Line corridor, including tower sites, spur roads and main access roads (LADWP 2023). Table 2.2-2 presents the expected construction on-road vehicles and off-road equipment per phase of construction.

Table 2.2-2. Anticipated Construction Equipment

Construction Phase	One-Way Vehicle Trips			Equipment			
	Average Daily Worker Trips	*Average Daily Vendor Truck Trips*	*Average Daily Haul Truck Trips*	*Equipment Type*	*Quantity*	*Average Daily Usage Hours*	*Max Daily Usage Hours*
Grading (Access Road Rehabilitation)	72	12	4	Tractors/Loaders/Backhoes	3	6	10
				Graders	3	6	10
				Dozer	3	6	10
Grading (Laydown/ Staging/Site Grading)	72	12	4	Graders	2	6	10
				Dozer	2	6	10
				Excavator	5	6	10
				Skid Steer Loader	5	6	10
				Tractors/Loaders/Backhoes	2	6	10
Line 1							
Construction (Foundation, Conductor Replacement, Ground Wire	276	30	32	Large Crane	6	6	10
				Small Crane	11	6	10
				Tensioner	3	6	10
				Power auger	4	6	10
				Jack hammer	4	6	10

Table 2.2-2. Anticipated Construction Equipment

Construction Phase	One-Way Vehicle Trips			Equipment			
	Average Daily Worker Trips	*Average Daily Vendor Truck Trips*	*Average Daily Haul Truck Trips*	*Equipment Type*	*Quantity*	*Average Daily Usage Hours*	*Max Daily Usage Hours*
Replacement, Insulators, Hardware Assembles, Structure Modification/Raising)				Portable Hydraulic Tower Lifting System	10	6	10
				Aerial Lift	40	6	10
				Rough Terrain Forklift	2	6	10
Grading	72	12	4	Tractors/Loaders/Backhoes	3	6	10
				Graders	3	6	10
				Dozer	3	6	10
Line 2							
Construction (Foundation, Conductor Replacement, Ground Wire Replacement, Insulators, Hardware Assembles, Structure Modification/Raising)	276	30	32	Large Crane	6	6	10
				Small Crane	11	6	10
				Tensioner	3	6	10
				Power auger	4	6	10
				Jack hammer	4	6	10
				Portable Hydraulic Tower Lifting System	10	6	10
				Aerial Lift	40	6	10
				Rough Terrain Forklift	2	6	10
Grading	72	12	4	Tractors/Loaders/Backhoes	3	6	10
				Graders	3	6	10
				Dozer	3	6	10

Source: Appendix A.

Where the terrain is steep or access is limited, helicopter use may be required (LADWP 2023). The helicopters would be used approximately 3 hours per day (average) to up to 8 hours per day (maximum) during Line 1 and Line 2 construction. The Project would require several helicopter laydown and staging areas for materials storage, construction equipment, construction vehicles, and temporary construction offices (LADWP 2023). Laydown areas would be approximately ten acres in size and located centrally or near each end of the transmission line route (LADWP 2023).

2.3 Operations

Operation of the Project is anticipated to begin in 2027 for MCV1 and 2028 for MCV2. The upgrade of the existing MCV1 and MCV2 would provide critical transmission capacity and is required to accommodate incoming renewable energy resources West of the Colorado River Path 46 transmission corridor. Regular maintenance activities would continue along the corridor in the same manner in which operation and maintenance is completed currently.

2.4 Approvals Required for the Project

The following permits and approvals may be required for the proposed Project:

- Approval by Los Angeles Department of Water and Power Board of Commissioners
- Approval by the U.S. Bureau of Land Management
- California Department of Fish and Wildlife Section 1602 Notification of Lake or Streambed Alternation
- National Pollutant Discharge Elimination System (NPDES) Water Pollution Control Permit
- Regional Water Quality Control Board Section 401 Water Quality Certification and Waste Discharge Requirements
- San Bernardino County Grading Permit (where applicable)
- City of Henderson or Boulder City Grading Permit (where applicable)
- State Water Resources Control Board Section 402 Storm Water Permit Associated with Construction Activities
- U.S. Army Corps of Engineers Section 404 Nationwide Permit
- Right of entry – state lands via public access roads

Construction would be completed in compliance with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002). Per the General Permit, a Stormwater Pollution Prevention Plan (SWPPP) incorporating BMPs for erosion control would be developed and implemented during Project construction.

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3 INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines to determine if the proposed project may have a significant effect on the environment.

1. Project title:

McCullough-Victorville Transmission Lines 1 and 2 Upgrade Project

2. Lead agency name and address:

Los Angeles Department of Water and Power
Environmental Planning and Assessment
111 North Hope Street, Room 1044
Los Angeles, California 90012

3. Contact person and phone number:

Matthew Kerby
Environmental Planning and Assessment
Los Angeles Department of Water and Power
213.367.1795

4. Project location:

The Project would be located within the County of San Bernardino, California, near Victorville, Barstow, Dagget, Harvard, Dunn, and Baker as well as within the County of Clark, Nevada, near Primm. The Project would be located within an existing utility corridor that extends through the Mojave Desert. The Project would primarily be located on federal land that is administered by the Bureau of Land Management as well as on land administered by the California State Lands Commission.

5. Project sponsor's name and address:

Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, California 90012

6. General plan designation:

Various

7. Zoning:

Various

8. Description of Proposed Project:

Refer to Chapter 2 of this Initial Study.

9. Surrounding land uses and setting:

Refer to Section 1.4 of this Initial Study.

10. Other public agencies whose approval is required:

Refer to Section 2.5 of this Initial Study.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

Notification of the Project has been provided to a list of all tribes provided by the Native American Heritage Commission. LADWP has initiated consultation with tribes that responded to the consultation invitation request.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklists on the following pages. With the implementation of mitigation measure outlined in the following pages, all impacts would be mitigated to less than significant

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

ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Eduardo Cuevas for

Signature
Jane Hauptman
Manager of Environmental Planning and Assessment
Los Angeles Department of Water and Power

April 1, 2024
Date

3.1 Aesthetics

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

The Project route largely crosses undeveloped state and federal lands, including lands under the jurisdiction of California State Lands Commission and the BLM, including ACECs (Aspen 2020). The 162-mile-long transmission line corridor is entirely in the Mojave Desert, a desert region south of the Sierra Nevada Mountains and east-northeast of the Transverse Ranges. The terrain of the Mojave Desert includes broad desert plains, rocky mountain ranges, narrow ephemeral channels, broad sandy desert washes, and dry lake beds (Psomas 2023). The various mountain ranges that occur along the corridor (from west to east) include the Newberry Mountains, Soda Mountains, Silurian Hills, Clark Mountains, and McCullough Mountains (Psomas 2023). Additionally, there are various desert washes and dry lake beds in the immediate vicinity of the transmission corridor (USDA NRCS 2022). In addition to the existing MCV1 and MCV2, portions of the surrounding viewshed have been modified by Interstate (I) 15, I-40, State Route (SR) 247, and SR-127 infrastructure, as well as by limited rural residential and agricultural development located near the communities of Primm, Nevada; Daggett, California; Yermo, California; and Victorville, California. However, segments of the utility corridor also pass through open and sparsely developed desert valleys and the foothills of local mountains ranges including the Soda Mountains and the Clark Range. East of Yermo, the desert and mountain landscape is generally undeveloped (with exception given to transmission lines and occasional transmission line access roads) and the proposed Project passes near the southeastern boundary of Fort Irwin Military Reservation lands and the northern boundary of the Mojave National Preserve.

Visual resource management is a process established by the BLM to manage the scenic quality of public lands and minimize potential impacts resulting from development activities. Management classes are identified by the BLM and denote permissible levels of landscape alteration while protecting the overall visual quality of a public lands. Visual resource management classes are assigned through the use of visual resource inventory during the BLM's land use process and in 2011, a visual resource inventory was conducted for the Barstow and Needles BLM districts. Within the Project area, the existing transmission line corridor traverses public lands managed by the BLM that is assigned either visual resource inventory Class II, Class III, or Class IV designation. The management objectives of Class I, Class II, Class III, and Class IV designated lands are identified below in Table 3.1-1 (BLM 1986).

Table 3.1-1. Visual Resource Management Objectives

VRM Class	Objective
I[1]	To preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention.
II	To retain the existing character of the landscape. The level of change to the characteristic landscape should be low.
III	To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate.
IV	To provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high.

VRM = visual resource management

1 There are no activities associated with the proposed Project that would occur on VRM Class I designated lands.

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

Construction

Less-than-Significant Impact. Scenic vistas generally refer to views of expansive open space areas or other natural features, such as mountains, undeveloped hillsides, large natural water bodies, or coastlines. Less commonly, certain urban settings or features, such as a striking or renowned skyline, may also represent a scenic vista. Under CEQA, scenic vistas also generally, although not exclusively, refer to views that are publicly accessible, rather than those available to a limited number of private entities (such as residences, private property).

While there are no known and designated scenic vistas in the Project area, the existing transmission line corridor traverses a primarily flat desert landscape with occasional rugged, mountainous terrain. As such, the Project area provides opportunities for particularly long and broad views of the western and central Mojave Desert. Primary receptors afforded views of the Project area desert landscape include interstate, highway, and local roadway motorists and dispersed, trail-based recreationists on public lands managed by the BLM. Trail-based recreationists within the northernmost portion of the Mojave National Preserve encompassing the southern extent of the Clark Mountain Range are also afforded views of the Project area landscape.

The proposed Project would involve activities at all 1,740 tower work areas as well as access roads. The proposed Project involves maintenance and rehabilitation of access roads, reinforcing or replacing tower structural steel members for approximately 1,508 towers, complete tower replacement for approximately 153 towers, tower raising for towers with ground-to-clearance violations and the subsequent power line re-tensioning that is necessary, as well as replacing all conductors, ground wires, insulators, and associated hardware assemblies, and adding grounding at every tower along the alignment. After construction is complete, each tower site and work area would be restored to its original condition to the extent feasible. No new or different tower sites would be created; however, once construction work begins it may be identified that new towers could be required or footprints would need to be offset.

Existing access and spur roads, transmission towers, and transmission line infrastructure are visible from segments of I-40, I-15, state highways, local roadways, and from public lands manage by the BLM. However, because the line and color contrast of access and spur roads are currently evident in the existing landscape, proposed activities within the existing LADWP right-of-way would not substantially affect existing views in the Project area. When viewed from elevated vantage points such as hiking trails on rising terrain in the surrounding area or mountain peaks, activities could result in additional smooth-texture and linear bands of discoloration in the desert landscape. However, due to the existing presence of access and spur roads along the utility corridor and given the broad, sweeping nature of views from elevated vantage points in the desert landscape, grading activities would not have substantial adverse effect on scenic views. Furthermore, the tall, geometric form of steel lattice structures already exist throughout the Project area landscape. Tower raising activities would involve the insertion of vertical extensions onto existing tower bodies within the transmission line corridor. Towers are currently approximately 100 feet in height; towers being raised would range between 5 to 45 feet taller when compared to existing conditions. As such and following construction, views containing the slightly taller steel lattice towers would not be substantially altered. Similarly, views containing towers in need of structural steel member reinforcement or complete tower replacement would not be substantially altered either, as the tower site would continue to display the tall, geometric form of steel lattice structures. Conductor, insulator, and hardware assembly replacements on the transmission towers would not substantially alter views either. Therefore, the Project would not have a substantial adverse effect on a scenic vista and impacts would be less than significant.

Operations

Less-than-Significant Impact. Once construction of the Project is complete, the level of noticeable change to the transmission line corridor is anticipated to be low and would not substantially alter the existing character of the corridor or the existing high desert landscape. After tower reinforcement, replacement, and raising is complete at all transmission line towers, towers near major roadways where the transmission line may be visible to motorists would present an almost identical form and line in the landscape and would display a similar steel lattice character as the existing towers within the transmission line corridor. As such, the transmission line corridor would look virtually the same as under the corridor's existing conditions, therefore, no substantial adverse effects to scenic vistas are expected. Project operational impacts would be less than significant.

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

Construction

Less-than-Significant Impact. There are no formally designated state scenic highways in the Project area. A segment of the Rim of the World Scenic Byway in southeastern San Bernardino County has been formally designated by the state legislature as a state scenic highway; however, the closest segment of the scenic byway is nearly 20 miles south of the proposed Project (USGS 2019). Furthermore, the Rim of the World Scenic Byway is generally lined by tall pine trees, and mountainous terrain to the north tends to limit the extent of available views to the foreground-middle ground (i.e., less than 5 miles) distance zone. Therefore, due to distance and the presence of intervening vertical features between the highway and the Project area, the proposed Project would not damage scenic resources within a state scenic highway.

In addition to officially designated state scenic highways, the California Department of Transportation (Caltrans) identifies eligible state scenic highways. Unlike officially designated scenic highways, eligible highways have not yet been submitted to Caltrans for scenic highway approval and Corridor Protection Programs, which among other required elements, regulate land use and the density of development adjacent to the highway, have not been adopted by the local governing body. Eligible state scenic highways in San Bernardino County and in the Project area include SR-247 (from SR-62 north to SR-40), I-40 (from SR-247 east to the California/Arizona state border), I-15 (from Barstow east to SR-127), and SR-127 (from SR-15 north to the San Bernardino County-Inyo County border) (Caltrans 2023).

The proposed Project may be briefly visible from segments of the roadways; however, given that the proposed Project activities would be located within the transmission line corridor where access and spur roads (and their resulting line, color, and texture contrast) are relatively commonplace, grading activities would not substantially damage existing views of the high desert and mountainous landscape. Construction activities may be visible to I-15 and I-40 motorists near the communities of Victorville, Bell Mountain, Daggett, and Harvard in California, as well as near the community of Primm, Nevada and may be visible to SR-247 and SR-127 motorists; however, construction impacts would be temporary and limited to existing pre-disturbed areas at each tower site. Furthermore, the reinforced, completely replaced, and raised towers proposed under the Project would be located within a desert landscape that has been visibly modified by the existing transmission line corridor, solar plant and agricultural development, and the Barstow-Daggett County Airport. Because tower raising activities would entail the insertion of vertical extensions onto existing towers, and these towers would be viewed in line with existing energy, agriculture, and transportation development that has altered the characteristic desert landscape, tower raising activities would not substantially damage existing views of the landscape. Similarly, views containing towers in need of structural steel member reinforcement or complete tower replacement would not be substantially altered either, as the tower site would continue to display the tall, geometric form of steel lattice structures. Conductor, insulator, and hardware assembly replacements on the transmission towers would not substantially alter views either. Therefore, construction impacts to scenic resources within the viewshed of state scenic highways would be less than significant.

Operations

No Impact. After construction on all Project transmission towers is complete, the viewshed of towers near state scenic highways would present an almost identical form and line in the landscape and would display a similar steel lattice character as the existing towers within the transmission line corridor. As such, after construction is complete, the transmission line corridor would look virtually the same as under the corridor's existing conditions and no substantial damage to any scenic resources is expected. As such, no operational impacts would occur under the Project.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings?

Construction

Less-than-Significant Impact. The Project would be located within an existing and already developed LADWP utility corridor that extends through the Mojave Desert, passing primarily through undeveloped federal land that is administered by BLM as well as undeveloped land administered by the California State Lands Commission.

The proposed Project would involve activities at all 1,740 tower work areas as well as access roads. The proposed Project involves maintenance and rehabilitation of access roads, reinforcing or replacing tower structural steel members for approximately 1,508 towers, complete tower replacement for approximately 153 towers, tower raising for towers with ground-to-clearance violations and the subsequent power line re-tensioning that is necessary, as well as replacing all conductors, ground wires, insulators, and associated hardware assemblies, and adding grounding at every tower along the alignment. After construction is complete, each tower site and work area would be restored to its original condition to the extent feasible. As proposed, the Project would not include the construction of any infrastructure that would be visually incompatible with the existing aesthetic of the existing transmission line corridor. The proposed activities would occur along the existing MCV1 and MCV2 transmission line corridor that traverses flat and arid desert valleys and the foothills of local mountain ranges. While much of the area surrounding the transmission corridor is sparsely developed, the desert landscape has been noticeably altered by the electrical transmission infrastructure, I-15, SR-247, and SR-127 infrastructure, and limited rural residential and agricultural development located near the communities of Primm, Nevada; Daggett, California; Yermo, California; and Victorville, California.

Construction of the Project would require establishing a temporary work area at each tower structure that could temporarily degrade the existing visual character or quality of public views of that site and its surroundings. The transmission line corridor includes native vegetation, like grasses and small bushes, as well as broad desert plains, rocky mountain ranges, narrow ephemeral channels, broad sandy desert washes, and dry lake beds within line of sight (GeoPentech 2021). National Monuments, Wilderness Areas, CDCAs, and DRECP areas are within the transmission line corridor. The Project route crosses multiple bajadas, intermittent drainages, dry lakes, mountains, and crosses several BLM-designated conservation lands (Aspen 2021). The Project also crosses rural and low-density residential land uses on non-federal land in San Bernardino County, California and Clark County, Nevada. Vegetation communities along the alignment are typical of the western Mojave Desert, consisting primarily of creosote bush scrub, burrobrush scrub, saltbush scrub, and Joshua tree woodland. Agricultural areas are also present along the alignment and, thus, may be near some work areas (Aspen 2020). Vegetation would be removed from tower sites as part of construction, however, native vegetation would be preserved and replaced after construction is complete.

During construction activities associated with the proposed Project, Project activities, material deliveries, equipment, trucks, and vehicles within the MCV1 and MCV2 transmission line corridor may be visible to motorists on I-15, I-40, SR-247, SR-127, and local roads due to the flat, relatively open viewing conditions surrounding the Project area. Dispersed trail-based recreationists on public lands surrounding the transmission line corridor may also be afforded views of construction activities. However, construction activities would occur for up to 45 months along the existing utility corridor marked by tall, steel lattice transmission line towers, multiple transmission lines, and linear discoloration and disturbance associated with access and spur roads. After construction, restoration activities would begin and last for up to 14 months along the existing utility corridor. Once construction and restoration activities cease, the visual effects of grading activities would be scattered throughout the existing high-voltage transmission line corridor and would create similar line, color, and texture contrast as nearby existing access and spur roads. In several instances, proposed activities would simply restore the width of existing access and spur roads and as a result would not be overly distinguishable from existing linear, ground level visual disturbance in the transmission line corridor. Therefore, the level of noticeable change to the corridor is anticipated to be low, and additional line and texture contrasts would not dominate the setting. Grading activities would not substantially alter the existing character of the transmission line corridor or the existing high desert landscape.

Tower steel member reinforcement, complete tower replacement, tower raising, as well as conductor, insulator, and hardware assembly replacement activities would produce negligible visual change in the landscape as the towers would continue to display a tall, geometric form, angular steel lattice lines, and a greyish color. Therefore, because the visual character of the replaced and elevated towers would be similar to that of existing towers, the level of perceptible change to the landscape would be extremely low.

Indirect impacts associated with the Project may include temporary visual impacts associated with the generation of fugitive dust and the presence of heavy equipment. Construction activities would occur sequentially along an existing utility corridor and as such, visible dust emissions would not be produced in any one location for an extended period of time. Similarly, construction vehicles, equipment, and workers would not remain in any one location for an extended period of time. In addition, construction activities would comply with all applicable air quality regulations and may require the regular application of water or other materials to suppress fugitive dust emissions.

Overall, the proposed Project would occur along an existing high-voltage transmission line corridor and the upgraded, replaced, and raised towers would continue to display a scale, form, line, color, and texture similar to the conditions of the existing towers. Therefore, construction impacts would be less than significant.

Operations

Less-than-Significant Impact. After construction is complete, the level of noticeable change to the transmission line corridor from grading activities is anticipated to be low, and grading would not substantially alter the existing character of the corridor or the existing high desert landscape. After tower reinforcement, replacement, and raising is complete at all transmission line towers, towers near major roadways where the transmission line may be visible to motorists would present an almost identical form and line in the landscape and would display a similar steel lattice character as the existing towers within the transmission line corridor. As such, the transmission line corridor would look virtually the same as under the corridor's existing conditions. Project operational impacts would be less than significant.

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

Construction

Less-than-Significant Impact. Construction activities would occur sequentially along the transmission line corridor and would take up to 45 months to complete. During Project construction, the increased presence of construction equipment and materials, including traffic control signage, may result in a slight increase in daytime glare; however, these impacts would be short-term and temporary in nature. It is expected that construction of the proposed Project would occur between sunrise and sunset, every Monday through Saturday during the construction period, while no construction would occur on Sundays and national holidays. No new lighting would be installed along access roads or work areas and, as such, Project activities would not create a new source of substantial light during construction. Nighttime construction would only occur as needed, in the summer months when customer demand is high during the day so outages may need to occur at night. New tower footings would be installed at tower raising sites following the insertion of vertical extensions within the tower bodies. The taller structures, which are currently 100 feet and could be raised between 5 to 45 feet in height, would not exceed the 200 feet above ground level by the Federal Aviation Administration to determine whether marking and/or lighting is required (FAA 2007). Although nighttime construction is planned, the transmission lines travel through relatively undeveloped and sparse lands such that the temporary nighttime lighting would therefore not substantially disrupt nearby light-sensitive receptors.

The temporary influx of construction vehicles and equipment to the generally flat desert and rugged mountainous landscape of the western and central Mojave Desert would not create substantial daytime glare that would affect day views. Furthermore, Project activities would be carried out within the existing LADWP MCV1 and MCV2 transmission line corridor in which maintenance vehicles can occasionally be seen by passing motorists. Lastly, with the exception of glass, construction vehicles and equipment contain limited amount of potentially reflective materials capable of generating daytime glare. With regard to the tower raising activities, vertical extensions would be inserted within tower bodies and these components would be constructed of a similar material (steel) as the existing tower. All other construction activities would also produce negligible visual change in light or glare as the towers would continue to display a tall, geometric form, angular steel lattice lines, and a greyish color. Therefore, the new structures would not constitute a new source of potential glare that would adversely affect existing day views. Construction impacts would be less than significant.

Operations

No Impact. After construction is complete, the level of noticeable change to the transmission line corridor is anticipated to be low, and the Project would not introduce any new permanent or significant sources of light or glare that would adversely affect day or nighttime views. After tower reinforcement, replacement, and raising is complete at all transmission line towers, the towers near major roadways where the transmission line may be visible to motorists would present an almost identical form and line in the landscape and would display a similar steel lattice character as the existing towers within the transmission line corridor. As such, the transmission line corridor would look virtually the same as under the corridor's existing conditions. No impacts would result from the Project's operational impacts.

3.2 Agriculture and Forestry Resources

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

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

<u>Construction</u>

No Impact. The County of San Bernardino contains numerous areas that have been designated as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. The majority of the proposed work would be within areas located on BLM land and would, in most cases, keep the proposed construction activities within existing tower structure sites.

Several work areas would be located either within, adjacent, or near to Prime Farmland or Farmland of Statewide Importance. Specifically, the work areas for Towers MCV1_123-4 to 128-1 and MCV2_122-4 to 127-1 would be near Prime Farmland or Farmland of Statewide Importance. Tower MCV1_125-5 is located within Prime

Farmland (DOC 2023a). However, all work areas and construction activities would be located within already existing tower sites and other pre-disturbed areas. The proposed Project involves maintenance and rehabilitation of access roads, reinforcing or replacing tower structural steel members for approximately 1,508 towers, complete tower replacement for approximately 153 towers, tower raising for towers with ground-to-clearance violations and the subsequent power line re-tensioning that is necessary, as well as replacing all conductors, ground wires, insulators, and associated hardware assemblies, and adding grounding at every tower along the alignment. Construction activities at these towers, would have the potential to temporarily interrupt or preclude farming within and surrounding the construction pads for approximately 14 days, especially at tower MCV1_125-5. Construction would involve preparation of a pad for construction equipment, which would be approximately 3,600 square feet per tower site. Four new footings would be installed at each tower raising site. Standard tower footings would be installed on or slightly offset from the existing footings and would be slightly larger than the existing footings. A standard tower footing size is 4 feet in diameter and 30 feet in depth. These footings would result in a total permanent impact area of 100 square feet (approximately 50 square feet per work site and 13 square feet per footing). Site cleanup and restoration would occur during and after construction is complete and would restore each work area to its original conditions to the extent feasible.

The area of disturbance involved with the construction process could temporarily preclude farming activities at work areas within or adjacent to Prime Farmland or Farmland of Statewide Importance and in the work area's 3,600-square-foot construction pad. However, as described in Section 2.1, topsoil that is removed from each of the construction pads would be salvaged and replaced upon completion of construction, in coordination with the property owner. Construction at the sites would only last for approximately 14 days, and the property owner would be notified of these temporary construction activities prior to the start of construction at each site. At the end of this construction period, each site would be restored and returned to its original condition to the extent feasible. As such, agricultural activities would be precluded for a short period of time. While the new tower footings may be slightly offset from those that currently exist, the presence of these footings (totaling 15 square feet per footing, equating to 50 square feet per site) and the partially demolished existing footings would not substantially hinder agricultural activities relative to existing conditions, should raising occur at tower sites near farmland. This is because the new footings would not occupy a substantial amount of farmland to the extent that farmland is converted to a non-agricultural use and would not preclude farming activities. As such, no Farmland would be converted to non-agricultural uses, and there would be no impact.

<u>Operations</u>

No Impact. After construction of the proposed Project is complete, no land zoned as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be converted to non-agricultural uses. As such, there would be no Project operational impacts.

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

Construction

No Impact. The Project area is not subject to a Williamson Act contact, although, Williamson Act contract land is located closest to the nearest transmission line tower approximately 890 feet northwest of tower MCV1_116-4 (DOC 2023b). Considering that the average work area at each tower location would be 60 by 60 feet, Project construction activity at the closest tower is not anticipated to impact any Williamson Act contract. As such, no impacts to Williamson Act contract land would occur.

Operations

No Impact. After construction of the proposed Project is complete, no Williamson Act contract land would be affected; as such, no impacts would occur.

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

No Impact. The Project area is located in an already existing LADWP utility corridor zoned primarily for Resource Conservation and is not considered forest land, timberland, or a timberland production zone as defined in the California Public Resources Code or Government Code. There is not any forest land near the transmission line corridor as the corridor is found within the Mojave Desert. As such, the proposed Project would not conflict with existing zoning for, or cause rezoning for, forest land, timberland, or timberland zoned Timberland Production. No construction or operational impacts would occur.

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

No Impact. As described under 3.2(c) above, the Project does not contain forest land. Thus, the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. No construction or operational impacts would occur.

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

Construction

Less-than-Significant Impact. The majority of the proposed work areas are located on BLM land, in which agricultural uses (except grazing) are not allowed. There are various grazing allotments that the transmission lines traverse through. However, construction activities would be limited to existing distributed areas and be short term in nature and thus would not prevent grazing from occurring. As such, Project construction impacts would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, existing land uses would remain in place. As such, no impacts would occur.

3.3 Air Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☒	☐	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☒	☐	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

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

and

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

and

Would the project expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Impact. Project construction would involve activities that would generate short-term criteria air pollutants. An air quality analysis is required to determine whether the Project could potentially result in any adverse effects related to air quality. Therefore, impacts are considered potentially significant and will be further analyzed in the EIR prepared for the Project.

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

Less-than-Significant Impact. Odors are a form of air pollution that is most obvious to the general public and can present problems for both the source and surrounding community. Although offensive odors seldom cause physical harm, they can be considered an annoyance and cause concern. Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed Project. Odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors are temporary and generally occur at magnitudes that would not affect substantial numbers of people. Regarding long-term operations, the proposed Project would not change the routine inspection and maintenance of the existing transmission lines and would not result in any sources of substantial odors. Therefore, impacts associated with odors would be less than significant.

3.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☒	☐	☐	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☒	☐	☐	☐

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☒	☐	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☒	☐	☐	☐

The Project is in the Mojave Desert, a hot, dry desert region south of the Sierra Nevada Mountains and east-northeast of the Transverse Ranges. Climate conditions are characterized by large fluctuations in daily temperature, high seasonal winds, and low humidity. Annual precipitation ranges from three to six inches and mainly occurs in the winter and spring months. Unique years can generate increased rainfall, when subtropical air from the south moves into the area and creates monsoonal thunderstorms. Alternatively, years of drought can yield average rainfall of less than one inch for the entire year. The region also receives periodic snowfall during cold winter storms. Elevations in the Mojave Desert range from about 280 feet above mean sea level near Death Valley to approximately 8,000 feet above mean sea level near Clark Mountain. However, the majority of the Mojave Desert ranges between 2,000 feet and 5,000 feet above mean sea level, characteristic of the High Desert found throughout the Mojave (Aspen 2020).

The Mojave Desert is characterized by widely scattered steep mountain ranges, dry lakes (playas), relatively flat plains (basins), bajadas (alluvial fans or debris flows), intermittent drainages, sand sheets, and volcanic landforms. The Project route crosses multiple bajadas, intermittent drainages, dry lakes, and mountains (Aspen 2020).

The Project route crosses largely undeveloped federal lands under the jurisdiction of BLM and also crosses portions of land owned by the state of California. National monuments, wilderness areas, Important Bird Areas, CDCAs, and DRECP areas are located near, but not within, the Project route. The Project also crosses rural and low-density residential areas on non-federal land in San Bernardino County, California and Clark County, Nevada.

There are several BLM designated conservation lands that overlap the Project route. These include Areas of Critical Environmental Concern and Designated Essential Connectivity Areas. Within the Project area, the Clark Mountain Area of Critical Environmental Concern was established to prevent significant damage to important ecological and cultural resources. Designated Essential Connectivity Areas are largely owned by BLM to protect undisturbed habitat that serve as critical connectivity points to support wildlife movement and gene flow (Audubon 2023). These include the Mid Hills/Ivanpah, Valley/New York, Mountains-Calico Mountains, and the San Bernardino Mountains–Calico Mountains Essential Connectivity Areas.

The Project area falls within two multi-jurisdictional habitat conservation plans. As of March 2021, the proposed Town of Apple Valley Multi-Species Conservation Plan Area is still in the planning process but may be completed during Project activity. The Nevada segment of the Project is located within the Clark County Multiple Species Habitat Conservation Plan area. Together with BLM conservation lands, they help protect the highly diverse species and habitat present within the Mojave Desert.

The Project route also overlaps designated critical habitat by the U.S. Fish and Wildlife Service (USFWS) for desert tortoise (*Gopherus agassizii*) within the Ivanpah, Superior-Cronese, Ord-Rodman, and Piute-Eldorado critical habitat units, and southwestern willow flycatcher (*Empidonax traillii extimus*) within the Mohave River critical habitat unit. Critical habitat is defined as the specific areas within the geographical range occupied by the species that possess the physical or biological features essential for the conservation of the species and that may require special management protection. The desert tortoise requires gentle-sloping sandy-gravel desert scrub habitat and southwestern willow flycatcher requires relatively riparian tree and scrub habitat within the 100-year floodplain with low-ground vegetation for nesting (Aspen 2020).

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

Potentially Significant Impact. The Project area contains numerous species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or USFWS (Aspen 2020). Project construction has the potential to affect these species, and as such, impacts are potentially significant. This issue area will be evaluated in the EIR prepared for the Project.

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

Potentially Significant Impact. The Project area contains numerous areas of riparian habitat and other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or USFWS (Aspen 2020). Project construction has the potential to affect this habitat, and as such, impacts are potentially significant. This issue area will be evaluated in the EIR prepared for the Project.

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

Potentially Significant Impact. The Project area contains known jurisdictional waters (Psomas 2023). Project construction has the potential to affect these waters, and as such, impacts are potentially significant. This issue area will be evaluated in the EIR prepared for the Project.

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

Potentially Significant Impact. The Project area includes significant wildlife species and is located within wildlife corridors. Project construction has the potential to affect wildlife species, corridors and potentially wildlife nursery sites. As such, impacts are potentially significant. This issue area will be evaluated in the EIR prepared for the Project.

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

Potentially Significant Impact. The Project area is located within areas where local policies and ordinances are in place to protect biological resources. Project construction has the potential to affect these resources. As such, impacts are potentially significant. This issue area will be evaluated in the EIR prepared for the Project.

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

Potentially Significant Impact. The Project area is located within areas where adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans exist. The proposed Project would be within the jurisdictional boundaries of the CDCA Plan, as amended, and the boundaries of the DRECP BLM Land Use Plan Amendment. Project construction has the potential to conflict with these plans. As such, impacts are potentially significant. This issue area will be evaluated in the EIR prepared for the Project.

3.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☒	☐	☐	☐

a) ***Would the project cause a substantial adverse change in the significance of a historical resource as pursuant to §15064.5?***

Potentially Significant Impact. The transmission corridor was determined to be eligible for listing in the National Register of Historic Places based on a review of the Project in 1994. As such, potential changes to the towers and transmission line have the potential to cause a substantial change in the significance of a historical resources, pursuant to Section 15064.5 of the CEQA Guidelines. This issue area will be evaluated in the EIR prepared for the Project.

b) ***Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?***

Potentially Significant Impact. The transmission corridor passes through a predominantly undeveloped area. Ground disturbing activities have the potential to result in in a substantial adverse change to the significance of archaeological resources, pursuant to Section 15064.5 of the CEQA Guidelines. This issue area will be evaluated in the EIR prepared for the Project.

c) ***Would the project disturb any human remains, including those interred outside of dedicated cemeteries?***

Potentially Significant Impact. The transmission corridor passes through a predominantly undeveloped area. Ground disturbing activities have the potential to affect human remains. This issue area will be evaluated in the EIR prepared for the Project.

3.6 Energy

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

Based on the type and location of construction activities for the Project, the energy demand associated with the Project would be petroleum use in the form of diesel, gas and/or jet fuel for construction equipment. Electricity and natural gas are not anticipated to be used and are not discussed further in this assessment.

According to the U.S. Energy Information Administration, California used approximately 524 million barrels of petroleum in 2020, with the majority (433 million barrels) used for the transportation sector, which was a substantial reduction from 2019 (659 million barrels of petroleum) due to the COVID-19 pandemic (EIA 2023). According to the U.S. Energy Information Administration's "Energy Outlook 2021," it may take years for the United States to return to 2019 levels of energy consumption following the impact of COVID-19 on the U.S. economy and global energy sector (EIA 2021). There are 42 U.S. gallons in a barrel, and in 2020 the total daily use of approximately 60.3 million gallons of total petroleum was consumed in California. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and greenhouse gas (GHG) emissions, and reduce vehicle miles traveled.

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

Less-than-Significant Impact. Construction of the Project would result in energy use primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, worker vehicles, and helicopters. Fuel consumption from construction equipment and vehicles was estimated by converting the total carbon dioxide (CO_2) emissions from each construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. CO_2 emissions were estimated with the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.21 based on the annual average usage assumptions developed by LADWP, as described in Section 2.2 above. All off-road equipment and hauling and vendor trucks are assumed to be diesel, and worker vehicles are assumed to be gasoline. The conversion factor for gasoline is 8.78 kilograms per metric ton of CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton of CO_2 per gallon (The Climate Registry 2023). For helicopters, the jet fuel usage per hour was based on the Guidance on the Determination of Helicopter Emissions (FOCA 2015), assuming a Hughes 500 and Sikorsky CH-53G would be representative for the Project per input from LADWP.

The estimated diesel fuel usage from construction equipment, vendor and haul trucks, as well as estimated gasoline fuel usage from worker vehicles and jet fuel from helicopters is shown in Table 3.6-1.

Table 3.6-1. Construction Petroleum Demand – Unmitigated

Phase	Off-Road Equipment (diesel)	Vendor Trucks (diesel)	Haul Trucks (diesel)	Worker Vehicles (gasoline)	Helicopters (jet fuel)
	Gallons				
Construction Total	1,032,357	99,640	76,596	206,439	163,828
				Total Petroleum	**1,578,859**

Source: Appendix A.

In summary, construction of the project is conservatively anticipated to consume 1,578,859 gallons of petroleum over a period of approximately 45 months (1,379 days). For comparison, approximately 83 billion gallons of petroleum will likely be consumed in California over the course of the Project's construction phase, based on the California daily petroleum consumption estimate of approximately 60.3 million gallons per day (EIA 2023). Notably, the Project would be subject to California Air Resources Board's (CARB) In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles; (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; (3) restricts the adding of older vehicles into fleets starting on January 1, 2014; and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology requirements. Project construction would represent a "single-event" petroleum demand and would not require on-going or permanent commitment of petroleum resources for this purpose. For operational energy use, proposed maintenance activities to service the upgraded transmission lines would be similar in nature and scale to the maintenance activities that are currently conducted for the existing lines that would be removed. Therefore, maintenance activities and energy demand would be similar to existing baseline conditions.

Overall, the Project would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state. In addition, long-term maintenance of the lines would be similar to existing conditions and is not anticipated to require additional energy demand. Therefore, impacts would be less than significant, and no mitigation is required.

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

No Impact. The proposed Project would follow applicable energy standards and regulations during the construction phases. In addition, the proposed Project would be built and operated in accordance with all existing, applicable regulations at the time of construction. Additionally, as discussed in Section 2 above, the Project is required to accommodate incoming renewable energy resources along the west of the Colorado River Path 46 transmission corridor and to ensure the continued safe and reliable operation of the lines and the additional 475 megawatts would contribute more than 15% toward LADWP's RPS as part of LADWP's commitment to be 100% carbon-free by 2035, 10 years ahead of the State's target (LADWP 2023). While energy consumption would be required during construction, operation of the project would ultimately assist in the implementation of state and local plans for renewable energy. As such, there would be no impact related to conflicts with plans for renewable energy and energy efficiency, and in fact, Project implementation would result in beneficial impacts.

3.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☒	☐	☐	☐

The proposed Project is located in the Mojave Desert geomorphic province, which is characterized by isolated mountain ranges separated by expanses of desert plains. It has an interior enclosed drainage and many playas. There are two important fault trends that control topography: a prominent northwest-southeast trend and a secondary east-west trend (CGS 2002). The proposed work areas along the transmission line corridor are underlain by a variety of soil types, including Mesozoic volcanic rock, quaternary alluvium, Mesozoic granitic rocks, Plio-Pleistocene and Pliocene loosely consolidated deposits, and Precambrian rocks (USGS 2015).

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

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

Construction

Less-than-Significant Impact. Several of the Project's proposed work areas are located near an Alquist-Priolo Earthquake Fault Zone as shown on the most recent Alquist-Priolo Earthquake Fault Zone Maps (DOC 2023c). Fault lines that cross the transmission alignment and that have the potential to generate future surface ruptures include the Calico, Lenwood, and Helendale faults (GeoPentech 2021). These faults encompass existing transmission towers MCV2_120-5 to 121-5, MCV2_131-5 to 136-1, as well as towers MCV2_151-2 and MCV2_152-3. Additional faults, the Stateline and Soda Mountain faults, occur within the Project area but have not been assigned to an Earthquake Fault Zone. These faults traverse the transmission corridor between towers MCV2_26-6 and 27-4, as well as between MCV2_78-3 and 80-4. Quaternary active faults have not been mapped by the U.S. Geological Survey or the Nevada Bureau of Mines and Geology in the Nevada segment (GeoPentech 2021).

The proposed Project would not involve the construction of any habitable structures, nor would the proposed Project increase the population in the Project area. The only permanent structures that would be constructed under the Project are the approximately 153 towers that would be completely replaced and the new footings for existing transmission towers that would be raised. Construction would be temporary, lasting up to approximately 45 months on each transmission line and up to 14 days at each work area, moving sequentially along the 162-mile transmission line corridor. Additionally, the upgraded transmission towers would be in the exact same or slightly offset from the exact same location as the current towers; therefore, tower site conditions would not substantially change relative to existing conditions. Due to the infrequency of human presence in the proposed work areas and due to the temporary nature of the construction activities, the proposed Project would not substantially expose people or structures to adverse impacts related to fault rupture. Project construction impacts would be less than significant.

Operations

Less-than-Significant Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to normal. As described above, Project features would be constructed in accordance with applicable federal, state, and LADWP design standards related to seismic criteria and would not substantially change tower site seismic conditions relative to existing conditions. For these reasons, the Project would not increase the risk of loss, injury, or death involving fault rupture within the Project area, and operational impacts would be less than significant.

ii) Strong seismic ground shaking?

Construction

Less-than-Significant Impact. The proposed Project is located within the seismically active Southern California region and, like all locations within the region, could be subject to strong seismic ground shaking in the event of an earthquake. While construction workers would have the potential to be exposed to seismic ground shaking during construction processes, the risk of loss, injury, or death would not be adverse relative to other areas in Southern California. The proposed Project would not involve construction of any habitable structures, nor would it change the use of any existing structures resulting in an increase of occupants who may be exposed to fault rupture. Furthermore, the reinforced or replaced towers, tower footings, and raised towers under the proposed Project would be designed and installed pursuant to existing federal, state, and County engineering and design standards related to seismic criteria which would reduce potential damage to the upgraded transmission towers from ground movement. For these reasons, the proposed Project would not increase the risk of loss, injury, or death involving seismic activity within the Project area, and impacts would be less than significant.

Operations

Less-than-Significant Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to normal. As described above, Project features would be constructed in accordance with applicable federal, state, and County design standards related to seismic criteria, and would not substantially change tower site seismic conditions relative to existing conditions. For these reasons, the Project would not increase the risk of loss, injury, or death involving seismic shaking within the Project area, and operational impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Construction

Less-than-Significant Impact. Liquefaction is the process in which saturated silty to cohesionless soils below the groundwater table temporarily lose strength during strong ground shaking as a consequence of increased pore pressure during conditions such as those caused by an earthquake.

Earthquake waves cause water pressure to increase in the sediment and the sand grains to lose contact with each other, leading the sediment to lose strength and behave like a liquid.

The proposed Project consists of work areas at all 1,740 tower site locations as well as access roads along the utility corridor where minimal amounts of grading would occur. The average depth of excavation during grading would be approximately 2 to 6 inches. Many of the Project's work areas are located in areas that are not susceptible to liquefaction (County of San Bernardino 2023a). The data collected in the geotechnical investigation revealed that liquefaction and other ground deformation is negligible along the transmission line. However, at MCV2 towers 1-1, 69-5, 75-5, 113-5, 124-2, and 153-2, seismically induced settlement has the potential to occur due to the presence of younger and looser alluvium (GeoPentech 2021). In the event that a work area would be located on potentially liquefiable soils, the grading activities would not expose people or structures to risk related to liquefaction. No habitable structures are proposed, and the Project would not increase the population in the Project area. The proposed Project also includes work areas where existing transmission towers would be reinforced, completely replaced, or raised, and new footings for the raised transmission towers would be installed. Furthermore, the reinforced or replaced towers, tower footings, and raised towers would be designed and installed pursuant to existing federal, state, and County engineering and design standards related to seismic criteria, which would reduce potential damage to the upgraded transmission towers from ground movement, including movement from liquefaction and seismically induced settlement. For these reasons, the proposed construction activities would not substantially increase the susceptibility of people or structures to risk of loss, injury, or death from seismic-related ground failure. Project construction impacts would be less than significant.

Operations

Less-than-Significant Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to normal. As described above, Project features would be constructed in accordance with applicable federal, state, and LADWP design standards related to seismic criteria, and would not substantially change tower site seismic conditions relative to existing conditions. For these reasons, the Project would not increase the risk of loss, injury, or death involving seismic-related ground failure within the Project area, and operational impacts would be less than significant.

iv) Landslides?

Construction

Less-than-Significant Impact. Landslides are characterized as deep-seated ground failures, in which a large section of a slope detaches and slides downhill. The Project is not located within any mapped landslide zones; however, the Project traverses a wide variety of terrain ranging from flat to relatively steep with a diverse set of rock units (GeoPentech 2021). Many of the proposed work sites are located on undeveloped flat land, which would not have the potential to be impacted by a landslide. However, areas of the Project are within steeper topography and are generally more susceptible to land sliding. Various Project areas have been mapped to have relatively high landslide susceptibility, as shown in the geotechnical report prepared for the Project (GeoPentech 2021).

The tower reinforcement, replacement, and raising locations are primarily located on flat land except for the towers mentioned above. Although some of the work sites may be located adjacent to slopes that could become unstable during an earthquake, the amount of grading per work site would be minimal (2-6 inches at each site, where needed) and the risk to construction workers from landslides would be negligible. Given this, it is unlikely that landslide movements would be generated by excavation associated with the proposed Project. As such, it is unlikely that landslide movements would be generated by excavation associated with construction of the proposed Project. Furthermore, the Project would not include construction of any habitable structures, nor would it increase the population in the Project area. As such, the proposed Project would not result in changes to structures or population levels susceptible to risk from landslide. For these reasons, landslide construction impacts would be less than significant.

Operations

Less-than-Significant Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to normal. As described above, Project features would be constructed in accordance with applicable federal, state, and LADWP design standards related to seismic criteria, and would not substantially change tower site seismic conditions relative to existing conditions. For these reasons, the Project would not increase the risk of loss, injury, or death involving landslides within the Project area, and operational impacts would be less than significant.

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

Construction

Less-than-Significant Impact. The proposed Project involves maintenance and rehabilitation of access roads, reinforcing or replacing tower structural steel members for approximately 1,508 towers, complete tower replacement for approximately 153 towers, tower raising for towers with ground-to-clearance violations and the subsequent power line re-tensioning that is necessary, as well as replacing all conductors, ground wires, insulators, and associated hardware assemblies, and adding grounding at every tower along the alignment. Various transmission tower work areas are located within or adjacent to an agricultural field. The grading activities would have the potential to contribute to erosion or loss of topsoil at the tower work sites. The proposed Project would result in approximately 1,437 acres of grading across the 1,740 tower sites, not including access road grading. This would make an average of approximately 1.2 acres of grading per tower site. Additionally, there are a variety of federal and state regulations that prevent erosion and loss of topsoil during construction that would be implemented for the proposed Project. This would include preparation of and compliance with a SWPPP, which would include erosion control measures. Furthermore, in order to mitigate impacts to biological resources, LADWP's construction contractor would be required to salvage and preserve topsoil during the grading activities and then replace the topsoil once grading is completed. While this requirement is intended to preserve the viability of the desert topsoil for biological purposes, it would also minimize the amount of topsoil loss that would occur. For these reasons, the proposed Project is not anticipated to result in substantial soil erosion or loss. As such, Project construction impacts would be less than significant.

Operations

Less-than-Significant Impact. During operation, no changes to operational activities would occur relative to existing conditions; as such, once construction is complete, no change in soil erosion or loss of topsoil attributable to the proposed Project would occur. Upon implementing the requirement to salvage topsoil during construction and upon compliance and with state and federal regulations involving stormwater pollution, operational impacts related to soil erosion and topsoil loss would be less than significant.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Construction

Less-than-Significant Impact. The proposed Project involves movement of earth materials with the potential to trigger geological instability. Project grading would also involve an average construction crew every day of 18 workers for access road rehabilitation grading for approximately 17 months, and 18 workers for laydown, staging, and site grading for approximately 27 months. Construction on Transmission Lines 1 and 2 would require a up to 276 daily workers who would move sequentially along the transmission line from work area to work area until construction at each work area is complete. The construction crew would have the potential to be exposed to geologic instability during the construction process. As such, potential impacts would be limited to the construction periods for each tower work area.

Refer above to Sections 3.7(a)(ii) and (a)(iv) for a discussion of impacts related to landslides and liquefaction. Lateral spreading is a type of liquefaction-induced ground failure occurring on mildly sloping ground. Lateral spreading primarily involves side-to-side movement of earth materials due to ground shaking and is evidenced by near-vertical cracks to predominantly horizontal movement of the soil mass involved. As discussed in Section 3.7(a)(iv), most of the Project work areas are not located in areas that are susceptible to liquefaction and liquefaction is negligible along the transmission alignment. As such, lateral spreading would be unlikely to occur in these proposed work areas. Subsidence is the lowering of surface elevation due to changes occurring underground, such as the extraction of large amounts of groundwater, oil, or gas. When groundwater is extracted from aquifers at a rate that exceeds the rate of replenishment, overdraft occurs, which can lead to subsidence. The proposed Project would involve soil movement of approximately 1,437 acres of soil across all 1,740 tower work areas as well as access roads, reinforcing tower structural members, completely replacing towers as needed, raising transmission towers as needed, and more. These activities would not involve removal of groundwater, oil, or gas. As such, the proposed Project would not result in on- or off-site subsidence. Collapsible soils consist of loose, dry materials that collapse and compact under the addition of water or excessive loading. Collapsible soils are prevalent throughout the southwestern United States, specifically in areas of young alluvial fans. Several work sites are located in areas underlain by quaternary alluvium (USGS 2015). Soil collapse occurs when the land surface is saturated at depths greater than those reached by typical rain events. While collapse has the potential to occur within or near the Project area, the proposed Project would not be expected to exacerbate or trigger collapse, as it would involve mostly minor grading activities at work areas and the reinforcement, replacement, or raising of existing transmission towers.

In the event that geologic instability were to occur in the Project area, the proposed Project would not significantly increase the number of people who could be affected, nor would it involve the construction of any habitable structures with the potential to be affected by geologic instability. During construction, up to a maximum of 276 workers would be present in the Project area for approximately up to 45 months. The reinforced or replaced towers, tower footings, and raised towers would be designed and installed pursuant to existing federal, state, and LADWP engineering and design standards related to seismic criteria, which would minimize the potential for the transmission towers to be damaged by geologic instability. The proposed Project would not expose additional people or structures to hazards related to geologic instability, and construction impacts would therefore be less than significant.

Operations

Less-than-Significant Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to normal. No changes to operational activities would occur relative to existing conditions and, as such, once construction is complete, no change in potentially unstable soil attributable to the proposed Project would occur. As described above, Project features would be constructed in accordance with applicable federal, state, and LADWP design standards related to seismic criteria, and would not substantially change unstable soil conditions relative to existing conditions. As such, Project operational impacts related to unstable soil would be less than significant.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Construction

Less-than-Significant Impact. Expansive soils are clay-based soils that tend to expand (increase in volume) as they absorb water and shrink (lessen in volume) as water is drawn away. If soils consist of expansive clays, foundation movement and/or damage can occur if wetting and drying of the clay does not occur uniformly across the entire area. The proposed Project would involve minor grading activities at all work areas and access roads, reinforcing tower structural members, completely replacing towers as needed, raising transmission towers as needed, and more. The Project area is generally underlain by quaternary alluvium, volcanic rock, granitic rock, and sandstone, shale, and gravel deposits (USGS 2015). In the event that soil expansion were to occur in the Project area, it would not create substantial risks to life or property. The proposed Project would not involve construction of habitable structures that would increase the population in the Project area, and the presence of on-site workers in the Project area would be temporary. The reinforced or replaced towers, tower footings, and raised towers would be designed and installed pursuant to existing federal, state, and LADWP engineering and design standards related to seismic criteria, which would reduce potential damage to the raised transmission towers from ground movement, including movement from expansive soils. Therefore, the proposed Project would not create a substantial risk to life or property resulting from expansive soils, and construction impacts would be less than significant.

Operations

Less-than-Significant Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to normal. No changes to operational activities would occur relative to existing conditions and, as such, once construction is complete, no change in expansive soil attributable to the proposed Project would occur. As described above, Project features would be constructed in accordance with applicable federal, state, and LADWP design standards related to seismic criteria, and would not substantially change expansive soil conditions relative to existing conditions. As such, Project operational impacts related to expansive soil would be less than significant.

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

No Impact. The proposed Project would involve minor grading activities at all work sites and access roads, reinforcing tower structural members, completely replacing towers as needed, raising transmission towers as needed, and more. No septic tanks or alternative wastewater disposal systems are proposed. Therefore, no construction or operational impacts associated with the use of septic tanks or alternative wastewater disposal systems would occur.

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

Potentially Significant Impact. The proposed Project would primarily involve minor grading activities at all work sites and access roads, reinforcing tower structural members, completely replacing towers as needed, raising transmission towers as needed, and more. However, if new tower footings are required, the footings would extend approximately 30 feet below ground, which could result in the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. As such, impacts to paleontological resources are potentially significant, and this issue will be evaluated in the EIR prepared for the Project.

3.8 Greenhouse Gas Emissions

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

GHGs are gases that absorb infrared radiation (i.e., trap heat) in the earth's atmosphere. The trapping and buildup of heat in the atmosphere near the earth's surface (the troposphere) is referred to as the "greenhouse effect" and is a natural process that contributes to the regulation of the earth's temperature, creating a livable environment on Earth. The earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in the earth's energy balance. Human activities since the Industrial Revolution have generated and emitted GHGs into the atmosphere at a rate that measurably increased the amount of infrared radiation that gets absorbed before escaping into space. This anthropogenic contribution to the naturally occurring greenhouse effect led to noticeable and large-scale changes to the earth's climate patterns (e.g., temperature, precipitation, wind patterns). This global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

As defined in Health and Safety Code Section 38505(g), for purposes of administering many of the State's primary GHG emissions reduction programs, GHGs include CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride (see also CEQA Guidelines Section 15364.5). The primary GHGs that would be emitted by project-related construction and operations include CO_2, CH_4, and N_2O.

The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare each GHG's ability to trap heat in the atmosphere relative to another gas. The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e). Consistent with CalEEMod Version 2022.1.1.21, this GHG emissions analysis assumed the GWP for CH_4 is 25 (i.e., emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

a-b) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? and

Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less-than-Significant Impact. The CEQA Guidelines provide for streamlining the environmental review of project-level analysis of GHG emissions from a programmatic document, such as a GHG reduction plan, and allow for a finding of less than significant where a project is determined to be consistent with a local reduction plan (CEQA Guidelines, Title 14 California Code of Regulations Section 15183.5). The CEQA Guidelines provide that the environmental analysis of specific projects may be tiered from a programmatic GHG plan that substantially lessens the cumulative effect of GHG emissions. If a public agency adopts such a programmatic GHG Plan, the environmental review of subsequent projects may be streamlined. A specific project's incremental contribution of GHG emissions will not be considered cumulatively significant if the project complies with the adopted GHG plan.

Potential to Conflict with the County of San Bernardino GHG Reduction Plan

The County of San Bernardino developed and adopted a Greenhouse Gas Reduction Plan (GHGRP) in September 2011, which presented a comprehensive set of actions to reduce its internal and external GHG emissions to 15% below 2007 levels by 2020, consistent with the Assembly Bill (AB) 32 Scoping Plan (County of San Bernardino 2011). As described in the latest Greenhouse Gas Reduction Plan Update (GHGRP Update), the County achieved the 2020 GHG reduction target that was set in the GHGRP and the GHGRP Update establishes a target for year 2030 to reduce emissions to 40% below 2007 levels, which aligns with the statewide goal of Senate Bill (SB) 32 and puts the County on a path toward the State's long-term goal to achieve statewide carbon neutrality (zero net emissions) by 2045 (County of San Bernardino 2021).

As described in the GHGRP Update, all development projects, including those otherwise determined to be exempt from CEQA, are subject to applicable Development Code provisions, including the GHG performance standards and state requirements. With the application of the GHG performance standards, projects that are exempt from CEQA and small projects that do not exceed 3,000 MT CO_2e per year are considered to be consistent with the GHGRP Update and determined to have a less–than-significant individual and cumulative impact for GHG emissions (County of San Bernardino 2021). The development of this threshold implies that it should be applied to the total of a project's annual operational emissions plus its construction emissions annualized over the project life. GHG reducing performance standards were developed by the County to improve the energy efficiency, water conservation, vehicle trip reduction potential, and other GHG reductions from all new development approved within the unincorporated portions of San Bernardino County. As such, the GHG performance standards establish the minimum level of compliance that development must meet to assist in meeting the 2030 GHG reduction target identified in the in the GHGRP Update. These performance standards apply to all projects, including those that are exempt under CEQA, and will be included as Conditions of Approval for development projects (County of San Bernardino 2021).

As the Project consists of short-term construction for utility infrastructure replacement, the majority of GHG reducing performance standards from the GHGRP Update would not apply. However, the following construction-related performance standards from the GHGRP Update would be required as Conditions of Approval for the proposed Project:

GHG – Construction Standards. The "developer" shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce GHG emissions and submitting documentation of compliance. The developer/construction contractors shall do the following:

a) Implement the approved Coating Restriction Plans.

b) Select construction equipment based on low GHG emissions factors and high-energy efficiency. All diesel/gasoline-powered construction equipment shall be replaced, where possible, with equivalent electric or compressed natural gas equipment.

c) Grading contractor shall provide the implement the following when possible:

1) training operators to use equipment more efficiently.

2) identifying the proper size equipment for a task can also provide fuel savings and associated reductions in GHG emissions

3) replacing older, less fuel-efficient equipment with newer models

4) use GPS for grading to maximize efficiency

d) Grading plans shall include the following statements:

• "All construction equipment engines shall be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration."

• "All construction equipment (including electric generators) shall be shut off by work crews when not in use and shall not idle for more than 5 minutes."

e) Schedule construction traffic ingress/egress to not interfere with peak-hour traffic and to minimize traffic obstructions. Queuing of trucks on and off site shall be firmly discouraged and not scheduled. A flag person shall be retained to maintain efficient traffic flow and safety adjacent to existing roadways.

f) Recycle and reuse construction and demolition waste (e.g. soil, vegetation, concrete, lumber, metal, and cardboard) per County Solid Waste procedures.

g) The construction contractor shall support and encourage ridesharing and transit incentives for the construction crew and educate all construction workers about the required waste reduction and the availability of recycling services.

In addition to implementation of the applicable GHG reducing performance standards, to determine the proposed Project's potential to generate GHG emissions that would have a significant impact on the environment, the Project's total construction GHG emissions were amortized and compared to the quantitative threshold of 3,000 MT CO_2e per year as identified in the County's GHGRP Update.

Construction of the Project would result in energy use primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, worker vehicles, and helicopters. CalEEMod Version 2022.1.1.21 was used to calculate the annual GHG emissions for these sources, except for helicopters, which were estimated in a spreadsheet model, based on the construction scenario described in Section 2.2. For the purposes of GHG emissions modeling, construction of the Project is anticipated to commence in April 2025 and would last approximately 1,379 days. Table 3.8-1 presents the GHG emissions resulting from construction of the proposed Project. For further detail on the assumptions and results of this analysis, please refer to Appendix A.

Table 3.8-1. Estimated Annual Construction Greenhouse Gas Emissions

Construction Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
2025	855.47	0.03	0.03	0.36	865.49
2026	2,788.46	0.09	0.11	1.16	2,823.47
2027	5,967.12	0.19	0.22	2.12	6,038.71
2028	5,470.19	0.18	0.19	1.69	5,532.47
2029	685.58	0.03	0.01	0.04	688.91
Totals	**15,766.82**	**0.51**	**0.55**	**5.38**	**15,949.04**
Amortized GHG Emissions (30 years)					**531.63**

Notes: GHG = greenhouse gas; CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R= refrigerants; CO_2e = carbon dioxide equivalent.
Helicopter emissions were added to the CalEEMod results during years 2026, 2027, and 2028, which would be the years that transmission line construction would occur.
See Appendix A for complete results.

As shown in Table 3.8-1, the estimated total GHG emissions over the construction period would be approximately 15,949 MT CO_2e, which equates to about 532 MT CO_2e per year when amortized over 30 years. For long-term operations, the proposed Project would not change the routine inspection and maintenance of the existing transmission lines or result in a net increase in GHG emissions. Overall, as the Project would implement all applicable GHG reducing performance standards from the GHGRP Update as Conditions of Approval and would result in amortized GHG emissions below the 3,000 MT CO_2e per year screening level, the Project would be consistent with the GHGRP Update and would have a less than significant individual and cumulative impact for GHG emissions.

Potential to Conflict with the Regional Transportation Plan/ Sustainable Communities Strategy

The Southern California Association of Governments developed Connect SoCal, the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), which complies with CARB's updated emissions reduction targets and meets the requirements of SB 375 by achieving per-capita GHG emissions reductions relative to 2005 of 8% by 2020 and 19% by 2035 (SCAG 2020). In addition to demonstrating the region's ability to attain the GHG emission-reduction targets set forth by CARB, the 2020–2045 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. Thus, successful implementation of the 2020–2045 RTP/SCS would result in more complete communities with a variety of transportation and housing choices, while reducing automobile use.

The following strategies are intended to be supportive of implementing the 2020–2045 RTP/SCS and reducing GHGs: focus growth near destinations and mobility options; promote diverse housing choices; leverage technology innovations; support implementation of sustainability policies; and promote a green region (SCAG 2020). The majority of these strategies would not apply to the Project, which pertain to land use development and transportation sectors. The Project's compliance with the remaining applicable strategy is presented below.

- **Promote a Green Region.** This strategy involves promoting a green region through efforts such as supporting local policies for renewable energy production and promoting more resource efficient development (e.g., reducing energy consumption) to reduce GHG emissions. The Project is supportive of this strategy since the Project is required to accommodate incoming renewable energy resources and allow the LADWP to achieve the State's RPS requirements.

Based on the preceding, the Project would not conflict with the Southern California Association of Governments' 2020–2045 RTP/SCS.

Project Potential to Conflict with State Reduction Targets and CARB's Scoping Plan

The California State Legislature passed the Global Warming Solutions Act of 2006 (AB 32) to provide initial direction to limit California's GHG emissions to 1990 levels by 2020 and initiate the state's long-range climate objectives. Since the passage of AB 32, the state has adopted GHG emissions reduction targets for future years beyond the initial 2020 horizon year. For the proposed Project, the relevant GHG emissions reduction targets include those established by SB 32 and AB 1279, which require GHG emissions be reduced to 40% below 1990 levels by 2030, and 85% below 1990 levels by 2045, respectively. In addition, AB 1279 requires the state achieve net zero GHG emissions by no later than 2045 and achieve and maintain net negative GHG emissions thereafter.

As defined by AB 32, CARB is required to develop the Scoping Plan, which provides the framework for actions to achieve the State's GHG emission targets. The Scoping Plan is required to be updated every 5 years and requires CARB and other state agencies to adopt regulations and initiatives that will reduce GHG emissions statewide. The first Scoping Plan was adopted in 2008, and was updated in 2014, 2017, and most recently in 2022. While the Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations,[2] it is the official framework for the measures and regulations that will be implemented to reduce California's GHG emissions in alignment with the adopted targets. Therefore, a project would be found to not conflict with the statutes if it would meet the Scoping Plan policies and would not impede attainment of the goals therein.

CARB's 2017 Scoping Plan update was the first to address the state's strategy for achieving the 2030 GHG reduction target set forth in SB 32 (CARB 2017), and the most recent CARB 2022 Scoping Plan update outlines the state's plan to reduce emissions and achieve carbon neutrality by 2045 in alignment with AB 1279 and assesses progress is making toward the 2030 SB 32 target (CARB 2022). As such, given that SB 32 and AB 1279 are the relevant GHG emission targets, the 2017 and 2022 Scoping Plan updates that outline the strategy to achieve those targets are the most applicable to the Project.

The 2017 Scoping Plan included measures to promote renewable energy and energy efficiency, increase stringency of the Low-Carbon Fuel Standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant Plan, and increase stringency of SB 375 targets. The 2022 Scoping Plan builds upon and accelerates programs currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; and displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines) (CARB 2022).

As the Project would be consistent with the San Bernardino County GHGRP Update, which aligned its 2030 target to SB 32, the Project would not conflict with SB 32. Further, as discussed in Section 2 above, the Project is required to accommodate incoming renewable energy resources along the west of the Colorado River Path 46 transmission corridor and to ensure the continued safe and reliable operation of the lines and the additional

[2] The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

475 megawatts would contribute over 15% toward LADWP's RPS as part of LADWP's commitment to be 100% carbon-free by 2035, 10 years ahead of the State's target (LADWP 2023). Thus, the Project is essential in aiding LADWP achieve the state's RPS requirements, which is a key component of the state's 2017 and 2022 Scoping Plan and would support the state's ability to achieve the 2030 and 2045 GHG reduction and carbon neutrality goals.

Summary

As discussed above, the Project would be consistent with the County of San Bernardino GHGRP Update, the Southern California Association of Governments' 2020 RPT/SCS, the 2017 and 2022 Scoping Plans and would not conflict with the state's trajectory toward future GHG reductions. Therefore, the Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment and would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be less-than-significant.

3.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
safety hazard or excessive noise for people residing or working in the project area?				
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Project Site Conditions and Hazardous Materials

The proposed Project would be located within an existing utility corridor extending through primarily vacant areas of the Mojave Desert, beginning and ending at existing substations. The proposed Project site is primarily desert land along the corridor and access roads from I-15 to the corridor. The proposed Project, as described in Section 2.1, would include maintenance activities along the corridor, including replacement and reinforcement of towers and lattice steel structures, rehabilitation of access roads, site clearing, and construction staging. Hazardous materials typically associated with this type of work includes diesel, oil, and other fuels associated with heavy equipment and powered equipment, paints and solvents associated with construction and steel work, and waste oils, solvents, and paints. Construction would generally be limited to surface-level construction and would involve minimal excavation only in instances when new tower footings are required. Excavation may occur during replacement of steel structures if the structure foundation needs to be replaced; excavation would be limited to the existing foundation area. Surficial grading may occur during road maintenance activities and land clearing for new tower placement.

Regulatory Database

A regulatory database search was conducted of the proposed Project vicinity and included a review of databases on the following websites: California Department of Toxic Substances Control's EnviroStor (DTSC 2024), the State Water Resources Control Board's Geotracker (SWRCB 2024), and other Cortese List sites (CalEPA 2024). The review examined the affected portions of the utility corridor and immediately surrounding areas along the proposed Project to Primm, California, at the border between California and Nevada. For the Nevada side of the project (state border to the McCullough substation), a search was conducted through Nevada Division of Environmental Protection (NDEP 2024a).

In California, six hazardous material/waste release sites were identified along the corridor, but do not appear to overlap the proposed Project site boundaries or work areas. Two adjoining sites are closed leaking underground storage tank sites, which have documented release from underground tanks, but have received regulatory closure from local Water

Quality Control Board. While impacts may remain at these locations in subsurface soils, they border proposed access roads, where no subsurface work (excavation) is proposed. Three sites are landfills, two of which are active. As with the leaking underground storage tank sites, impacts, if any, are likely subsurface and do not overlap the proposed Project work sites.

In Nevada, multiple closed hazardous material/waste release sites were identified. In Primm, the sites were mainly associated with the nearby casino complex along I-15 (approximately 0.50 miles south of the corridor). Multiple sites were also identified at the solar complex southeast of the McCullough substation. Most of the sites have received regulatory closure, indicating the release was cleaned up to the satisfaction of the regulatory agency (Nevada Division of Environmental Protection). One nearby case is open, indicating the site is still undergoing remediation at the casino complex; contamination is related to subsurface fuel release to groundwater (NDEP 2024b). As the impacts are subsurface and do not overlap the Project, they are not likely to impact construction or operation of the proposed Project.

The proposed Project also borders Fort Irwin, between proposed transmission line markers MCV-1_74.5 and MCV-1_100.1. Fort Irwin was established in 1940 as the Mojave Anti-Aircraft Range; the site became a permanent military facility and renamed Fort Irwin in 1961. Operations included desert training and armor and artillery firing ranges for multiple Army units (Dawson 2020). As of 2020, sixteen separate areas within Fort Irwin were under cleanup action (Dawson 2020). These areas are within the borders of Fort Irwin and are not expected to overlap proposed Project work areas.

Schools

The majority of the proposed work areas are located in vacant areas of the Mojave Desert and on BLM land. The nearest school to the Project area is the Baker Valley Unified School District elementary, middle, and high school, located at 72100 Schoolhouse Lane, Baker, California. This school is approximately 1,075 feet south-southeast of the Highway 127 access road through Baker at its nearest point.

Airports

Airports within the vicinity of the proposed Project include the Apple Valley Airport, 21600 Corwin Road in Apple Valley; the Southern California Logistics Airport, 18374 Phantom W in Victorville; Barstow-Daggett Airport, 39500 National Trails Highway in Daggett; and Jean Sport Aviation Center, 23600 S Las Vegas Boulevard in Jean, Nevada (Airnav 2024). All nearby airports are open to the public and located within 5 miles of the proposed Project and its access roads.

Emergency Evacuation

The work areas are located in relatively remote locations that would be primarily accessed by existing access roads, which are not major evacuation or emergency routes. I-15 serves as a major east/west transportation corridor for the region and is critical to emergency operations.

Wildland Fires

Wildland fire is not likely to occur in the Project area, as desert vegetation is typically characterized by low fire frequency (BLM 1980).

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

Less-than-Significant Impact. Implementation of the proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Construction activities would be temporary in nature and would involve the limited transportation, storage, usage, and disposal of hazardous materials. Such hazardous materials could include on-site fueling/servicing of construction equipment, and the transport of fuels, lubricating fluids, and solvents. These types of materials are not acutely hazardous, and all storage, handling, and disposal of these materials are regulated by the California Department of Toxic Substances Control, the U.S. Environmental Protection Agency, the Occupational Safety and Health Administration, and the San Bernardino County Fire Protection District. The transport, use, and disposal of construction-related hazardous materials would occur in conformance with applicable federal, state, and local regulations governing such activities. Therefore, the short-term construction impact would be less than significant.

Once construction is complete, the operational activities along the transmission lines would not change upon implementation of the proposed Project. As such, no operational impact related to the routine use or transport of hazardous materials would occur as a result of the proposed Project.

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

Less-than-Significant Impact. The proposed Project construction would not create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. As discussed in Section 3.9(a), construction activities for both phases of the proposed Project may involve limited transport, storage, use, or disposal of some hazardous materials, such as on-site fueling/servicing of construction equipment, and the transport of fuels, lubricating fluids, and solvents. There is also the potential that areas used for agriculture or areas that have been used for agriculture in the past would contain residual pesticides in the soil that is being excavated. However, there are only a handful of work areas under the proposed Project that are within or adjacent to land currently being used for agriculture (MCV1_124-4 to 127-4 and MCV2_123-4 to 126-4). The majority of the Project area is located in undeveloped areas of the Mojave Desert. As such, the potential for encountering pesticides of high concentration is low. Furthermore, these types of materials that would be used or that would have the potential to be encountered (i.e., pesticides) are not acutely hazardous.

The heavy equipment used for grading and excavation would be operated using oil, fuel, lubricating grease, coolants and hydraulic fluids. In the event that hazardous or regulated materials were spilled, direct impacts could occur related to the release of hazardous materials into the environment, resulting in the exposure of workers to the materials. Such impacts would generally be temporary, due to the short-term nature of construction. Any hazardous substance spills would be cleaned immediately, and any resulting waste would be transferred off site in accordance with all applicable local, state, and federal regulations. Contractors would maintain spill kits on site for use in case of a spill. Measures would be taken to control the spill, and the appropriate agencies or landowners would be notified as required. As such, in the unlikely event that hazardous materials are spilled during construction, impacts would be temporary, minor, and localized, because such spills would be required to be properly controlled and safety removed in accordance with existing regulations.

Compliance with existing federal, state, and local regulations would ensure that construction impacts related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials would be less than significant.

Once construction is complete, the operational activities along the transmission lines would not change upon implementation of the proposed Project. As such, no operational impact related to the release of hazardous materials would occur as a result of the Project.

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

No Impact. As discussed above, there is one school within 0.25 miles of the Highway 127 access road through Baker. The school is not located on or adjoining any work zones. The majority of the proposed work areas are located in undeveloped areas of the Mojave Desert and on BLM land, so it is unlikely that a school would be proposed near the Project area in the future. The proposed Project would not alter any land uses or introduce any new sources of hazardous materials. Furthermore, the activities associated with the proposed tower raising activities would involve hazardous materials typical of construction processes and therefore would not introduce acutely hazardous materials into the Project area. As such, no impact would occur as a result of the proposed Project.

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

Less-than-Significant Impact. Six properties within the Project vicinity are listed on sites that have documented releases of hazardous materials or wastes. Only two of these sites are on lists compiled pursuant to Government Code Section 65962.5 (leaking underground storage tank cases located at 17400 D Street in Victorville, and 40873 Sunrise Canyon in Yermo). Both of these sites have received regulatory closure, and remaining contamination, if any, would be limited to subsurface impacts (soil, soil vapor, or groundwater). Other sites not listed on the Cortese Lists would have similar subsurface impacts. Work areas along the proposed Project site would mainly occur within BLM land and are not located directly on contaminated sites. Except for towers being replaced, which requires excavation up to 30 feet below ground surface, construction activities would not require deep excavations. As discussed under "Regulatory Databases," hazardous materials sites with ongoing cleanups do not appear to overlap the proposed Project, so these excavations are not likely to occur on hazardous material release sites. This would further decrease the likelihood for hazardous materials sites, such as underground storage tanks, to be encountered during ground-to-conductor clearance activities. Furthermore, construction activities would occur primarily in areas that are naturally vegetated, with prior on-site activities limited to those required to construct and maintain the transmission infrastructure. For these reasons, it is not anticipated that any hazardous materials sites would be encountered or disturbed during the proposed tower reinforcement, replacement, and raising activities. In the unlikely event that hazardous wastes are uncovered, workers would be required to adhere to existing state and federal requirements pertaining to safe handling and proper disposal of such wastes. As such, impacts would be less than significant.

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

No Impact. Four public use airports were identified within 5 miles of the proposed Project site and proposed access roads. Airport impact areas, as defined in airport-specific airport land use plans and buffer zones defined by state aviation administrations, do not overlap proposed work areas, but may overlap access roads (Coffman 2008; County of San Bernardino 1992; NDOT n.d.; Town of Apple Valley 1995). As construction activities, including new structures, are not planned within access roads, the proposed Project would have no impact related to noise and safety due to nearby airports.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed work areas are located within undeveloped areas of the Mojave Desert, with most work sites located on BLM land. No private airstrips are located in the vicinity of the work sites. As described under Section 3.9(e), the proposed Project would not substantially alter airport safety hazards in the Project area. No impact would occur.

g) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less-than-Significant Impact. The proposed Project would be located in primarily undeveloped areas of the Mojave Desert. The Vegetation Element in the CDCA Plan notes that desert vegetation is typically characterized by low fire frequency (BLM 1980). The County maps fire safety areas within the County; however, the Project area is not located in a fire safety area (County of San Bernardino 2023b). The proposed Project would involve the temporary presence of construction workers in the Project area (up to 276 personnel on site for approximately up to 45 months), who would be temporarily exposed to wildland fire, in the event that one was to occur in the Project area. However, the risk would not be greater than that of other areas in Southern California. Additionally, no habitable structures are proposed, and the Project would not permanently increase the population in the Project area resulting in an increase of people and/or structures that would be at risk of loss, injury, or death involving wildland fire. As such, impacts would be less than significant.

3.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the				

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Surface Water

The Project area is within the Mojave Desert, an arid area with high summer temperatures and low humidity. Annual average precipitation in the region of the Project area is approximately 3.83 inches per year (Western Regional Climate Center 2012). The proposed Project is within the South Lahontan Regional Water Quality Control Board Hydrologic Basin (Region 6). According to the 2010 U.S. Environmental Protection Agency approved 303(d) List, there are no impaired waterbodies in the vicinity of the Project area (SWRCB 2011). Surface flow in the Project area comes primarily from stormwater runoff from precipitation. Numerous drainage features such as ephemeral washes and swales traverse the Project area. The majority of features that appear to convey flows in the Project area are eroded rills and gullies that formed as a result of lack of activity on the access roads and large, sudden rain events that acted on the friable soils. The majority of these washes, swales, and other drainages are unnamed. Some of the more prominent named waterbodies nearby include the Mojave River; Red Pass Lake, located approximately 850 feet north of the MCV1_88-5 tower site; and Riggs Wash, located approximately 4.33 miles to the northwest of the alignment near MCV1_66-3 (USGS 2022).

Groundwater

The Project area is underlain by multiple groundwater basins, including the Upper Mojave River Valley Basin (6-42), Middle Mojave River Valley Basin (6-41), Lower Mojave River Valley Basin (6-040), Caves Canyon Valley (6-38), Cronise Valley Basin (6-35), Soda Lake Valley (6-033), Upper Kingston Valley (6-022), and Ivanpah Valley (6-030) (Mojave Water Agency 2023). Beneficial uses for these basins include municipal, agricultural, industrial, freshwater replenishment, and aquaculture (Lahontan RWQCB 2021). In accordance with the Sustainable Groundwater Management Act, all of these groundwater basins are considered to be very low priority basins that are not required to comply with Sustainable Groundwater Management Act basin requirements (DWR 2019).

Floodplains

Several work sites, particularly those near Barstow and Baker, may be located within or adjacent to an area potentially subject to a 100-year flood. Additionally, the ephemeral washes in the Project area represent potential hazard areas for flooding. However, the various construction activities would not adversely affect floodplains or expose substantial numbers of people to flood hazards.

a) Would the project violate any water quality standards or waste discharge requirements?

Construction

Less-than-Significant Impact. The proposed Project would involve grading activities and relatively minor earthwork activities at most of the 1,740 tower work areas as well as all access roads which are in undeveloped areas of the Mojave Desert. The proposed Project involves maintenance and rehabilitation of access roads, reinforcing or replacing tower structural steel members for approximately 1,508 towers, complete tower replacement for approximately 153 towers, tower raising for towers with ground-to-clearance violations and the subsequent power line re-tensioning that is necessary, as well as replacing all conductors, ground wires, insulators, and associated hardware assemblies, and adding grounding at every tower along the alignment. After construction is complete, each tower site and work area would be restored to its original condition to the extent feasible.

The proposed Project would include relatively minor grading across most of the 1,740 tower work sites and all access road sites. The tower raising activities would also result in temporary disturbances. Barricade installation, if necessary, would involve minimal grading. In the event that stormwater runoff was to be generated during construction activities, sediment runoff or runoff containing pollutants from construction equipment present on site would have the potential to be transported offsite. As such, water quality standards and waste discharge requirements related to construction and stormwater runoff would apply to the proposed Project.

Prior to the start of construction, LADWP would be required to obtain a General Storm Water Permit Associated with Construction Activity, issued by the State Water Resources Control Board. One of the conditions of the General Permit is the development and the implementation of a SWPPP by a Qualified

SWPPP Developer, which would identify structural and nonstructural BMPs to be implemented by the Qualified SWPPP Practitioner during the construction phase. LADWP would also develop and implement an erosion control plan for the proposed Project. These required BMPs would minimize direct impacts to surface water quality and would also minimize the potential for indirect impacts to occur such as increases in sediment loads in surface waters. With implementation of BMPs as outlined in the SWPPP and erosion control plan, the proposed Project would not violate any water quality standards or waste discharge requirements. Therefore, potential construction impacts to any water quality standards or waste discharge requirements would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to normal. Operational conditions and activities would not be altered by the proposed Project such that water quality standards or waste discharge requirements would be violated and, as such, no operational impacts associated with such conflicts would occur.

b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Construction

Less-than-Significant Impact. Water demands associated with the proposed Project would primarily consist of water used for dust control during construction activities. This water would be transported to the work sites in a water truck and could be sourced from various different water providers that could be accessing groundwater or imported surface water. Regardless, considering the general scope of activities involved, the volumes of water required would be temporary, relatively small volumes, dispersed over a large area and likely would not increase water use in the Project area to the extent that groundwater supplies in any one of the groundwater basins where it would become substantially depleted. Furthermore, the only impervious surfaces that would be installed in association with proposed Project are the towers being completely replaced and the new footings associated with the tower raising activities. These standard footings would be approximately 4 feet in diameter and 30 feet in depth, for a total permanent impact area of approximately 120 square feet at each tower raising site and runoff would still be directed to pervious areas where recharge can still occur. Towers and tower footings would be installed on or slightly offset from the existing tower footprint. Replaced transmission towers are not anticipated to increase the total amount of impervious surface at tower sites as the replaced tower would be installed in place of the previous tower. Therefore, the resulting construction impacts would be maintained entirely within pre-disturbed areas of each tower site and, as such, the proposed Project would not substantially increase the area of impervious surface in the transmission corridor.

Groundwater can potentially be encountered during construction activities when deep excavations are involved and/or when groundwater levels are high. However, the proposed grading activities would be relatively shallow and are not anticipated to require dewatering. During the tower raising activities, new footings would be placed in the ground at a depth of approximately 30 feet but would not require dewatering even if groundwater was encountered. As such, it is not anticipated that groundwater would be required to be pumped or adversely affected during the proposed construction activities. Considering the above, construction impacts would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would have negligible changes related to groundwater use or groundwater recharge. Operational conditions and activities would not be altered by the proposed Project such that groundwater would be required to be pumped or adversely affected in any way. As such, no operational impacts would occur.

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

i) Result in substantial erosion or siltation on- or off-site?

Construction

Less-than-Significant Impact. Numerous drainage features such as ephemeral washes and swales traverse the Project area; however, the proposed construction and tower raising activities are not anticipated to impact any drainage feature or alter the stream course of any feature. Furthermore, no proposed construction activities are anticipated to result in temporary or permanent fill of any stream or river. The transmission alignment occurs in the Mojave Desert with terrain that includes narrow ephemeral channels, broad sandy desert washes, and dry lake beds. The western Mojave has numerous small channels that convey surface water after a rainfall event which normally occur during the winter months. These drainages flatten out into alluvial fans over the landscape of flat desert plains. These surface flows tend to infiltrate into the soil quickly as the gradient decreases (Psomas 2023). The construction activities within an existing utility corridor would not result in substantial erosion or siltation on or off site. However, storm events occurring during the construction phase would have the potential to carry disturbed sediments off site. Compliance with the stormwater runoff regulations described under Section 3.10(a) would ensure that impacts related to erosion and siltation during construction activities would remain less than significant. Construction impacts would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to conditions that are effectively very similar to existing conditions as far as drainage patterns are concerned. It is anticipated that during operation, any water features within the Project area that were affected by construction activities would be reestablished and that drainage patterns would not be substantially altered during operation. Operational conditions and activities would not be altered by the proposed Project and, as such, no operational impacts would occur.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Construction

Less-than-Significant Impact. As described above in Section 3.10(c)(i), the proposed Project would not alter the course of a stream or river. Furthermore, as described above in Section 3.10(b), the Project would not substantially increase the amount of impervious surfaces in the Project area, with the exception of the new tower footings for towers that would be raised, which would total 120 square feet of impervious surface at each tower raising site. Again, these tower footings would be installed in the same place as or slightly offset from the original tower footing location, and as such, the Project would not substantially increase the amount of impervious surface in the Project area. Because the proposed Project would not introduce substantial amounts of new impervious surfaces, the rate or amount of surface runoff would not be substantially increased to the extent that flooding is caused on or off site.

As explained above in Section 3.10(c), the proposed tower raising activities may result in minor alternations to the drainage patterns within the Project area. This is because existing rills or gullies formed by water flow may be altered, and the shape and slope of the grading sites may be slightly altered as areas underneath the power lines are graded and excavated soils are spread along access roads. However, these minor alternations in drainage would not substantially alter the extent to which flooding occurs in the Project area or vicinity, as flooding would not be impeded or substantially redirected. Construction impacts would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to conditions that are effectively very similar to existing conditions as far as drainage patterns are concerned. It is anticipated that during operation, any rills or gullies within the Project area that were affected by construction activities would be reestablished and that drainage patterns would not be substantially altered during operation. Operational conditions and activities would not be altered by the proposed Project and, as such, no operational impacts would occur.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction

Less-than-Significant Impact. As described above under Section 3.10(d), the proposed Project would not increase the amount of runoff from the Project area. As such, the proposed Project would not affect the capacity of stormwater drainage systems. However, storm events occurring during the construction phase would have the potential to carry disturbed sediments and spilled substances from construction activities, thereby creating a temporary source of polluted runoff. Compliance with the water quality regulations described above under Section 3.10(a) would ensure that impacts related to polluted runoff during construction activities would remain less than significant. Therefore, construction impacts would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to normal. The Project would not increase the amount of runoff from the Project area. As such, operational conditions and activities would not be altered by the proposed Project and, as such, no operational impacts would occur.

iv) Impede or redirect flood flows?

No Impact. There are several 100-year flood hazard areas near Barstow and Baker (DWR 2023). While some of the Project's proposed work sites may be located within or near a 100-year flood hazard area, the proposed construction activities do not involve installation of new permanent or habitable structures nor anything that is substantially more substantive than what currently exists and, as such, no floods flows would be redirected. Therefore, no construction or operational impacts would occur.

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

Construction

Less-than-Significant Impact. As noted above, some of the Project's proposed work sites may be located within or near an identified 100-year flood hazard area, however the proposed construction activities do not involve the storage or handling of bulk quantities of hazardous materials and would be required to manage any hazardous materials in a manner consistent with existing regulatory requirements. Therefore, risk of release of pollutants during construction due to flooding would be less than significant.

Seiches are oscillations generated in enclosed or semi-enclosed bodies of water, usually as a result of earthquake-related ground shaking. A seiche wave has the potential to overflow the sides of a containing basin to inundate adjacent or downstream areas. There are no large, enclosed permanent bodies of water immediately adjacent to the Project area. As such, the Project area would not be subject to inundation by seiche during construction.

Tsunamis are large ocean waves caused by the sudden water displacement that results from an underwater earthquake, landslide, or volcanic eruption. Tsunamis affect low-lying areas along the coastline. The Project area is located over 80 miles northeast of the Pacific Ocean. As such, the Project area would not be susceptible to inundation by tsunami during construction.

<u>Operations</u>

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would occur largely similar to existing conditions. Operational conditions and activities, such as the occurrence of flooding, seiche waves, or tsunami events, would not be substantially affected by these hazards and there would be no storage of substantive quantities of hazardous materials and, as such, no operational impacts would occur.

3.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

The proposed Project is located within an existing right-of-way within Utility Corridor D (the Boulder Corridor), which is delineated in the CDCA Plan. Corridor D originates at the border of Nevada and California, traverses the CDCA Planning Area in a southwest direction, and extends past the town of Victorville, California, in a southerly direction, terminating at the border of San Bernardino County (edge of CDCA Planning Area). The corridor measures approximately 2 miles in width.

The 162-mile transmission line corridor also crosses through a number of Special Recreation Management Areas (SRMAs) and Extensive Recreation Management Areas (ERMAs) under the DRECP. SRMAs are designated by BLM to provide specific recreational opportunities such as trailheads for hikers or for off-road vehicle users while ERMAs are designated to manage and support the principal recreational activities and associated qualities of the EMRA (BLM 2024a, 2024b). The Project passes through the Stoddard/Johnson SRMA, the Shadow Valley ERMA, and the Ivanpah Valley ERMA. A portion of the proposed Project also passes through the Stoddard Valley off-highway-vehicle (OHV) area.

The proposed Project would also pass within approximately 2,505 feet of the Ivanpah SRMA at the nearest transmission tower. Although the Project would not pass through any BLM wilderness areas, wilderness areas are located along the transmission corridor. Wilderness Areas are managed by BLM to ensure that they maintain their wilderness characteristics (BLM 2024a). The Stateline Wilderness Area within approximately 2,765 feet at the nearest tower, the Mesquite Wilderness Area within approximately 2,345 feet at the nearest tower, the Kingston Range Wilderness Area within approximately 2,700 feet at the nearest tower, and the Hollow Hills Wilderness Area within approximately 1,675 feet at the nearest tower. Various portions of the transmission corridor are near, but not within DRECP conservation land. Towers that overlap with the Fremont-Kramer to Ord-Rodman Linkage for the Desert tortoise include MCV1_159-3 to 158-3 and MCV2_137-4 to 150-3, as well as MCV1_145-6, MCV2_145-1 and 144-5. A different portion of the alignment overlaps with the Ord Rodman Tortoise Conservation Area, including towers MCV1_139-5 to 128-6 and MCV2_139-1 to 128-1. Towers MCV1_121-4 to 94-1 and MCV2_120-5 to 93-3 traverse through the Superior-Cronese Tortoise Conservation Area. Towers MCV1_93-5 to 54-1 and MCV2_93-2 to 53-4 pass through or pass directly adjacent to the Superior-Cronese to the Mojave National Preserve to Shadow Valley to Death Valley National Park Linkage such that construction activities are expected to overlap with the linkage. Towers MCV1_53-6 to 43-2 and MCV2_53-3 to 42-3 pass through the Ivanpah Tortoise Conservation Area. The Project overlaps with the Ivanpah Valley Linkage at towers MCV1_33-2 to 27-6 and MCV2_32-4 to 27-1. The Project also passes within approximately 105 feet of High Priority Colorado Desert Habitat for the Desert tortoise at tower MCV1_127-3.

The proposed Project also would pass through various ACECs maintained by the BLM. The BLM designates ACEC to highlight areas where special management attention is necessary to protect important historical, cultural, and scenic resources, or fish and wildlife, and other natural resources. ACEC can also be created to protect human life and safety from natural disasters (BLM 2024c). At towers MCV1_154-1 to 151-2 and MCV2_153-2 to 150-3, as well as at MCV1_145-6, MCV2_145-1 and 144-5, the Project overlaps with the Northern Lucerne Wildlife Linkage. A different portion of the alignment overlaps with the Ord Rodman ACEC, including towers MCV1_139-5 to 135-1 and MCV2_139-1 to 134-2. The subsequent towers, from MCV1_134-7 to 128-6 and MCV2_134-1 to 128-1, pass through the Daggett Ridge Monkey Flower ACEC. The Project runs through the Superior-Cronese ACEC at towers MCV1_121-2 to 94-1 and MCV2_120-3 to 93-3. Towers MCV1_72-1 to 43-2 and MCV2_71-2 to 42-2 pass through the Shadow Valley ACEC. Towers MCV1_43-1 to 27-6 and MCV2_42-1 to 27-1 pass through the Shadow Valley ACEC. The Project also passes the Mojave fringe-toed lizard ACEC within approximately 515 feet at tower MCV1_124-2 and within approximately 250 feet at tower MCV1_123-3.

Lands protected by USFWS also intersect with the proposed Project and include Critical Habitat for southwestern willow flycatcher and Mojave Desert tortoise. Critical Habitat is designated by USFWS to protect specific areas essential to the conservation of a threatened or endangered species under the Endangered Species Act (USFWS 2024). Both Project transmission lines cross through Critical Habitat designated for the Southwestern willow flycatcher between towers MCV1_162-2 and 162-1, where the nearest tower (MCV1_162-2) is within approximately 425 feet of the habitat. A few other portions of the transmission alignment also overlap with USFWS Critical Habitat for desert tortoise, including the following segments of the alignment: towers MCV1_139-5 to 128-6 and MCV2_139-1 to 128-1; towers MCV1_121-2 to 94-1 and MCV2_120-3 to 93-3; and towers MCV1_53-6 to 43-2 and MCV2_53-3 to 42-3. Additionally, towers MCV1_122-3 and 122-2 pass USFWS Critical Habitat for desert tortoise within approximately 200 feet and 625 feet, respectively.

The proposed Project would also pass through various areas designated as California Desert National Conservation Lands (CDNCL) managed by the BLM under the DRECP. These lands have been protected by the BLM as they contain nationally significant landscapes with ecological, cultural, and scientific benefits determined by a number of factors, including scenic quality, development pressure, and landscape intactness (BLM 2016). Towers MCV1_139-5 to 139-2 and MCV2_139-1 to 138-3 pass through the West Desert and Eastern Slopes CDNCL area while towers MCV1_139-1 to 134-7 and MCV2_138-2 to 134-1 overlap the Pinto Lucerne Valley and Eastern Slopes CDNCL area. Project towers MCV1_134-6 to 128-6 and MCV2_133-5 to 128-1, as well as towers MCV1_72-1 to 69-4 and MCV2_71-2 to 68-5, are found within the Mojave and Silurian Valley CDNCL area. The Kingston-Armargosa CDNCL area also overlaps with the proposed Project at towers MCV1_69-3 to 43-2 and MCV2_68-4 to 42-2.

b) ***Would the project physically divide an established community?***

No Impact. The proposed work sites are located in undeveloped areas of the Mojave Desert, with the exception of several work sites near Barstow that are within or near agricultural fields. However, these agricultural fields do not constitute an established community. Because the transmission alignment already exists and is not within an established community, it would not have the potential to divide such a community. After construction is complete, operational conditions and activities would return to normal. As such, no construction or operational impacts would occur.

b) ***Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?***

Less-than-Significant Impact. Numerous land use plans apply to the Project area. Consistency with applicable land use plans is addressed below.

BLM Land Use Plans

The proposed Project would be within the jurisdictional boundaries of the CDCA Plan, as amended, and the boundaries of the DRECP BLM Land Use Plan Amendment. The consistency of the Project with these plans is addressed below.

- **1980 California Desert Conservation Area Plan, as amended.** On BLM-administered lands, the proposed action is subject to the 1980 CDCA Plan, as amended. As part of the Federal Land Policy and Management Act, the CDCA Plan was developed to guide land use management of BLM lands within this portion of California. The proposed action is located in Corridor D (Boulder Corridor), a designated 2-mile-wide planning corridor in the CDCA Plan (BLM 1980). The CDCA Plan identifies two 500 kV power lines (the subject transmission lines of this Project) as pre-existing lines. Per the CDCA Plan, existing facilities within designated corridors may be maintained and upgraded or improved in accordance with existing right-of-way grants or by amendments to right-of-way grants. Existing facilities outside designated corridors may only be maintained but not upgraded or improved (BLM 1980).
- **2016 Desert Renewable Energy Conservation Plan**. Phase I of the DRECP was approved on September 14, 2016, by the BLM. This phase of the BLM DRECP is a Land Use Plan Amendment to the CDCA Plan and identifies priority areas for renewable energy development while setting aside areas for conservation and recreation. The BLM DRECP Land Use Plan Amendment establishes mitigation and habitat compensation ratios for project impacts that would occur within designated ACECs, including habitat linkage ACECs; CDNCLs; and non-ACEC areas. The proposed Project extends through areas covered by the DRECP.
- **California Desert National Conservation Lands**. In 1976, Congress designated a 25-million-acre expanse of resource-rich desert lands in southern California as the CDCA through the Federal Land Policy and Management Act. In 2009, Congress passed the Omnibus Public Land Management Act, which directed the BLM to include lands managed for conservation purposes within the CDCA as part of the CDNCLs. Phase I of the DRECP designated 4.2 million acres as part of the CDNCLs. Much of this land was already a part of the CDNCLs (in particular, large portions of the Mojave Trails and Sand to Snow National Monuments), but 2.89 million acres were a new addition to the system.

CDNCLs are closed to all energy development. Phase II of the DRECP focuses on better aligning local, state, and federal renewable energy development and conservation plans, policies, and goals.

County of San Bernardino General Plan

The proposed Project is within the boundaries of the County of San Bernardino General Plan (General Plan). The land use and zoning designations for almost all of the work sites is Resource Conservation (County of San Bernardino 2014). The purpose of the Resource Conservation land use and zoning designation is set forth in the General Plan, as follows (County of San Bernardino 2014):

- To encourage limited rural development that maximizes preservation of open space, watershed and wildlife habitat areas.
- To identify areas where rural residences may be established on lands with limited grazing potential but which have significant open space values.
- To prevent inappropriate urban population densities in remote and/or hazardous areas of the County.
- To establish areas where open space and non-agricultural activities are the primary use of the land, but where agriculture and compatible uses may co-exist.

Construction

The proposed Project would not involve an increase in residential development, would not result in population growth, and would not preclude the establishment of open space areas. The Project merely includes improvements and retrofits to existing infrastructure. As such, the proposed Project would be consistent with the above four purposes of the Resource Conservation land use and zoning designation.

For the reasons listed above, the proposed Project would be consistent with the land use designations for the Project area (the transmission alignment) set forth in the General Plan.

Operations

After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to normal. Operational conditions and activities would not be altered by the proposed Project, no conflicts with any applicable land use plan or policy would occur, and, as such, no operational impacts would occur.

3.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

Minerals are typically grouped into four categories including metallic minerals, industrial/nonmetallic minerals, energy minerals, and construction materials. On public lands, mineral resources are categorized by the disposal categories of locatable, leasable, and saleable. Leasable minerals include energy-related mineral resources such as oil, natural gas, coal, and geothermal, and some non-energy minerals, such as potash, salt, phosphate, and sulfur. Saleable minerals, or mineral materials, are common varieties of minerals and building materials such as sand, gravel, stone, aggregate, silica, clay, and volcanic rock products. Locatable minerals are those that are not leasable or saleable, and include minerals such as gold, silver, copper, lead, zinc, barite, gypsum, molybdenum, gemstones, and certain varieties of high calcium limestone. The CDCA, within which the Project area would be located, is an important area in the state for mineral production. At the time of the CDCA Plan adoption, the CDCA produced 50% of the state's revenue from mineral resources, and 46 mineral commodities are known to exist in the CDCA (BLM 1980). As such, mineral resources are prevalent in the vicinity of the Project area. As indicated in Section 3.12(a) below, the Project area includes areas designated by the state as having the potential to contain mineral deposits. However, the Project area does not include any oil wells or oil fields.

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

No Impact. The proposed Project consists of 1,740 individual work sites and work areas on access roads located along an approximately 162-mile alignment in the Mojave Desert. Portions of the Project area pass through Mineral Resource Zone 3a, as designated by the Department of Conservation and identified by the County on Policy Map NR-4 within the Natural Resources Element of San Bernardino's Countywide Plan (County of San Bernardino 2020). A designation of Mineral Resource Zone 3a is given to areas containing known mineral deposits that may qualify as mineral resources. These areas are considered to have moderate potential for the discovery of economic mineral deposits. A portion of the proposed Project passes through Surface Mining and Reclamation Act Study Area Open-File Report (OFR) 92-06 that has a Mineral Land

Classification of Concrete Aggregate (DOC 2024). As such, there is the potential that mineral resources of value to the region and residents of the state exist within the Project area.

Because the proposed Project would occur within a CDCA-designated utility corridor primarily used for linear utility rights-of-way the proposed Project would not affect extraction of leasable minerals, as no operations are currently present within the corridor.

Therefore, the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Additionally, according to the State of California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, no oil wells or oil fields are known to exist in the Project area (DOC 2023d). As such, the proposed Project would have no potential to interfere with the extraction of oil.

After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to normal. Given the above, no construction or operational impacts would occur.

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

No Impact. See Section 3.12(a). No construction or operational impacts related to locally important mineral resources would occur.

3.13 Noise

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport,	☐	☐	☒	☐

Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
would the project expose people residing or working in the project area to excessive noise levels?				

This section describes the noise-sensitive resources present in the Project area; discusses applicable federal, state, and regional regulations pertaining to noise; and evaluates the potential effects on noise associated with development of the proposed Project.

Noise Definitions

Sound is mechanical energy transmitted by pressure waves in a compressible medium, such as air. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired. The sound-pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The unit of measurement of sound pressure is a decibel (dB). Under controlled conditions in an acoustics laboratory, the trained, healthy human ear is able to discern changes in sound levels of 1 dB when exposed to steady, single-frequency signals in the mid-frequency range. Outside such controlled conditions, the trained ear can detect changes of 2 dB in normal environmental noise. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dB. A change of 5 dB is readily perceptible, and a change of 10 dB is perceived as twice or half as loud. A doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a road) would result in a barely perceptible change in the sound level.

Since the human ear is not equally sensitive to all sound frequencies within the entire spectrum, noise levels at maximum human sensitivity are factored more heavily into sound descriptions in a process called “A-weighting,” the measurement of which is expressed as dBA. Hourly average noise levels are usually expressed as dBA L_{eq} or the equivalent sound level over that period of time. Therefore, all sound levels discussed in this section are A-weighted. Because community receptors are more sensitive to noise intrusion during the evening and at night, state law requires that an artificial dBA increment be added to quiet-time noise levels in 24-hour noise metrics such as the Community Noise Equivalent Level (CNEL) or day-night sound level (L_{dn}).

The Project alignment spans from Boulder City, in Clark County, Nevada to Victorville, in San Bernardino County in California, as shown in Figure 1-1, Project Location. The Project would be located within an established transmission corridor (specifically the existing single-circuit MCV1 and MCV2). Generally, as the transmission line corridor is mostly isolated away from development, the Project route primarily crosses undeveloped state and federal lands, including lands under the jurisdiction of California State Lands Commission and BLM, including ACECs (Aspen 2020). National

Monuments, Wilderness Areas, CDCAs, and DRECP areas within the Project area (Aspen 2020). The Project also crosses rural and low-density residential land uses on non-federal land in San Bernardino County, California and Clark County, Nevada (Aspen 2020).

Existing Noise Levels

Noise-sensitive receptors are typically land uses such as residences, schools, hospitals, religious facilities, theaters, concert halls, libraries, and parks. Along the Project alignment, adjacent noise-sensitive uses consist of transient residential (e.g., a hotel/casino in Primm Nevada) and scattered residences located near Barstow and isolated points west. Existing noise sources in the study area include highways, roadways, OHV noise, agricultural activities, population centers, and natural noise-producing sources such as wind, insects, and other animals. The majority of the Project area and surrounding area are isolated with no major noise sources in the vicinity. In the Barstow area and points west, the Project alignment crosses several highways and rail lines, both of which contribute to the noise environment. Another low-level source of noise is from existing transmission lines that emit corona noise under certain atmospheric conditions (i.e., wet or high humidity).

The existing noise environment in a project area can be characterized by the area's general level of development because the level of development and ambient noise levels tend to be closely correlated. Areas which are not urbanized are relatively quiet, while areas which are more urbanized are noisier as a result of roadway traffic, industrial activities, and other human activities.

Table 3.13-1 summarizes typical ambient noise levels based on level of development. Given the rural nature of the Project area, ambient noise levels are expected to be in the range of 40 to 50 L_{dn}. During daytime hours, the corresponding typical hourly average noise levels would be approximately 37 to 47 dBA L_{eq}.[3]

Table 3.13-1. Population Density and Associated Ambient Noise Levels

Land Use Type	dBA, L_{dn}
Rural	40–50
Small Town or quiet suburban residential	50
Normal suburban residential	55
Urban residential	60
Noisy urban residential	65
Very noisy urban residential	70
Downtown, major metropolis	75–80
Area adjoining freeway or near major airport	80–90

Source: Hoover and Keith 2000.
dBA = A-weighted decibel; L_{dn} = day/night sound level

[3] Based on average hourly time patterns of noise levels from a 100-site survey (per Bishop and Simpson 1977).

Relevant Plans, Policies, and Ordinances

Federal

Although no federal regulations are applicable to this project, guidance and methodologies from the Federal Transit Administration's Transit Noise and Vibration Impact Assessment Manual (FTA 2018) pertaining to construction noise and vibration are used in this analysis.

State

California Department of Transportation

In its Transportation and Construction Vibration Guidance Manual, Caltrans recommends a vibration velocity threshold of 0.2 inches per second (ips) peak particle velocity (PPV) (Caltrans 2020) for assessing annoying vibration impacts to occupants of residential structures. Although this Caltrans guidance is not a regulation, it can serve as a quantified standard in the absence of such limits at the local jurisdictional level. Similarly, thresholds to assess building damage risk due to construction vibration vary with the type of structure and its fragility; for instance, 0.3 ips PPV is recommended for typical older residential structures exposed to continuous or frequently intermittent sources of groundborne vibration (Caltrans 2020).

Government Code Section 65302(g)

California Government Code Section 65302(g) requires the preparation of a noise element in a general plan, which must identify and appraise the noise problems in the community. The noise element must recognize the guidelines adopted by the Office of Noise Control in the State Department of Health Services and shall quantify, to the extent practicable, current and projected noise levels for the following sources in the general plan's planning area:

- Highways and freeways
- Primary arterials and major local streets
- Passenger and freight on-line railroad operations and ground rapid transit systems
- Aviation and airport-related operations
- Local industrial plants
- Other ground stationary noise sources contributing to the community noise environment

California General Plan Guidelines

The California General Plan Guidelines, published by the Governor's Office of Planning and Research, provides guidance for the acceptability of specific land use types within areas of specific noise exposure. Table 3.13-2 presents guidelines for determining acceptable and unacceptable community noise exposure limits for land use categories within or near the Project area. The guidelines also present adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. The Governor's Office of Planning and Research guidelines are advisory in nature. Local jurisdictions, including the County of San Bernardino, have the responsibility to set specific noise standards based on local conditions.

Table 3.13-2. Land Use Compatibility for Community Noise Environments

	Community Noise Exposure (CNEL)			
	Normally Acceptable[1]	*Conditionally Acceptable[2]*	*Normally Unacceptable[3]*	*Clearly Unacceptable[4]*
Residential-low density, single-family, duplex, mobile homes	50–60	55–70	70–75	75–85
Residential – multiple-family	50–65	60–70	70–75	70–85
Transit lodging – motel, hotels	50–65	60–70	70–80	80–85

Source: OPR 2017.
Notes: CNEL = community noise equivalent level
1 Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
2 Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features have been included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.
3 Normally Unacceptable: New construction or development should be discouraged. If new construction of development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.
4 Clearly Unacceptable: New construction or development should generally not be undertaken.

Local

County of San Bernardino Municipal Code

Pursuant to Section 83.01.080(g)(3) of the County of San Bernardino Development Code, construction noise that occurs during daytime hours – defined as 7:00am to 7:00pm, excluding Sundays and federal holidays – is exempt from the noise limits specified in the Development Code. Because Project-related construction activities are primarily expected to occur on weekdays (and, potentially, on Saturdays) during daylight hours, Project construction would not exceed the standards established by the County of San Bernardino Development Code. Construction activity may occur during nighttime hours if necessary, because of schedule or other factors. Section 24.0708 (Other Public Agency Exception) states: "The provisions of this Chapter shall not be construed to prohibit any work at different hours by or under the direction of any other public agency or public or private utility companies in cases of necessity or emergency."

Because the County's Development Code does not establish numerical construction noise thresholds for construction activities that occur during the hours permitted by the County of San Bernardino Development Code, the Federal Transit Administration's construction noise standard for permissible exposure over an eight-hour workday of 80 dBA at a residential land use is used as the significance threshold for Project construction activities. In the event that construction activities occur during nighttime hours (between 7:00pm and 7:00am), a significant impact would occur if sensitive receptors were exposed to noise levels that exceed 45 dBA L_{eq}. based upon Section 83.01.080 (Noise) of the County of San Bernardino Development Code's Noise Standards for Stationary Noise Sources.

Additionally, Section 83.01.090 (Vibration) specifies a numerical limit for groundborne vibration of 0.20 inches per second at of beyond the lot line. This vibration threshold is exempt for temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and federal holidays.

Clark County (Nevada) Municipal Code

Section 30.68.020 (Noise) of the Clark County Code of Ordinances specifies octave band noise standards by daytime and nighttime hours for residential districts as well as business and industrial districts in Table 30.69 – 1 (Noise – Maximum Permitted Sound Levels (Decibels)). At the octave band center frequency of 500 hertz (which is the frequency at which most of the sound energy that typical construction equipment is centered), the daytime noise limit within residential districts is 50 dBA and the nighttime noise limit is 40 dBA; within business and industrial districts the daytime noise limit is 55 dBA and the nighttime noise limit is 45 dBA Additionally, Section 30.68.040 (Vibration) specifies that groundborne vibration shall not be discernable to the human senses at any property line at any time. Based upon studies of human response to vibration from transient sources (such as construction activities), a vibration level of 0.035 ips is used as the threshold of perception for this analysis (Caltrans 2020). However, Section 30.68.020 (h)(1) states that demolition and construction activities are exempt from these requirements provided that they occur during daytime hours.

Approach and Methodology

The noise assessment quantifies construction noise and operational generation and the resulting noise levels at noise-sensitive receptors in the Project vicinity. Assumptions regarding construction activities, construction equipment, and duration of construction activities are based on information from LADWP's construction design and engineering specialists and from similar construction projects. The Federal Highway Administration's Roadway Construction Noise Model (FHWA 2008) was used to estimate construction noise levels at a typical distance to the nearest noise-sensitive land uses. Input variables for the Roadway Construction Noise Model consist of the receiver/land use types, the equipment type and number of each (e.g., two excavators, a loader, a dump truck), the duty cycle for each piece of equipment (e.g., percentage of hours the equipment typically works per day), and the distance from the noise-sensitive receiver. The Roadway Construction Noise Model has default duty cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty cycle values were utilized for this analysis. Special construction equipment and methods such as the use of helicopters is addressed separately. Short-term noise impacts were assessed by comparing construction noise levels to ambient noise levels in the Project area and by evaluating the proposed Project's compliance with applicable municipal codes. Groundborne vibration was assessed using guidance and methodologies from the Federal Transit Administration (FTA 2018) and

Caltrans (Caltrans 2020). The levels of operational noise from transmission lines were estimated using noise calculations for the existing and proposed transmission lines within the Project alignment.

Impacts Assessment

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

Less than Significant with Mitigation Incorporated. Although relatively few in number, noise-sensitive uses (residential) do exist in the vicinity of the Project site. Noise from on-site construction activities have the potential to expose nearby sensitive receptors to noise levels above established standards. Additionally, construction and operational traffic could potentially result in noise levels exceeding established standards at nearby noise-sensitive land uses.

On-Site Construction Noise

Construction is expected to commence in April 2025 with completion anticipated in January 2029. Construction activities would normally occur between sunrise and sunset up to six days per week (Monday through Saturday). Construction is expected to occur on Saturdays, as well as all normal business days, for the entire duration of the Project. Although not anticipated, nighttime work may occur between sunset and sunrise, as needed. Table 2.2-1 (within Chapter 2, Project Description) shows the standard phasing for Project construction and the duration for each phase, as it applies to the proposed Project. No construction work would occur on Sundays or national holidays. During construction of the proposed Project, activities would include foundation work, conductor replacement, ground wire replacement, installation of new insulators and hardware assemblies, structure modification and raising, and restoration, recontouring, revegetation, and removal of BMPs. These activities would be spread across numerous work areas along the alignment. For the most part, construction activities would require the use of standard construction equipment such as loaders, dozers, soil compaction equipment, water trucks and cranes. Additional equipment would include specialized stringing equipment, hydraulic tower lifting systems as well as helicopters. The maximum number of daily workers within the alignment would be approximately 276 workers.

The range of maximum noise levels for various types of construction equipment at a distance of 50 feet is depicted in Table 3.13-3. The noise values represent maximum noise generation, or full-power operation of the equipment. Simultaneous operation of more than one piece of equipment would increase the sound level of the equipment operating individually. As an example, a loader and two dozers, all operating at full power and relatively close together, would generate a maximum sound level of approximately 90 dBA at 50 feet from their operating locations. As one increases the distance between equipment, and/or the separation of areas with simultaneous construction activity, dispersion and distance attenuation reduce the effects of separate noise sources added together. In addition, typical equipment operating cycles may involve 2 minutes of full-power operation, followed by 3 or 4 minutes at lower levels. Noise in this analysis is usually expressed in terms of L_{eq}, which is the average sound level for any specific time period. L_{eq} is expressed in units of dBA. The L_{eq} from proposed Project construction would generally be lower than the maximum noise levels expressed in Table 3.13-3, since maximum noise generation from construction would typically occur 50% of the time, at most. Noise levels from construction activities generally decrease at a rate of 6 dB per doubling of distance away from the activity.

Table 3.13-3. Construction Equipment Maximum Noise Emission Levels

Equipment	Typical Sound Level (A-weighted decibel) 50 Feet from Source
Roller	74
Concrete vibrator	76
Pump	76
Saw	76
Backhoe	80
Air compressor	81
Generator	81
Compactor	82
Concrete pump	82
Crane, mobile	83
Concrete mixer	85
Dozer	85
Grader	85
Impact wrench	85
Loader	85
Pneumatic tool	85
Jackhammer	88
Truck	88
Paver	89

Source: FTA 2018

The nearest off-site sensitive receptors to the Project alignment are residences located approximately 9 miles south of Barstow, adjacent to existing transmission structures (i.e., towers) L1, 139-6 through 140-2. Several residences are located approximately 150 feet from the nearest structures. Along the remainder of the Project alignment, distances from noise-sensitive receivers to the nearest structure locations range from approximately 600 feet to 2,600 feet.

As described previously, a spreadsheet program emulating the Federal Highway Administration's Roadway Construction Noise Model was used to estimate construction noise levels at the nearest noise-sensitive land uses. The estimated noise levels from construction were calculated and are shown in Table 3.13-4. The Roadway Construction Noise Model inputs and outputs are provided in Appendix B.

As presented in Table 3.13-4, the highest noise levels are predicted to occur at residences nearest to the existing and proposed transmission structures, when noise levels would be as high as 74 dBA L_{eq} during grading activities. More typically, construction activity noise at nearby receivers would range from approximately 52 dBA L_{eq} to 74 dBA L_{eq}. The existing daytime ambient noise levels for residences at these locations, as discussed in Section 3.13.1, are estimated to range from approximately 37 to 47 dBA L_{eq}. As such, construction would temporarily increase noise levels at nearby sensitive receptors, relative to ambient noise levels under existing conditions.

Table 3.13-4. Construction Noise Modeling Summary Results

Receiver and Nearest Proposed Tower Location, by Construction Phase	Construction Noise Level (dBA L_{eq})
Buffalo Bill's Resort and Casino / L2, 25-2	*Nearest Receiver: 2,600 feet*
Grading (Access Road Rehabilitation)	53
Grading (Laydown/Staging/Site Grading)	53
Construction (Line 1)	53
Construction (Line 2)	55
Grading (Line 1)	52
Grading (Line 2)	52
Residence / L2, 112-4	*Nearest Receiver: 1,600 feet*
Grading (Access Road Rehabilitation)	56
Grading (Laydown/Staging/Site Grading)	57
Construction (Line 1)	56
Construction (Line 2)	55
Grading (Line 1)	56
Grading (Line 2)	55
Residence / L1, 116-3	*Nearest Receiver: 1,400 feet*
Grading (Access Road Rehabilitation)	57
Grading (Laydown/Staging/Site Grading)	58
Construction (Line 1)	57
Construction (Line 2)	56
Grading (Line 1)	57
Grading (Line 2)	56

Table 3.13-4. Construction Noise Modeling Summary Results

Receiver and Nearest Proposed Tower Location, by Construction Phase	Construction Noise Level (dBA L_{eq})
Residences / L2, 121-5; L2, 123-3; L2, 125-5	*Nearest Receiver: 800 feet*
Grading (Access Road Rehabilitation)	61
Grading (Laydown/Staging/Site Grading)	61
Construction (Line 1)	60
Construction (Line 2)	59
Grading (Line 1)	61
Grading (Line 2)	59
Residences / L1, 139-6 – L1, 140-2	*Nearest Receiver: 150 feet*
Grading (Access Road Rehabilitation)	74
Grading (Laydown/Staging/Site Grading)	72
Construction (Line 1)	71
Construction (Line 2)	65
Grading (Line 1)	72
Grading (Line 2)	66
Residence / L1, 151-5	*Nearest Receiver: 600 feet*
Grading (Access Road Rehabilitation)	64
Grading (Laydown/Staging/Site Grading)	64
Construction (Line 1)	62
Construction (Line 2)	60
Grading (Line 1)	63
Grading (Line 2)	61
Residence / L2, 152-5	*Nearest Receiver: 900 feet*
Grading (Access Road Rehabilitation)	61
Grading (Laydown/Staging/Site Grading)	61
Construction (Line 1)	59
Construction (Line 2)	60
Grading (Line 1)	58
Grading (Line 2)	60

Source: Appendix B.
dBA = A-weighted decibel; L_{eq} = equivalent sound level

Although nearby off-site residences would be exposed to elevated construction noise levels, the increased noise levels would typically be relatively short term at any one location and would cease upon completion of Project construction. It is anticipated that construction activities in proximity of noise-sensitive receivers would take place primarily within the allowable hours of San Bernardino County (7:00 a.m. to 7:00 p.m.) and Clark County (6:00 a.m. to 10:00 p.m.) and would not occur at any time on Sunday or on national holidays. In the event that construction is required to extend beyond these times, extended hours' permits would be required and would be obtained by LADWP. As such, construction would not violate San Bernardino County or Clark County standards for construction.

However, construction noise levels would be substantially higher than existing ambient daytime noise levels, particularly for the construction activities proposed in proximity to the nearest adjacent noise-sensitive receivers (as shown in Table 3.13-4). For this reason, temporary noise impacts from construction would be potentially significant. However, Mitigation Measure (MM) NOI-1 has been set forth to reduce construction noise associated with the proposed Project and to ensure that nearby receptors are informed of construction activities.

The effectiveness of measures listed in MM-NOI-1 would vary from several decibels (which in general is a relatively small change) to 10 or more decibels (which subjectively would be perceived as a substantial change). Installation of a temporary noise barrier, for example, would vary in effectiveness depending upon the degree to which the line-of-sight between the source and receiver is broken. The noise reduction achieved by a barrier typically ranges from 5 dB to 10 dB. The noise reduction achieved by equipment silencers would range from several decibels to well over 10 decibels. Limiting equipment idling could reduce overall noise levels up to several decibels. However, the measures listed in MM-NOI-1, in conjunction, would result in a substantial decrease in construction noise. Upon implementation of MM-NOI-1 and due to the temporary nature of construction noise, impacts would be less than significant with mitigation incorporated.

MM-NOI-1. **Construction Noise Reduction.** The Los Angeles Department of Water and Power and/or its construction contractor(s) shall comply with the following measures during construction:

1. For construction activities occurring within 1,000 feet of residential uses within the County of San Bernardino, construction activities shall not occur between the hours of 7:00 p.m. and 7:00 a.m. Monday through Saturday, or on Sundays or national holidays. In the event that construction is required to extend beyond these times, extended hours' permits shall be required.
2. Equipment (e.g., portable generators) shall be shielded from sensitive uses using local temporary noise barriers or enclosures or shall otherwise be designed or configured to minimize noise at nearby noise-sensitive receptors.
3. Staging of construction equipment shall not occur within 150 feet of any noise- or vibration-sensitive land uses.
4. All noise-producing equipment and vehicles using internal combustion engines shall be equipped with mufflers; air-inlet silencers, where appropriate; and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be

equipped with shrouds and noise control features that are readily available for that type of equipment.

5. All mobile or fixed noise-producing equipment used for the project that are regulated for noise output by a local, state, or federal agency shall comply with such regulations.
6. Idling equipment shall be kept to a minimum and moved as far as practicable from noise-sensitive land uses.
7. Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
8. Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
9. The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.

Helicopter Noise

Where the terrain is steep or access is limited, helicopter use may be required for replacement of existing tower structures, tower construction and conductor pulling and tensioning (i.e., stringing). The helicopters used for structure installations and removals are expected to be heavy-duty helicopters that are suited for hauling transmission structure components. Helicopters used for conductor stringing and removal are expected to be smaller and lighter, as less power is required for conductor stringing/removal. Helicopters typically generate peak noise levels of approximately 78 to 88 dBA at 500 feet (FAA 1977). At any one location along the Project alignment, helicopter operations would typically occur for short periods several times per day. Each structure removal would take approximately one day. While structure installations may take longer, helicopter use is only expected to occur on one day during each installation and would occur intermittently throughout that day (e.g., the helicopter would come and go from the site and would not hover continuously for the entire workday).

Helicopter operations would be limited to daytime working hours and would be short-term in nature. Furthermore, they would primarily be used in remote locations, far from residential or other noise-sensitive uses, rather infrequent (a few weeks per year) and for relatively short durations (a few hours per day during daytime working hours). For this reason, noise impacts from construction helicopter use is considered less than significant.

Off-Site (Construction-Related Traffic) Noise

As discussed in greater detail in Section 3.17, Transportation, during construction up to 276 worker trips, 30 vendor truck trips, and 32 haul truck trips would be generated daily. These trips would be distributed across the 162-mile Project area throughout the construction period. Once construction equipment is delivered to the designated laydown and equipment staging locations along the transmission line, equipment and construction material would be transported to work areas within the existing utility corridor, as needed. Based on the distance between work areas, the construction trucks and equipment would occasionally use highways such as I-15 to access the next work area or travel along existing roads, access roads or spur roads. Increases in construction traffic (and associated traffic noise) in the vicinity of the Project area would be temporary and dispersed. The Project area is generally undeveloped, and the surrounding land uses primarily consist of vacant land, with some agricultural and industrial land uses. As such, potential increases in construction traffic noise in the vicinity of the work sites would be less than significant.

Operations

Maintenance

Upon completion of Project construction, onsite construction noise as well as on-road construction worker and truck trips would cease. Noise sources associated with operation of the Project would consist of periodic inspection and maintenance. As with the existing 500 kV lines, the proposed 570 kV transmission lines would be inspected several times annually by both ground and air patrols. Maintenance would be performed as needed. Because noise from such activities would be similar to that under the existing conditions, no impacts would occur from noise associated with inspection and maintenance.

Corona Noise

Noise would also be generated during operation by so-called "corona effect" noise. Corona is an electrical discharge associated with transmission lines produced by the ionization of fluid (most often humidity in the air) surrounding an electrically charged conductor. This phenomenon can produce low-level audible noise. Corona discharge is not a steady source of noise; rather, it varies with humidity conditions and occurs mostly during very damp or wet conditions. Based upon information provided by LADWP staff, the Department would require that the proposed 570 kV transmission lines be designed to meet an audible noise limit of 55 dBA at the edge of alignment right-of-way. This is the same design standard that was used for a prior Project involving modifications to the existing 500 kV transmission lines (TRC Companies 2022). As such, no change would occur in corona noise compared to existing conditions in the vicinity of the transmission corridor. Therefore, operational noise impacts due to corona would be less than significant.

Off-Site (Operation-Related Traffic) Noise

The operation of the Project would require maintenance trips which would be same as under existing operations and would not occur on a daily basis. As such, the Project is not anticipated to generate new operational vehicle trips. Therefore, traffic noise related to the proposed project would be less than significant.

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

Less-than-Significant Impact. Construction activities may expose persons to excessive groundborne vibration or groundborne noise, causing a potentially significant impact. Caltrans has collected groundborne vibration information related to construction activities (Caltrans 2020). Information from Caltrans indicates that continuous vibrations with a PPV of approximately 0.2 ips is considered annoying. For context, heavier pieces of construction equipment, such as a bulldozer that may be expected on the project site, have peak particle velocities of approximately 0.089 ips or less at a reference distance of 25 feet (FTA 2018).

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in Federal Transit Administration and Caltrans guidance. By way of example, for a bulldozer operating on site and as close as 50 feet from the hydrogen production project boundary (i.e., 50 feet from the nearest occupied property) the estimated vibration velocity level would be 0.03 ips per the equation as follows (FTA 2018):

$$PPVrcvr = PPVref * (25/D)^{1.5} = 0.03 = 0.089 * (25/50)^{1.5}$$

In the above equation, PPVrcvr is the predicted vibration velocity at the receiver position, PPVref is the reference value at 25 feet from the vibration source (the bulldozer), and D is the actual horizontal distance to the receiver. At the distance from the nearest residence to the construction area (approximately 150 feet) and with the anticipated construction equipment, the vibration level would be approximately 0.006 ips PPV. At the closest sensitive receptors, vibration levels would not exceed the vibration threshold of annoyance of 0.2 ips PPV.

Construction vibration, at sufficiently high levels, can also present a building damage risk. However, the estimated worst-case construction vibration level of 0.006 ips PPV, would be well below the guidance limit of 0.2 to 0.3 ips PPV for preventing damage to residential structures (Caltrans 2020). Therefore, the risk of annoyance or damage to nearby structures from groundborne construction vibration would be less than significant.

Once operational, the proposed Project would not be expected to feature major producers of groundborne vibration. No large sources of unbalanced rotating or impact-generating machinery would be in use during operation of the proposed project. On this basis, potential groundborne vibration noise impacts due to the proposed Project's operation would be less than significant.

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

Less-than-Significant Impact. The proposed Project is not located in the vicinity of an airstrip. Additionally, the proposed Project is not located within an airport land use plan. The nearest airport is Barstow-Daggett Airport Comprehensive Land Use Plan, located approximately 1.3 miles to the south of the Project site. Based upon the San Bernardino County Comprehensive Land Use Plan (County of San Bernardino 1992), the Project site is located approximately 1.5 miles outside of the airport's 65 dBA CNEL noise contour. Thus, the proposed Project would not expose people residing or working in the Project area to excessive noise levels from an airport or a private airstrip. Noise impacts would thus be less than significant.

3.14 Population and Housing

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

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

No Impact. The proposed Project does not include any new residences or businesses and is not intended to induce growth but to serve existing and projected electricity demands. No new homes or businesses would result, and the infrastructure upgrades would not generate new growth as the Project would not enable any new development to occur. Therefore, the proposed Project would not result in direct or indirect population growth during construction or operations. No impact to population growth would occur.

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

No Impact. The Project area consists of an existing transmission line corridor and there are no homes that exist within the Project area. During construction and operations, no people or housing would be removed necessitating the construction of replacement housing elsewhere, and no impact would occur.

3.15 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

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

Fire Protection

<u>Construction</u>

Less-than-Significant Impact. The need for new or altered fire facilities is typically associated with an increase in population. As described under Section 3.14, the proposed Project would not alter population in the Project area. As such, the proposed Project would not substantially alter service ratios, response times, or other performance objectives to the extent that new or expanded fire protection facilities, equipment, or staff would be required. Impacts to fire protection would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines related to fire protection would return to normal. No operational impacts relating to fire protection would occur.

Police Protection

Construction

Less-than-Significant Impact. The need for new or altered police facilities is typically associated with an increase in population. As described under Section 3.14, the proposed Project would not alter population in the Project area. As such, the proposed Project would not substantially alter service ratios, response times, or other performance objectives to the extent that new or expanded police protection facilities, equipment, or staff would be required. Impacts to police protection would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines related to police protection would return to normal. No operational impacts relating to police protection would occur.

Schools

Construction

No Impact. The need for new or altered schools is typically associated with an increase in population. As described under Section 3.14, the proposed Project would not alter population in the Project area. As such, the proposed Project would not alter the ability of existing schools to accommodate students to the extent that new or expanded school facilities, materials, or staff would be required. No impacts to schools would occur.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines related to school services would return to normal. No operational impacts relating to school services would occur.

Parks

<u>Construction</u>

No Impact. The need for new or altered parks is typically associated with an increase in population. As described under Section 3.14, the proposed Project would not alter population in the Project area. As such, the proposed Project would not alter the ability of parks to serve the region to the extent that new or expanded parks would be required. No impacts to parks would occur.

<u>Operations</u>

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines related to park services would return to normal. No operational impacts relating to park services would occur.

Other Public Facilities

<u>Construction</u>

No Impact. Other public facilities include libraries and government administrative services. The need for new or altered libraries or administrative services is typically associated with an increase in population. As described under Section 3.14, the proposed Project would not result in the need for libraries or other government administrative services to the extent that new or expanded facilities would be required No impacts to other public facilities would.

<u>Operations</u>

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines related to library or other services would return to normal. No operational impacts relating to library or other services would occur.

3.16 Recreation

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

The 162-mile transmission line corridor also crosses through a number of SRMAs and ERMAs under the DRECP. SRMAs are designated by BLM to provide specific recreational opportunities such as trailheads for hikers or for off-road vehicle users while ERMAs are designated to manage and support the principal recreational activities and associated qualities of the EMRA (BLM 2024a, 2024b). The Project passes through the Stoddard/Johnson SRMA, the Shadow Valley ERMA, and the Ivanpah Valley ERMA. A portion of the proposed Project also passes through the Stoddard Valley off-highway vehicle OHV area. OHV Areas consist of designated areas where OHVs are allowed to tour and race. The proposed Project includes work areas within the BLM Stoddard Valley OHV Open Area, which is within the BLM Stoddard Valley Subregional plan area (BLM 2023). The open riding area is formed by I-15 and SR-247 (Barstow Road), immediately south of Barstow. Most visitors access the area to the east, off I-15 at the Outlet Center Drive Exit (Sidewinder Road) or at the Hodge Road Exit, to the south on I-15. Most area visitors ride motorcycles or all-terrain vehicles or tour the area in four-wheel drive vehicles. The areas off Sidewinder Road (Outlet Center Drive exit on I-15) are used extensively for OHV "free play." This area is used extensively for competitive racing events by permit (BLM 2023).

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

No Impact. During times of active construction within the right-of-way, public access to the portion of the right-of-way in which construction is taking place would be precluded. However, construction at each site would last approximately 1 to 3 days on average and up to 14 days for tower replacement. As such, interruptions in OHV access to the Project area would be temporary and intermittent, and thus, would not result in increased use of other neighborhood and regional parks. Therefore, physical deterioration of facilities would not occur or be accelerated as a result of the proposed Project during construction or operations. As discussed in Section

3.14, the proposed Project would not result in population increases resulting in an increased need for park facilities. For these reasons, no impact would occur.

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

No Impact. The proposed Project does not include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse impact on the environment. As such, no impact would occur during construction or operations.

3.17 Transportation

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

The Project alignment spans from Boulder City, in Clark County, Nevada, to Victorville, in San Bernardino County in California, as shown in Figure 1-1, Project Location. The transportation network within the Project area is composed of a mix of interstate, county highways, and local roadways, some of which are regionally and locally significant roadways. The existing utility corridor in which the proposed work sites are located is generally parallel to I-15, an interstate freeway that provides north-south regional access between San Bernardino, Riverside, and San Diego Counties. I-40 runs east-west through the high desert region of the County and traverses the Project alignment near Barstow and has two lanes in each direction. SR-247 and SR-127 are north-south, two-lane highways that traverse the Project area near MCV1_139-6 and MCV2_139-2 as well as near MCV1_72-2 and MCV2_71-3, respectively. The alignment ends near U.S. Route 95 which traverses through eastern end of the San Bernardino County and continues north to the Nevada state line. The proposed work areas would be primarily accessed via the existing access roads[4] that run parallel to the transmission lines. Access to sites along MCV2 would be provided via the existing Powerline Road and associated spur roads,[5] and access to sites along MCV1 would be provided via an existing unnamed access road that runs parallel to the lines. Construction trucks and equipment may use roadways such as I-15, I-40, SR-247, and SR-127 to access those existing roads when traveling to the proposed tower sites.

The Barstow-Daggett Airport is within 2 miles of work sites MCV1_123-4 to 128-1 and MCV2_122-4 to 127-1 (Caltrans 2022). The Baker Airport is located approximately 7 miles southeast of the Project's transmission corridor on SR-127. Due to the proximity of Towers MCV1_123-4 to 128-1 and MCV2_122-4 to 127-1 to the Barstow-Daggett Airport, LADWP would be required to file a Notice of Proposed Construction or Alteration (FAA Form 7460-1) either 45 days prior to construction or 45 days prior to obtaining a construction permit for the Project, whichever is earliest (14 CFR Part 77.9).

Due to the remoteness of the Project area, bicycle routes and pedestrian facilities (sidewalks) are nonexistent.

Transportation and Traffic Analysis

This section analyzes the potential transportation impacts of the proposed Project under CEQA including Section 15064.3(b) which focuses on the currently adopted vehicle miles traveled (VMT) metric for determining the significance of transportation impacts. The passage of SB 743 required the focus of transportation analyses to change from the level of service or vehicle delay metric to the VMT metric. The Los Angeles Department of Transportation's Transportation Assessment Guidelines (LADOT 2022) and San Bernardino County Transportation Impact Study Guidelines (County of San Bernardino 2019) contains guidelines and methodologies for assessing transportation impacts for development and transportation projects based on the updated CEQA Guidelines.

Construction Trip Generation

The trips generated from construction of the Project have been estimated for informational purposes. The Institute of Transportation Engineers' Trip Generation, 11th Edition (ITE 2021) does not contain trip rates for construction-related activities associated with the Project, therefore, it is primarily based on the number of construction employees or workers as well as the quantity of vendor (material and concrete trucks) and haul related truck estimates provided by LADWP. This data was also used in the Project's Air Quality analysis. Each worker vehicle as well as vendor and haul trucks are assumed to generate two daily trips, one inbound and one outbound, to and from the Project. The construction work shift would generally occur during the day, and during the nighttime as needed. Therefore, a majority of workers could arrive before the AM peak hour (before 7:00 a.m.) and could depart after the PM peak hour (after 6:00 p.m.) of the adjacent street network during construction days. The maximum number of workers (approximately

[4] Access roads are main roads that run along the towers.

[5] Spur roads are short segments that connect to the individual towers, taking access off the main access road.

276 workers) would be required during the phases 5 and 6 of construction. It is anticipated that carpooling will occur during those phases and an average two workers would use one vehicle. The vendor and haul truck traffic would be evenly distributed through the workday duration of the construction phase, which could occur 8 to 14 hours per day.

The Project's construction traffic was estimated per phase (i.e., grading, building construction, and paving). Trip generation for workers and trucks is estimated for each phase of construction. It should be noted that there could be an overlap among construction phases, however, construction trips would not be completely localized as each phase of construction would occur throughout and along the Project alignment. Table 3.17-1 provides the Project's daily trip generation estimates per construction phase.

Table 3.17-1. Construction Trip Generation

Phase	Daily Trips[a]			Total Trips	Total Trips (PCE)[b]
	Worker Vehicle Trips	*Vendor Truck Trips*	*Haul Truck Trips*		
1. Grading (Access Road Rehabilitation)	72	12	4	88	108
2. Grading (Laydown/Staging/Site Grading)	72	12	4	88	108
3. Grading (Line 1)	72	12	4	88	108
4. Grading (Line 2)	72	12	4	88	108
5. Building Construction (Line 1)	276[c]	30	32	338	432
6. Building Construction (Line 2)	276[c]	30	32	338	432

Source: Appendix A.
Notes: PCE = passenger car equivalent

a. The estimate provided in the table is for daily trips. Each worker vehicle as well as vendor and haul trucks are assumed to generate two daily trips, one inbound and one outbound, to and from the Project.
b. PCE factor of 1.0 used for worker vehicle trips, 2.0 used for vendor truck trips and 3.0 used for haul truck trips.
c. Phases 5 and 6 would require the maximum number of workers i.e. approximately 275 workers. The estimate of 275 worker vehicle trips assume two workers would carpool to the construction site. Therefore, a total 275 workers trips would require 138 vehicles which would generate 276 daily trips (138 inbound trips and 138 trips outbound).

As shown in Table 3.17-1, the peak construction phase of the proposed Project would generate 338 daily trips which includes 276 worker vehicle trips, 30 vendor truck trips and 32 haul truck trips. Applying a passenger-car-equivalent factor of 1.0 for worker vehicle trips, 2.0 for vendor truck trips and 3.0 for haul truck trips, the peak construction phase would generate a total of 432 daily passenger-car-equivalent trips. However, the construction trips would be spread over the project alignment and would be temporary and cease after construction is complete.

Operational Trip Generation

The operation of the Project would require maintenance trips which would be same as under existing operations and would not occur on a daily basis. As such, the Project is not estimated to generate new operational trips or VMT. The operational phase would not exceed the Los Angeles Department of Transportation threshold of 250 daily trips and

County of San Bernardino's requirement of 100 or more peak hour trips, to require preparation of detailed transportation or traffic analyses.

The following describes the Project's potential impacts to programs, plans and policies, VMT, hazards related to geometric design, and emergency access.

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

Construction

Less-than-Significant Impact. The San Bernardino Countywide Plan (County of San Bernardino 2020) provides the purpose and principles regarding transportation in the Transportation and Mobility Element. These establish the location and operational conditions of the roadway network, coordinate the transportation and mobility system with future land use patterns and projected growth, provides guidance for the County's responsibility to satisfy the local and subregional mobility needs of residents, visitors and businesses in unincorporated areas, and address access and connectivity among the various communities, cities, towns, and regions, as well as the range and suitability of mobility options: vehicular, trucking, freight and passenger rail, air, pedestrian, bicycle, and transit. It further sets goals and policies which address roadway capacity, road design standards, vehicle miles traveled, complete streets, transit and active transportation, goods movement, and airports.

The construction on MCV1 and MCV2, would occur for up to 45 months during which approximately 276 construction workers would be sequentially accessing 1,740 individual sites located across the alignment. Several construction trucks would also be required at each site (motor graders, boring rigs, excavators, skid steer loaders, dump trucks, water trucks, wheel/track loaders, and various small utility vehicles). The number of construction workers traveling to and from Project sites every day would vary per construction phase. However, approximately 276 construction workers would carpool and travel to and from the site(s) each day. As shown in Table 3.17-1, during the peak phase of construction 276 worker vehicle trips, 30 vendor truck trips, and 32 haul truck trips would be generated daily.

Once construction equipment is delivered to the designated laydown and equipment staging locations along the transmission line, equipment and construction material would be transported to work areas within the existing utility corridor, as needed. Laydown and staging areas would be required for materials storage, construction equipment, construction vehicles, and temporary construction offices. Based on the distance between work areas, the construction trucks and equipment would occasionally use highways such as I-15 to access the next work area or travel along existing roads, access roads or spur roads.

Increases in construction traffic in the vicinity of the Project area would be temporary and dispersed. The Project area is generally undeveloped, and the surrounding land uses primarily consist of vacant land, with some agricultural and industrial land uses. As such, the addition of these trips would not adversely affect roadways or effects would be short-term, minor, and localized and negligible when viewed in a regional context. Additionally, these trips would be distributed across the 162-mile Project area throughout the 45-month construction period. As such, potential increases in construction traffic in the vicinity of the work sites would be negligible, temporary, and dispersed on roadways. The proposed Project is located in generally undeveloped areas within an existing utility corridor. As such, transit, bicycle, and pedestrian facilities would not be affected.

<u>Operation</u>

Less-than-Significant Impact. During operation, traffic in the area near the alignment would not be affected by the proposed Project. Operational conditions would not change under the proposed Project. Transmission lines would continue to be inspected regularly via helicopter and by ground using existing access roads. The proposed Project would not involve any changes in land use within the Project area requiring analysis of impacts.

As such, due to the temporary and dispersed construction trips and no new operational trips, the proposed Project would not impede implementation of nor conflict with any program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less-than-Significant Impact. CEQA Guidelines Section 15064.3(b) focuses on VMT for determining the significance of transportation impacts. It is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. This project would be categorized under subdivision (b)(3), qualitative analysis. The Updated CEQA Guidelines state that "generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts," and define VMT as "the amount and distance of automobile travel attributable to a project." "Automobile" refers to on-road passenger vehicles, specifically cars and light trucks. The Governor's Office of Planning and Research has clarified in its Technical Advisory (OPR 2018) that heavy-duty truck VMT is not required to be included in the estimation of a project's VMT. Other relevant considerations may include the effects of a project on transit and non-motorized traveled.

This section uses VMT as the basis for evaluating transportation impacts of the proposed Project under CEQA. These guidelines and thresholds apply to land use and transportation projects that are subject to CEQA analysis. The proposed Project is a land use project; however, it is primarily a construction Project that would generate temporary construction-related traffic and thereafter, nominal operations and maintenance traffic. Therefore, it would be categorized under subdivision (b)(3) qualitative analysis for construction phase and Section 15064.3(b)(1) for permanent operations phase.

The County of San Bernardino and Los Angeles Department of Transportation guidelines recommend a threshold of significance for land use development (residential, office, and other land uses) and transportation projects. It should be noted that there is no significance threshold for construction or maintenance projects.

The Project would involve construction that would generate temporary traffic for the period of construction anticipated to be from April 2025 to January 2029. Even though worker and truck trips would generate VMT, once construction is completed, the construction-related traffic would cease and would return to pre-construction conditions. Car-pooling will be encouraged and facilitated by the contractor to reduce single occupancy worker trips. However, measures to reduce the VMT generated by workers and trucks are limited, and there are no thresholds or significance criteria for temporary, construction related VMT. Project construction would be generally consistent with construction activities in terms of the temporary nature of activities, trip generation characteristics, and the types of vehicles and equipment required. Car-pooling will be encouraged and facilitated by the contractor to reduce single occupancy worker trips. the Project's construction is expected to be temporary and would therefore not cause a significant VMT impact. s construction is expected to be temporary and would therefore not cause a significant VMT impact.

Operational conditions would not be changed by implementation of the proposed Project. Transmission lines would continue to be inspected regularly via helicopter and by ground using existing access roads or helicopters. No additional personnel beyond current operations would be necessary after project implementation as most of the on-site activities require as needed maintenance. Therefore, operation of the proposed Project would be screened out of having to address VMT, per the Los Angeles Department of Transportation's Transportation Assessment Guidelines given that it would not generate 250 daily trips or more or the County of San Bernardino's requirement of 100 or more peak hour trips. The Project would be presumed to have a less than significant VMT impact.

Therefore, the proposed Project would not conflict or be inconsistent with CEQA Guidelines Sections 15064.3(b)(1) and 15064.3(b)(3), and impacts would be less than significant.

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

Less-than-Significant Impact. The proposed Project would not alter or introduce any design features or existing roadways. Construction trucks and equipment may use roadways such as I-15 to access existing dirt roads and access roads when traveling to the proposed grading sites. As construction trucks and equipment enter and exit roadways and highways, these maneuvering activities could potentially result in safety impacts as construction vehicles, and slowly accelerating trucks in particular, would be entering and exiting highways. However, where appropriate, access to the right-of-way would be controlled through the use of proper signage and flagging. This would warn oncoming traffic that trucks may be entering or existing the highway. As such, while temporary and intermittent safety hazards may be created along highways near the Project area, impacts would be less than significant because standard construction safety measures would be put in place. The contractor would obtain all necessary encroachment, oversized load and/or haul permits to transport equipment and materials by trucks on County and Caltrans facilities. Therefore, the proposed Project would not increase hazards due to a design feature, and impacts would be less than significant.

d) Would the project result in inadequate emergency access?

No Impact. The proposed Project would be located primarily in undeveloped areas within an existing utility corridor. While existing unpaved access roads would be used throughout the 45-month construction period, these access roads are located within the existing utility corridor. Temporary use of these access roads would not hinder emergency access. No lane closures in the public right-of-way or driveway closures are anticipated that would impact adopted emergency access or response plans. Therefore, the Project would not create significant impediments for emergency access. As such, the Project would have no impact.

3.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☒	☐	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☒	☐	☐	☐

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

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

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

Potentially Significant Impact. The proposed Project is subject to compliance with AB 52, which requires consideration of impacts to tribal cultural resources as defined in California Public Resources Code Section 21074 as part of the CEQA process and requires LADWP to notify any groups who have requested notification of the proposed action who are traditionally or culturally affiliated with the geographic area of the Project. LADWP is in the midst of tribal consultations, the outcome of which is unknown. As such, impacts are potentially significant, and this issue will be evaluated in the EIR prepared for the Project.

3.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the waste water treatment provider, which serves or may serve	☐	☐	☐	☒

	Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
	the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d)	Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e)	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

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

No Impact. The proposed Project would upgrade transmission line capacity along the two existing overhead transmission lines. The proposed Project involves grading, maintenance and rehabilitation of access roads, reinforcing or replacing tower structural steel members for approximately 1,508 towers, complete tower replacement for approximately 153 towers, tower raising for transmission towers, as well as replacing all conductors, ground wires, insulators, and associated hardware assemblies, and adding grounding at every tower along the alignment. These activities would not increase the amount of water used or wastewater generated at the work sites, however, the proposed Project would use water for dust control during construction. This water would be transported to work sites via a water truck. Thus, no new or expanded water or wastewater treatment facilities would be required due to implementation of the proposed Project.

The majority of work sites are located within undeveloped portions of the Mojave Desert. Upgrading, maintaining, and raising transmission towers and grading within an existing utility corridor would not lead to increased stormwater flows from any of the work sites. As such, the proposed Project would not require the construction of new storm water drainage facilities or expansion of existing facilities.

The purpose of the proposed Project is to increase transmission capacity of the existing electrical transmission line and outside of the activities already described and analyzed throughout this document as part of the proposed activities, no other new or expanded electrical power facilities are required that have not been addressed herein.

Project construction and operation would have no need for natural gas or telecommunication infrastructure. To the extent that any existing telecommunication lines are currently coexisting with the transmission lines, there would not be alterations or changes to any existing telecommunication facilities.

For these reasons, there would be no construction or operational impacts related to new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities.

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

Construction

Less-than-Significant Impact. High water demand is typically associated with residential developments, hotels, and large offices. The proposed Project involves grading, maintenance and rehabilitation of access roads, reinforcing or replacing tower structural steel members for approximately 1,508 towers, complete tower replacement for approximately 153 towers, tower raising for transmission towers, as well as replacing all conductors, ground wires, insulators, and associated hardware assemblies, and adding grounding at every tower along the alignment. The water needs of the proposed Project would be limited to water required for dust control during construction activities, which would be delivered to the Project area by water trucks. New or expanded water entitlements would not be required, as water to supply the water trucks would be minor relative to the total water service provided by regional purveyors. Construction impacts would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines related to water supply would return to normal. Normal operational conditions and activities would not require water supplies. No operational impacts would occur.

c) Would the project result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The proposed Project would upgrade transmission capacity along the two existing overhead transmission lines. The proposed Project involves grading, maintenance and rehabilitation of access roads, reinforcing or replacing tower structural steel members for approximately 1,508 towers, complete tower replacement for approximately 153 towers, tower raising for transmission towers, as well as replacing all conductors, ground wires, insulators, and associated hardware assemblies, and adding grounding at every tower along the alignment. These activities would not increase the amount of wastewater produced in the Project area. No construction or operational impacts would occur.

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

Construction

Less-than-Significant Impact. The proposed Project would upgrade transmission capacity along the two existing overhead transmission lines. The proposed Project involves grading, maintenance and rehabilitation of access roads, reinforcing or replacing tower structural steel members for approximately 1,508 towers, complete tower replacement for approximately 153 towers, tower raising for transmission towers, as well as replacing all conductors, ground wires, insulators, and associated hardware assemblies, and adding grounding at every tower along the alignment. The Project's grading activities would involve removal of earth materials and placement of excavated soils along existing access roads. The transmission tower raising activities may produce minimal amounts of construction debris, such as concrete associated with the demolished footings. Construction waste would be disposed of at a landfill approved to accept such materials and would be recycled when feasible. Due to the minimal amount of waste that would be produced during construction, area landfills would be able to accommodate any solid waste disposal needs associated with the proposed Project. construction impacts would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines would return to normal. Operational conditions would not change under the proposed Project meaning no solid waste would be produced. No operational impacts would occur.

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

Construction

Less-than-Significant Impact. The proposed Project would comply with federal, state, and local statutes and regulations related to solid waste. As discussed above in Section 3.19(f), construction debris generated by the proposed Project would be minimal. Any construction debris that are produced would be recycled or disposed of according to local and regional standards. All materials would be handled and disposed of in accordance with existing local, state, and federal regulations. Compliance with existing regulations would ensure less than significant construction impacts.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines related to applicable solid waste statues and regulations would return to normal. No operational impacts would occur.

3.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
c) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

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

Construction

Less-than-Significant Impact. The proposed Project would be constructed in adherence to the requirements set forth in Title 24, Part 9 of the California Building Code (the Fire Code). During construction of the proposed Project, emergency access to the Project area would be adequately maintained to provide emergency services to construction workers along the transmission lines in the event of an emergency. Construction impacts would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines related to adopted emergency response plans would return to normal. The operations of the Project would not interfere with an adopted emergency response plan or emergency evacuation plans. Department vehicle and emergency vehicle access to and from the transmission lines would continue to be provided via the paved and unpaved access roads that run along the entire transmission line alignment. No operational impacts would occur.

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

Construction

Less-than-Significant Impact. The proposed Project would be located within the existing McCullough-Victorville utility corridor extending through primarily vacant areas of the Mojave Desert, all of which precludes the spread of wildland fire. The alignment is not located in a designated Very High Fire Hazard Severity Zone and the proposed Project does not include the construction of any infrastructure or buildings that would exacerbate fire risk (CAL FIRE 2023). The proposed Project does not propose any new residential development or allow for any new occupants and would be constructed in adherence to the requirements set forth in the Fire Code. During construction of the proposed Project, emergency access to the Project area would be maintained. Given the above, the proposed Project would not exacerbate wildfire risks thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Construction impacts would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines related to wildfire risks would return to normal. The operations of the Project would not exacerbate wildfire risks for project occupants as the proposed Project does not propose new residential development, does not allow for any new occupants, and is located in the Mojave Desert where wildfire risks are low. As such, no operational impacts would occur.

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

Construction

Less-than-Significant Impact. The proposed Project would include the construction and maintenance of utility infrastructure that has the potential to exacerbate fire risks. The proposed Project would upgrade the transmission capacity along the two existing overhead transmission lines.

The proposed Project would be constructed in adherence to the requirements set forth in the Fire Code. During construction of the Project, emergency access to the area would be maintained. In the unlikely event of a fire emergency in the Project area, the San Bernardino County Fire Protection District would respond along the entire California segment of the alignment. In the Nevada segment, Clark County Fire Department would respond. Any fire event that occurs would be unlikely to significantly exacerbate fire risks that would result in temporary or ongoing impacts to the environment as the Project is located within the Mojave Desert where fire risk and the potential of fires to spread is low.

Given the above, the proposed Project would not result in the installation or maintenance of associated infrastructure that would exacerbate fire risk or that would result in temporary or ongoing impacts to the environment. Construction impacts would be less than significant.

Operations

No Impact. After construction of the proposed Project is complete, each tower site and work area would be restored to its original condition to the extent feasible, and operational activities of the transmission lines related to fire risks would return to normal. The operations of the Project would not exacerbate fire risks beyond existing conditions. As such, no operational impacts would occur.

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

No Impact. The proposed Project would be located within the existing McCullough-Victorville utility corridor extending through primarily vacant areas of the Mojave Desert. Construction of the proposed Project would result in ground surface disruption that could temporarily alter on-site drainage patterns. However, runoff in the Project area would be managed through implementation of the BMPs outlined in the SWPPP as described in Section 3.10, Hydrology and Water Quality. Upon operation, the Project would maintain the general existing drainage pattern of the utility corridor and its surrounding area. Given the above, the proposed Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No construction or operational impacts would occur.

3.21 Mandatory Findings of Significance

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

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

Potentially Significant Impact. The proposed Project is located within an existing utility corridor, along existing transmission lines that cross a generally undeveloped portion of the Mojave Desert. However, as discussed above in Section 3.18, Tribal Cultural Resources, Section 3.4, Biological Resources, Section 3.5, Cultural Resources, and Section 3.7, Geology and Soils, the proposed Project has the potential to significantly affect biological, cultural and paleontological resources, including special-status wildlife and plant species and examples of California history and prehistory. As such, these issues will be the focus of the EIR prepared for the proposed Project. Impacts are considered potentially significant.

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

Potentially Significant Impact. The proposed Project is located within an existing utility corridor, along existing transmission lines that cross a generally undeveloped portion of the Mojave Desert. However, as discussed above in Section 3.4, Biological Resources and Section 3.5, Cultural Resources, the proposed Project has the potential to significantly affect biological and cultural resources, including special-status wildlife and plant species and examples of California history and prehistory. These impacts have the potential to result in cumulatively considerable impacts. As such, these issues will be the focus of the EIR prepared for the proposed Project. Impacts are considered potentially significant.

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

Potentially Significant Impact. As discussed above in Section 3.3, Air Quality, the Project has the potential to result in air quality impacts, which in turn has the potential to affect human beings. As such, the potential impacts to human beings associated with air quality will be discussed in the EIR prepared for the proposed Project.

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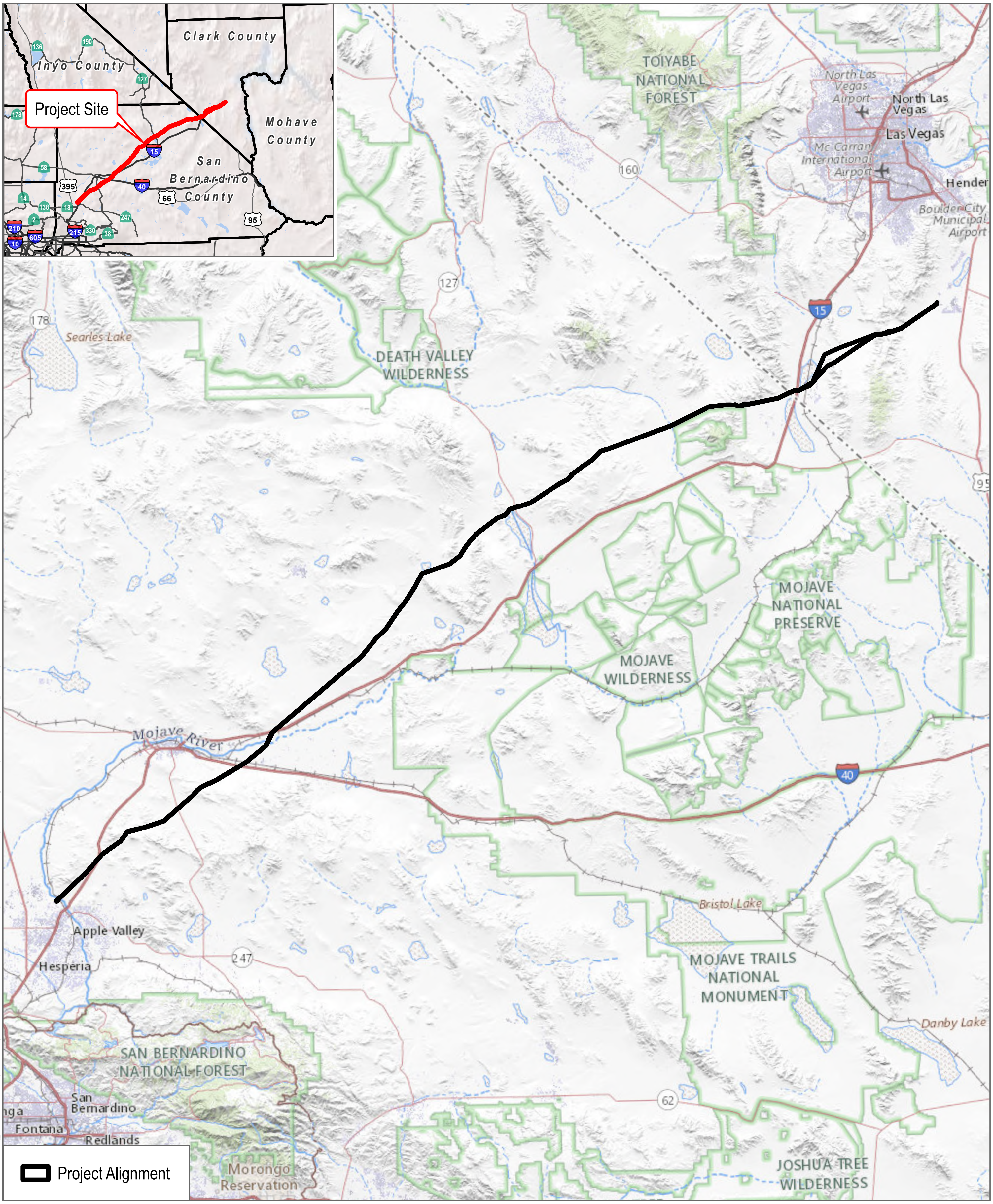

SOURCE: USGS National Map 2024

DUDEK

0 5 10 Miles

FIGURE 1-1

Project Location

McCullough-Victorville Transmission Lines 1 And 2 Upgrade Project

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SOURCE: Maxar 2022; Open Street Map 2023

DUDEK

0 2.5 5 Miles

FIGURE 1-2.1

Project Alignment

McCullough-Victorville Transmission Lines 1 And 2 Upgrade Project

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SOURCE: Maxar 2022; Open Street Map 2023

DUDEK

0 2.5 5 Miles

FIGURE 1-2.2

Project Alignment

McCullough-Victorville Transmission Lines 1 And 2 Upgrade Project

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SOURCE: Maxar 2022; Open Street Map 2023

DUDEK

FIGURE 1-2.3

Project Alignment

McCullough-Victorville Transmission Lines 1 And 2 Upgrade Project

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APPENDIX A

Air Quality Greenhouse Gas and Energy Calculations

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McCullough-Victorville Transmission Lines 1 and 2 Upgrade Project - Annual Average Detailed Report

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7.5. Evaluation Scorecard

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	McCullough-Victorville Transmission Lines 1 and 2 Upgrade Project - Annual Average
Construction Start Date	4/16/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	8.20
Location	60060 Powerline Rd, California, USA
County	San Bernardino-Mojave Desert
City	Unincorporated
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5139
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	1,437	Acre	1,437	0.00	0.00	—	—	Area to be graded

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.5	14.0	126	155	0.27	4.92	37.5	42.1	4.53	16.8	21.0	—	34,330	34,330	1.23	1.03	26.9	34,695
Mit.	8.17	7.27	58.3	170	0.27	1.92	18.1	20.0	1.80	7.39	9.17	—	34,617	34,617	1.23	1.03	26.9	34,963
% Reduced	51%	48%	54%	-10%	-2%	61%	52%	53%	60%	56%	56%	—	-1%	-1%	—	—	—	-1%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.0	13.6	123	144	0.27	4.78	33.8	37.0	4.40	15.9	18.6	—	33,611	33,611	1.10	1.01	0.63	33,941
Mit.	7.97	7.06	58.7	161	0.27	1.92	16.0	18.0	1.80	6.48	8.18	—	33,611	33,611	1.10	1.01	0.63	33,941
% Reduced	50%	48%	52%	-11%	—	60%	53%	51%	59%	59%	56%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.5	11.4	105	125	0.23	3.99	32.8	36.5	3.68	14.8	18.2	—	29,356	29,356	0.96	0.90	9.29	29,656

Mit.	7.42	6.54	56.4	141	0.23	1.85	15.5	16.8	1.73	6.44	7.66	—	29,356	29,356	0.96	0.90	9.29	29,656
% Reduced	45%	43%	46%	-13%	—	54%	53%	54%	53%	57%	58%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.46	2.08	19.1	22.8	0.04	0.73	5.99	6.66	0.67	2.70	3.32	—	4,860	4,860	0.16	0.15	1.54	4,910
Mit.	1.35	1.19	10.3	25.7	0.04	0.34	2.83	3.07	0.31	1.17	1.40	—	4,860	4,860	0.16	0.15	1.54	4,910
% Reduced	45%	43%	46%	-13%	—	54%	53%	54%	53%	57%	58%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.26	3.62	30.8	34.7	0.05	1.39	16.9	18.3	1.28	7.94	9.22	—	6,648	6,648	0.24	0.18	5.09	6,713
2026	16.5	14.0	126	155	0.27	4.92	32.2	37.2	4.53	14.2	18.7	—	34,330	34,330	1.23	1.03	26.9	34,695
2027	16.2	13.8	122	152	0.27	4.78	32.2	37.0	4.40	14.2	18.6	—	34,153	34,153	1.08	1.00	24.3	34,503
2028	16.1	13.6	119	150	0.27	4.60	37.5	42.1	4.23	16.8	21.0	—	34,182	34,182	1.09	0.99	21.9	34,526
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.20	3.55	30.9	33.1	0.05	1.39	16.9	18.3	1.28	7.94	9.22	—	6,551	6,551	0.24	0.18	0.13	6,611
2026	12.3	10.5	97.7	114	0.21	3.67	16.9	19.0	3.38	7.94	9.65	—	27,255	27,255	0.88	0.85	0.58	27,532
2027	16.0	13.6	123	144	0.27	4.78	32.2	37.0	4.40	14.2	18.6	—	33,611	33,611	1.10	1.01	0.63	33,941
2028	15.2	13.0	117	143	0.27	4.37	33.8	36.6	4.03	15.9	18.3	—	33,422	33,422	1.09	0.99	0.57	33,744
2029	7.23	6.09	48.4	61.2	0.10	2.12	33.8	35.9	1.95	15.9	17.8	—	12,855	12,855	0.44	0.33	0.17	12,964
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	2.99	2.53	22.0	23.8	0.04	0.99	12.0	13.0	0.91	5.66	6.56	—	4,682	4,682	0.17	0.13	1.57	4,726
2026	7.66	6.49	58.1	68.5	0.12	2.32	19.4	21.7	2.14	8.77	10.9	—	15,128	15,128	0.50	0.45	5.06	15,279
2027	13.5	11.4	105	125	0.23	3.99	21.0	25.0	3.68	8.94	12.6	—	29,356	29,356	0.96	0.90	9.29	29,656
2028	12.7	10.9	95.7	118	0.21	3.68	32.8	36.5	3.39	14.8	18.2	—	26,814	26,814	0.88	0.78	7.42	27,074
2029	0.46	0.39	3.06	3.89	0.01	0.13	2.13	2.26	0.12	1.00	1.12	—	813	813	0.03	0.02	0.18	820
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.55	0.46	4.02	4.35	0.01	0.18	2.20	2.38	0.17	1.03	1.20	—	775	775	0.03	0.02	0.26	782
2026	1.40	1.18	10.6	12.5	0.02	0.42	3.53	3.96	0.39	1.60	1.99	—	2,505	2,505	0.08	0.07	0.84	2,530
2027	2.46	2.08	19.1	22.8	0.04	0.73	3.83	4.56	0.67	1.63	2.30	—	4,860	4,860	0.16	0.15	1.54	4,910
2028	2.32	1.98	17.5	21.5	0.04	0.67	5.99	6.66	0.62	2.70	3.32	—	4,439	4,439	0.15	0.13	1.23	4,482
2029	0.08	0.07	0.56	0.71	< 0.005	0.02	0.39	0.41	0.02	0.18	0.21	—	135	135	< 0.005	< 0.005	0.03	136

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.91	0.87	3.51	33.8	0.05	0.11	7.18	7.29	0.11	3.24	3.35	—	6,648	6,648	0.24	0.18	5.09	6,713
2026	8.06	7.20	57.2	170	0.27	1.80	16.0	17.8	1.69	6.38	8.07	—	34,330	34,330	1.23	1.03	26.9	34,695
2027	8.17	7.27	58.3	168	0.27	1.92	16.0	18.0	1.80	6.38	8.18	—	34,153	34,153	1.08	1.00	24.3	34,503
2028	8.16	7.26	57.5	169	0.27	1.89	18.1	20.0	1.77	7.39	9.17	—	34,617	34,617	1.11	0.99	21.9	34,963
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.84	0.81	3.58	32.3	0.05	0.11	7.18	7.29	0.11	3.24	3.35	—	6,551	6,551	0.24	0.18	0.13	6,611
2026	7.00	6.17	54.1	130	0.21	1.69	8.85	10.5	1.58	3.24	4.72	—	27,255	27,255	0.88	0.85	0.58	27,532
2027	7.97	7.06	58.7	161	0.27	1.92	16.0	18.0	1.80	6.38	8.18	—	33,611	33,611	1.10	1.01	0.63	33,941
2028	7.35	6.64	56.0	159	0.27	1.67	16.0	17.7	1.57	6.48	7.97	—	33,422	33,422	1.09	0.99	0.57	33,744

2029	2.44	2.21	13.3	65.6	0.11	0.52	14.4	14.9	0.50	6.48	6.98	—	13,290	13,290	0.45	0.33	0.17	13,401
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.60	0.58	2.57	23.3	0.04	0.08	5.11	5.19	0.08	2.31	2.38	—	4,682	4,682	0.17	0.13	1.57	4,726
2026	3.25	2.91	22.8	73.8	0.12	0.70	9.05	9.75	0.66	3.78	4.44	—	15,128	15,128	0.50	0.45	5.06	15,279
2027	7.42	6.54	56.4	141	0.23	1.85	11.2	13.1	1.73	4.22	5.95	—	29,356	29,356	0.96	0.90	9.29	29,656
2028	5.78	5.25	42.3	130	0.21	1.31	15.5	16.8	1.23	6.44	7.66	—	26,959	26,959	0.88	0.78	7.42	27,220
2029	0.15	0.14	0.84	4.17	0.01	0.03	0.90	0.94	0.03	0.41	0.44	—	840	840	0.03	0.02	0.18	847
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.11	0.11	0.47	4.25	0.01	0.01	0.93	0.95	0.01	0.42	0.43	—	775	775	0.03	0.02	0.26	782
2026	0.59	0.53	4.15	13.5	0.02	0.13	1.65	1.78	0.12	0.69	0.81	—	2,505	2,505	0.08	0.07	0.84	2,530
2027	1.35	1.19	10.3	25.7	0.04	0.34	2.05	2.39	0.31	0.77	1.09	—	4,860	4,860	0.16	0.15	1.54	4,910
2028	1.06	0.96	7.72	23.7	0.04	0.24	2.83	3.07	0.22	1.17	1.40	—	4,463	4,463	0.15	0.13	1.23	4,507
2029	0.03	0.03	0.15	0.76	< 0.005	0.01	0.17	0.17	0.01	0.07	0.08	—	139	139	< 0.005	< 0.005	0.03	140

3. Construction Emissions Details

3.1. Access Road Rehabilitation (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.83	3.22	29.8	29.4	0.05	1.38	—	1.38	1.27	—	1.27	—	5,033	5,033	0.20	0.04	—	5,050
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.83	3.22	29.8	29.4	0.05	1.38	—	1.38	1.27	—	1.27	—	5,033	5,033	0.20	0.04	—	5,050
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.73	2.29	21.2	21.0	0.03	0.98	—	0.98	0.90	—	0.90	—	3,585	3,585	0.15	0.03	—	3,597
Dust From Material Movement	—	—	—	—	—	—	11.4	11.4	—	5.49	5.49	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.87	3.83	0.01	0.18	—	0.18	0.16	—	0.16	—	594	594	0.02	< 0.005	—	596
Dust From Material Movement	—	—	—	—	—	—	2.07	2.07	—	1.00	1.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.38	0.29	4.97	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	854	854	0.04	0.03	3.11	867
Vendor	0.02	0.02	0.51	0.20	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	555	555	< 0.005	0.07	1.54	578
Hauling	0.01	0.01	0.25	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	207	207	< 0.005	0.03	0.44	217
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.31	0.32	3.40	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	756	756	0.04	0.03	0.08	766
Vendor	0.02	0.02	0.54	0.20	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	555	555	< 0.005	0.07	0.04	577
Hauling	0.01	0.01	0.26	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	207	207	< 0.005	0.03	0.01	217
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.25	2.70	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	555	555	0.03	0.02	0.96	563
Vendor	0.01	0.01	0.39	0.14	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	395	395	< 0.005	0.05	0.47	412
Hauling	< 0.005	< 0.005	0.18	0.05	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	147	147	< 0.005	0.02	0.14	155
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	91.8	91.8	< 0.005	< 0.005	0.16	93.2
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	65.4	65.4	< 0.005	0.01	0.08	68.1
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24.4	24.4	< 0.005	< 0.005	0.02	25.6

3.2. Access Road Rehabilitation (2025) - Mitigated

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

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

Off-Road Equipment	0.47	0.47	2.46	28.6	0.05	0.09	—	0.09	0.09	—	0.09	—	5,033	5,033	0.20	0.04	—	5,050
Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.46	28.6	0.05	0.09	—	0.09	0.09	—	0.09	—	5,033	5,033	0.20	0.04	—	5,050
Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.34	1.75	20.4	0.03	0.07	—	0.07	0.07	—	0.07	—	3,585	3,585	0.15	0.03	—	3,597
Dust From Material Movement	—	—	—	—	—	—	4.43	4.43	—	2.14	2.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.32	3.72	0.01	0.01	—	0.01	0.01	—	0.01	—	594	594	0.02	< 0.005	—	596
Dust From Material Movement	—	—	—	—	—	—	0.81	0.81	—	0.39	0.39	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.38	0.29	4.97	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	854	854	0.04	0.03	3.11	867
Vendor	0.02	0.02	0.51	0.20	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	555	555	< 0.005	0.07	1.54	578
Hauling	0.01	0.01	0.25	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	207	207	< 0.005	0.03	0.44	217
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.31	0.32	3.40	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	756	756	0.04	0.03	0.08	766
Vendor	0.02	0.02	0.54	0.20	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	555	555	< 0.005	0.07	0.04	577
Hauling	0.01	0.01	0.26	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	207	207	< 0.005	0.03	0.01	217
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.25	2.70	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	555	555	0.03	0.02	0.96	563
Vendor	0.01	0.01	0.39	0.14	< 0.005	0.01	0.11	0.11	0.01	0.03	0.04	—	395	395	< 0.005	0.05	0.47	412
Hauling	< 0.005	< 0.005	0.18	0.05	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	147	147	< 0.005	0.02	0.14	155
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	91.8	91.8	< 0.005	< 0.005	0.16	93.2
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	65.4	65.4	< 0.005	0.01	0.08	68.1
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24.4	24.4	< 0.005	< 0.005	0.02	25.6

3.3. Access Road Rehabilitation (2026) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.61	3.04	27.2	28.4	0.05	1.24	—	1.24	1.14	—	1.14	—	5,034	5,034	0.20	0.04	—	5,051
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.61	3.04	27.2	28.4	0.05	1.24	—	1.24	1.14	—	1.14	—	5,034	5,034	0.20	0.04	—	5,051
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.42	2.03	18.2	19.0	0.03	0.83	—	0.83	0.77	—	0.77	—	3,365	3,365	0.14	0.03	—	3,377
Dust From Material Movement	—	—	—	—	—	—	10.7	10.7	—	5.15	5.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.37	3.32	3.46	0.01	0.15	—	0.15	0.14	—	0.14	—	557	557	0.02	< 0.005	—	559

Dust From Material Movement	—	—	—	—	—	—	1.94	1.94	—	0.94	0.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.33	0.27	4.62	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	837	837	0.04	0.03	2.83	850
Vendor	0.02	0.02	0.49	0.18	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	< 0.005	0.07	1.39	567
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.42	212
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.29	3.13	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	741	741	0.01	0.03	0.07	751
Vendor	0.02	0.02	0.52	0.18	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	< 0.005	0.07	0.04	566
Hauling	0.01	0.01	0.25	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.01	212
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	0.21	2.35	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	510	510	0.01	0.02	0.81	517
Vendor	0.01	0.01	0.35	0.12	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	364	364	< 0.005	0.05	0.40	379
Hauling	< 0.005	< 0.005	0.17	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.12	142
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.43	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	84.5	84.5	< 0.005	< 0.005	0.13	85.6
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	60.2	60.2	< 0.005	0.01	0.07	62.7
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.4	22.4	< 0.005	< 0.005	0.02	23.5

3.4. Access Road Rehabilitation (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.46	28.6	0.05	0.09	—	0.09	0.09	—	0.09	—	5,034	5,034	0.20	0.04	—	5,051
Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.46	28.6	0.05	0.09	—	0.09	0.09	—	0.09	—	5,034	5,034	0.20	0.04	—	5,051
Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.32	1.65	19.1	0.03	0.06	—	0.06	0.06	—	0.06	—	3,365	3,365	0.14	0.03	—	3,377
Dust From Material Movement	—	—	—	—	—	—	4.15	4.15	—	2.01	2.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.30	3.49	0.01	0.01	—	0.01	0.01	—	0.01	—	557	557	0.02	< 0.005	—	559
Dust From Material Movement	—	—	—	—	—	—	0.76	0.76	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.33	0.27	4.62	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	837	837	0.04	0.03	2.83	850
Vendor	0.02	0.02	0.49	0.18	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	< 0.005	0.07	1.39	567
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.42	212
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.29	3.13	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	741	741	0.01	0.03	0.07	751
Vendor	0.02	0.02	0.52	0.18	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	< 0.005	0.07	0.04	566
Hauling	0.01	0.01	0.25	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.01	212
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	0.21	2.35	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	510	510	0.01	0.02	0.81	517
Vendor	0.01	0.01	0.35	0.12	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	364	364	< 0.005	0.05	0.40	379
Hauling	< 0.005	< 0.005	0.17	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.12	142
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.43	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	84.5	84.5	< 0.005	< 0.005	0.13	85.6
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	60.2	60.2	< 0.005	0.01	0.07	62.7
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.4	22.4	< 0.005	< 0.005	0.02	23.5

3.5. Laydown/Staging/Site Grading (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.11	2.61	24.3	28.4	0.04	1.01	—	1.01	0.93	—	0.93	—	4,806	4,806	0.19	0.04	—	4,822
Dust From Material Movement	—	—	—	—	—	—	10.6	10.6	—	5.14	5.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.11	2.61	24.3	28.4	0.04	1.01	—	1.01	0.93	—	0.93	—	4,806	4,806	0.19	0.04	—	4,822
Dust From Material Movement	—	—	—	—	—	—	10.6	10.6	—	5.14	5.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.83	1.54	14.3	16.7	0.03	0.59	—	0.59	0.55	—	0.55	—	2,831	2,831	0.11	0.02	—	2,840
Dust From Material Movement	—	—	—	—	—	—	6.26	6.26	—	3.03	3.03	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.28	2.62	3.05	< 0.005	0.11	—	0.11	0.10	—	0.10	—	469	469	0.02	< 0.005	—	470
Dust From Material Movement	—	—	—	—	—	—	1.14	1.14	—	0.55	0.55	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.33	0.27	4.62	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	837	837	0.04	0.03	2.83	850
Vendor	0.02	0.02	0.49	0.18	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	< 0.005	0.07	1.39	567
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.42	212
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.29	3.13	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	741	741	0.01	0.03	0.07	751
Vendor	0.02	0.02	0.52	0.18	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	< 0.005	0.07	0.04	566
Hauling	0.01	0.01	0.25	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.01	212
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.19	2.07	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	450	450	0.01	0.02	0.72	456
Vendor	0.01	0.01	0.31	0.11	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	321	321	< 0.005	0.04	0.35	334
Hauling	< 0.005	< 0.005	0.15	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.11	125
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.38	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	74.4	74.4	< 0.005	< 0.005	0.12	75.5
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	53.1	53.1	< 0.005	0.01	0.06	55.3

Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.8	19.8	< 0.005	< 0.005	0.02	20.7

3.6. Laydown/Staging/Site Grading (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.90	7.86	28.5	0.04	0.24	—	0.24	0.23	—	0.23	—	4,806	4,806	0.19	0.04	—	4,822
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.90	7.86	28.5	0.04	0.24	—	0.24	0.23	—	0.23	—	4,806	4,806	0.19	0.04	—	4,822
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.53	4.63	16.8	0.03	0.14	—	0.14	0.13	—	0.13	—	2,831	2,831	0.11	0.02	—	2,840

Dust From Material Movement	—	—	—	—	—	—	2.44	2.44	—	1.18	1.18	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	0.85	3.07	< 0.005	0.03	—	0.03	0.02	—	0.02	—	469	469	0.02	< 0.005	—	470
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.33	0.27	4.62	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	837	837	0.04	0.03	2.83	850
Vendor	0.02	0.02	0.49	0.18	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	< 0.005	0.07	1.39	567
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.42	212
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.29	0.29	3.13	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	741	741	0.01	0.03	0.07	751
Vendor	0.02	0.02	0.52	0.18	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	< 0.005	0.07	0.04	566
Hauling	0.01	0.01	0.25	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.01	212
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.19	2.07	0.00	0.00	0.45	0.45	0.00	0.10	0.10	—	450	450	0.01	0.02	0.72	456
Vendor	0.01	0.01	0.31	0.11	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	321	321	< 0.005	0.04	0.35	334
Hauling	< 0.005	< 0.005	0.15	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	119	119	< 0.005	0.02	0.11	125

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.38	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	74.4	74.4	< 0.005	< 0.005	0.12	75.5
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	53.1	53.1	< 0.005	0.01	0.06	55.3
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.8	19.8	< 0.005	< 0.005	0.02	20.7

3.7. Laydown/Staging/Site Grading (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.00	2.52	23.2	28.1	0.04	0.94	—	0.94	0.86	—	0.86	—	4,807	4,807	0.19	0.04	—	4,823
Dust From Material Movement	—	—	—	—	—	—	10.6	10.6	—	5.14	5.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.00	2.52	23.2	28.1	0.04	0.94	—	0.94	0.86	—	0.86	—	4,807	4,807	0.19	0.04	—	4,823
Dust From Material Movement	—	—	—	—	—	—	10.6	10.6	—	5.14	5.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.00	2.52	23.2	28.1	0.04	0.94	—	0.94	0.86	—	0.86	—	4,807	4,807	0.19	0.04	—	4,823
Dust From Material Movement	—	—	—	—	—	—	10.6	10.6	—	5.14	5.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.46	4.24	5.13	0.01	0.17	—	0.17	0.16	—	0.16	—	796	796	0.03	0.01	—	799
Dust From Material Movement	—	—	—	—	—	—	1.94	1.94	—	0.94	0.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.32	0.24	4.27	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	823	823	0.01	0.03	2.55	834
Vendor	0.02	0.01	0.47	0.17	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	532	532	< 0.005	0.07	1.24	554
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	< 0.005	0.03	0.38	208
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.28	0.27	2.92	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	729	729	0.01	0.03	0.07	738
Vendor	0.02	0.01	0.50	0.17	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	532	532	< 0.005	0.07	0.03	553
Hauling	0.01	< 0.005	0.25	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	< 0.005	0.03	0.01	208
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.28	0.29	3.26	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	750	750	0.01	0.03	1.10	761

Vendor	0.02	0.01	0.50	0.17	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	532	532	< 0.005	0.07	0.54	554
Hauling	0.01	0.01	0.25	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	< 0.005	0.03	0.17	208
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.59	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.18	126
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	88.1	88.1	< 0.005	0.01	0.09	91.7
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.8	32.8	< 0.005	0.01	0.03	34.4

3.8. Laydown/Staging/Site Grading (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.88	7.73	28.5	0.04	0.22	—	0.22	0.21	—	0.21	—	4,807	4,807	0.19	0.04	—	4,823
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.88	7.73	28.5	0.04	0.22	—	0.22	0.21	—	0.21	—	4,807	4,807	0.19	0.04	—	4,823
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.88	7.73	28.5	0.04	0.22	—	0.22	0.21	—	0.21	—	4,807	4,807	0.19	0.04	—	4,823
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.16	1.41	5.21	0.01	0.04	—	0.04	0.04	—	0.04	—	796	796	0.03	0.01	—	799
Dust From Material Movement	—	—	—	—	—	—	0.76	0.76	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.32	0.24	4.27	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	823	823	0.01	0.03	2.55	834
Vendor	0.02	0.01	0.47	0.17	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	532	532	< 0.005	0.07	1.24	554
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	< 0.005	0.03	0.38	208
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.28	0.27	2.92	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	729	729	0.01	0.03	0.07	738
Vendor	0.02	0.01	0.50	0.17	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	532	532	< 0.005	0.07	0.03	553

Hauling	0.01	< 0.005	0.25	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	< 0.005	0.03	0.01	208
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.28	0.29	3.26	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	750	750	0.01	0.03	1.10	761
Vendor	0.02	0.01	0.50	0.17	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	532	532	< 0.005	0.07	0.54	554
Hauling	0.01	0.01	0.25	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	< 0.005	0.03	0.17	208
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.59	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.18	126
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	88.1	88.1	< 0.005	0.01	0.09	91.7
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.8	32.8	< 0.005	0.01	0.03	34.4

3.9. Laydown/Staging/Site Grading (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.94	2.47	22.6	28.2	0.04	0.89	—	0.89	0.82	—	0.82	—	4,808	4,808	0.20	0.04	—	4,824
Dust From Material Movement	—	—	—	—	—	—	10.6	10.6	—	5.14	5.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.94	2.47	22.6	28.2	0.04	0.89	—	0.89	0.82	—	0.82	—	4,808	4,808	0.20	0.04	—	4,824

Dust From Material Movement	—	—	—	—	—	—	10.6	10.6	—	5.14	5.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.97	1.65	15.1	18.8	0.03	0.60	—	0.60	0.55	—	0.55	—	3,214	3,214	0.13	0.03	—	3,225
Dust From Material Movement	—	—	—	—	—	—	7.10	7.10	—	3.43	3.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	2.76	3.44	0.01	0.11	—	0.11	0.10	—	0.10	—	532	532	0.02	< 0.005	—	534
Dust From Material Movement	—	—	—	—	—	—	1.30	1.30	—	0.63	0.63	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.30	0.21	3.97	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	807	807	0.01	0.03	2.30	818
Vendor	0.02	0.01	0.46	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	518	518	< 0.005	0.07	1.10	540
Hauling	0.01	0.01	0.23	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.35	202
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.28	0.27	0.24	2.71	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	715	715	0.01	0.03	0.06	724
Vendor	0.02	0.01	0.48	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	519	519	< 0.005	0.07	0.03	540
Hauling	0.01	< 0.005	0.24	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.01	202
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.18	2.02	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	492	492	0.01	0.02	0.66	499
Vendor	0.01	0.01	0.32	0.11	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	347	347	< 0.005	0.05	0.32	361
Hauling	< 0.005	< 0.005	0.16	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	129	129	< 0.005	0.02	0.10	135
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	81.5	81.5	< 0.005	< 0.005	0.11	82.6
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	57.4	57.4	< 0.005	0.01	0.05	59.7
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.3	21.3	< 0.005	< 0.005	0.02	22.4

3.10. Laydown/Staging/Site Grading (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.87	7.64	28.5	0.04	0.21	—	0.21	0.20	—	0.20	—	4,808	4,808	0.20	0.04	—	4,824
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.97	0.87	7.64	28.5	0.04	0.21	—	0.21	0.20	—	0.20	—	4,808	4,808	0.20	0.04	—	4,824
Dust From Material Movement	—	—	—	—	—	—	4.14	4.14	—	2.00	2.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.58	5.10	19.1	0.03	0.14	—	0.14	0.13	—	0.13	—	3,214	3,214	0.13	0.03	—	3,225
Dust From Material Movement	—	—	—	—	—	—	2.77	2.77	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.11	0.93	3.48	0.01	0.03	—	0.03	0.02	—	0.02	—	532	532	0.02	< 0.005	—	534
Dust From Material Movement	—	—	—	—	—	—	0.51	0.51	—	0.24	0.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.30	0.21	3.97	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	807	807	0.01	0.03	2.30	818
Vendor	0.02	0.01	0.46	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	518	518	< 0.005	0.07	1.10	540
Hauling	0.01	0.01	0.23	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.35	202

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.24	2.71	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	715	715	0.01	0.03	0.06	724
Vendor	0.02	0.01	0.48	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	519	519	< 0.005	0.07	0.03	540
Hauling	0.01	< 0.005	0.24	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.01	202
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.18	2.02	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	492	492	0.01	0.02	0.66	499
Vendor	0.01	0.01	0.32	0.11	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	347	347	< 0.005	0.05	0.32	361
Hauling	< 0.005	< 0.005	0.16	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	129	129	< 0.005	0.02	0.10	135
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	81.5	81.5	< 0.005	< 0.005	0.11	82.6
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	57.4	57.4	< 0.005	0.01	0.05	59.7
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.3	21.3	< 0.005	< 0.005	0.02	22.4

3.11. Line 1 Work Area Restoration (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.48	2.93	25.7	28.0	0.05	1.16	—	1.16	1.07	—	1.07	—	5,035	5,035	0.20	0.04	—	5,052
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.48	2.93	25.7	28.0	0.05	1.16	—	1.16	1.07	—	1.07	—	5,035	5,035	0.20	0.04	—	5,052
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.17	0.99	8.67	9.43	0.02	0.39	—	0.39	0.36	—	0.36	—	1,697	1,697	0.07	0.01	—	1,703
Dust From Material Movement	—	—	—	—	—	—	5.37	5.37	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.58	1.72	< 0.005	0.07	—	0.07	0.07	—	0.07	—	281	281	0.01	< 0.005	—	282
Dust From Material Movement	—	—	—	—	—	—	0.98	0.98	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.32	0.24	4.27	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	823	823	0.01	0.03	2.55	834

Vendor	0.02	0.01	0.47	0.17	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	532	532	< 0.005	0.07	1.24	554
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	< 0.005	0.03	0.38	208
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.28	0.27	2.92	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	729	729	0.01	0.03	0.07	738
Vendor	0.02	0.01	0.50	0.17	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	532	532	< 0.005	0.07	0.03	553
Hauling	0.01	< 0.005	0.25	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	< 0.005	0.03	0.01	208
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.10	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.37	256
Vendor	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	179	179	< 0.005	0.02	0.18	187
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	66.7	66.7	< 0.005	0.01	0.06	69.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	41.9	41.9	< 0.005	< 0.005	0.06	42.4
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.7	29.7	< 0.005	< 0.005	0.03	30.9
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.6

3.12. Line 1 Work Area Restoration (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.46	28.6	0.05	0.09	—	0.09	0.09	—	0.09	—	5,035	5,035	0.20	0.04	—	5,052

Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.46	28.6	0.05	0.09	—	0.09	0.09	—	0.09	—	5,035	5,035	0.20	0.04	—	5,052
Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	0.83	9.64	0.02	0.03	—	0.03	0.03	—	0.03	—	1,697	1,697	0.07	0.01	—	1,703
Dust From Material Movement	—	—	—	—	—	—	2.09	2.09	—	1.01	1.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.15	1.76	< 0.005	0.01	—	0.01	0.01	—	0.01	—	281	281	0.01	< 0.005	—	282
Dust From Material Movement	—	—	—	—	—	—	0.38	0.38	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.32	0.24	4.27	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	823	823	0.01	0.03	2.55	834
Vendor	0.02	0.01	0.47	0.17	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	532	532	< 0.005	0.07	1.24	554
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	< 0.005	0.03	0.38	208
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.31	0.28	0.27	2.92	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	729	729	0.01	0.03	0.07	738
Vendor	0.02	0.01	0.50	0.17	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	532	532	< 0.005	0.07	0.03	553
Hauling	0.01	< 0.005	0.25	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	198	198	< 0.005	0.03	0.01	208
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.10	1.10	0.00	0.00	0.26	0.26	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.37	256
Vendor	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	179	179	< 0.005	0.02	0.18	187
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	66.7	66.7	< 0.005	0.01	0.06	69.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	41.9	41.9	< 0.005	< 0.005	0.06	42.4
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.7	29.7	< 0.005	< 0.005	0.03	30.9
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.6

3.13. Line 1 Work Area Restoration (2028) - Unmitigated

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

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

Off-Road Equipment	3.43	2.88	24.9	28.1	0.05	1.12	—	1.12	1.03	—	1.03	—	5,037	5,037	0.20	0.04	—	5,054
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.43	2.88	24.9	28.1	0.05	1.12	—	1.12	1.03	—	1.03	—	5,037	5,037	0.20	0.04	—	5,054
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.44	2.89	25.0	28.1	0.05	1.12	—	1.12	1.03	—	1.03	—	5,051	5,051	0.20	0.04	—	5,068
Dust From Material Movement	—	—	—	—	—	—	16.0	16.0	—	7.73	7.73	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	4.56	5.13	0.01	0.20	—	0.20	0.19	—	0.19	—	836	836	0.03	0.01	—	839
Dust From Material Movement	—	—	—	—	—	—	2.92	2.92	—	1.41	1.41	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.30	0.21	3.97	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	807	807	0.01	0.03	2.30	818
Vendor	0.02	0.01	0.46	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	518	518	< 0.005	0.07	1.10	540
Hauling	0.01	0.01	0.23	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.35	202
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.24	2.71	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	715	715	0.01	0.03	0.06	724
Vendor	0.02	0.01	0.48	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	519	519	< 0.005	0.07	0.03	540
Hauling	0.01	< 0.005	0.24	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.01	202
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.27	3.03	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	738	738	0.01	0.03	1.00	748
Vendor	0.02	0.01	0.48	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	520	520	< 0.005	0.07	0.48	541
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.15	203
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.55	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.17	124
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	86.1	86.1	< 0.005	0.01	0.08	89.6
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.0	32.0	< 0.005	0.01	0.03	33.5

3.14. Line 1 Work Area Restoration (2028) - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.46	28.6	0.05	0.09	—	0.09	0.09	—	0.09	—	5,037	5,037	0.20	0.04	—	5,054
Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.46	28.6	0.05	0.09	—	0.09	0.09	—	0.09	—	5,037	5,037	0.20	0.04	—	5,054
Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.47	28.7	0.05	0.09	—	0.09	0.09	—	0.09	—	5,051	5,051	0.20	0.04	—	5,068
Dust From Material Movement	—	—	—	—	—	—	6.23	6.23	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	0.45	5.24	0.01	0.02	—	0.02	0.02	—	0.02	—	836	836	0.03	0.01	—	839

Dust From Material Movement	—	—	—	—	—	—	1.14	1.14	—	0.55	0.55	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.30	0.21	3.97	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	807	807	0.01	0.03	2.30	818
Vendor	0.02	0.01	0.46	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	518	518	< 0.005	0.07	1.10	540
Hauling	0.01	0.01	0.23	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.35	202
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.24	2.71	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	715	715	0.01	0.03	0.06	724
Vendor	0.02	0.01	0.48	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	519	519	< 0.005	0.07	0.03	540
Hauling	0.01	< 0.005	0.24	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.01	202
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.27	3.03	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	738	738	0.01	0.03	1.00	748
Vendor	0.02	0.01	0.48	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	520	520	< 0.005	0.07	0.48	541
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.15	203
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.55	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	0.17	124
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	86.1	86.1	< 0.005	0.01	0.08	89.6
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.0	32.0	< 0.005	0.01	0.03	33.5

3.15. Line 1 Work Area Restoration (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.33	2.80	23.3	27.9	0.05	1.05	—	1.05	0.96	—	0.96	—	5,033	5,033	0.20	0.04	—	5,050
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.47	1.76	< 0.005	0.07	—	0.07	0.06	—	0.06	—	317	317	0.01	< 0.005	—	318
Dust From Material Movement	—	—	—	—	—	—	1.00	1.00	—	0.49	0.49	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.27	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.5	52.5	< 0.005	< 0.005	—	52.7
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.09	0.09	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.23	0.21	2.53	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	702	702	0.01	0.03	0.05	711
Vendor	0.02	0.01	0.46	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	504	504	< 0.005	0.07	0.03	524
Hauling	0.01	< 0.005	0.24	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	188	188	< 0.005	0.03	0.01	197
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.6	45.6	< 0.005	< 0.005	0.06	46.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.7	31.7	< 0.005	< 0.005	0.03	33.0
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.8	11.8	< 0.005	< 0.005	0.01	12.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.54	7.54	< 0.005	< 0.005	0.01	7.64
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.26	5.26	< 0.005	< 0.005	< 0.005	5.47
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.96	1.96	< 0.005	< 0.005	< 0.005	2.05

3.16. Line 1 Work Area Restoration (2029) - Mitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.47	2.46	28.6	0.05	0.09	—	0.09	0.09	—	0.09	—	5,033	5,033	0.20	0.04	—	5,050
Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.16	1.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	317	317	0.01	< 0.005	—	318
Dust From Material Movement	—	—	—	—	—	—	0.39	0.39	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.03	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	52.5	52.5	< 0.005	< 0.005	—	52.7
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.23	0.21	2.53	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	702	702	0.01	0.03	0.05	711
Vendor	0.02	0.01	0.46	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	504	504	< 0.005	0.07	0.03	524
Hauling	0.01	< 0.005	0.24	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	188	188	< 0.005	0.03	0.01	197
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.6	45.6	< 0.005	< 0.005	0.06	46.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.7	31.7	< 0.005	< 0.005	0.03	33.0
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.8	11.8	< 0.005	< 0.005	0.01	12.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.54	7.54	< 0.005	< 0.005	0.01	7.64
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.26	5.26	< 0.005	< 0.005	< 0.005	5.47
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.96	1.96	< 0.005	< 0.005	< 0.005	2.05

3.17. Line 2 Work Area Restoration (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.43	2.88	24.9	28.1	0.05	1.12	—	1.12	1.03	—	1.03	—	5,037	5,037	0.20	0.04	—	5,054
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.43	2.88	24.9	28.1	0.05	1.12	—	1.12	1.03	—	1.03	—	5,037	5,037	0.20	0.04	—	5,054
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.96	8.32	9.38	0.02	0.37	—	0.37	0.34	—	0.34	—	1,684	1,684	0.07	0.01	—	1,689
Dust From Material Movement	—	—	—	—	—	—	5.33	5.33	—	2.58	2.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.52	1.71	< 0.005	0.07	—	0.07	0.06	—	0.06	—	279	279	0.01	< 0.005	—	280
Dust From Material Movement	—	—	—	—	—	—	0.97	0.97	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.30	0.21	3.97	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	807	807	0.01	0.03	2.30	818

Vendor	0.02	0.01	0.46	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	518	518	< 0.005	0.07	1.10	540
Hauling	0.01	0.01	0.23	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.35	202
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.24	2.71	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	715	715	0.01	0.03	0.06	724
Vendor	0.02	0.01	0.48	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	519	519	< 0.005	0.07	0.03	540
Hauling	0.01	< 0.005	0.24	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.01	202
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.09	1.01	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	246	246	< 0.005	0.01	0.33	249
Vendor	0.01	< 0.005	0.16	0.05	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	173	173	< 0.005	0.02	0.16	180
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.4	64.4	< 0.005	0.01	0.05	67.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	40.7	40.7	< 0.005	< 0.005	0.06	41.3
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.7	28.7	< 0.005	< 0.005	0.03	29.9
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.01	11.2

3.18. Line 2 Work Area Restoration (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.27	9.54	31.6	0.05	0.43	—	0.43	0.40	—	0.40	—	5,472	5,472	0.22	0.04	—	5,491

Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.27	9.54	31.6	0.05	0.43	—	0.43	0.40	—	0.40	—	5,472	5,472	0.22	0.04	—	5,491
Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.42	3.19	10.5	0.02	0.14	—	0.14	0.13	—	0.13	—	1,829	1,829	0.07	0.01	—	1,835
Dust From Material Movement	—	—	—	—	—	—	2.08	2.08	—	1.00	1.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.58	1.93	< 0.005	0.03	—	0.03	0.02	—	0.02	—	303	303	0.01	< 0.005	—	304
Dust From Material Movement	—	—	—	—	—	—	0.38	0.38	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.30	0.21	3.97	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	807	807	0.01	0.03	2.30	818
Vendor	0.02	0.01	0.46	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	518	518	< 0.005	0.07	1.10	540
Hauling	0.01	0.01	0.23	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.35	202
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.27	0.24	2.71	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	715	715	0.01	0.03	0.06	724
Vendor	0.02	0.01	0.48	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	519	519	< 0.005	0.07	0.03	540
Hauling	0.01	< 0.005	0.24	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	193	193	< 0.005	0.03	0.01	202
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.09	1.01	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	246	246	< 0.005	0.01	0.33	249
Vendor	0.01	< 0.005	0.16	0.05	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	173	173	< 0.005	0.02	0.16	180
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.4	64.4	< 0.005	0.01	0.05	67.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	40.7	40.7	< 0.005	< 0.005	0.06	41.3
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.7	28.7	< 0.005	< 0.005	0.03	29.9
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.01	11.2

3.19. Line 2 Work Area Restoration (2029) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.33	2.80	23.3	27.9	0.05	1.05	—	1.05	0.96	—	0.96	—	5,033	5,033	0.20	0.04	—	5,050
Dust From Material Movement	—	—	—	—	—	—	15.9	15.9	—	7.71	7.71	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.47	1.76	< 0.005	0.07	—	0.07	0.06	—	0.06	—	317	317	0.01	< 0.005	—	318
Dust From Material Movement	—	—	—	—	—	—	1.00	1.00	—	0.49	0.49	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.27	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.5	52.5	< 0.005	< 0.005	—	52.7
Dust From Material Movement	—	—	—	—	—	—	0.18	0.18	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.23	0.21	2.53	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	702	702	0.01	0.03	0.05	711
Vendor	0.02	0.01	0.46	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	504	504	< 0.005	0.07	0.03	524
Hauling	0.01	< 0.005	0.24	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	188	188	< 0.005	0.03	0.01	197
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.6	45.6	< 0.005	< 0.005	0.06	46.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.7	31.7	< 0.005	< 0.005	0.03	33.0
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.8	11.8	< 0.005	< 0.005	0.01	12.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.54	7.54	< 0.005	< 0.005	0.01	7.64
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.26	5.26	< 0.005	< 0.005	< 0.005	5.47
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.96	1.96	< 0.005	< 0.005	< 0.005	2.05

3.20. Line 2 Work Area Restoration (2029) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.40	1.24	9.03	31.5	0.05	0.41	—	0.41	0.38	—	0.38	—	5,468	5,468	0.22	0.04	—	5,487

Dust From Material Movement	—	—	—	—	—	—	6.21	6.21	—	3.01	3.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.57	1.98	< 0.005	0.03	—	0.03	0.02	—	0.02	—	345	345	0.01	< 0.005	—	346
Dust From Material Movement	—	—	—	—	—	—	0.39	0.39	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.36	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	57.0	57.0	< 0.005	< 0.005	—	57.2
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.23	0.21	2.53	0.00	0.00	0.76	0.76	0.00	0.18	0.18	—	702	702	0.01	0.03	0.05	711
Vendor	0.02	0.01	0.46	0.16	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	504	504	< 0.005	0.07	0.03	524
Hauling	0.01	< 0.005	0.24	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	188	188	< 0.005	0.03	0.01	197

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.6	45.6	< 0.005	< 0.005	0.06	46.2
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	31.7	31.7	< 0.005	< 0.005	0.03	33.0
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.8	11.8	< 0.005	< 0.005	0.01	12.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.54	7.54	< 0.005	< 0.005	0.01	7.64
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.26	5.26	< 0.005	< 0.005	< 0.005	5.47
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.96	1.96	< 0.005	< 0.005	< 0.005	2.05

3.21. Line 1 Construction (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.53	6.32	67.8	69.5	0.14	2.59	—	2.59	2.39	—	2.39	—	15,135	15,135	0.61	0.12	—	15,187
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.53	6.32	67.8	69.5	0.14	2.59	—	2.59	2.39	—	2.39	—	15,135	15,135	0.61	0.12	—	15,187
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.52	2.11	22.7	23.2	0.05	0.87	—	0.87	0.80	—	0.80	—	5,059	5,059	0.21	0.04	—	5,076
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	4.14	4.24	0.01	0.16	—	0.16	0.15	—	0.15	—	838	838	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.39	1.28	1.02	17.7	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	3,209	3,209	0.14	0.12	10.8	3,257
Vendor	0.05	0.04	1.23	0.44	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,360	1,360	< 0.005	0.19	3.48	1,419
Hauling	0.05	0.04	1.92	0.52	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,620	1,620	< 0.005	0.25	3.33	1,699
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.25	1.13	1.13	12.0	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	2,842	2,842	0.05	0.12	0.28	2,878
Vendor	0.04	0.04	1.30	0.46	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,361	1,361	< 0.005	0.19	0.09	1,416
Hauling	0.04	0.04	2.04	0.53	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,622	1,622	< 0.005	0.25	0.09	1,698
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.38	0.41	4.51	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	978	978	0.02	0.04	1.56	992
Vendor	0.01	0.01	0.43	0.15	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	455	455	< 0.005	0.06	0.50	474
Hauling	0.02	0.01	0.68	0.17	< 0.005	0.01	0.14	0.16	0.01	0.04	0.05	—	542	542	< 0.005	0.09	0.48	568
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.82	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	162	162	< 0.005	0.01	0.26	164
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.3	75.3	< 0.005	0.01	0.08	78.4
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	89.7	89.7	< 0.005	0.01	0.08	94.0

3.22. Line 1 Construction (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.31	3.75	40.7	84.7	0.14	1.39	—	1.39	1.29	—	1.29	—	15,135	15,135	0.61	0.12	—	15,187
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.31	3.75	40.7	84.7	0.14	1.39	—	1.39	1.29	—	1.29	—	15,135	15,135	0.61	0.12	—	15,187
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.25	13.6	28.3	0.05	0.46	—	0.46	0.43	—	0.43	—	5,059	5,059	0.21	0.04	—	5,076
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.23	2.48	5.17	0.01	0.08	—	0.08	0.08	—	0.08	—	838	838	0.03	0.01	—	840
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.39	1.28	1.02	17.7	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	3,209	3,209	0.14	0.12	10.8	3,257
Vendor	0.05	0.04	1.23	0.44	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,360	1,360	< 0.005	0.19	3.48	1,419
Hauling	0.05	0.04	1.92	0.52	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,620	1,620	< 0.005	0.25	3.33	1,699
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.25	1.13	1.13	12.0	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	2,842	2,842	0.05	0.12	0.28	2,878
Vendor	0.04	0.04	1.30	0.46	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,361	1,361	< 0.005	0.19	0.09	1,416
Hauling	0.04	0.04	2.04	0.53	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,622	1,622	< 0.005	0.25	0.09	1,698
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.38	0.41	4.51	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	978	978	0.02	0.04	1.56	992
Vendor	0.01	0.01	0.43	0.15	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	455	455	< 0.005	0.06	0.50	474
Hauling	0.02	0.01	0.68	0.17	< 0.005	0.01	0.14	0.16	0.01	0.04	0.05	—	542	542	< 0.005	0.09	0.48	568
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.82	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	162	162	< 0.005	0.01	0.26	164
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.3	75.3	< 0.005	0.01	0.08	78.4
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	89.7	89.7	< 0.005	0.01	0.08	94.0

3.23. Line 1 Construction (2027) - Unmitigated

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

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

Off-Road Equipment	7.59	6.37	67.3	69.6	0.14	2.60	—	2.60	2.39	—	2.39	—	15,141	15,141	0.61	0.12	—	15,193
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.59	6.37	67.3	69.6	0.14	2.60	—	2.60	2.39	—	2.39	—	15,141	15,141	0.61	0.12	—	15,193
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.03	4.23	44.6	46.1	0.09	1.73	—	1.73	1.59	—	1.59	—	10,039	10,039	0.41	0.08	—	10,073
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	8.14	8.42	0.02	0.31	—	0.31	0.29	—	0.29	—	1,662	1,662	0.07	0.01	—	1,668
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.32	1.21	0.92	16.4	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	3,153	3,153	0.04	0.11	9.79	3,197
Vendor	0.05	0.03	1.18	0.42	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,330	1,330	< 0.005	0.17	3.11	1,385
Hauling	0.05	0.04	1.89	0.51	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,582	1,582	< 0.005	0.25	3.07	1,661
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.20	1.08	1.02	11.2	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	2,794	2,794	0.05	0.12	0.25	2,830

Vendor	0.04	0.03	1.25	0.44	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,331	1,331	< 0.005	0.18	0.08	1,383
Hauling	0.04	0.04	1.99	0.52	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,584	1,584	< 0.005	0.25	0.08	1,660
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.72	0.74	8.28	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,907	1,907	0.04	0.08	2.80	1,933
Vendor	0.03	0.02	0.83	0.29	0.01	0.01	0.25	0.26	0.01	0.07	0.08	—	882	882	< 0.005	0.12	0.89	918
Hauling	0.03	0.03	1.32	0.34	0.01	0.02	0.29	0.31	0.02	0.07	0.09	—	1,050	1,050	< 0.005	0.17	0.88	1,101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.13	1.51	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	316	316	0.01	0.01	0.46	320
Vendor	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	146	146	< 0.005	0.02	0.15	152
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	174	174	< 0.005	0.03	0.15	182

3.24. Line 1 Construction (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.55	3.95	42.2	84.9	0.14	1.53	—	1.53	1.42	—	1.42	—	15,141	15,141	0.61	0.12	—	15,193
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.55	3.95	42.2	84.9	0.14	1.53	—	1.53	1.42	—	1.42	—	15,141	15,141	0.61	0.12	—	15,193
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.02	2.62	28.0	56.3	0.09	1.01	—	1.01	0.94	—	0.94	—	10,039	10,039	0.41	0.08	—	10,073
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	0.48	5.11	10.3	0.02	0.18	—	0.18	0.17	—	0.17	—	1,662	1,662	0.07	0.01	—	1,668
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.32	1.21	0.92	16.4	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	3,153	3,153	0.04	0.11	9.79	3,197
Vendor	0.05	0.03	1.18	0.42	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,330	1,330	< 0.005	0.17	3.11	1,385
Hauling	0.05	0.04	1.89	0.51	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,582	1,582	< 0.005	0.25	3.07	1,661
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.20	1.08	1.02	11.2	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	2,794	2,794	0.05	0.12	0.25	2,830
Vendor	0.04	0.03	1.25	0.44	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,331	1,331	< 0.005	0.18	0.08	1,383
Hauling	0.04	0.04	1.99	0.52	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,584	1,584	< 0.005	0.25	0.08	1,660
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.72	0.74	8.28	0.00	0.00	1.93	1.93	0.00	0.45	0.45	—	1,907	1,907	0.04	0.08	2.80	1,933
Vendor	0.03	0.02	0.83	0.29	0.01	0.01	0.25	0.26	0.01	0.07	0.08	—	882	882	< 0.005	0.12	0.89	918
Hauling	0.03	0.03	1.32	0.34	0.01	0.02	0.29	0.31	0.02	0.07	0.09	—	1,050	1,050	< 0.005	0.17	0.88	1,101
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.13	1.51	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	316	316	0.01	0.01	0.46	320

Vendor	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	146	146	< 0.005	0.02	0.15	152
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	174	174	< 0.005	0.03	0.15	182

3.25. Line 2 Construction (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.59	6.37	67.3	69.6	0.14	2.60	—	2.60	2.39	—	2.39	—	15,141	15,141	0.61	0.12	—	15,193
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.59	6.37	67.3	69.6	0.14	2.60	—	2.60	2.39	—	2.39	—	15,141	15,141	0.61	0.12	—	15,193
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.54	2.13	22.5	23.3	0.05	0.87	—	0.87	0.80	—	0.80	—	5,061	5,061	0.21	0.04	—	5,078
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	4.10	4.24	0.01	0.16	—	0.16	0.15	—	0.15	—	838	838	0.03	0.01	—	841
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.32	1.21	0.92	16.4	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	3,153	3,153	0.04	0.11	9.79	3,197
Vendor	0.05	0.03	1.18	0.42	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,330	1,330	< 0.005	0.17	3.11	1,385
Hauling	0.05	0.04	1.89	0.51	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,582	1,582	< 0.005	0.25	3.07	1,661
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.20	1.08	1.02	11.2	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	2,794	2,794	0.05	0.12	0.25	2,830
Vendor	0.04	0.03	1.25	0.44	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,331	1,331	< 0.005	0.18	0.08	1,383
Hauling	0.04	0.04	1.99	0.52	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,584	1,584	< 0.005	0.25	0.08	1,660
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.37	4.17	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	961	961	0.02	0.04	1.41	975
Vendor	0.01	0.01	0.42	0.14	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	445	445	< 0.005	0.06	0.45	463
Hauling	0.02	0.01	0.66	0.17	< 0.005	0.01	0.14	0.16	0.01	0.04	0.05	—	529	529	< 0.005	0.09	0.44	555
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.76	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	159	159	< 0.005	0.01	0.23	161
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.6	73.6	< 0.005	0.01	0.07	76.6
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	87.6	87.6	< 0.005	0.01	0.07	91.9

3.26. Line 2 Construction (2027) - Mitigated

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

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

Off-Road Equipment	4.55	3.95	42.2	84.9	0.14	1.53	—	1.53	1.42	—	1.42	—	15,141	15,141	0.61	0.12	—	15,193
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.55	3.95	42.2	84.9	0.14	1.53	—	1.53	1.42	—	1.42	—	15,141	15,141	0.61	0.12	—	15,193
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.52	1.32	14.1	28.4	0.05	0.51	—	0.51	0.47	—	0.47	—	5,061	5,061	0.21	0.04	—	5,078
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.24	2.58	5.18	0.01	0.09	—	0.09	0.09	—	0.09	—	838	838	0.03	0.01	—	841
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.32	1.21	0.92	16.4	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	3,153	3,153	0.04	0.11	9.79	3,197
Vendor	0.05	0.03	1.18	0.42	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,330	1,330	< 0.005	0.17	3.11	1,385
Hauling	0.05	0.04	1.89	0.51	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,582	1,582	< 0.005	0.25	3.07	1,661
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.20	1.08	1.02	11.2	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	2,794	2,794	0.05	0.12	0.25	2,830

Vendor	0.04	0.03	1.25	0.44	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,331	1,331	< 0.005	0.18	0.08	1,383
Hauling	0.04	0.04	1.99	0.52	0.01	0.03	0.43	0.47	0.03	0.11	0.14	—	1,584	1,584	< 0.005	0.25	0.08	1,660
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.37	4.17	0.00	0.00	0.97	0.97	0.00	0.23	0.23	—	961	961	0.02	0.04	1.41	975
Vendor	0.01	0.01	0.42	0.14	< 0.005	0.01	0.13	0.13	0.01	0.03	0.04	—	445	445	< 0.005	0.06	0.45	463
Hauling	0.02	0.01	0.66	0.17	< 0.005	0.01	0.14	0.16	0.01	0.04	0.05	—	529	529	< 0.005	0.09	0.44	555
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.07	0.76	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	159	159	< 0.005	0.01	0.23	161
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	73.6	73.6	< 0.005	0.01	0.07	76.6
Hauling	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	87.6	87.6	< 0.005	0.01	0.07	91.9

3.27. Line 2 Construction (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.11	5.97	63.3	69.5	0.14	2.29	—	2.29	2.10	—	2.10	—	15,142	15,142	0.61	0.12	—	15,194
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	7.11	5.97	63.3	69.5	0.14	2.29	—	2.29	2.10	—	2.10	—	15,142	15,142	0.61	0.12	—	15,194
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.77	4.01	42.5	46.6	0.09	1.54	—	1.54	1.41	—	1.41	—	10,164	10,164	0.41	0.08	—	10,199
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	7.76	8.51	0.02	0.28	—	0.28	0.26	—	0.26	—	1,683	1,683	0.07	0.01	—	1,689
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.28	1.17	0.82	15.2	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	3,094	3,094	0.04	0.11	8.81	3,136
Vendor	0.04	0.03	1.14	0.40	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,296	1,296	< 0.005	0.17	2.75	1,350
Hauling	0.05	0.04	1.85	0.51	0.01	0.03	0.43	0.47	0.03	0.12	0.15	—	1,541	1,541	< 0.005	0.24	2.83	1,616
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.06	1.03	0.92	10.4	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	2,742	2,742	0.05	0.11	0.23	2,776
Vendor	0.04	0.03	1.20	0.40	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,297	1,297	< 0.005	0.17	0.07	1,349
Hauling	0.04	0.04	1.96	0.52	0.01	0.03	0.43	0.47	0.03	0.12	0.15	—	1,543	1,543	< 0.005	0.24	0.07	1,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.70	0.68	7.78	0.00	0.00	1.95	1.95	0.00	0.46	0.46	—	1,894	1,894	0.03	0.07	2.56	1,919
Vendor	0.03	0.02	0.81	0.27	0.01	0.01	0.25	0.27	0.01	0.07	0.08	—	870	870	< 0.005	0.12	0.80	906
Hauling	0.03	0.03	1.31	0.34	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,035	1,035	< 0.005	0.16	0.82	1,085
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.12	1.42	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	314	314	0.01	0.01	0.42	318

Vendor	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	144	144	< 0.005	0.02	0.13	150
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	171	171	< 0.005	0.03	0.14	180

3.28. Line 2 Construction (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.16	3.63	39.9	84.8	0.14	1.29	—	1.29	1.20	—	1.20	—	15,142	15,142	0.61	0.12	—	15,194
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.16	3.63	39.9	84.8	0.14	1.29	—	1.29	1.20	—	1.20	—	15,142	15,142	0.61	0.12	—	15,194
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.79	2.44	26.8	56.9	0.09	0.87	—	0.87	0.81	—	0.81	—	10,164	10,164	0.41	0.08	—	10,199
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.44	4.89	10.4	0.02	0.16	—	0.16	0.15	—	0.15	—	1,683	1,683	0.07	0.01	—	1,689
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.28	1.17	0.82	15.2	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	3,094	3,094	0.04	0.11	8.81	3,136
Vendor	0.04	0.03	1.14	0.40	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,296	1,296	< 0.005	0.17	2.75	1,350
Hauling	0.05	0.04	1.85	0.51	0.01	0.03	0.43	0.47	0.03	0.12	0.15	—	1,541	1,541	< 0.005	0.24	2.83	1,616
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.06	1.03	0.92	10.4	0.00	0.00	2.93	2.93	0.00	0.69	0.69	—	2,742	2,742	0.05	0.11	0.23	2,776
Vendor	0.04	0.03	1.20	0.40	0.01	0.02	0.38	0.40	0.02	0.10	0.12	—	1,297	1,297	< 0.005	0.17	0.07	1,349
Hauling	0.04	0.04	1.96	0.52	0.01	0.03	0.43	0.47	0.03	0.12	0.15	—	1,543	1,543	< 0.005	0.24	0.07	1,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.70	0.68	7.78	0.00	0.00	1.95	1.95	0.00	0.46	0.46	—	1,894	1,894	0.03	0.07	2.56	1,919
Vendor	0.03	0.02	0.81	0.27	0.01	0.01	0.25	0.27	0.01	0.07	0.08	—	870	870	< 0.005	0.12	0.80	906
Hauling	0.03	0.03	1.31	0.34	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,035	1,035	< 0.005	0.16	0.82	1,085
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.12	1.42	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	314	314	0.01	0.01	0.42	318
Vendor	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	144	144	< 0.005	0.02	0.13	150
Hauling	0.01	0.01	0.24	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	171	171	< 0.005	0.03	0.14	180

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Access Road Rehabilitation	Grading	4/16/2025	9/1/2026	7.00	504	—
Laydown/Staging/Site Grading	Grading	5/31/2026	8/31/2028	7.00	824	—
Line 1 Work Area Restoration	Grading	8/31/2027	1/23/2029	7.00	512	—
Line 2 Work Area Restoration	Grading	9/1/2028	1/23/2029	7.00	145	—
Line 1 Construction	Building Construction	9/1/2026	8/30/2027	7.00	364	—
Line 2 Construction	Building Construction	9/1/2027	9/1/2028	7.00	367	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Access Road Rehabilitation	Graders	Diesel	Average	3.00	6.00	148	0.41
Access Road Rehabilitation	Tractors/Loaders/Backhoes	Diesel	Average	3.00	6.00	84.0	0.37
Access Road Rehabilitation	Rubber Tired Dozers	Diesel	Average	3.00	6.00	367	0.40
Laydown/Staging/Site Grading	Graders	Diesel	Average	2.00	6.00	148	0.41
Laydown/Staging/Site Grading	Excavators	Diesel	Average	5.00	6.00	36.0	0.38
Laydown/Staging/Site Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Laydown/Staging/Site Grading	Rubber Tired Dozers	Diesel	Average	2.00	6.00	367	0.40
Laydown/Staging/Site Grading	Skid Steer Loaders	Diesel	Average	5.00	6.00	71.0	0.37
Line 1 Work Area Restoration	Graders	Diesel	Average	3.00	6.00	148	0.41
Line 1 Work Area Restoration	Tractors/Loaders/Backhoes	Diesel	Average	3.00	6.00	84.0	0.37
Line 1 Work Area Restoration	Rubber Tired Dozers	Diesel	Average	3.00	6.00	367	0.40
Line 2 Work Area Restoration	Graders	Diesel	Average	3.00	6.00	148	0.41
Line 2 Work Area Restoration	Tractors/Loaders/Backhoes	Diesel	Average	3.00	6.00	84.0	0.37
Line 2 Work Area Restoration	Rubber Tired Dozers	Diesel	Average	3.00	6.00	367	0.40
Line 1 Construction	Cranes	Diesel	Average	6.00	6.00	400	0.29
Line 1 Construction	Other General Industrial Equipment	Diesel	Average	3.00	6.00	270	0.34
Line 1 Construction	Bore/Drill Rigs	Diesel	Average	4.00	6.00	10.0	0.50

Line 1 Construction	Plate Compactors	Diesel	Average	4.00	6.00	8.00	0.43
Line 1 Construction	Other Material Handling Equipment	Diesel	Average	10.0	6.00	50.0	0.40
Line 1 Construction	Aerial Lifts	Diesel	Average	40.0	6.00	46.0	0.31
Line 1 Construction	Rough Terrain Forklifts	Diesel	Average	2.00	6.00	96.0	0.40
Line 1 Construction	Other Construction Equipment	Diesel	Average	11.0	6.00	75.0	0.29
Line 2 Construction	Cranes	Diesel	Average	6.00	6.00	400	0.29
Line 2 Construction	Other General Industrial Equipment	Diesel	Average	3.00	6.00	270	0.34
Line 2 Construction	Bore/Drill Rigs	Diesel	Average	4.00	6.00	10.0	0.50
Line 2 Construction	Plate Compactors	Diesel	Average	4.00	6.00	8.00	0.43
Line 2 Construction	Other Material Handling Equipment	Diesel	Average	10.0	6.00	50.0	0.40
Line 2 Construction	Aerial Lifts	Diesel	Average	40.0	6.00	46.0	0.31
Line 2 Construction	Rough Terrain Forklifts	Diesel	Average	2.00	6.00	96.0	0.40
Line 2 Construction	Other Construction Equipment	Diesel	Average	11.0	6.00	75.0	0.29

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Access Road Rehabilitation	Graders	Diesel	Tier 4 Final	3.00	6.00	148	0.41
Access Road Rehabilitation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	6.00	84.0	0.37
Access Road Rehabilitation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	6.00	367	0.40
Laydown/Staging/Site Grading	Graders	Diesel	Tier 4 Final	2.00	6.00	148	0.41
Laydown/Staging/Site Grading	Excavators	Diesel	Average	5.00	6.00	36.0	0.38

Laydown/Staging/Site Grading	Tractors/Loaders/Backh	Diesel	Tier 4 Final	2.00	6.00	84.0	0.37
Laydown/Staging/Site Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	6.00	367	0.40
Laydown/Staging/Site Grading	Skid Steer Loaders	Diesel	Average	5.00	6.00	71.0	0.37
Line 1 Work Area Restoration	Graders	Diesel	Tier 4 Final	3.00	6.00	148	0.41
Line 1 Work Area Restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	6.00	84.0	0.37
Line 1 Work Area Restoration	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	6.00	367	0.40
Line 2 Work Area Restoration	Graders	Diesel	Average	1.00	6.00	148	0.41
Line 2 Work Area Restoration	Graders	Diesel	Tier 4 Final	2.00	6.00	148	0.41
Line 2 Work Area Restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	5.00	6.00	84.0	0.37
Line 2 Work Area Restoration	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Line 2 Work Area Restoration	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	6.00	367	0.40
Line 1 Construction	Cranes	Diesel	Tier 4 Final	6.00	6.00	400	0.29
Line 1 Construction	Other General Industrial Equipment	Diesel	Tier 4 Final	3.00	6.00	270	0.34
Line 1 Construction	Bore/Drill Rigs	Diesel	Average	4.00	6.00	10.0	0.50
Line 1 Construction	Plate Compactors	Diesel	Average	4.00	6.00	8.00	0.43
Line 1 Construction	Other Material Handling Equipment	Diesel	Average	10.0	6.00	50.0	0.40
Line 1 Construction	Aerial Lifts	Diesel	Average	40.0	6.00	46.0	0.31
Line 1 Construction	Rough Terrain Forklifts	Diesel	Tier 4 Final	2.00	6.00	96.0	0.40
Line 1 Construction	Other Construction Equipment	Diesel	Tier 4 Final	11.0	6.00	75.0	0.29

Line 2 Construction	Cranes	Diesel	Tier 4 Final	6.00	6.00	400	0.29
Line 2 Construction	Other General Industrial Equipment	Diesel	Tier 4 Final	3.00	6.00	270	0.34
Line 2 Construction	Bore/Drill Rigs	Diesel	Average	4.00	6.00	10.0	0.50
Line 2 Construction	Plate Compactors	Diesel	Average	4.00	6.00	8.00	0.43
Line 2 Construction	Other Material Handling Equipment	Diesel	Average	10.0	6.00	50.0	0.40
Line 2 Construction	Aerial Lifts	Diesel	Average	40.0	6.00	46.0	0.31
Line 2 Construction	Rough Terrain Forklifts	Diesel	Tier 4 Final	2.00	6.00	96.0	0.40
Line 2 Construction	Other Construction Equipment	Diesel	Tier 4 Final	11.0	6.00	75.0	0.29

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Access Road Rehabilitation	—	—	—	—
Access Road Rehabilitation	Worker	72.0	15.0	LDA,LDT1,LDT2
Access Road Rehabilitation	Vendor	12.0	15.0	HHDT,MHDT
Access Road Rehabilitation	Hauling	4.00	15.0	HHDT
Access Road Rehabilitation	Onsite truck	—	—	HHDT
Line 1 Construction	—	—	—	—
Line 1 Construction	Worker	276	15.0	LDA,LDT1,LDT2
Line 1 Construction	Vendor	30.0	15.0	HHDT,MHDT
Line 1 Construction	Hauling	32.0	15.0	HHDT
Line 1 Construction	Onsite truck	—	—	HHDT
Laydown/Staging/Site Grading	—	—	—	—
Laydown/Staging/Site Grading	Worker	72.0	15.0	LDA,LDT1,LDT2

Laydown/Staging/Site Grading	Vendor	12.0	15.0	HHDT,MHDT
Laydown/Staging/Site Grading	Hauling	4.00	15.0	HHDT
Laydown/Staging/Site Grading	Onsite truck	—	—	HHDT
Line 1 Work Area Restoration	—	—	—	—
Line 1 Work Area Restoration	Worker	72.0	15.0	LDA,LDT1,LDT2
Line 1 Work Area Restoration	Vendor	12.0	15.0	HHDT,MHDT
Line 1 Work Area Restoration	Hauling	4.00	15.0	HHDT
Line 1 Work Area Restoration	Onsite truck	—	—	HHDT
Line 2 Work Area Restoration	—	—	—	—
Line 2 Work Area Restoration	Worker	72.0	15.0	LDA,LDT1,LDT2
Line 2 Work Area Restoration	Vendor	12.0	15.0	HHDT,MHDT
Line 2 Work Area Restoration	Hauling	4.00	15.0	HHDT
Line 2 Work Area Restoration	Onsite truck	—	—	HHDT
Line 2 Construction	—	—	—	—
Line 2 Construction	Worker	276	15.0	LDA,LDT1,LDT2
Line 2 Construction	Vendor	30.0	15.0	HHDT,MHDT
Line 2 Construction	Hauling	32.0	15.0	HHDT
Line 2 Construction	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Access Road Rehabilitation	—	—	—	—
Access Road Rehabilitation	Worker	72.0	15.0	LDA,LDT1,LDT2
Access Road Rehabilitation	Vendor	12.0	15.0	HHDT,MHDT
Access Road Rehabilitation	Hauling	4.00	15.0	HHDT
Access Road Rehabilitation	Onsite truck	—	—	HHDT
Line 1 Construction	—	—	—	—

Line 1 Construction	Worker	276	15.0	LDA,LDT1,LDT2
Line 1 Construction	Vendor	30.0	15.0	HHDT,MHDT
Line 1 Construction	Hauling	32.0	15.0	HHDT
Line 1 Construction	Onsite truck	—	—	HHDT
Laydown/Staging/Site Grading	—	—	—	—
Laydown/Staging/Site Grading	Worker	72.0	15.0	LDA,LDT1,LDT2
Laydown/Staging/Site Grading	Vendor	12.0	15.0	HHDT,MHDT
Laydown/Staging/Site Grading	Hauling	4.00	15.0	HHDT
Laydown/Staging/Site Grading	Onsite truck	—	—	HHDT
Line 1 Work Area Restoration	—	—	—	—
Line 1 Work Area Restoration	Worker	72.0	15.0	LDA,LDT1,LDT2
Line 1 Work Area Restoration	Vendor	12.0	15.0	HHDT,MHDT
Line 1 Work Area Restoration	Hauling	4.00	15.0	HHDT
Line 1 Work Area Restoration	Onsite truck	—	—	HHDT
Line 2 Work Area Restoration	—	—	—	—
Line 2 Work Area Restoration	Worker	72.0	15.0	LDA,LDT1,LDT2
Line 2 Work Area Restoration	Vendor	12.0	15.0	HHDT,MHDT
Line 2 Work Area Restoration	Hauling	4.00	15.0	HHDT
Line 2 Work Area Restoration	Onsite truck	—	—	HHDT
Line 2 Construction	—	—	—	—
Line 2 Construction	Worker	276	15.0	LDA,LDT1,LDT2
Line 2 Construction	Vendor	30.0	15.0	HHDT,MHDT
Line 2 Construction	Hauling	32.0	15.0	HHDT
Line 2 Construction	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Access Road Rehabilitation	—	—	1,134	0.00	—
Laydown/Staging/Site Grading	—	—	1,236	0.00	—
Line 1 Work Area Restoration	—	—	1,152	0.00	—
Line 2 Work Area Restoration	—	—	326	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	1,437	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	532	0.03	< 0.005
2026	0.00	532	0.03	< 0.005

2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005
2029	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	25.0	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	7.45
AQ-DPM	3.61
Drinking Water	87.0
Lead Risk Housing	39.1
Pesticides	39.4
Toxic Releases	2.81
Traffic	13.8
Effect Indicators	—
CleanUp Sites	94.2
Groundwater	92.8
Haz Waste Facilities/Generators	78.8
Impaired Water Bodies	0.00
Solid Waste	99.9
Sensitive Population	—
Asthma	54.8
Cardio-vascular	73.9
Low Birth Weights	99.2
Socioeconomic Factor Indicators	—
Education	54.1
Housing	34.2
Linguistic	38.1
Poverty	76.4

Unemployment	95.3

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	33.78673168
Employed	3.811112537
Median HI	21.35249583
Education	—
Bachelor's or higher	26.78044399
High school enrollment	100
Preschool enrollment	39.0606955
Transportation	—
Auto Access	32.77300141
Active commuting	75.32400873
Social	—
2-parent households	57.35916848
Voting	45.82317464
Neighborhood	—
Alcohol availability	90.37597844
Park access	24.44501476
Retail density	3.387655588
Supermarket access	7.275760298
Tree canopy	0.051328115
Housing	—
Homeownership	62.60746824

Housing habitability	64.36545618
Low-inc homeowner severe housing cost burden	44.92493263
Low-inc renter severe housing cost burden	77.50545361
Uncrowded housing	56.87155139
Health Outcomes	—
Insured adults	15.69357115
Arthritis	0.0
Asthma ER Admissions	37.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	7.6
Cognitively Disabled	60.3
Physically Disabled	25.6
Heart Attack ER Admissions	35.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	96.1
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0

No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	64.0
Elderly	23.5
English Speaking	39.9
Foreign-born	36.0
Outdoor Workers	55.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	97.4
Traffic Density	9.6
Traffic Access	23.0
Other Indices	—
Hardship	66.7
Other Decision Support	—
2016 Voting	56.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	75.0
Healthy Places Index Score for Project Location (b)	23.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction phases and duration based on input from applicant team.
Construction: Off-Road Equipment	Equipment list based on input from the applicant team. 6 hours assumed for each piece of equipment for the annual average scenario.
Construction: On-Road Fugitive Dust	—
Construction: Trips and VMT	On-road vehicle information based on input from the applicant team assuming average vehicle trip length on paved roads (unpaved modeled separately).

McCullough-Victorville Transmission Lines 1 and 2 Upgrade Project - Annual Average Unpaved Roads Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	McCullough-Victorville Transmission Lines 1 and 2 Upgrade Project - Annual Average Unpaved Roads
Construction Start Date	4/16/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	5.00
Precipitation (days)	8.20
Location	60060 Powerline Rd, California, USA
County	San Bernardino-Mojave Desert
City	Unincorporated
Air District	Mojave Desert AQMD
Air Basin	Mojave Desert
TAZ	5139
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Other Non-Asphalt Surfaces	1,437	Acre	1,437	0.00	0.00	—	—	Area to be graded

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-9	Use Dust Suppressants
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.36	1.31	5.23	10.0	0.01	0.03	3,783	3,783	0.03	378	378	—	4,060	4,060	0.06	0.45	10.4	4,205
Mit.	1.36	1.31	5.23	10.0	0.01	0.03	339	339	0.03	33.9	33.9	—	4,060	4,060	0.06	0.45	10.4	4,205
% Reduced	—	—	—	—	—	—	91%	91%	—	91%	91%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.18	1.11	5.53	8.48	0.01	0.03	3,783	3,783	0.03	378	378	—	3,853	3,853	0.07	0.44	0.24	3,987
Mit.	1.18	1.11	5.53	8.48	0.01	0.03	339	339	0.03	33.9	33.9	—	3,853	3,853	0.07	0.44	0.24	3,987
% Reduced	—	—	—	—	—	—	91%	91%	—	91%	91%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	1.08	1.01	4.84	7.86	0.01	0.02	3,271	3,271	0.02	326	327	—	3,437	3,437	0.06	0.39	3.54	3,559
Mit.	1.08	1.01	4.84	7.86	0.01	0.02	293	293	0.02	29.3	29.3	—	3,437	3,437	0.06	0.39	3.54	3,559
% Reduced	—	—	—	—	—	—	91%	91%	—	91%	91%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	0.18	0.88	1.44	< 0.005	< 0.005	597	597	< 0.005	59.6	59.6	—	569	569	0.01	0.06	0.59	589
Mit.	0.20	0.18	0.88	1.44	< 0.005	< 0.005	53.5	53.5	< 0.005	5.35	5.35	—	569	569	0.01	0.06	0.59	589
% Reduced	—	—	—	—	—	—	91%	91%	—	91%	91%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.25	0.23	0.88	1.79	< 0.005	< 0.005	648	648	< 0.005	64.6	64.6	—	700	700	0.01	0.07	1.96	724
2026	1.36	1.31	5.23	10.0	0.01	0.03	3,783	3,783	0.03	378	378	—	4,060	4,060	0.06	0.45	10.4	4,205
2027	1.32	1.25	5.16	9.65	0.01	0.03	3,783	3,783	0.03	378	378	—	3,986	3,986	0.06	0.44	9.27	4,128
2028	1.28	1.17	5.09	9.35	0.01	0.03	3,783	3,783	0.03	378	378	—	3,905	3,905	0.06	0.44	8.26	4,044
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.22	0.21	0.95	1.55	< 0.005	< 0.005	648	648	< 0.005	64.6	64.6	—	676	676	0.01	0.07	0.05	698
2026	1.00	0.96	4.73	7.28	0.01	0.02	3,135	3,135	0.02	313	313	—	3,260	3,260	0.06	0.37	0.22	3,373
2027	1.18	1.11	5.53	8.48	0.01	0.03	3,783	3,783	0.03	378	378	—	3,853	3,853	0.07	0.44	0.24	3,987
2028	1.15	1.04	5.47	8.24	0.01	0.03	3,783	3,783	0.03	378	378	—	3,775	3,775	0.06	0.44	0.21	3,907
2029	0.38	0.34	1.80	2.72	< 0.005	0.01	1,295	1,295	0.01	129	129	—	1,252	1,252	0.02	0.14	0.06	1,295

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.16	0.15	0.66	1.16	< 0.005	< 0.005	451	451	< 0.005	45.0	45.0	—	485	485	0.01	0.05	0.60	501
2026	0.55	0.52	2.39	3.99	0.01	0.01	1,609	1,609	0.01	161	161	—	1,714	1,714	0.03	0.19	1.95	1,775
2027	1.08	1.01	4.84	7.86	0.01	0.02	3,271	3,271	0.02	326	327	—	3,437	3,437	0.06	0.39	3.54	3,559
2028	0.92	0.83	4.19	6.74	0.01	0.02	2,902	2,902	0.02	290	290	—	2,978	2,978	0.05	0.34	2.80	3,083
2029	0.02	0.02	0.11	0.18	< 0.005	< 0.005	79.8	79.8	< 0.005	7.96	7.96	—	79.4	79.4	< 0.005	0.01	0.07	82.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.03	0.03	0.12	0.21	< 0.005	< 0.005	82.3	82.3	< 0.005	8.21	8.21	—	80.3	80.3	< 0.005	0.01	0.10	83.0
2026	0.10	0.09	0.44	0.73	< 0.005	< 0.005	294	294	< 0.005	29.3	29.3	—	284	284	0.01	0.03	0.32	294
2027	0.20	0.18	0.88	1.44	< 0.005	< 0.005	597	597	< 0.005	59.6	59.6	—	569	569	0.01	0.06	0.59	589
2028	0.17	0.15	0.77	1.23	< 0.005	< 0.005	530	530	< 0.005	52.9	52.9	—	493	493	0.01	0.06	0.46	510
2029	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	14.6	14.6	< 0.005	1.45	1.45	—	13.2	13.2	< 0.005	< 0.005	0.01	13.6

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.25	0.23	0.88	1.79	< 0.005	< 0.005	58.1	58.1	< 0.005	5.80	5.81	—	700	700	0.01	0.07	1.96	724
2026	1.36	1.31	5.23	10.0	0.01	0.03	339	339	0.03	33.9	33.9	—	4,060	4,060	0.06	0.45	10.4	4,205
2027	1.32	1.25	5.16	9.65	0.01	0.03	339	339	0.03	33.9	33.9	—	3,986	3,986	0.06	0.44	9.27	4,128
2028	1.28	1.17	5.09	9.35	0.01	0.03	339	339	0.03	33.9	33.9	—	3,905	3,905	0.06	0.44	8.26	4,044
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.22	0.21	0.95	1.55	< 0.005	< 0.005	58.1	58.1	< 0.005	5.80	5.81	—	676	676	0.01	0.07	0.05	698
2026	1.00	0.96	4.73	7.28	0.01	0.02	281	281	0.02	28.1	28.1	—	3,260	3,260	0.06	0.37	0.22	3,373

2027	1.18	1.11	5.53	8.48	0.01	0.03	339	339	0.03	33.9	33.9	—	3,853	3,853	0.07	0.44	0.24	3,987
2028	1.15	1.04	5.47	8.24	0.01	0.03	339	339	0.03	33.9	33.9	—	3,775	3,775	0.06	0.44	0.21	3,907
2029	0.38	0.34	1.80	2.72	< 0.005	0.01	116	116	0.01	11.6	11.6	—	1,252	1,252	0.02	0.14	0.06	1,295
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.16	0.15	0.66	1.16	< 0.005	< 0.005	40.4	40.4	< 0.005	4.04	4.04	—	485	485	0.01	0.05	0.60	501
2026	0.55	0.52	2.39	3.99	0.01	0.01	144	144	0.01	14.4	14.4	—	1,714	1,714	0.03	0.19	1.95	1,775
2027	1.08	1.01	4.84	7.86	0.01	0.02	293	293	0.02	29.3	29.3	—	3,437	3,437	0.06	0.39	3.54	3,559
2028	0.92	0.83	4.19	6.74	0.01	0.02	260	260	0.02	26.0	26.0	—	2,978	2,978	0.05	0.34	2.80	3,083
2029	0.02	0.02	0.11	0.18	< 0.005	< 0.005	7.15	7.15	< 0.005	0.72	0.72	—	79.4	79.4	< 0.005	0.01	0.07	82.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.03	0.03	0.12	0.21	< 0.005	< 0.005	7.38	7.38	< 0.005	0.74	0.74	—	80.3	80.3	< 0.005	0.01	0.10	83.0
2026	0.10	0.09	0.44	0.73	< 0.005	< 0.005	26.3	26.3	< 0.005	2.63	2.63	—	284	284	0.01	0.03	0.32	294
2027	0.20	0.18	0.88	1.44	< 0.005	< 0.005	53.5	53.5	< 0.005	5.35	5.35	—	569	569	0.01	0.06	0.59	589
2028	0.17	0.15	0.77	1.23	< 0.005	< 0.005	47.5	47.5	< 0.005	4.75	4.75	—	493	493	0.01	0.06	0.46	510
2029	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	1.31	1.31	< 0.005	0.13	0.13	—	13.2	13.2	< 0.005	< 0.005	0.01	13.6

3. Construction Emissions Details

3.1. Access Road Rehabilitation - worker (2025) - Unmitigated

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

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

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.23	0.21	0.50	1.59	0.00	0.00	530	530	0.00	52.9	52.9	—	430	430	0.01	0.04	1.31	442
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.21	0.19	0.54	1.34	0.00	0.00	530	530	0.00	52.9	52.9	—	405	405	0.01	0.04	0.03	416
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.15	0.14	0.38	1.02	0.00	0.00	369	369	0.00	36.8	36.8	—	292	292	0.01	0.03	0.40	300
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.07	0.19	0.00	0.00	67.3	67.3	0.00	6.72	6.72	—	48.3	48.3	< 0.005	< 0.005	0.07	49.7
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Access Road Rehabilitation - worker (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.23	0.21	0.50	1.59	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	430	430	0.01	0.04	1.31	442
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.21	0.19	0.54	1.34	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	405	405	0.01	0.04	0.03	416
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.15	0.14	0.38	1.02	0.00	0.00	33.1	33.1	0.00	3.30	3.30	—	292	292	0.01	0.03	0.40	300
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.07	0.19	0.00	0.00	6.04	6.04	0.00	0.60	0.60	—	48.3	48.3	< 0.005	< 0.005	0.07	49.7
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Access Road Rehabilitation - worker (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.21	0.21	0.49	1.51	0.00	0.00	530	530	0.00	52.9	52.9	—	423	423	0.01	0.04	1.18	435

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.19	0.18	0.54	1.29	0.00	0.00	530	530	0.00	52.9	52.9	—	398	398	0.01	0.04	0.03	410
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.13	0.13	0.35	0.91	0.00	0.00	346	346	0.00	34.6	34.6	—	270	270	0.01	0.02	0.34	278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.06	0.17	0.00	0.00	63.2	63.2	0.00	6.31	6.31	—	44.7	44.7	< 0.005	< 0.005	0.06	45.9
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Access Road Rehabilitation - worker (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.21	0.21	0.49	1.51	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	423	423	0.01	0.04	1.18	435
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.19	0.18	0.54	1.29	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	398	398	0.01	0.04	0.03	410
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.13	0.13	0.35	0.91	0.00	0.00	31.0	31.0	0.00	3.10	3.10	—	270	270	0.01	0.02	0.34	278
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.06	0.17	0.00	0.00	5.66	5.66	0.00	0.57	0.57	—	44.7	44.7	< 0.005	< 0.005	0.06	45.9
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Laydown/Staging/Site Grading - worker (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.21	0.21	0.49	1.51	0.00	0.00	530	530	0.00	52.9	52.9	—	423	423	0.01	0.04	1.18	435
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.19	0.18	0.54	1.29	0.00	0.00	530	530	0.00	52.9	52.9	—	398	398	0.01	0.04	0.03	410
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.31	0.80	0.00	0.00	305	305	0.00	30.4	30.4	—	238	238	0.01	0.02	0.30	245
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.06	0.15	0.00	0.00	55.7	55.7	0.00	5.56	5.56	—	39.3	39.3	< 0.005	< 0.005	0.05	40.5
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Laydown/Staging/Site Grading - worker (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.21	0.21	0.49	1.51	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	423	423	0.01	0.04	1.18	435
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.19	0.18	0.54	1.29	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	398	398	0.01	0.04	0.03	410
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.12	0.11	0.31	0.80	0.00	0.00	27.3	27.3	0.00	2.73	2.73	—	238	238	0.01	0.02	0.30	245
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.06	0.15	0.00	0.00	4.99	4.99	0.00	0.50	0.50	—	39.3	39.3	< 0.005	< 0.005	0.05	40.5
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Laydown/Staging/Site Grading - worker (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.21	0.20	0.49	1.45	0.00	0.00	530	530	0.00	52.9	52.9	—	416	416	0.01	0.04	1.05	428
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.19	0.18	0.53	1.24	0.00	0.00	530	530	0.00	52.9	52.9	—	392	392	0.01	0.04	0.03	404
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.19	0.18	0.52	1.31	0.00	0.00	518	518	0.00	51.7	51.7	—	397	397	0.01	0.04	0.45	409
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.09	0.24	0.00	0.00	94.5	94.5	0.00	9.43	9.43	—	65.8	65.8	< 0.005	0.01	0.07	67.7
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Laydown/Staging/Site Grading - worker (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.21	0.20	0.49	1.45	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	416	416	0.01	0.04	1.05	428
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.19	0.18	0.53	1.24	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	392	392	0.01	0.04	0.03	404
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.19	0.18	0.52	1.31	0.00	0.00	46.4	46.4	0.00	4.64	4.64	—	397	397	0.01	0.04	0.45	409
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.03	0.03	0.09	0.24	0.00	0.00	8.47	8.47	0.00	0.85	0.85	—	65.8	65.8	< 0.005	0.01	0.07	67.7
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Laydown/Staging/Site Grading - worker (2028) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.20	0.18	0.48	1.40	0.00	0.00	530	530	0.00	52.9	52.9	—	409	409	0.01	0.04	0.93	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.18	0.17	0.52	1.20	0.00	0.00	530	530	0.00	52.9	52.9	—	386	386	0.01	0.04	0.02	397
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.34	0.85	0.00	0.00	346	346	0.00	34.6	34.6	—	261	261	0.01	0.02	0.27	269
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.06	0.15	0.00	0.00	63.2	63.2	0.00	6.31	6.31	—	43.2	43.2	< 0.005	< 0.005	0.04	44.5
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Laydown/Staging/Site Grading - worker (2028) - Mitigated

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

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

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.20	0.18	0.48	1.40	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	409	409	0.01	0.04	0.93	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.18	0.17	0.52	1.20	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	386	386	0.01	0.04	0.02	397
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.12	0.11	0.34	0.85	0.00	0.00	31.0	31.0	0.00	3.10	3.10	—	261	261	0.01	0.02	0.27	269
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.06	0.15	0.00	0.00	5.66	5.66	0.00	0.57	0.57	—	43.2	43.2	< 0.005	< 0.005	0.04	44.5
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Line 1 Work Area Restoration - worker (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.21	0.20	0.49	1.45	0.00	0.00	530	530	0.00	52.9	52.9	—	416	416	0.01	0.04	1.05	428
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.19	0.18	0.53	1.24	0.00	0.00	530	530	0.00	52.9	52.9	—	392	392	0.01	0.04	0.03	404
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.06	0.06	0.17	0.44	0.00	0.00	175	175	0.00	17.4	17.4	—	134	134	< 0.005	0.01	0.15	138
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.03	0.08	0.00	0.00	31.9	31.9	0.00	3.18	3.18	—	22.2	22.2	< 0.005	< 0.005	0.03	22.8
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Line 1 Work Area Restoration - worker (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.21	0.20	0.49	1.45	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	416	416	0.01	0.04	1.05	428

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.19	0.18	0.53	1.24	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	392	392	0.01	0.04	0.03	404
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.06	0.06	0.17	0.44	0.00	0.00	15.6	15.6	0.00	1.56	1.56	—	134	134	< 0.005	0.01	0.15	138
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.03	0.08	0.00	0.00	2.86	2.86	0.00	0.29	0.29	—	22.2	22.2	< 0.005	< 0.005	0.03	22.8
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Line 1 Work Area Restoration - worker (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.20	0.18	0.48	1.40	0.00	0.00	530	530	0.00	52.9	52.9	—	409	409	0.01	0.04	0.93	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.18	0.17	0.52	1.20	0.00	0.00	530	530	0.00	52.9	52.9	—	386	386	0.01	0.04	0.02	397
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.18	0.17	0.52	1.27	0.00	0.00	519	519	0.00	51.8	51.8	—	392	392	0.01	0.04	0.40	403
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.09	0.23	0.00	0.00	94.8	94.8	0.00	9.46	9.46	—	64.9	64.9	< 0.005	0.01	0.07	66.8
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Line 1 Work Area Restoration - worker (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.20	0.18	0.48	1.40	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	409	409	0.01	0.04	0.93	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.18	0.17	0.52	1.20	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	386	386	0.01	0.04	0.02	397
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.18	0.17	0.52	1.27	0.00	0.00	46.6	46.6	0.00	4.65	4.65	—	392	392	0.01	0.04	0.40	403
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.09	0.23	0.00	0.00	8.50	8.50	0.00	0.85	0.85	—	64.9	64.9	< 0.005	0.01	0.07	66.8
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Line 1 Work Area Restoration - worker (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.17	0.16	0.53	1.17	0.00	0.00	530	530	0.00	52.9	52.9	—	380	380	0.01	0.04	0.02	391
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.03	0.08	0.00	0.00	32.6	32.6	0.00	3.26	3.26	—	24.2	24.2	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.01	0.01	0.00	0.00	5.96	5.96	0.00	0.59	0.59	—	4.01	4.01	< 0.005	< 0.005	< 0.005	4.13
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Line 1 Work Area Restoration - worker (2029) - Mitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.17	0.16	0.53	1.17	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	380	380	0.01	0.04	0.02	391
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.03	0.08	0.00	0.00	2.93	2.93	0.00	0.29	0.29	—	24.2	24.2	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	0.00	0.00	0.53	0.53	0.00	0.05	0.05	—	4.01	4.01	< 0.005	< 0.005	< 0.005	4.13
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Line 2 Work Area Restoration - worker (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.20	0.18	0.48	1.40	0.00	0.00	530	530	0.00	52.9	52.9	—	409	409	0.01	0.04	0.93	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.18	0.17	0.52	1.20	0.00	0.00	530	530	0.00	52.9	52.9	—	386	386	0.01	0.04	0.02	397

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.06	0.06	0.17	0.42	0.00	0.00	173	173	0.00	17.3	17.3	—	131	131	< 0.005	0.01	0.13	134
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.03	0.08	0.00	0.00	31.6	31.6	0.00	3.15	3.15	—	21.6	21.6	< 0.005	< 0.005	0.02	22.3
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Line 2 Work Area Restoration - worker (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.20	0.18	0.48	1.40	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	409	409	0.01	0.04	0.93	421
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.18	0.17	0.52	1.20	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	386	386	0.01	0.04	0.02	397
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.06	0.06	0.17	0.42	0.00	0.00	15.5	15.5	0.00	1.55	1.55	—	131	131	< 0.005	0.01	0.13	134
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.03	0.08	0.00	0.00	2.83	2.83	0.00	0.28	0.28	—	21.6	21.6	< 0.005	< 0.005	0.02	22.3
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Line 2 Work Area Restoration - worker (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.17	0.16	0.53	1.17	0.00	0.00	530	530	0.00	52.9	52.9	—	380	380	0.01	0.04	0.02	391
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.03	0.08	0.00	0.00	32.6	32.6	0.00	3.26	3.26	—	24.2	24.2	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	0.00	0.00	5.96	5.96	0.00	0.59	0.59	—	4.01	4.01	< 0.005	< 0.005	< 0.005	4.13
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Line 2 Work Area Restoration - worker (2029) - Mitigated

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

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

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.17	0.16	0.53	1.17	0.00	0.00	47.5	47.5	0.00	4.75	4.75	—	380	380	0.01	0.04	0.02	391
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.03	0.08	0.00	0.00	2.93	2.93	0.00	0.29	0.29	—	24.2	24.2	< 0.005	< 0.005	0.02	24.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	0.00	0.00	0.53	0.53	0.00	0.05	0.05	—	4.01	4.01	< 0.005	< 0.005	< 0.005	4.13
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Access Road Rehabilitation - vendor (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.14	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	195	195	< 0.005	0.03	0.51	204
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.27	0.15	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	196	196	< 0.005	0.03	0.01	204
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.19	0.10	< 0.005	< 0.005	61.5	61.5	< 0.005	6.14	6.14	—	139	139	< 0.005	0.02	0.16	145
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	11.2	11.2	< 0.005	1.12	1.12	—	23.1	23.1	< 0.005	< 0.005	0.03	24.0
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Access Road Rehabilitation - vendor (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.14	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	195	195	< 0.005	0.03	0.51	204
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.27	0.15	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	196	196	< 0.005	0.03	0.01	204
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.01	0.01	0.19	0.10	< 0.005	< 0.005	5.52	5.52	< 0.005	0.55	0.55	—	139	139	< 0.005	0.02	0.16	145
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	1.01	1.01	< 0.005	0.10	0.10	—	23.1	23.1	< 0.005	< 0.005	0.03	24.0
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Access Road Rehabilitation - vendor (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.14	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	192	192	< 0.005	0.03	0.46	200
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.26	0.14	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	192	192	< 0.005	0.03	0.01	200
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.17	0.09	< 0.005	< 0.005	57.7	57.7	< 0.005	5.76	5.76	—	128	128	< 0.005	0.02	0.13	134
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	10.5	10.5	< 0.005	1.05	1.05	—	21.2	21.2	< 0.005	< 0.005	0.02	22.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Access Road Rehabilitation - vendor (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.14	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	192	192	< 0.005	0.03	0.46	200
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.26	0.14	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	192	192	< 0.005	0.03	0.01	200
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.17	0.09	< 0.005	< 0.005	5.18	5.18	< 0.005	0.52	0.52	—	128	128	< 0.005	0.02	0.13	134
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.94	0.95	< 0.005	0.09	0.09	—	21.2	21.2	< 0.005	< 0.005	0.02	22.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Access Road Rehabilitation - haul (2025) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	74.9	74.9	< 0.005	0.01	0.15	78.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	75.2	75.2	< 0.005	0.01	< 0.005	78.8
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	20.5	20.5	< 0.005	2.05	2.05	—	53.5	53.5	< 0.005	0.01	0.05	56.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	3.74	3.74	< 0.005	0.37	0.37	—	8.85	8.85	< 0.005	< 0.005	0.01	9.28
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Access Road Rehabilitation - haul (2025) - Mitigated

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

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

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	74.9	74.9	< 0.005	0.01	0.15	78.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	75.2	75.2	< 0.005	0.01	< 0.005	78.8
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	1.84	1.84	< 0.005	0.18	0.19	—	53.5	53.5	< 0.005	0.01	0.05	56.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.34	0.34	< 0.005	0.03	0.03	—	8.85	8.85	< 0.005	< 0.005	0.01	9.28
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Access Road Rehabilitation - haul (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	73.3	73.3	< 0.005	0.01	0.14	76.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	73.6	73.6	< 0.005	0.01	< 0.005	77.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	19.2	19.2	< 0.005	1.92	1.92	—	49.1	49.1	< 0.005	0.01	0.04	51.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	3.51	3.51	< 0.005	0.35	0.35	—	8.13	8.13	< 0.005	< 0.005	0.01	8.52
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Access Road Rehabilitation - haul (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	73.3	73.3	< 0.005	0.01	0.14	76.9

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	73.6	73.6	< 0.005	0.01	< 0.005	77.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	1.73	1.73	< 0.005	0.17	0.17	—	49.1	49.1	< 0.005	0.01	0.04	51.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.32	0.32	< 0.005	0.03	0.03	—	8.13	8.13	< 0.005	< 0.005	0.01	8.52
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Laydown/Staging/Site Grading - vendor (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.14	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	192	192	< 0.005	0.03	0.46	200
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.01	0.01	0.26	0.14	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	192	192	< 0.005	0.03	0.01	200
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.15	0.08	< 0.005	< 0.005	50.9	50.9	< 0.005	5.08	5.08	—	113	113	< 0.005	0.02	0.12	118
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	9.28	9.28	< 0.005	0.93	0.93	—	18.7	18.7	< 0.005	< 0.005	0.02	19.5
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Laydown/Staging/Site Grading - vendor (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.14	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	192	192	< 0.005	0.03	0.46	200
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.26	0.14	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	192	192	< 0.005	0.03	0.01	200
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.15	0.08	< 0.005	< 0.005	4.56	4.56	< 0.005	0.46	0.46	—	113	113	< 0.005	0.02	0.12	118
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.83	0.83	< 0.005	0.08	0.08	—	18.7	18.7	< 0.005	< 0.005	0.02	19.5
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Laydown/Staging/Site Grading - vendor (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.24	0.13	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	187	187	< 0.005	0.02	0.41	195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.26	0.14	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	188	188	< 0.005	0.03	0.01	195
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.01	0.01	0.25	0.14	< 0.005	< 0.005	86.3	86.3	< 0.005	8.62	8.62	—	188	188	< 0.005	0.03	0.18	195
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	15.8	15.8	< 0.005	1.57	1.57	—	31.1	31.1	< 0.005	< 0.005	0.03	32.3
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Laydown/Staging/Site Grading - vendor (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.24	0.13	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	187	187	< 0.005	0.02	0.41	195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.26	0.14	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	188	188	< 0.005	0.03	0.01	195
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.14	< 0.005	< 0.005	7.75	7.75	< 0.005	0.78	0.78	—	188	188	< 0.005	0.03	0.18	195
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	1.41	1.41	< 0.005	0.14	0.14	—	31.1	31.1	< 0.005	< 0.005	0.03	32.3
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Laydown/Staging/Site Grading - vendor (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.23	0.13	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	183	183	< 0.005	0.02	0.37	190
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.13	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	183	183	< 0.005	0.02	0.01	190
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.16	0.09	< 0.005	< 0.005	57.7	57.7	< 0.005	5.76	5.76	—	122	122	< 0.005	0.02	0.11	127
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	10.5	10.5	< 0.005	1.05	1.05	—	20.2	20.2	< 0.005	< 0.005	0.02	21.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.34. Laydown/Staging/Site Grading - vendor (2028) - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.23	0.13	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	183	183	< 0.005	0.02	0.37	190
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.13	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	183	183	< 0.005	0.02	0.01	190
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.16	0.09	< 0.005	< 0.005	5.18	5.18	< 0.005	0.52	0.52	—	122	122	< 0.005	0.02	0.11	127
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.94	0.95	< 0.005	0.09	0.09	—	20.2	20.2	< 0.005	< 0.005	0.02	21.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Laydown/Staging/Site Grading - haul (2026) - Unmitigated

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

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

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	73.3	73.3	< 0.005	0.01	0.14	76.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	73.6	73.6	< 0.005	0.01	< 0.005	77.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	17.0	17.0	< 0.005	1.69	1.69	—	43.3	43.3	< 0.005	0.01	0.04	45.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	3.09	3.09	< 0.005	0.31	0.31	—	7.16	7.16	< 0.005	< 0.005	0.01	7.51
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.36. Laydown/Staging/Site Grading - haul (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	73.3	73.3	< 0.005	0.01	0.14	76.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	73.6	73.6	< 0.005	0.01	< 0.005	77.1
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	1.52	1.52	< 0.005	0.15	0.15	—	43.3	43.3	< 0.005	0.01	0.04	45.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.28	0.28	< 0.005	0.03	0.03	—	7.16	7.16	< 0.005	< 0.005	0.01	7.51
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Laydown/Staging/Site Grading - haul (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	71.6	71.6	< 0.005	0.01	0.13	75.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	71.9	71.9	< 0.005	0.01	< 0.005	75.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	28.8	28.8	< 0.005	2.87	2.87	—	71.8	71.8	< 0.005	0.01	0.06	75.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	5.25	5.25	< 0.005	0.52	0.52	—	11.9	11.9	< 0.005	< 0.005	0.01	12.5
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.38. Laydown/Staging/Site Grading - haul (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	71.6	71.6	< 0.005	0.01	0.13	75.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	71.9	71.9	< 0.005	0.01	< 0.005	75.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	2.58	2.58	< 0.005	0.26	0.26	—	71.8	71.8	< 0.005	0.01	0.06	75.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.47	0.47	< 0.005	0.05	0.05	—	11.9	11.9	< 0.005	< 0.005	0.01	12.5
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Laydown/Staging/Site Grading - haul (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	69.8	69.8	< 0.005	0.01	0.12	73.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	70.1	70.1	< 0.005	0.01	< 0.005	73.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	19.2	19.2	< 0.005	1.92	1.92	—	46.7	46.7	< 0.005	0.01	0.03	49.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	3.51	3.51	< 0.005	0.35	0.35	—	7.74	7.74	< 0.005	< 0.005	0.01	8.11
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.40. Laydown/Staging/Site Grading - haul (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	69.8	69.8	< 0.005	0.01	0.12	73.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	70.1	70.1	< 0.005	0.01	< 0.005	73.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	1.73	1.73	< 0.005	0.17	0.17	—	46.7	46.7	< 0.005	0.01	0.03	49.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.32	0.32	< 0.005	0.03	0.03	—	7.74	7.74	< 0.005	< 0.005	0.01	8.11
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Line 1 Work Area Restoration - vendor (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.24	0.13	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	187	187	< 0.005	0.02	0.41	195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.26	0.14	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	188	188	< 0.005	0.03	0.01	195
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.09	0.05	< 0.005	< 0.005	29.1	29.1	< 0.005	2.90	2.90	—	63.2	63.2	< 0.005	0.01	0.06	65.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	5.31	5.31	< 0.005	0.53	0.53	—	10.5	10.5	< 0.005	< 0.005	0.01	10.9
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.42. Line 1 Work Area Restoration - vendor (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.24	0.13	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	187	187	< 0.005	0.02	0.41	195
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.26	0.14	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	188	188	< 0.005	0.03	0.01	195
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.09	0.05	< 0.005	< 0.005	2.61	2.61	< 0.005	0.26	0.26	—	63.2	63.2	< 0.005	0.01	0.06	65.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.48	0.48	< 0.005	0.05	0.05	—	10.5	10.5	< 0.005	< 0.005	0.01	10.9
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Line 1 Work Area Restoration - vendor (2028) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.23	0.13	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	183	183	< 0.005	0.02	0.37	190
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.13	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	183	183	< 0.005	0.02	0.01	190
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.13	< 0.005	< 0.005	86.6	86.6	< 0.005	8.64	8.64	—	183	183	< 0.005	0.02	0.16	191
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	15.8	15.8	< 0.005	1.58	1.58	—	30.3	30.3	< 0.005	< 0.005	0.03	31.6
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.44. Line 1 Work Area Restoration - vendor (2028) - Mitigated

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

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

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.23	0.13	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	183	183	< 0.005	0.02	0.37	190
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.13	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	183	183	< 0.005	0.02	0.01	190
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.13	< 0.005	< 0.005	7.77	7.77	< 0.005	0.78	0.78	—	183	183	< 0.005	0.02	0.16	191
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	1.42	1.42	< 0.005	0.14	0.14	—	30.3	30.3	< 0.005	< 0.005	0.03	31.6
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.45. Line 1 Work Area Restoration - vendor (2029) - Unmitigated

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

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

Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.24	0.13	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	178	178	< 0.005	0.02	0.01	185
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	5.44	5.44	< 0.005	0.54	0.54	—	11.2	11.2	< 0.005	< 0.005	0.01	11.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.99	0.99	< 0.005	0.10	0.10	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.93
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.46. Line 1 Work Area Restoration - vendor (2029) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.24	0.13	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	178	178	< 0.005	0.02	0.01	185
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.49	0.49	< 0.005	0.05	0.05	—	11.2	11.2	< 0.005	< 0.005	0.01	11.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.93
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.47. Line 1 Work Area Restoration - haul (2027) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	71.6	71.6	< 0.005	0.01	0.13	75.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	71.9	71.9	< 0.005	0.01	< 0.005	75.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	9.70	9.70	< 0.005	0.97	0.97	—	24.2	24.2	< 0.005	< 0.005	0.02	25.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	1.77	1.77	< 0.005	0.18	0.18	—	4.00	4.00	< 0.005	< 0.005	< 0.005	4.20
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.48. Line 1 Work Area Restoration - haul (2027) - Mitigated

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

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

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	71.6	71.6	< 0.005	0.01	0.13	75.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	71.9	71.9	< 0.005	0.01	< 0.005	75.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.87	0.87	< 0.005	0.09	0.09	—	24.2	24.2	< 0.005	< 0.005	0.02	25.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	4.00	4.00	< 0.005	< 0.005	< 0.005	4.20
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.49. Line 1 Work Area Restoration - haul (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	69.8	69.8	< 0.005	0.01	0.12	73.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	70.1	70.1	< 0.005	0.01	< 0.005	73.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	28.9	28.9	< 0.005	2.88	2.88	—	70.1	70.1	< 0.005	0.01	0.05	73.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	5.27	5.27	< 0.005	0.53	0.53	—	11.6	11.6	< 0.005	< 0.005	0.01	12.2
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.50. Line 1 Work Area Restoration - haul (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	69.8	69.8	< 0.005	0.01	0.12	73.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	70.1	70.1	< 0.005	0.01	< 0.005	73.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	2.59	2.59	< 0.005	0.26	0.26	—	70.1	70.1	< 0.005	0.01	0.05	73.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.47	0.47	< 0.005	0.05	0.05	—	11.6	11.6	< 0.005	< 0.005	0.01	12.2
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.51. Line 1 Work Area Restoration - haul (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	68.3	68.3	< 0.005	0.01	< 0.005	71.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	1.81	1.81	< 0.005	0.18	0.18	—	4.29	4.29	< 0.005	< 0.005	< 0.005	4.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.33	0.33	< 0.005	0.03	0.03	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.74
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.52. Line 1 Work Area Restoration - haul (2029) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	68.3	68.3	< 0.005	0.01	< 0.005	71.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	4.29	4.29	< 0.005	< 0.005	< 0.005	4.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.74
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.53. Line 2 Work Area Restoration - vendor (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.01	0.01	0.23	0.13	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	183	183	< 0.005	0.02	0.37	190
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.13	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	183	183	< 0.005	0.02	0.01	190
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	28.9	28.9	< 0.005	2.88	2.88	—	61.1	61.1	< 0.005	0.01	0.05	63.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	5.27	5.27	< 0.005	0.53	0.53	—	10.1	10.1	< 0.005	< 0.005	0.01	10.5
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.54. Line 2 Work Area Restoration - vendor (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.23	0.13	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	183	183	< 0.005	0.02	0.37	190

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.25	0.13	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	183	183	< 0.005	0.02	0.01	190
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	2.59	2.59	< 0.005	0.26	0.26	—	61.1	61.1	< 0.005	0.01	0.05	63.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.47	0.47	< 0.005	0.05	0.05	—	10.1	10.1	< 0.005	< 0.005	0.01	10.5
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.55. Line 2 Work Area Restoration - vendor (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.24	0.13	< 0.005	< 0.005	88.3	88.3	< 0.005	8.82	8.82	—	178	178	< 0.005	0.02	0.01	185
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	5.44	5.44	< 0.005	0.54	0.54	—	11.2	11.2	< 0.005	< 0.005	0.01	11.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.99	0.99	< 0.005	0.10	0.10	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.93
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.56. Line 2 Work Area Restoration - vendor (2029) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.24	0.13	< 0.005	< 0.005	7.92	7.93	< 0.005	0.79	0.80	—	178	178	< 0.005	0.02	0.01	185
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.49	0.49	< 0.005	0.05	0.05	—	11.2	11.2	< 0.005	< 0.005	0.01	11.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.09	0.09	< 0.005	0.01	0.01	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.93
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.57. Line 2 Work Area Restoration - haul (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	69.8	69.8	< 0.005	0.01	0.12	73.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	70.1	70.1	< 0.005	0.01	< 0.005	73.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	9.62	9.62	< 0.005	0.96	0.96	—	23.4	23.4	< 0.005	< 0.005	0.02	24.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	1.76	1.76	< 0.005	0.18	0.18	—	3.87	3.87	< 0.005	< 0.005	< 0.005	4.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.58. Line 2 Work Area Restoration - haul (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	69.8	69.8	< 0.005	0.01	0.12	73.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	70.1	70.1	< 0.005	0.01	< 0.005	73.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.86	0.86	< 0.005	0.09	0.09	—	23.4	23.4	< 0.005	< 0.005	0.02	24.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	3.87	3.87	< 0.005	< 0.005	< 0.005	4.05
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.59. Line 2 Work Area Restoration - haul (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	29.4	29.4	< 0.005	2.94	2.94	—	68.3	68.3	< 0.005	0.01	< 0.005	71.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	1.81	1.81	< 0.005	0.18	0.18	—	4.29	4.29	< 0.005	< 0.005	< 0.005	4.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.33	0.33	< 0.005	0.03	0.03	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.74
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.60. Line 2 Work Area Restoration - haul (2029) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.13	0.06	< 0.005	< 0.005	2.64	2.64	< 0.005	0.26	0.27	—	68.3	68.3	< 0.005	0.01	< 0.005	71.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.16	0.16	< 0.005	0.02	0.02	—	4.29	4.29	< 0.005	< 0.005	< 0.005	4.50
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.74
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.61. Line 1 Construction - worker (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.82	0.79	1.89	5.79	0.00	0.00	2,031	2,031	0.00	203	203	—	1,620	1,620	0.04	0.14	4.52	1,667
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.73	0.70	2.07	4.93	0.00	0.00	2,031	2,031	0.00	203	203	—	1,527	1,527	0.04	0.14	0.12	1,570
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.25	0.24	0.67	1.75	0.00	0.00	664	664	0.00	66.2	66.2	—	517	517	0.01	0.05	0.65	532
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.05	0.04	0.12	0.32	0.00	0.00	121	121	0.00	12.1	12.1	—	85.6	85.6	< 0.005	0.01	0.11	88.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.62. Line 1 Construction - worker (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.82	0.79	1.89	5.79	0.00	0.00	182	182	0.00	18.2	18.2	—	1,620	1,620	0.04	0.14	4.52	1,667
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.73	0.70	2.07	4.93	0.00	0.00	182	182	0.00	18.2	18.2	—	1,527	1,527	0.04	0.14	0.12	1,570
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.25	0.24	0.67	1.75	0.00	0.00	59.5	59.5	0.00	5.94	5.94	—	517	517	0.01	0.05	0.65	532
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.05	0.04	0.12	0.32	0.00	0.00	10.9	10.9	0.00	1.08	1.08	—	85.6	85.6	< 0.005	0.01	0.11	88.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.63. Line 1 Construction - worker (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.79	0.76	1.87	5.56	0.00	0.00	2,031	2,031	0.00	203	203	—	1,595	1,595	0.04	0.14	4.02	1,641
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.71	0.68	2.02	4.76	0.00	0.00	2,031	2,031	0.00	203	203	—	1,504	1,504	0.04	0.14	0.10	1,547
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.48	0.46	1.32	3.34	0.00	0.00	1,316	1,316	0.00	131	131	—	1,010	1,010	0.03	0.09	1.15	1,039

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.09	0.08	0.24	0.61	0.00	0.00	240	240	0.00	24.0	24.0	—	167	167	< 0.005	0.02	0.19	172
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.64. Line 1 Construction - worker (2027) - Mitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.79	0.76	1.87	5.56	0.00	0.00	182	182	0.00	18.2	18.2	—	1,595	1,595	0.04	0.14	4.02	1,641
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.71	0.68	2.02	4.76	0.00	0.00	182	182	0.00	18.2	18.2	—	1,504	1,504	0.04	0.14	0.10	1,547
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.48	0.46	1.32	3.34	0.00	0.00	118	118	0.00	11.8	11.8	—	1,010	1,010	0.03	0.09	1.15	1,039
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.09	0.08	0.24	0.61	0.00	0.00	21.5	21.5	0.00	2.15	2.15	—	167	167	< 0.005	0.02	0.19	172
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.65. Line 2 Construction - worker (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.79	0.76	1.87	5.56	0.00	0.00	2,031	2,031	0.00	203	203	—	1,595	1,595	0.04	0.14	4.02	1,641
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.71	0.68	2.02	4.76	0.00	0.00	2,031	2,031	0.00	203	203	—	1,504	1,504	0.04	0.14	0.10	1,547
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.24	0.23	0.67	1.68	0.00	0.00	664	664	0.00	66.2	66.2	—	509	509	0.01	0.05	0.58	524
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.04	0.12	0.31	0.00	0.00	121	121	0.00	12.1	12.1	—	84.3	84.3	< 0.005	0.01	0.10	86.7
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.66. Line 2 Construction - worker (2027) - Mitigated

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

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

Onsite truck	0.79	0.76	1.87	5.56	0.00	0.00	182	182	0.00	18.2	18.2	—	1,595	1,595	0.04	0.14	4.02	1,641
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.71	0.68	2.02	4.76	0.00	0.00	182	182	0.00	18.2	18.2	—	1,504	1,504	0.04	0.14	0.10	1,547
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.24	0.23	0.67	1.68	0.00	0.00	59.5	59.5	0.00	5.94	5.94	—	509	509	0.01	0.05	0.58	524
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.04	0.12	0.31	0.00	0.00	10.9	10.9	0.00	1.08	1.08	—	84.3	84.3	< 0.005	0.01	0.10	86.7
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.67. Line 2 Construction - worker (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.77	0.71	1.86	5.37	0.00	0.00	2,031	2,031	0.00	203	203	—	1,567	1,567	0.04	0.14	3.57	1,614
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.69	0.63	2.01	4.62	0.00	0.00	2,031	2,031	0.00	203	203	—	1,479	1,479	0.04	0.14	0.09	1,522
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.47	0.43	1.32	3.27	0.00	0.00	1,333	1,333	0.00	133	133	—	1,005	1,005	0.02	0.09	1.03	1,035
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.09	0.08	0.24	0.60	0.00	0.00	243	243	0.00	24.3	24.3	—	166	166	< 0.005	0.02	0.17	171
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.68. Line 2 Construction - worker (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.77	0.71	1.86	5.37	0.00	0.00	182	182	0.00	18.2	18.2	—	1,567	1,567	0.04	0.14	3.57	1,614
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.69	0.63	2.01	4.62	0.00	0.00	182	182	0.00	18.2	18.2	—	1,479	1,479	0.04	0.14	0.09	1,522
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.47	0.43	1.32	3.27	0.00	0.00	119	119	0.00	11.9	11.9	—	1,005	1,005	0.02	0.09	1.03	1,035
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.09	0.08	0.24	0.60	0.00	0.00	21.8	21.8	0.00	2.18	2.18	—	166	166	< 0.005	0.02	0.17	171
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.69. Line 1 Construction - vendor (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.62	0.34	< 0.005	0.01	221	221	0.01	22.0	22.0	—	479	479	< 0.005	0.07	1.16	500
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.66	0.35	< 0.005	0.01	221	221	0.01	22.0	22.0	—	480	480	< 0.005	0.07	0.03	500
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.22	0.12	< 0.005	< 0.005	72.1	72.1	< 0.005	7.20	7.20	—	160	160	< 0.005	0.02	0.17	167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	13.2	13.2	< 0.005	1.31	1.31	—	26.5	26.5	< 0.005	< 0.005	0.03	27.6
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.70. Line 1 Construction - vendor (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.62	0.34	< 0.005	0.01	19.8	19.8	0.01	1.98	1.99	—	479	479	< 0.005	0.07	1.16	500
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.66	0.35	< 0.005	0.01	19.8	19.8	0.01	1.98	1.99	—	480	480	< 0.005	0.07	0.03	500
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.22	0.12	< 0.005	< 0.005	6.47	6.47	< 0.005	0.65	0.65	—	160	160	< 0.005	0.02	0.17	167

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	1.18	1.18	< 0.005	0.12	0.12	—	26.5	26.5	< 0.005	< 0.005	0.03	27.6
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.71. Line 1 Construction - vendor (2027) - Unmitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.60	0.33	< 0.005	0.01	221	221	0.01	22.0	22.0	—	468	468	< 0.005	0.06	1.04	488
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.64	0.34	< 0.005	0.01	221	221	0.01	22.0	22.0	—	469	469	< 0.005	0.06	0.03	488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.42	0.22	< 0.005	< 0.005	143	143	< 0.005	14.3	14.3	—	311	311	< 0.005	0.04	0.30	324
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	26.1	26.1	< 0.005	2.61	2.61	—	51.5	51.5	< 0.005	0.01	0.05	53.6
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.72. Line 1 Construction - vendor (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.60	0.33	< 0.005	0.01	19.8	19.8	0.01	1.98	1.99	—	468	468	< 0.005	0.06	1.04	488
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.64	0.34	< 0.005	0.01	19.8	19.8	0.01	1.98	1.99	—	469	469	< 0.005	0.06	0.03	488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.42	0.22	< 0.005	< 0.005	12.8	12.8	< 0.005	1.29	1.29	—	311	311	< 0.005	0.04	0.30	324
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	2.34	2.34	< 0.005	0.23	0.24	—	51.5	51.5	< 0.005	0.01	0.05	53.6
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.73. Line 1 Construction - haul (2026) - Unmitigated

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

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

Onsite truck	0.04	0.04	0.99	0.48	< 0.005	0.01	236	236	0.01	23.5	23.5	—	587	587	< 0.005	0.09	1.11	615
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.03	1.06	0.50	< 0.005	0.01	236	236	0.01	23.5	23.5	—	589	589	< 0.005	0.09	0.03	616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.35	0.16	< 0.005	< 0.005	77.0	77.0	< 0.005	7.68	7.68	—	196	196	< 0.005	0.03	0.16	206
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	14.0	14.0	< 0.005	1.40	1.40	—	32.5	32.5	< 0.005	0.01	0.03	34.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.74. Line 1 Construction - haul (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.04	0.99	0.48	< 0.005	0.01	21.1	21.1	0.01	2.12	2.13	—	587	587	< 0.005	0.09	1.11	615
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.03	1.06	0.50	< 0.005	0.01	21.1	21.1	0.01	2.12	2.13	—	589	589	< 0.005	0.09	0.03	616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.35	0.16	< 0.005	< 0.005	6.91	6.91	< 0.005	0.69	0.70	—	196	196	< 0.005	0.03	0.16	206
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	1.26	1.26	< 0.005	0.13	0.13	—	32.5	32.5	< 0.005	0.01	0.03	34.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.75. Line 1 Construction - haul (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.04	0.98	0.48	< 0.005	0.01	236	236	0.01	23.5	23.5	—	573	573	< 0.005	0.09	1.02	602
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.04	0.03	1.05	0.49	< 0.005	0.01	236	236	0.01	23.5	23.5	—	575	575	< 0.005	0.09	0.03	603
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.68	0.32	< 0.005	0.01	153	153	0.01	15.2	15.2	—	381	381	< 0.005	0.06	0.29	399
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.12	0.06	< 0.005	< 0.005	27.9	27.9	< 0.005	2.78	2.78	—	63.0	63.0	< 0.005	0.01	0.05	66.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.76. Line 1 Construction - haul (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.04	0.98	0.48	< 0.005	0.01	21.1	21.1	0.01	2.12	2.13	—	573	573	< 0.005	0.09	1.02	602
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.03	1.05	0.49	< 0.005	0.01	21.1	21.1	0.01	2.12	2.13	—	575	575	< 0.005	0.09	0.03	603
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.68	0.32	< 0.005	0.01	13.7	13.7	0.01	1.37	1.38	—	381	381	< 0.005	0.06	0.29	399
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.12	0.06	< 0.005	< 0.005	2.50	2.50	< 0.005	0.25	0.25	—	63.0	63.0	< 0.005	0.01	0.05	66.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.77. Line 2 Construction - vendor (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.60	0.33	< 0.005	0.01	221	221	0.01	22.0	22.0	—	468	468	< 0.005	0.06	1.04	488
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.64	0.34	< 0.005	0.01	221	221	0.01	22.0	22.0	—	469	469	< 0.005	0.06	0.03	488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.21	0.11	< 0.005	< 0.005	72.1	72.1	< 0.005	7.20	7.20	—	157	157	< 0.005	0.02	0.15	163

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	13.2	13.2	< 0.005	1.31	1.31	—	25.9	25.9	< 0.005	< 0.005	0.02	27.0
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.78. Line 2 Construction - vendor (2027) - Mitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.60	0.33	< 0.005	0.01	19.8	19.8	0.01	1.98	1.99	—	468	468	< 0.005	0.06	1.04	488
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.64	0.34	< 0.005	0.01	19.8	19.8	0.01	1.98	1.99	—	469	469	< 0.005	0.06	0.03	488
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.21	0.11	< 0.005	< 0.005	6.47	6.47	< 0.005	0.65	0.65	—	157	157	< 0.005	0.02	0.15	163
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	1.18	1.18	< 0.005	0.12	0.12	—	25.9	25.9	< 0.005	< 0.005	0.02	27.0
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.79. Line 2 Construction - vendor (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.03	0.59	0.32	< 0.005	0.01	221	221	0.01	22.0	22.0	—	456	456	< 0.005	0.06	0.92	476
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.62	0.33	< 0.005	0.01	221	221	0.01	22.0	22.0	—	458	458	< 0.005	0.06	0.02	476
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.41	0.22	< 0.005	< 0.005	145	145	< 0.005	14.5	14.5	—	307	307	< 0.005	0.04	0.27	319
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	26.4	26.4	< 0.005	2.64	2.64	—	50.8	50.8	< 0.005	0.01	0.04	52.9
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.80. Line 2 Construction - vendor (2028) - Mitigated

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

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

Onsite truck	0.03	0.03	0.59	0.32	< 0.005	0.01	19.8	19.8	0.01	1.98	1.99	—	456	456	< 0.005	0.06	0.92	476
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.62	0.33	< 0.005	0.01	19.8	19.8	0.01	1.98	1.99	—	458	458	< 0.005	0.06	0.02	476
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.02	0.02	0.41	0.22	< 0.005	< 0.005	13.0	13.0	< 0.005	1.30	1.31	—	307	307	< 0.005	0.04	0.27	319
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	2.37	2.37	< 0.005	0.24	0.24	—	50.8	50.8	< 0.005	0.01	0.04	52.9
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.81. Line 2 Construction - haul (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.04	0.98	0.48	< 0.005	0.01	236	236	0.01	23.5	23.5	—	573	573	< 0.005	0.09	1.02	602
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.03	1.05	0.49	< 0.005	0.01	236	236	0.01	23.5	23.5	—	575	575	< 0.005	0.09	0.03	603
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.34	0.16	< 0.005	< 0.005	77.0	77.0	< 0.005	7.68	7.68	—	192	192	< 0.005	0.03	0.15	201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	14.0	14.0	< 0.005	1.40	1.40	—	31.8	31.8	< 0.005	0.01	0.02	33.3
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.82. Line 2 Construction - haul (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.04	0.98	0.48	< 0.005	0.01	21.1	21.1	0.01	2.12	2.13	—	573	573	< 0.005	0.09	1.02	602
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.04	0.03	1.05	0.49	< 0.005	0.01	21.1	21.1	0.01	2.12	2.13	—	575	575	< 0.005	0.09	0.03	603
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.34	0.16	< 0.005	< 0.005	6.91	6.91	< 0.005	0.69	0.70	—	192	192	< 0.005	0.03	0.15	201
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	1.26	1.26	< 0.005	0.13	0.13	—	31.8	31.8	< 0.005	0.01	0.02	33.3
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.83. Line 2 Construction - haul (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.04	0.97	0.48	< 0.005	0.01	236	236	0.01	23.5	23.5	—	559	559	< 0.005	0.09	0.94	586
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.03	1.03	0.49	< 0.005	0.01	236	236	0.01	23.5	23.5	—	561	561	< 0.005	0.09	0.02	587
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.68	0.33	< 0.005	0.01	155	155	0.01	15.4	15.4	—	375	375	< 0.005	0.06	0.27	393
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.12	0.06	< 0.005	< 0.005	28.2	28.2	< 0.005	2.82	2.82	—	62.2	62.2	< 0.005	0.01	0.05	65.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.84. Line 2 Construction - haul (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.04	0.97	0.48	< 0.005	0.01	21.1	21.1	0.01	2.12	2.13	—	559	559	< 0.005	0.09	0.94	586
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.04	0.03	1.03	0.49	< 0.005	0.01	21.1	21.1	0.01	2.12	2.13	—	561	561	< 0.005	0.09	0.02	587
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.03	0.02	0.68	0.33	< 0.005	0.01	13.9	13.9	0.01	1.39	1.40	—	375	375	< 0.005	0.06	0.27	393

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.12	0.06	< 0.005	< 0.005	2.53	2.53	< 0.005	0.25	0.26	—	62.2	62.2	< 0.005	0.01	0.05	65.1
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Access Road Rehabilitation - worker	Grading	4/16/2025	9/1/2026	7.00	504	—
Laydown/Staging/Site Grading - worker	Grading	5/31/2026	8/31/2028	7.00	824	—
Line 1 Work Area Restoration - worker	Grading	8/31/2027	1/23/2029	7.00	512	—
Line 2 Work Area Restoration - worker	Grading	9/1/2028	1/23/2029	7.00	145	—
Access Road Rehabilitation - vendor	Grading	4/16/2025	9/1/2026	7.00	504	—

Access Road Rehabilitation - haul	Grading	4/16/2025	9/1/2026	7.00	504	—
Laydown/Staging/Site Grading - vendor	Grading	5/31/2026	8/31/2028	7.00	824	—
Laydown/Staging/Site Grading - haul	Grading	5/31/2026	8/31/2028	7.00	824	—
Line 1 Work Area Restoration - vendor	Grading	8/31/2027	1/23/2029	7.00	512	—
Line 1 Work Area Restoration - haul	Grading	8/31/2027	1/23/2029	7.00	512	—
Line 2 Work Area Restoration - vendor	Grading	9/1/2028	1/23/2029	7.00	145	—
Line 2 Work Area Restoration - haul	Grading	9/1/2028	1/23/2029	7.00	145	—
Line 1 Construction - worker	Building Construction	9/1/2026	8/30/2027	7.00	364	—
Line 2 Construction - worker	Building Construction	9/1/2027	9/1/2028	7.00	367	—
Line 1 Construction - vendor	Building Construction	9/1/2026	8/30/2027	7.00	364	—
Line 1 Construction - haul	Building Construction	9/1/2026	8/30/2027	7.00	364	—
Line 2 Construction - vendor	Building Construction	9/1/2027	9/1/2028	7.00	367	—
Line 2 Construction - haul	Building Construction	9/1/2027	9/1/2028	7.00	367	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

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

5.2.2. Mitigated

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

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Access Road Rehabilitation - worker	—	—	—	—
Access Road Rehabilitation - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Access Road Rehabilitation - worker	Vendor	0.00	50.0	HHDT,MHDT
Access Road Rehabilitation - worker	Hauling	0.00	50.0	HHDT
Access Road Rehabilitation - worker	Onsite truck	72.0	5.00	EMFAC Fleet Mix
Line 1 Construction - worker	—	—	—	—
Line 1 Construction - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Line 1 Construction - worker	Vendor	0.00	50.0	HHDT,MHDT
Line 1 Construction - worker	Hauling	0.00	50.0	HHDT
Line 1 Construction - worker	Onsite truck	276	5.00	EMFAC Fleet Mix
Laydown/Staging/Site Grading - worker	—	—	—	—
Laydown/Staging/Site Grading - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Laydown/Staging/Site Grading - worker	Vendor	0.00	50.0	HHDT,MHDT
Laydown/Staging/Site Grading - worker	Hauling	0.00	50.0	HHDT
Laydown/Staging/Site Grading - worker	Onsite truck	72.0	5.00	EMFAC Fleet Mix
Line 1 Work Area Restoration - worker	—	—	—	—
Line 1 Work Area Restoration - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Line 1 Work Area Restoration - worker	Vendor	0.00	50.0	HHDT,MHDT
Line 1 Work Area Restoration - worker	Hauling	0.00	50.0	HHDT
Line 1 Work Area Restoration - worker	Onsite truck	72.0	5.00	EMFAC Fleet Mix
Line 2 Work Area Restoration - worker	—	—	—	—

Line 2 Work Area Restoration - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Line 2 Work Area Restoration - worker	Vendor	0.00	50.0	HHDT,MHDT
Line 2 Work Area Restoration - worker	Hauling	0.00	50.0	HHDT
Line 2 Work Area Restoration - worker	Onsite truck	72.0	5.00	EMFAC Fleet Mix
Line 2 Construction - worker	—	—	—	—
Line 2 Construction - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Line 2 Construction - worker	Vendor	0.00	50.0	HHDT,MHDT
Line 2 Construction - worker	Hauling	0.00	50.0	HHDT
Line 2 Construction - worker	Onsite truck	276	5.00	EMFAC Fleet Mix
Access Road Rehabilitation - vendor	—	—	—	—
Access Road Rehabilitation - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Access Road Rehabilitation - vendor	Vendor	—	10.2	HHDT,MHDT
Access Road Rehabilitation - vendor	Hauling	0.00	20.0	HHDT
Access Road Rehabilitation - vendor	Onsite truck	12.0	5.00	HHDT,MHDT
Access Road Rehabilitation - haul	—	—	—	—
Access Road Rehabilitation - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Access Road Rehabilitation - haul	Vendor	—	10.2	HHDT,MHDT
Access Road Rehabilitation - haul	Hauling	0.00	20.0	HHDT
Access Road Rehabilitation - haul	Onsite truck	4.00	5.00	HHDT
Laydown/Staging/Site Grading - vendor	—	—	—	—
Laydown/Staging/Site Grading - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Laydown/Staging/Site Grading - vendor	Vendor	—	10.2	HHDT,MHDT
Laydown/Staging/Site Grading - vendor	Hauling	0.00	20.0	HHDT
Laydown/Staging/Site Grading - vendor	Onsite truck	12.0	5.00	HHDT,MHDT
Laydown/Staging/Site Grading - haul	—	—	—	—
Laydown/Staging/Site Grading - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Laydown/Staging/Site Grading - haul	Vendor	—	10.2	HHDT,MHDT

Laydown/Staging/Site Grading - haul	Hauling	0.00	20.0	HHDT
Laydown/Staging/Site Grading - haul	Onsite truck	4.00	5.00	HHDT
Line 1 Work Area Restoration - vendor	—	—	—	—
Line 1 Work Area Restoration - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 1 Work Area Restoration - vendor	Vendor	—	10.2	HHDT,MHDT
Line 1 Work Area Restoration - vendor	Hauling	0.00	20.0	HHDT
Line 1 Work Area Restoration - vendor	Onsite truck	12.0	5.00	HHDT,MHDT
Line 1 Work Area Restoration - haul	—	—	—	—
Line 1 Work Area Restoration - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 1 Work Area Restoration - haul	Vendor	—	10.2	HHDT,MHDT
Line 1 Work Area Restoration - haul	Hauling	0.00	20.0	HHDT
Line 1 Work Area Restoration - haul	Onsite truck	4.00	5.00	HHDT
Line 2 Work Area Restoration - vendor	—	—	—	—
Line 2 Work Area Restoration - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 2 Work Area Restoration - vendor	Vendor	—	10.2	HHDT,MHDT
Line 2 Work Area Restoration - vendor	Hauling	0.00	20.0	HHDT
Line 2 Work Area Restoration - vendor	Onsite truck	12.0	5.00	HHDT,MHDT
Line 2 Work Area Restoration - haul	—	—	—	—
Line 2 Work Area Restoration - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 2 Work Area Restoration - haul	Vendor	—	10.2	HHDT,MHDT
Line 2 Work Area Restoration - haul	Hauling	0.00	20.0	HHDT
Line 2 Work Area Restoration - haul	Onsite truck	4.00	5.00	HHDT
Line 1 Construction - vendor	—	—	—	—
Line 1 Construction - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 1 Construction - vendor	Vendor	0.00	10.2	HHDT,MHDT
Line 1 Construction - vendor	Hauling	0.00	20.0	HHDT
Line 1 Construction - vendor	Onsite truck	30.0	5.00	HHDT,MHDT

Line 1 Construction - haul	—	—	—	—
Line 1 Construction - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 1 Construction - haul	Vendor	0.00	10.2	HHDT,MHDT
Line 1 Construction - haul	Hauling	0.00	20.0	HHDT
Line 1 Construction - haul	Onsite truck	32.0	5.00	HHDT
Line 2 Construction - vendor	—	—	—	—
Line 2 Construction - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 2 Construction - vendor	Vendor	0.00	10.2	HHDT,MHDT
Line 2 Construction - vendor	Hauling	0.00	20.0	HHDT
Line 2 Construction - vendor	Onsite truck	30.0	5.00	HHDT,MHDT
Line 2 Construction - haul	—	—	—	—
Line 2 Construction - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 2 Construction - haul	Vendor	0.00	10.2	HHDT,MHDT
Line 2 Construction - haul	Hauling	0.00	20.0	HHDT
Line 2 Construction - haul	Onsite truck	32.0	5.00	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Access Road Rehabilitation - worker	—	—	—	—
Access Road Rehabilitation - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Access Road Rehabilitation - worker	Vendor	0.00	50.0	HHDT,MHDT
Access Road Rehabilitation - worker	Hauling	0.00	50.0	HHDT
Access Road Rehabilitation - worker	Onsite truck	72.0	5.00	EMFAC Fleet Mix
Line 1 Construction - worker	—	—	—	—
Line 1 Construction - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Line 1 Construction - worker	Vendor	0.00	50.0	HHDT,MHDT
Line 1 Construction - worker	Hauling	0.00	50.0	HHDT

Line 1 Construction - worker	Onsite truck	276	5.00	EMFAC Fleet Mix
Laydown/Staging/Site Grading - worker	—	—	—	—
Laydown/Staging/Site Grading - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Laydown/Staging/Site Grading - worker	Vendor	0.00	50.0	HHDT,MHDT
Laydown/Staging/Site Grading - worker	Hauling	0.00	50.0	HHDT
Laydown/Staging/Site Grading - worker	Onsite truck	72.0	5.00	EMFAC Fleet Mix
Line 1 Work Area Restoration - worker	—	—	—	—
Line 1 Work Area Restoration - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Line 1 Work Area Restoration - worker	Vendor	0.00	50.0	HHDT,MHDT
Line 1 Work Area Restoration - worker	Hauling	0.00	50.0	HHDT
Line 1 Work Area Restoration - worker	Onsite truck	72.0	5.00	EMFAC Fleet Mix
Line 2 Work Area Restoration - worker	—	—	—	—
Line 2 Work Area Restoration - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Line 2 Work Area Restoration - worker	Vendor	0.00	50.0	HHDT,MHDT
Line 2 Work Area Restoration - worker	Hauling	0.00	50.0	HHDT
Line 2 Work Area Restoration - worker	Onsite truck	72.0	5.00	EMFAC Fleet Mix
Line 2 Construction - worker	—	—	—	—
Line 2 Construction - worker	Worker	0.00	25.0	LDA,LDT1,LDT2
Line 2 Construction - worker	Vendor	0.00	50.0	HHDT,MHDT
Line 2 Construction - worker	Hauling	0.00	50.0	HHDT
Line 2 Construction - worker	Onsite truck	276	5.00	EMFAC Fleet Mix
Access Road Rehabilitation - vendor	—	—	—	—
Access Road Rehabilitation - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Access Road Rehabilitation - vendor	Vendor	—	10.2	HHDT,MHDT
Access Road Rehabilitation - vendor	Hauling	0.00	20.0	HHDT
Access Road Rehabilitation - vendor	Onsite truck	12.0	5.00	HHDT,MHDT
Access Road Rehabilitation - haul	—	—	—	—

Access Road Rehabilitation - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Access Road Rehabilitation - haul	Vendor	—	10.2	HHDT,MHDT
Access Road Rehabilitation - haul	Hauling	0.00	20.0	HHDT
Access Road Rehabilitation - haul	Onsite truck	4.00	5.00	HHDT
Laydown/Staging/Site Grading - vendor	—	—	—	—
Laydown/Staging/Site Grading - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Laydown/Staging/Site Grading - vendor	Vendor	—	10.2	HHDT,MHDT
Laydown/Staging/Site Grading - vendor	Hauling	0.00	20.0	HHDT
Laydown/Staging/Site Grading - vendor	Onsite truck	12.0	5.00	HHDT,MHDT
Laydown/Staging/Site Grading - haul	—	—	—	—
Laydown/Staging/Site Grading - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Laydown/Staging/Site Grading - haul	Vendor	—	10.2	HHDT,MHDT
Laydown/Staging/Site Grading - haul	Hauling	0.00	20.0	HHDT
Laydown/Staging/Site Grading - haul	Onsite truck	4.00	5.00	HHDT
Line 1 Work Area Restoration - vendor	—	—	—	—
Line 1 Work Area Restoration - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 1 Work Area Restoration - vendor	Vendor	—	10.2	HHDT,MHDT
Line 1 Work Area Restoration - vendor	Hauling	0.00	20.0	HHDT
Line 1 Work Area Restoration - vendor	Onsite truck	12.0	5.00	HHDT,MHDT
Line 1 Work Area Restoration - haul	—	—	—	—
Line 1 Work Area Restoration - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 1 Work Area Restoration - haul	Vendor	—	10.2	HHDT,MHDT
Line 1 Work Area Restoration - haul	Hauling	0.00	20.0	HHDT
Line 1 Work Area Restoration - haul	Onsite truck	4.00	5.00	HHDT
Line 2 Work Area Restoration - vendor	—	—	—	—
Line 2 Work Area Restoration - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 2 Work Area Restoration - vendor	Vendor	—	10.2	HHDT,MHDT

Line 2 Work Area Restoration - vendor	Hauling	0.00	20.0	HHDT
Line 2 Work Area Restoration - vendor	Onsite truck	12.0	5.00	HHDT,MHDT
Line 2 Work Area Restoration - haul	—	—	—	—
Line 2 Work Area Restoration - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 2 Work Area Restoration - haul	Vendor	—	10.2	HHDT,MHDT
Line 2 Work Area Restoration - haul	Hauling	0.00	20.0	HHDT
Line 2 Work Area Restoration - haul	Onsite truck	4.00	5.00	HHDT
Line 1 Construction - vendor	—	—	—	—
Line 1 Construction - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 1 Construction - vendor	Vendor	0.00	10.2	HHDT,MHDT
Line 1 Construction - vendor	Hauling	0.00	20.0	HHDT
Line 1 Construction - vendor	Onsite truck	30.0	5.00	HHDT,MHDT
Line 1 Construction - haul	—	—	—	—
Line 1 Construction - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 1 Construction - haul	Vendor	0.00	10.2	HHDT,MHDT
Line 1 Construction - haul	Hauling	0.00	20.0	HHDT
Line 1 Construction - haul	Onsite truck	32.0	5.00	HHDT
Line 2 Construction - vendor	—	—	—	—
Line 2 Construction - vendor	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 2 Construction - vendor	Vendor	0.00	10.2	HHDT,MHDT
Line 2 Construction - vendor	Hauling	0.00	20.0	HHDT
Line 2 Construction - vendor	Onsite truck	30.0	5.00	HHDT,MHDT
Line 2 Construction - haul	—	—	—	—
Line 2 Construction - haul	Worker	0.00	18.5	LDA,LDT1,LDT2
Line 2 Construction - haul	Vendor	0.00	10.2	HHDT,MHDT
Line 2 Construction - haul	Hauling	0.00	20.0	HHDT
Line 2 Construction - haul	Onsite truck	32.0	5.00	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Access Road Rehabilitation - worker	—	—	0.00	0.00	—
Laydown/Staging/Site Grading - worker	—	—	0.00	0.00	—
Line 1 Work Area Restoration - worker	—	—	0.00	0.00	—
Line 2 Work Area Restoration - worker	—	—	0.00	0.00	—
Access Road Rehabilitation - vendor	—	—	0.00	0.00	—
Access Road Rehabilitation - haul	—	—	0.00	0.00	—
Laydown/Staging/Site Grading - vendor	—	—	0.00	0.00	—
Laydown/Staging/Site Grading - haul	—	—	0.00	0.00	—
Line 1 Work Area Restoration - vendor	—	—	0.00	0.00	—

Line 1 Work Area Restoration - haul	—	—	0.00	0.00	—
Line 2 Work Area Restoration - vendor	—	—	0.00	0.00	—
Line 2 Work Area Restoration - haul	—	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Non-Asphalt Surfaces	1,437	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	532	0.03	< 0.005
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005
2029	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	25.0	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	7.45
AQ-DPM	3.61

Drinking Water	87.0
Lead Risk Housing	39.1
Pesticides	39.4
Toxic Releases	2.81
Traffic	13.8
Effect Indicators	—
CleanUp Sites	94.2
Groundwater	92.8
Haz Waste Facilities/Generators	78.8
Impaired Water Bodies	0.00
Solid Waste	99.9
Sensitive Population	—
Asthma	54.8
Cardio-vascular	73.9
Low Birth Weights	99.2
Socioeconomic Factor Indicators	—
Education	54.1
Housing	34.2
Linguistic	38.1
Poverty	76.4
Unemployment	95.3

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	33.78673168

Employed	3.811112537
Median HI	21.35249583
Education	—
Bachelor's or higher	26.78044399
High school enrollment	100
Preschool enrollment	39.0606955
Transportation	—
Auto Access	32.77300141
Active commuting	75.32400873
Social	—
2-parent households	57.35916848
Voting	45.82317464
Neighborhood	—
Alcohol availability	90.37597844
Park access	24.44501476
Retail density	3.387655588
Supermarket access	7.275760298
Tree canopy	0.051328115
Housing	—
Homeownership	62.60746824
Housing habitability	64.36545618
Low-inc homeowner severe housing cost burden	44.92493263
Low-inc renter severe housing cost burden	77.50545361
Uncrowded housing	56.87155139
Health Outcomes	—
Insured adults	15.69357115
Arthritis	0.0

Asthma ER Admissions	37.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	7.6
Cognitively Disabled	60.3
Physically Disabled	25.6
Heart Attack ER Admissions	35.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	96.1
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	64.0
Elderly	23.5
English Speaking	39.9

Foreign-born	36.0
Outdoor Workers	55.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	97.4
Traffic Density	9.6
Traffic Access	23.0
Other Indices	—
Hardship	66.7
Other Decision Support	—
2016 Voting	56.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	75.0
Healthy Places Index Score for Project Location (b)	23.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction phases and duration based on input from applicant team. Duplicated phases in order to model vehicle categories.
Construction: Off-Road Equipment	Modeling vehicles on unpaved roads only
Construction: On-Road Fugitive Dust	Assuming 2% of travel on unpaved roads
Construction: Trips and VMT	On-road vehicle information based on input from the applicant team. Unpaved road portion only (5 miles average)

Helicopter Emissions - Annual Average

Criteria Air Pollutants						Emission Factors (lb/hr)*				Emissions (lbs/day)				Emissions (tons/year)			
Helicopter	**Mode**	**Days/week**	**Hours/Day**	**Duration (weeks)**	**Horsepower**	**ROC**	**NOx**	**CO**	**PM10**	**ROC**	**NOx**	**CO**	**PM10**	**ROC**	**NOx**	**CO**	**PM10**
Hughes 500	LTO	7	0.39	10.4	317	0.97	0.13	1.26	0.01	0.38	0.05	0.49	0.00	0.01	0.00	0.02	0.00
Hughes 500	Operation	7	2.61	10.4	317	2.12	1.06	2.65	0.04	5.52	2.76	6.90	0.09	0.20	0.10	0.25	0.00
Hughes 500	Total									**5.90**	**2.81**	**7.40**	**0.09**	**0.21**	**0.10**	**0.27**	**0.00**

Helicopter	**Mode**	**Days/week**	**Hours/Day**	**Duration (weeks)**	**Horsepower**	**ROC**	**NOx**	**CO**	**PM10**	**ROC**	**NOx**	**CO**	**PM10**	**ROC**	**NOx**	**CO**	**PM10**
SIKORSKY CH-53G (S-65)	LTO	7	0.39	10.4	7,850	0.76	3.72	0.94	0.09	0.30	1.45	0.37	0.04	0.01	0.05	0.01	0.00
SIKORSKY CH-53G (S-65)	Operation	7	2.61	10.4	7,850	1.81	38.14	2.16	0.86	4.72	99.55	5.64	2.23	0.17	3.62	0.21	0.03
SIKORSKY CH-53G (S-65)	Total									**5.02**	**101.00**	**6.01**	**2.27**	**0.18**	**3.68**	**0.22**	**0.03**

*Federal Office of Civil Aviation (FOCA). n.d. Guidance on Determination of Helicopter Emissions.

Greenhouse Gases

Helicopter	**Mode**	**Days/week**	**Hours/Day**	**Duration (weeks)**	**Horsepower**	**Fuel/hour**	**Fuel Per day**	**Gallons Per day**	**CO2 MT**	**CH4 MT**	**N20**	**CO2E**
Hughes 500	LTO	7	0.39	10.4	650	16.4	6.396	69.2022474	49.62355	0.00	0.00	49.67
Hughes 500	Operation	7	2.61	10.4	650	98.8	257.868					
Hughes 500	Total						264.264					

Helicopter	**Mode**	**Days/week**	**Hours/Day**	**Duration (weeks)**	**Horsepower**	**Fuel (kg)**	**Fuel Per day**	**Gallons Per day**	**CO2 MT**	**CH4 MT**	**N20**	**CO2E**
SIKORSKY CH-53G (S-65)	LTO	7	0.39	10.4	7,850	125.6	48.984	680.9242523	488.2772	0.02	0.00	489.93
SIKORSKY CH-53G (S-65)	Operation	7	2.61	10.4	7,850	977.5	2551.275					
SIKORSKY CH-53G (S-65)	Total						2600.259					

*Federal Office of Civil Aviation (FOCA). n.d. Guidance on Determination of Helicopter Emissions.

Notes

Jet Fuel Density 840 Kg/m3	
Kg to pounds	2.20462
grams to pounds	0.00220462

LADWP MCC-VIC Transmission Line Project

Construction

		15	Gallons	
Source	**Percent**	**Total MTCO2**	**Diesel**	**Gasoline**
2025				
Off-road	76.6%	655	64,181	
Electricity	0.0%	0		
Worker	11.8%	101		11,497
Vendor	8.4%	72	7,038	
Hauling	3.1%	27	2,597	
Total	*100.0%*	*855*	*73,817*	*11,497*
2026				
Off-road	74.4%	2,075	203,194	
Electricity	0.0%	0		
Worker	12.8%	357		40,652
Vendor	7.5%	209	20,483	
Hauling	5.3%	148	14,475	
Total	*100.0%*	*2,788*	*238,152*	*40,652*
2027				
Off-road	73.6%	3,996	391,372	
Electricity	0.0%	0		
Worker	13.2%	717		81,624
Vendor	6.9%	375	36,691	
Hauling	6.3%	342	33,501	
Total	*100.0%*	*5,429*	*461,563*	*81,624*
2028				
Off-road	75.0%	3,699	362,313	
Electricity	0.0%	0		
Worker	12.6%	621		70,782
Vendor	7.1%	350	34,299	
Hauling	5.3%	261	25,603	
Total	*100.0%*	*4,932*	*422,216*	*70,782*
2029				
Off-road	78.1%	115	11,297	
Electricity	0.0%	0		
Worker	11.2%	17		1,884
Vendor	7.8%	12	1,128	
Hauling	2.9%	4	419	
Total	*100.0%*	*148*	*12,845*	*1,884*
Total Construction Period				
Off-road	74.5%	10,540	1,032,357	0
Electricity	0.0%	0	0	0
Worker	12.8%	1,813	0	206,439
Vendor	7.2%	1,017	99,640	0
Hauling	5.5%	782	76,596	0
Total	***100.0%***	***14,153***	***1,208,593***	***206,439***

Constants		
Fuel	**KgCO2/Gallon**	1000 Kg in MT
Gasoline	8.78	
Diesel	10.21	

Source: The Climate Registry 2022

Helicopter Jet Fuel - 2026	54,609	gallons
Helicopter Jet Fuel - 2027	54,609	gallons
Helicopter Jet Fuel - 2028	54,609	gallons
Total Helicopter Fuel	163,828	gallons

*Helicopter fuel from Federal Office of Civil Aviation (FOCA). n.d. Guidance on Determination of Helicopter Emissions

Total Petroleum 1,578,859 gallons

APPENDIX B

Noise Technical Analysis

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 0
grnd abs? 0

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
1	Grading (Access Road Rehabilitation)	Tractor	1	40	84	150	0		74.4	8	480	70
		grader	1	40	85	200	0		72.9	8	480	69
		dozer	1	40	82	250	0		68.0	8	480	64
		front end loader	1	40	79	300	0		63.4	8	480	59
		grader	1	40	85	850	0		60.3	8	480	56
		dozer	1	40	82	900	0		56.8	8	480	53
		backhoe	1	40	78	950	0		52.4	8	480	48
		dozer	1	40	82	1000	0		55.9	8	480	52
		grader	1	40	85	1050	0		58.5	8	480	55
							Total Aggregate Noise Exposure from Grading (Access Road Rehabilitation) Phase					**73.7**
2	Grading (Laydown/Staging/Site Grading)	excavator	1	40	81	150	0		71.4	8	480	67
		grader	1	40	85	200	0		72.9	8	480	69
		dozer	1	40	82	250	0		68.0	8	480	64
		front end loader	1	40	79	300	0		63.4	8	480	59
		backhoe	1	40	78	850	0		53.3	8	480	49
		excavator	1	40	81	900	0		55.8	8	480	52
		scraper	1	40	84	950	0		58.4	8	480	54
		excavator	1	40	81	1000	0		54.9	8	480	51
		grader	1	40	85	1550	0		55.1	8	480	51
		front end loader	1	40	79	1600	0		48.8	8	480	45
		dozer	1	40	82	1650	0		51.6	8	480	48
		tractor	1	40	84	1700	0		53.3	8	480	49
		excavator	1	40	81	2250	0		47.9	8	480	44
		scraper	1	40	84	2300	0		50.7	8	480	47
		front end loader	1	40	79	2350	0		45.5	8	480	42
		excavator	1	40	81	2400	0		47.3	8	480	43
							Total Aggregate Noise Exposure from Grading (Laydown/Staging/Site Grading) Phase					**72.5**
3	Construction (Line 1)	crane	1	16	81	150	0		71.4	8	480	63
		man lift	1	20	75	200	0		62.9	8	480	56
		all other equipment > 5 HP	1	50	85	250	0		71.0	8	480	68
		jackhammer	1	20	85	300	0		69.4	8	480	62
		man lift	1	20	75	200	0		62.9	8	480	56
		crane	1	16	81	850	0		56.3	8	480	48
		man lift	1	20	75	900	0		49.8	8	480	43
		all other equipment > 5 HP	1	50	85	950	0		59.4	8	480	56
		auger drill rig	1	20	84	1000	0		57.9	8	480	51
		man lift	1	20	75	900	0		49.8	8	480	43
		crane	1	16	81	1550	0		51.1	8	480	43
		man lift	1	20	75	1600	0		44.8	8	480	38
		all other equipment > 5 HP	1	50	85	1650	0		54.6	8	480	52
		crane	1	16	81	1700	0		50.3	8	480	42
		man lift	1	20	75	1600	0		44.8	8	480	38
		all other equipment > 5 HP	1	50	85	2250	0		51.9	8	480	49
		jackhammer	1	20	85	2300	0		51.7	8	480	45
		man lift	1	20	75	2350	0		41.5	8	480	35
		crane	1	16	81	2400	0		47.3	8	480	39
		man lift	1	20	75	2300	0		41.7	8	480	35
		all other equipment > 5 HP	1	50	85	2950	0		49.5	8	480	47
		auger drill rig	1	20	84	3000	0		48.4	8	480	41
		man lift	1	20	75	3050	0		39.2	8	480	32
		crane	1	16	81	3100	0		45.1	8	480	37

		man lift	1	20	75	3000	0		39.4	8	480	32
		all other equipment > 5 HP	1	50	85	3650	0		47.7	8	480	45
		crane	1	16	81	3700	0		43.6	8	480	36
		man lift	1	20	75	3750	0		37.4	8	480	30
		all other equipment > 5 HP	1	50	85	3800	0		47.3	8	480	44
		jackhammer	1	20	85	3700	0		47.6	8	480	41
		man lift	1	20	75	4350	0		36.1	8	480	29
		crane	1	16	81	4400	0		42.0	8	480	34
		man lift	1	20	75	4450	0		35.9	8	480	29
		all other equipment > 5 HP	1	50	85	4500	0		45.9	8	480	43
		auger drill rig	1	20	84	4400	0		45.0	8	480	38
		man lift	1	20	75	5050	0		34.8	8	480	28
		crane	1	16	81	5100	0		40.8	8	480	33
		man lift	1	20	75	5150	0		34.7	8	480	28
		all other equipment > 5 HP	1	50	85	5200	0		44.6	8	480	42
		crane	1	16	81	5100	0		40.8	8	480	33
		auger drill rig	1	20	84	5750	0		42.7	8	480	36
		crane	1	16	81	5800	0		39.6	8	480	32
		man lift	1	20	75	5850	0		33.6	8	480	27
		all other equipment > 5 HP	1	50	85	5900	0		43.5	8	480	40
		backhoe	1	40	78	5800	0		36.6	8	480	33
		crane	1	16	81	6000	0		39.4	8	480	31
								Total Aggregate Noise Exposure from Construction (Line 1) Phase				**70.8**
4	Construction (Line 2)	crane	1	16	81	400	0		62.9	8	480	55
		man lift	1	20	75	450	0		55.9	8	480	49
		all other equipment > 5 HP	1	50	85	500	0		64.9	8	480	62
		jackhammer	1	20	85	550	0		64.1	8	480	57
		man lift	1	20	75	450	0		55.9	8	480	49
		crane	1	16	81	1300	0		52.6	8	480	45
		man lift	1	20	75	1350	0		46.3	8	480	39
		all other equipment > 5 HP	1	50	85	1400	0		56.0	8	480	53
		auger drill rig	1	20	84	1450	0		54.7	8	480	48
		man lift	1	20	75	1350	0		46.3	8	480	39
		crane	1	16	81	2200	0		48.1	8	480	40
		man lift	1	20	75	2250	0		41.9	8	480	35
		all other equipment > 5 HP	1	50	85	2300	0		51.7	8	480	49
		crane	1	16	81	2350	0		47.5	8	480	40
		man lift	1	20	75	2250	0		41.9	8	480	35
		all other equipment > 5 HP	1	50	85	3100	0		49.1	8	480	46
		jackhammer	1	20	85	3150	0		48.9	8	480	42
		man lift	1	20	75	3200	0		38.8	8	480	32
		crane	1	16	81	3250	0		44.7	8	480	37
		man lift	1	20	75	3150	0		38.9	8	480	32
		all other equipment > 5 HP	1	50	85	4000	0		46.9	8	480	44
		auger drill rig	1	20	84	4050	0		45.8	8	480	39
		man lift	1	20	75	4100	0		36.7	8	480	30
		crane	1	16	81	4150	0		42.6	8	480	35
		man lift	1	20	75	4050	0		36.8	8	480	30
		all other equipment > 5 HP	1	50	85	4900	0		45.1	8	480	42
		crane	1	16	81	4950	0		41.0	8	480	33
		man lift	1	20	75	5000	0		34.9	8	480	28
		all other equipment > 5 HP	1	50	85	5050	0		44.8	8	480	42
		jackhammer	1	20	85	4950	0		45.0	8	480	38
		man lift	1	20	75	5800	0		33.6	8	480	27
		crane	1	16	81	5850	0		39.6	8	480	32
		man lift	1	20	75	5900	0		33.5	8	480	27
		all other equipment > 5 HP	1	50	85	5950	0		43.4	8	480	40
		auger drill rig	1	20	84	5850	0		42.6	8	480	36
		man lift	1	20	75	6700	0		32.4	8	480	25
		crane	1	16	81	6750	0		38.3	8	480	30

		man lift	1	20	75	6800	0		32.3	8	480	25
		all other equipment > 5 HP	1	50	85	6850	0		42.2	8	480	39
		crane	1	16	81	6750	0		38.3	8	480	30
		auger drill rig	1	20	84	7600	0		40.3	8	480	33
		crane	1	16	81	7650	0		37.2	8	480	29
		man lift	1	20	75	7700	0		31.2	8	480	24
		all other equipment > 5 HP	1	50	85	7750	0		41.1	8	480	38
		backhoe	1	40	78	7650	0		34.2	8	480	30
		crane	1	16	81	8500	0		36.3	8	480	28
											Total Aggregate Noise Exposure from Construction (Line 2) Phase	**64.9**
5	Grading (Line 1)	front end loader	1	40	79	150	0		69.4	7	420	65
		grader	1	40	85	200	0		72.9	7	420	68
		dozer	1	40	82	250	0		68.0	8	480	64
		tractor	1	40	84	300	0		68.4	8	480	64
		dozer	1	40	82	950	0		56.4	8	480	52
		grader	1	40	85	1000	0		58.9	7	420	54
		backhoe	1	40	78	1050	0		51.5	7	420	47
		grader	1	40	85	1100	0		58.1	8	480	54
		dozer	1	40	82	1750	0		51.1	8	480	47
											Total Aggregate Noise Exposure from Grading (Line 1) Phase	**72.0**
6	Grading (Line 2)	front end loader	1	40	79	400	0		60.9	7	420	56
		grader	1	40	85	450	0		65.9	7	420	61
		dozer	1	40	82	500	0		61.9	8	480	58
		tractor	1	40	84	550	0		63.1	8	480	59
		front end loader	1	40	79	900	0		53.8	8	480	50
		grader	1	40	85	900	0		59.8	7	420	55
		backhoe	1	40	78	900	0		52.8	7	420	48
		tractor	1	40	84	900	0		58.8	8	480	55
		dozer	1	40	82	900	0		56.8	8	480	53
											Total Aggregate Noise Exposure from Grading (Line 2) Phase	**66.2**

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 0
grnd abs? 0

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
1	Grading (Access Road Rehabilitation)	Tractor	1	40	84	600	0		62.4	8	480	58
		grader	1	40	85	650	0		62.7	8	480	59
		dozer	1	40	82	700	0		59.0	8	480	55
		front end loader	1	40	79	750	0		55.4	8	480	51
		grader	1	40	85	1300	0		56.6	8	480	53
		dozer	1	40	82	1350	0		53.3	8	480	49
		backhoe	1	40	78	1400	0		49.0	8	480	45
		dozer	1	40	82	1450	0		52.7	8	480	49
		grader	1	40	85	2000	0		52.9	8	480	49
							Total Aggregate Noise Exposure from Grading (Access Road Rehabilitation) Phase					**63.7**
2	Grading (Laydown/Staging/Site Grading)	excavator	1	40	81	600	0		59.4	8	480	55
		grader	1	40	85	650	0		62.7	8	480	59
		dozer	1	40	82	700	0		59.0	8	480	55
		front end loader	1	40	79	750	0		55.4	8	480	51
		backhoe	1	40	78	800	0		53.9	8	480	50
		excavator	1	40	81	1300	0		52.6	8	480	49
		scraper	1	40	84	1350	0		55.3	8	480	51
		excavator	1	40	81	1400	0		52.0	8	480	48
		grader	1	40	85	1450	0		55.7	8	480	52
		front end loader	1	40	79	1500	0		49.4	8	480	45
		dozer	1	40	82	2000	0		49.9	8	480	46
		tractor	1	40	84	2050	0		51.7	8	480	48
		excavator	1	40	81	2100	0		48.5	8	480	44
		scraper	1	40	84	2150	0		51.3	8	480	47
		front end loader	1	40	79	2200	0		46.1	8	480	42
		excavator	1	40	81	2700	0		46.3	8	480	42
							Total Aggregate Noise Exposure from Grading (Laydown/Staging/Site Grading) Phase					**63.6**
3	Construction (Line 1)	crane	1	16	81	600	0		59.4	8	480	51
		man lift	1	20	75	650	0		52.7	8	480	46
		all other equipment > 5 HP	1	50	85	700	0		62.0	8	480	59
		jackhammer	1	20	85	750	0		61.4	8	480	54
		man lift	1	20	75	1300	0		46.6	8	480	40
		crane	1	16	81	1350	0		52.3	8	480	44
		man lift	1	20	75	1400	0		46.0	8	480	39
		all other equipment > 5 HP	1	50	85	1450	0		55.7	8	480	53
		auger drill rig	1	20	84	2000	0		51.9	8	480	45
		man lift	1	20	75	2050	0		42.7	8	480	36
		crane	1	16	81	2100	0		48.5	8	480	41
		man lift	1	20	75	2150	0		42.3	8	480	35
		all other equipment > 5 HP	1	50	85	2700	0		50.3	8	480	47
		crane	1	16	81	2750	0		46.1	8	480	38
		man lift	1	20	75	2800	0		40.0	8	480	33
		all other equipment > 5 HP	1	50	85	2850	0		49.8	8	480	47
		jackhammer	1	20	85	3400	0		48.3	8	480	41
		man lift	1	20	75	3450	0		38.2	8	480	31
		crane	1	16	81	3500	0		44.0	8	480	36
		man lift	1	20	75	3550	0		37.9	8	480	31
		all other equipment > 5 HP	1	50	85	4100	0		46.7	8	480	44
		auger drill rig	1	20	84	4150	0		45.6	8	480	39
		man lift	1	20	75	4200	0		36.5	8	480	29
		crane	1	16	81	4250	0		42.3	8	480	34

		man lift	1	20	75	4800	0		35.3	8	480	28
		all other equipment > 5 HP	1	50	85	4850	0		45.2	8	480	42
		crane	1	16	81	4900	0		41.1	8	480	33
		man lift	1	20	75	4950	0		35.0	8	480	28
		all other equipment > 5 HP	1	50	85	5500	0		44.1	8	480	41
		jackhammer	1	20	85	5550	0		44.0	8	480	37
		man lift	1	20	75	5600	0		34.0	8	480	27
		crane	1	16	81	5650	0		39.9	8	480	32
		man lift	1	20	75	6200	0		33.1	8	480	26
		all other equipment > 5 HP	1	50	85	6250	0		43.0	8	480	40
		auger drill rig	1	20	84	6300	0		41.9	8	480	35
		man lift	1	20	75	6350	0		32.9	8	480	26
		crane	1	16	81	6900	0		38.1	8	480	30
		man lift	1	20	75	6950	0		32.1	8	480	25
		all other equipment > 5 HP	1	50	85	7000	0		42.0	8	480	39
		crane	1	16	81	7050	0		38.0	8	480	30
		auger drill rig	1	20	84	7600	0		40.3	8	480	33
		crane	1	16	81	7650	0		37.2	8	480	29
		man lift	1	20	75	7700	0		31.2	8	480	24
		all other equipment > 5 HP	1	50	85	7750	0		41.1	8	480	38
		backhoe	1	40	78	8300	0		33.5	8	480	30
		crane	1	16	81	8350	0		36.5	8	480	29
								Total Aggregate Noise Exposure from Construction (Line 1) Phase				**62.5**
4	Construction (Line 2)	crane	1	16	81	850	0		56.3	8	480	48
		man lift	1	20	75	900	0		49.8	8	480	43
		all other equipment > 5 HP	1	50	85	950	0		59.4	8	480	56
		jackhammer	1	20	85	1000	0		58.9	8	480	52
		man lift	1	20	75	1550	0		45.1	8	480	38
		crane	1	16	81	1600	0		50.8	8	480	43
		man lift	1	20	75	1650	0		44.6	8	480	38
		all other equipment > 5 HP	1	50	85	1700	0		54.3	8	480	51
		auger drill rig	1	20	84	2250	0		50.9	8	480	44
		man lift	1	20	75	2300	0		41.7	8	480	35
		crane	1	16	81	2350	0		47.5	8	480	40
		man lift	1	20	75	2400	0		41.3	8	480	34
		all other equipment > 5 HP	1	50	85	2950	0		49.5	8	480	47
		crane	1	16	81	3000	0		45.4	8	480	37
		man lift	1	20	75	3050	0		39.2	8	480	32
		all other equipment > 5 HP	1	50	85	3100	0		49.1	8	480	46
		jackhammer	1	20	85	3650	0		47.7	8	480	41
		man lift	1	20	75	3700	0		37.6	8	480	31
		crane	1	16	81	3750	0		43.4	8	480	35
		man lift	1	20	75	3800	0		37.3	8	480	30
		all other equipment > 5 HP	1	50	85	4350	0		46.1	8	480	43
		auger drill rig	1	20	84	4400	0		45.0	8	480	38
		man lift	1	20	75	4450	0		35.9	8	480	29
		crane	1	16	81	4500	0		41.9	8	480	34
		man lift	1	20	75	5050	0		34.8	8	480	28
		all other equipment > 5 HP	1	50	85	5100	0		44.8	8	480	42
		crane	1	16	81	5150	0		40.7	8	480	33
		man lift	1	20	75	5200	0		34.6	8	480	28
		all other equipment > 5 HP	1	50	85	5750	0		43.7	8	480	41
		jackhammer	1	20	85	5800	0		43.6	8	480	37
		man lift	1	20	75	5850	0		33.6	8	480	27
		crane	1	16	81	5900	0		39.5	8	480	32
		man lift	1	20	75	6450	0		32.7	8	480	26
		all other equipment > 5 HP	1	50	85	6500	0		42.7	8	480	40
		auger drill rig	1	20	84	6550	0		41.6	8	480	35
		man lift	1	20	75	6600	0		32.5	8	480	26
		crane	1	16	81	7150	0		37.8	8	480	30

		man lift	1	20	75	7200	0		31.8	8	480	25
		all other equipment > 5 HP	1	50	85	7250	0		41.7	8	480	39
		crane	1	16	81	7300	0		37.6	8	480	30
		auger drill rig	1	20	84	7850	0		40.0	8	480	33
		crane	1	16	81	7900	0		37.0	8	480	29
		man lift	1	20	75	7950	0		30.9	8	480	24
		all other equipment > 5 HP	1	50	85	8000	0		40.9	8	480	38
		backhoe	1	40	78	8550	0		33.3	8	480	29
		crane	1	16	81	8600	0		36.2	8	480	28
											Total Aggregate Noise Exposure from Construction (Line 2) Phase	**60.4**
5	Grading (Line 1)	front end loader	1	40	79	600	0		57.4	7	420	53
		grader	1	40	85	650	0		62.7	7	420	58
		dozer	1	40	82	700	0		59.0	8	480	55
		tractor	1	40	84	750	0		60.4	8	480	56
		dozer	1	40	82	1300	0		53.6	8	480	50
		grader	1	40	85	1350	0		56.3	7	420	52
		backhoe	1	40	78	1400	0		49.0	7	420	44
		grader	1	40	85	1450	0		55.7	8	480	52
		dozer	1	40	82	2000	0		49.9	8	480	46
											Total Aggregate Noise Exposure from Grading (Line 1) Phase	**63.1**
6	Grading (Line 2)	front end loader	1	40	79	850	0		54.3	7	420	50
		grader	1	40	85	900	0		59.8	7	420	55
		dozer	1	40	82	950	0		56.4	8	480	52
		tractor	1	40	84	1000	0		57.9	8	480	54
		front end loader	1	40	79	1550	0		49.1	8	480	45
		grader	1	40	85	1600	0		54.8	7	420	50
		backhoe	1	40	78	1650	0		47.6	7	420	43
		tractor	1	40	84	1700	0		53.3	8	480	49
		dozer	1	40	82	2250	0		48.9	8	480	45
											Total Aggregate Noise Exposure from Grading (Line 2) Phase	**60.5**

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 0
grnd abs? 0

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
1	Grading (Access Road Rehabilitation)	Tractor	1	40	84	800	0		59.9	8	480	56
		grader	1	40	85	850	0		60.3	8	480	56
		dozer	1	40	82	900	0		56.8	8	480	53
		front end loader	1	40	79	950	0		53.4	8	480	49
		grader	1	40	85	1600	0		54.8	8	480	51
		dozer	1	40	82	1650	0		51.6	8	480	48
		backhoe	1	40	78	1700	0		47.3	8	480	43
		dozer	1	40	82	1750	0		51.1	8	480	47
		grader	1	40	85	2400	0		51.3	8	480	47
											Total Aggregate Noise Exposure from Grading (Access Road Rehabilitation) Phase	**61.5**
2	Grading (Laydown/Staging/Site Grading)	excavator	1	40	81	800	0		56.9	8	480	53
		grader	1	40	85	850	0		60.3	8	480	56
		dozer	1	40	82	900	0		56.8	8	480	53
		front end loader	1	40	79	950	0		53.4	8	480	49
		backhoe	1	40	78	1000	0		51.9	8	480	48
		excavator	1	40	81	1650	0		50.6	8	480	47
		scraper	1	40	84	1700	0		53.3	8	480	49
		excavator	1	40	81	1750	0		50.1	8	480	46
		grader	1	40	85	1800	0		53.8	8	480	50
		front end loader	1	40	79	2450	0		45.1	8	480	41
		dozer	1	40	82	2500	0		48.0	8	480	44
		tractor	1	40	84	2550	0		49.8	8	480	46
		excavator	1	40	81	2600	0		46.6	8	480	43
		scraper	1	40	84	3250	0		47.7	8	480	44
		front end loader	1	40	79	3300	0		42.5	8	480	39
		excavator	1	40	81	3350	0		44.4	8	480	40
											Total Aggregate Noise Exposure from Grading (Laydown/Staging/Site Grading) Phase	**61.4**
3	Construction (Line 1)	crane	1	16	81	800	0		56.9	8	480	49
		man lift	1	20	75	850	0		50.3	8	480	43
		all other equipment > 5 HP	1	50	85	900	0		59.8	8	480	57
		jackhammer	1	20	85	950	0		59.4	8	480	52
		man lift	1	20	75	1600	0		44.8	8	480	38
		crane	1	16	81	1650	0		50.6	8	480	43
		man lift	1	20	75	1700	0		44.3	8	480	37
		all other equipment > 5 HP	1	50	85	1750	0		54.1	8	480	51
		auger drill rig	1	20	84	2400	0		50.3	8	480	43
		man lift	1	20	75	2450	0		41.1	8	480	34
		crane	1	16	81	2500	0		47.0	8	480	39
		man lift	1	20	75	2550	0		40.8	8	480	34
		all other equipment > 5 HP	1	50	85	3200	0		48.8	8	480	46
		crane	1	16	81	3250	0		44.7	8	480	37
		man lift	1	20	75	3300	0		38.5	8	480	32
		all other equipment > 5 HP	1	50	85	3350	0		48.4	8	480	45
		jackhammer	1	20	85	4000	0		46.9	8	480	40
		man lift	1	20	75	4050	0		36.8	8	480	30
		crane	1	16	81	4100	0		42.7	8	480	35
		man lift	1	20	75	4150	0		36.6	8	480	30
		all other equipment > 5 HP	1	50	85	4800	0		45.3	8	480	42
		auger drill rig	1	20	84	4850	0		44.2	8	480	37
		man lift	1	20	75	4900	0		35.1	8	480	28
		crane	1	16	81	4950	0		41.0	8	480	33

		man lift	1	20	75	5600	0		34.0	8	480	27
		all other equipment > 5 HP	1	50	85	5650	0		43.9	8	480	41
		crane	1	16	81	5700	0		39.8	8	480	32
		man lift	1	20	75	5750	0		33.7	8	480	27
		all other equipment > 5 HP	1	50	85	6400	0		42.8	8	480	40
		jackhammer	1	20	85	6450	0		42.7	8	480	36
		man lift	1	20	75	6500	0		32.7	8	480	26
		crane	1	16	81	6550	0		38.6	8	480	31
		man lift	1	20	75	7200	0		31.8	8	480	25
		all other equipment > 5 HP	1	50	85	7250	0		41.7	8	480	39
		auger drill rig	1	20	84	7300	0		40.6	8	480	34
		man lift	1	20	75	7350	0		31.6	8	480	25
		crane	1	16	81	8000	0		36.9	8	480	29
		man lift	1	20	75	8050	0		30.8	8	480	24
		all other equipment > 5 HP	1	50	85	8100	0		40.7	8	480	38
		crane	1	16	81	8150	0		36.7	8	480	29
		auger drill rig	1	20	84	8800	0		39.0	8	480	32
		crane	1	16	81	8850	0		36.0	8	480	28
		man lift	1	20	75	8900	0		29.9	8	480	23
		all other equipment > 5 HP	1	50	85	8950	0		39.9	8	480	37
		backhoe	1	40	78	9600	0		32.3	8	480	28
		crane	1	16	81	9650	0		35.2	8	480	27
									Total Aggregate Noise Exposure from Construction (Line 1) Phase			**60.5**
4	Construction (Line 2)	crane	1	16	81	1050	0		54.5	8	480	47
		man lift	1	20	75	1100	0		48.1	8	480	41
		all other equipment > 5 HP	1	50	85	1150	0		57.7	8	480	55
		jackhammer	1	20	85	1200	0		57.3	8	480	50
		man lift	1	20	75	1100	0		48.1	8	480	41
		crane	1	16	81	1850	0		49.6	8	480	42
		man lift	1	20	75	1900	0		43.3	8	480	36
		all other equipment > 5 HP	1	50	85	1950	0		53.1	8	480	50
		auger drill rig	1	20	84	2000	0		51.9	8	480	45
		man lift	1	20	75	1900	0		43.3	8	480	36
		crane	1	16	81	2650	0		46.5	8	480	38
		man lift	1	20	75	2700	0		40.3	8	480	33
		all other equipment > 5 HP	1	50	85	2750	0		50.1	8	480	47
		crane	1	16	81	2800	0		46.0	8	480	38
		man lift	1	20	75	2700	0		40.3	8	480	33
		all other equipment > 5 HP	1	50	85	3450	0		48.2	8	480	45
		jackhammer	1	20	85	3500	0		48.0	8	480	41
		man lift	1	20	75	3550	0		37.9	8	480	31
		crane	1	16	81	3600	0		43.8	8	480	36
		man lift	1	20	75	3500	0		38.0	8	480	31
		all other equipment > 5 HP	1	50	85	4250	0		46.3	8	480	43
		auger drill rig	1	20	84	4300	0		45.2	8	480	38
		man lift	1	20	75	4350	0		36.1	8	480	29
		crane	1	16	81	4400	0		42.0	8	480	34
		man lift	1	20	75	4300	0		36.2	8	480	29
		all other equipment > 5 HP	1	50	85	5050	0		44.8	8	480	42
		crane	1	16	81	5100	0		40.8	8	480	33
		man lift	1	20	75	5150	0		34.7	8	480	28
		all other equipment > 5 HP	1	50	85	5200	0		44.6	8	480	42
		jackhammer	1	20	85	5100	0		44.8	8	480	38
		man lift	1	20	75	5850	0		33.6	8	480	27
		crane	1	16	81	5900	0		39.5	8	480	32
		man lift	1	20	75	5950	0		33.4	8	480	26
		all other equipment > 5 HP	1	50	85	6000	0		43.4	8	480	40
		auger drill rig	1	20	84	5900	0		42.5	8	480	36
		man lift	1	20	75	6650	0		32.5	8	480	25
		crane	1	16	81	6700	0		38.4	8	480	30

		man lift	1	20	75	6750	0		32.3	8	480	25
		all other equipment > 5 HP	1	50	85	6800	0		42.3	8	480	39
		crane	1	16	81	6700	0		38.4	8	480	30
		auger drill rig	1	20	84	7450	0		40.5	8	480	33
		crane	1	16	81	7500	0		37.4	8	480	29
		man lift	1	20	75	7550	0		31.4	8	480	24
		all other equipment > 5 HP	1	50	85	7600	0		41.3	8	480	38
		backhoe	1	40	78	7500	0		34.4	8	480	30
		crane	1	16	81	8250	0		36.6	8	480	29
								Total Aggregate Noise Exposure from Construction (Line 2) Phase				**59.4**
5	Grading (Line 1)	front end loader	1	40	79	800	0		54.9	7	420	50
		grader	1	40	85	850	0		60.3	7	420	56
		dozer	1	40	82	900	0		56.8	8	480	53
		tractor	1	40	84	950	0		58.4	8	480	54
		dozer	1	40	82	1600	0		51.8	8	480	48
		grader	1	40	85	1650	0		54.6	7	420	50
		backhoe	1	40	78	1700	0		47.3	7	420	43
		grader	1	40	85	1750	0		54.1	8	480	50
		dozer	1	40	82	2400	0		48.3	8	480	44
								Total Aggregate Noise Exposure from Grading (Line 1) Phase				**61.0**
6	Grading (Line 2)	front end loader	1	40	79	1050	0		52.5	7	420	48
		grader	1	40	85	1100	0		58.1	7	420	54
		dozer	1	40	82	1150	0		54.7	8	480	51
		tractor	1	40	84	1200	0		56.3	8	480	52
		front end loader	1	40	79	1850	0		47.6	8	480	44
		grader	1	40	85	1900	0		53.3	7	420	49
		backhoe	1	40	78	1950	0		46.1	7	420	42
		tractor	1	40	84	2000	0		51.9	8	480	48
		dozer	1	40	82	2650	0		47.5	8	480	43
								Total Aggregate Noise Exposure from Grading (Line 2) Phase				**58.9**

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 0
grnd abs? 0

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
1	Grading (Access Road Rehabilitation)	Tractor	1	40	84	900	0		58.8	8	480	55
		grader	1	40	85	950	0		59.4	8	480	55
		dozer	1	40	82	1000	0		55.9	8	480	52
		front end loader	1	40	79	1050	0		52.5	8	480	49
		grader	1	40	85	1700	0		54.3	8	480	50
		dozer	1	40	82	1750	0		51.1	8	480	47
		backhoe	1	40	78	1800	0		46.8	8	480	43
		dozer	1	40	82	1850	0		50.6	8	480	47
		grader	1	40	85	2500	0		51.0	8	480	47
											Total Aggregate Noise Exposure from Grading (Access Road Rehabilitation) Phase	**60.6**
2	Grading (Laydown/Staging/Site Grading)	excavator	1	40	81	900	0		55.8	8	480	52
		grader	1	40	85	950	0		59.4	8	480	55
		dozer	1	40	82	1000	0		55.9	8	480	52
		front end loader	1	40	79	1050	0		52.5	8	480	49
		backhoe	1	40	78	925	0		52.6	8	480	49
		excavator	1	40	81	1700	0		50.3	8	480	46
		scraper	1	40	84	1750	0		53.1	8	480	49
		excavator	1	40	81	1800	0		49.8	8	480	46
		grader	1	40	85	1850	0		53.6	8	480	50
		front end loader	1	40	79	1725	0		48.2	8	480	44
		dozer	1	40	82	2500	0		48.0	8	480	44
		tractor	1	40	84	2550	0		49.8	8	480	46
		excavator	1	40	81	2600	0		46.6	8	480	43
		scraper	1	40	84	2650	0		49.5	8	480	45
		front end loader	1	40	79	2525	0		44.9	8	480	41
		excavator	1	40	81	3300	0		44.5	8	480	41
											Total Aggregate Noise Exposure from Grading (Laydown/Staging/Site Grading) Phase	**60.9**
3	Construction (Line 1)	crane	1	16	81	1150	0		53.7	8	480	46
		man lift	1	20	75	1200	0		47.3	8	480	40
		all other equipment > 5 HP	1	50	85	1250	0		57.0	8	480	54
		jackhammer	1	20	85	1300	0		56.6	8	480	50
		man lift	1	20	75	1200	0		47.3	8	480	40
		crane	1	16	81	1950	0		49.1	8	480	41
		man lift	1	20	75	2000	0		42.9	8	480	36
		all other equipment > 5 HP	1	50	85	2050	0		52.7	8	480	50
		auger drill rig	1	20	84	2100	0		51.5	8	480	44
		man lift	1	20	75	2000	0		42.9	8	480	36
		crane	1	16	81	2750	0		46.1	8	480	38
		man lift	1	20	75	2800	0		40.0	8	480	33
		all other equipment > 5 HP	1	50	85	2850	0		49.8	8	480	47
		crane	1	16	81	2900	0		45.7	8	480	38
		man lift	1	20	75	2800	0		40.0	8	480	33
		all other equipment > 5 HP	1	50	85	3550	0		47.9	8	480	45
		jackhammer	1	20	85	3600	0		47.8	8	480	41
		man lift	1	20	75	3650	0		37.7	8	480	31
		crane	1	16	81	3700	0		43.6	8	480	36
		man lift	1	20	75	3600	0		37.8	8	480	31
		all other equipment > 5 HP	1	50	85	4350	0		46.1	8	480	43
		auger drill rig	1	20	84	4400	0		45.0	8	480	38
		man lift	1	20	75	4450	0		35.9	8	480	29
		crane	1	16	81	4500	0		41.9	8	480	34

		man lift	1	20	75	4400	0		36.0	8	480	29
		all other equipment > 5 HP	1	50	85	5150	0		44.7	8	480	42
		crane	1	16	81	5200	0		40.6	8	480	33
		man lift	1	20	75	5250	0		34.5	8	480	28
		all other equipment > 5 HP	1	50	85	5300	0		44.4	8	480	41
		jackhammer	1	20	85	5200	0		44.6	8	480	38
		man lift	1	20	75	5950	0		33.4	8	480	26
		crane	1	16	81	6000	0		39.4	8	480	31
		man lift	1	20	75	6050	0		33.3	8	480	26
		all other equipment > 5 HP	1	50	85	6100	0		43.2	8	480	40
		auger drill rig	1	20	84	6000	0		42.4	8	480	35
		man lift	1	20	75	6750	0		32.3	8	480	25
		crane	1	16	81	6800	0		38.3	8	480	30
		man lift	1	20	75	6850	0		32.2	8	480	25
		all other equipment > 5 HP	1	50	85	6900	0		42.1	8	480	39
		crane	1	16	81	6800	0		38.3	8	480	30
		auger drill rig	1	20	84	7550	0		40.4	8	480	33
		crane	1	16	81	7600	0		37.3	8	480	29
		man lift	1	20	75	7650	0		31.2	8	480	24
		all other equipment > 5 HP	1	50	85	7700	0		41.2	8	480	38
		backhoe	1	40	78	7600	0		34.3	8	480	30
		crane	1	16	81	8350	0		36.5	8	480	29
								Total Aggregate Noise Exposure from Construction (Line 1) Phase				**58.8**
4	Construction (Line 2)	crane	1	16	81	900	0		55.8	8	480	48
		man lift	1	20	75	950	0		49.4	8	480	42
		all other equipment > 5 HP	1	50	85	1000	0		58.9	8	480	56
		jackhammer	1	20	85	1050	0		58.5	8	480	52
		man lift	1	20	75	800	0		50.9	8	480	44
		crane	1	16	81	1700	0		50.3	8	480	42
		man lift	1	20	75	1750	0		44.1	8	480	37
		all other equipment > 5 HP	1	50	85	1800	0		53.8	8	480	51
		auger drill rig	1	20	84	1850	0		52.6	8	480	46
		man lift	1	20	75	1600	0		44.8	8	480	38
		crane	1	16	81	2500	0		47.0	8	480	39
		man lift	1	20	75	2550	0		40.8	8	480	34
		all other equipment > 5 HP	1	50	85	2600	0		50.6	8	480	48
		crane	1	16	81	2650	0		46.5	8	480	38
		man lift	1	20	75	2400	0		41.3	8	480	34
		all other equipment > 5 HP	1	50	85	3300	0		48.5	8	480	46
		jackhammer	1	20	85	3350	0		48.4	8	480	41
		man lift	1	20	75	3400	0		38.3	8	480	31
		crane	1	16	81	3450	0		44.2	8	480	36
		man lift	1	20	75	3200	0		38.8	8	480	32
		all other equipment > 5 HP	1	50	85	4100	0		46.7	8	480	44
		auger drill rig	1	20	84	4150	0		45.6	8	480	39
		man lift	1	20	75	4200	0		36.5	8	480	29
		crane	1	16	81	4250	0		42.3	8	480	34
		man lift	1	20	75	4000	0		36.9	8	480	30
		all other equipment > 5 HP	1	50	85	4900	0		45.1	8	480	42
		crane	1	16	81	4950	0		41.0	8	480	33
		man lift	1	20	75	5000	0		34.9	8	480	28
		all other equipment > 5 HP	1	50	85	5050	0		44.8	8	480	42
		jackhammer	1	20	85	4800	0		45.3	8	480	38
		man lift	1	20	75	5700	0		33.8	8	480	27
		crane	1	16	81	5750	0		39.7	8	480	32
		man lift	1	20	75	5800	0		33.6	8	480	27
		all other equipment > 5 HP	1	50	85	5850	0		43.6	8	480	41
		auger drill rig	1	20	84	5600	0		43.0	8	480	36
		man lift	1	20	75	6500	0		32.7	8	480	26
		crane	1	16	81	6550	0		38.6	8	480	31

		man lift	1	20	75	6600	0		32.5	8	480	26
		all other equipment > 5 HP	1	50	85	6650	0		42.5	8	480	39
		crane	1	16	81	6400	0		38.8	8	480	31
		auger drill rig	1	20	84	7300	0		40.6	8	480	34
		crane	1	16	81	7350	0		37.6	8	480	30
		man lift	1	20	75	7400	0		31.5	8	480	25
		all other equipment > 5 HP	1	50	85	7450	0		41.5	8	480	38
		backhoe	1	40	78	7200	0		34.8	8	480	31
		crane	1	16	81	8100	0		36.7	8	480	29
											Total Aggregate Noise Exposure from Construction (Line 2) Phase	**60.3**
5	Grading (Line 1)	front end loader	1	40	79	1150	0		51.7	7	420	47
		grader	1	40	85	1200	0		57.3	7	420	53
		dozer	1	40	82	1250	0		54.0	8	480	50
		tractor	1	40	84	1300	0		55.6	8	480	52
		dozer	1	40	82	1950	0		50.1	8	480	46
		grader	1	40	85	2000	0		52.9	7	420	48
		backhoe	1	40	78	2050	0		45.7	7	420	41
		grader	1	40	85	2100	0		52.5	8	480	48
		dozer	1	40	82	2750	0		47.1	8	480	43
											Total Aggregate Noise Exposure from Grading (Line 1) Phase	**58.5**
6	Grading (Line 2)	front end loader	1	40	79	900	0		53.8	7	420	49
		grader	1	40	85	950	0		59.4	7	420	55
		dozer	1	40	82	1000	0		55.9	8	480	52
		tractor	1	40	84	1050	0		57.5	8	480	54
		front end loader	1	40	79	1700	0		48.3	8	480	44
		grader	1	40	85	1750	0		54.1	7	420	49
		backhoe	1	40	78	1800	0		46.8	7	420	42
		tractor	1	40	84	1850	0		52.6	8	480	49
		dozer	1	40	82	2500	0		48.0	8	480	44
											Total Aggregate Noise Exposure from Grading (Line 2) Phase	**60.0**

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 0
grnd abs? 0

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
1	Grading (Access Road Rehabilitation)	Tractor	1	40	84	1400	0		55.0	8	480	51
		grader	1	40	85	1450	0		55.7	8	480	52
		dozer	1	40	82	1500	0		52.4	8	480	48
		front end loader	1	40	79	1550	0		49.1	8	480	45
		grader	1	40	85	2200	0		52.1	8	480	48
		dozer	1	40	82	2250	0		48.9	8	480	45
		backhoe	1	40	78	2300	0		44.7	8	480	41
		dozer	1	40	82	2350	0		48.5	8	480	45
		grader	1	40	85	3000	0		49.4	8	480	45
											Total Aggregate Noise Exposure from Grading (Access Road Rehabilitation) Phase	**57.4**
2	Grading (Laydown/Staging/Site Grading)	excavator	1	40	81	1400	0		52.0	8	480	48
		grader	1	40	85	1450	0		55.7	8	480	52
		dozer	1	40	82	1500	0		52.4	8	480	48
		front end loader	1	40	79	1550	0		49.1	8	480	45
		backhoe	1	40	78	1425	0		48.8	8	480	45
		excavator	1	40	81	2250	0		47.9	8	480	44
		scraper	1	40	84	2300	0		50.7	8	480	47
		excavator	1	40	81	2350	0		47.5	8	480	44
		grader	1	40	85	2225	0		52.0	8	480	48
		front end loader	1	40	79	3050	0		43.2	8	480	39
		dozer	1	40	82	3100	0		46.1	8	480	42
		tractor	1	40	84	3150	0		47.9	8	480	44
		excavator	1	40	81	3025	0		45.3	8	480	41
		scraper	1	40	84	3850	0		46.2	8	480	42
		front end loader	1	40	79	3900	0		41.1	8	480	37
		excavator	1	40	81	3950	0		43.0	8	480	39
											Total Aggregate Noise Exposure from Grading (Laydown/Staging/Site Grading) Phase	**57.7**
3	Construction (Line 1)	crane	1	16	81	1400	0		52.0	8	480	44
		man lift	1	20	75	1450	0		45.7	8	480	39
		all other equipment > 5 HP	1	50	85	1500	0		55.4	8	480	52
		jackhammer	1	20	85	1550	0		55.1	8	480	48
		man lift	1	20	75	2200	0		42.1	8	480	35
		crane	1	16	81	2250	0		47.9	8	480	40
		man lift	1	20	75	2300	0		41.7	8	480	35
		all other equipment > 5 HP	1	50	85	2350	0		51.5	8	480	48
		auger drill rig	1	20	84	3000	0		48.4	8	480	41
		man lift	1	20	75	3050	0		39.2	8	480	32
		crane	1	16	81	3100	0		45.1	8	480	37
		man lift	1	20	75	3150	0		38.9	8	480	32
		all other equipment > 5 HP	1	50	85	3800	0		47.3	8	480	44
		crane	1	16	81	3850	0		43.2	8	480	35
		man lift	1	20	75	3900	0		37.1	8	480	30
		all other equipment > 5 HP	1	50	85	3950	0		47.0	8	480	44
		jackhammer	1	20	85	4600	0		45.7	8	480	39
		man lift	1	20	75	4650	0		35.6	8	480	29
		crane	1	16	81	4700	0		41.5	8	480	34
		man lift	1	20	75	4750	0		35.4	8	480	28
		all other equipment > 5 HP	1	50	85	5400	0		44.3	8	480	41
		auger drill rig	1	20	84	5450	0		43.2	8	480	36
		man lift	1	20	75	5500	0		34.1	8	480	27
		crane	1	16	81	5550	0		40.0	8	480	32

		man lift	1	20	75	6200	0		33.1	8	480	26
		all other equipment > 5 HP	1	50	85	6250	0		43.0	8	480	40
		crane	1	16	81	6300	0		38.9	8	480	31
		man lift	1	20	75	6350	0		32.9	8	480	26
		all other equipment > 5 HP	1	50	85	7000	0		42.0	8	480	39
		jackhammer	1	20	85	7050	0		42.0	8	480	35
		man lift	1	20	75	7100	0		31.9	8	480	25
		crane	1	16	81	7150	0		37.8	8	480	30
		man lift	1	20	75	7800	0		31.1	8	480	24
		all other equipment > 5 HP	1	50	85	7850	0		41.0	8	480	38
		auger drill rig	1	20	84	7900	0		40.0	8	480	33
		man lift	1	20	75	7950	0		30.9	8	480	24
		crane	1	16	81	8600	0		36.2	8	480	28
		man lift	1	20	75	8650	0		30.2	8	480	23
		all other equipment > 5 HP	1	50	85	8700	0		40.1	8	480	37
		crane	1	16	81	8750	0		36.1	8	480	28
		auger drill rig	1	20	84	9400	0		38.5	8	480	31
		crane	1	16	81	9450	0		35.4	8	480	27
		man lift	1	20	75	9500	0		29.4	8	480	22
		all other equipment > 5 HP	1	50	85	9550	0		39.3	8	480	36
		backhoe	1	40	78	10200	0		31.7	8	480	28
		crane	1	16	81	10250	0		34.7	8	480	27
									Total Aggregate Noise Exposure from Construction (Line 1) Phase			**57.1**
4	Construction (Line 2)	crane	1	16	81	1650	0		50.6	8	480	43
		man lift	1	20	75	1700	0		44.3	8	480	37
		all other equipment > 5 HP	1	50	85	1750	0		54.1	8	480	51
		jackhammer	1	20	85	1800	0		53.8	8	480	47
		man lift	1	20	75	2450	0		41.1	8	480	34
		crane	1	16	81	2500	0		47.0	8	480	39
		man lift	1	20	75	2550	0		40.8	8	480	34
		all other equipment > 5 HP	1	50	85	2600	0		50.6	8	480	48
		auger drill rig	1	20	84	3250	0		47.7	8	480	41
		man lift	1	20	75	3300	0		38.5	8	480	32
		crane	1	16	81	3350	0		44.4	8	480	36
		man lift	1	20	75	3400	0		38.3	8	480	31
		all other equipment > 5 HP	1	50	85	4050	0		46.8	8	480	44
		crane	1	16	81	4100	0		42.7	8	480	35
		man lift	1	20	75	4150	0		36.6	8	480	30
		all other equipment > 5 HP	1	50	85	4200	0		46.5	8	480	43
		jackhammer	1	20	85	4850	0		45.2	8	480	38
		man lift	1	20	75	4900	0		35.1	8	480	28
		crane	1	16	81	4950	0		41.0	8	480	33
		man lift	1	20	75	5000	0		34.9	8	480	28
		all other equipment > 5 HP	1	50	85	5650	0		43.9	8	480	41
		auger drill rig	1	20	84	5700	0		42.8	8	480	36
		man lift	1	20	75	5750	0		33.7	8	480	27
		crane	1	16	81	5800	0		39.6	8	480	32
		man lift	1	20	75	6450	0		32.7	8	480	26
		all other equipment > 5 HP	1	50	85	6500	0		42.7	8	480	40
		crane	1	16	81	6550	0		38.6	8	480	31
		man lift	1	20	75	6600	0		32.5	8	480	26
		all other equipment > 5 HP	1	50	85	7250	0		41.7	8	480	39
		jackhammer	1	20	85	7300	0		41.6	8	480	35
		man lift	1	20	75	7350	0		31.6	8	480	25
		crane	1	16	81	7400	0		37.5	8	480	30
		man lift	1	20	75	8050	0		30.8	8	480	24
		all other equipment > 5 HP	1	50	85	8100	0		40.7	8	480	38
		auger drill rig	1	20	84	8150	0		39.7	8	480	33
		man lift	1	20	75	8200	0		30.6	8	480	24
		crane	1	16	81	8850	0		36.0	8	480	28

		man lift	1	20	75	8900	0		29.9	8	480	23
		all other equipment > 5 HP	1	50	85	8950	0		39.9	8	480	37
		crane	1	16	81	9000	0		35.8	8	480	28
		auger drill rig	1	20	84	9650	0		38.2	8	480	31
		crane	1	16	81	9700	0		35.2	8	480	27
		man lift	1	20	75	9750	0		29.1	8	480	22
		all other equipment > 5 HP	1	50	85	9800	0		39.1	8	480	36
		backhoe	1	40	78	10450	0		31.5	8	480	28
		crane	1	16	81	10500	0		34.5	8	480	27
											Total Aggregate Noise Exposure from Construction (Line 2) Phase	**56.1**
5	Grading (Line 1)	front end loader	1	40	79	1400	0		50.0	7	420	45
		grader	1	40	85	1450	0		55.7	7	420	51
		dozer	1	40	82	1500	0		52.4	8	480	48
		tractor	1	40	84	1550	0		54.1	8	480	50
		dozer	1	40	82	2200	0		49.1	8	480	45
		grader	1	40	85	2250	0		51.9	7	420	47
		backhoe	1	40	78	2300	0		44.7	7	420	40
		grader	1	40	85	2350	0		51.5	8	480	48
		dozer	1	40	82	3000	0		46.4	8	480	42
											Total Aggregate Noise Exposure from Grading (Line 1) Phase	**57.1**
6	Grading (Line 2)	front end loader	1	40	79	1650	0		48.6	7	420	44
		grader	1	40	85	1700	0		54.3	7	420	50
		dozer	1	40	82	1750	0		51.1	8	480	47
		tractor	1	40	84	1800	0		52.8	8	480	49
		front end loader	1	40	79	2450	0		45.1	8	480	41
		grader	1	40	85	2500	0		51.0	7	420	46
		backhoe	1	40	78	2550	0		43.8	7	420	39
		tractor	1	40	84	2600	0		49.6	8	480	46
		dozer	1	40	82	3250	0		45.7	8	480	42
											Total Aggregate Noise Exposure from Grading (Line 2) Phase	**55.6**

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 0
grnd abs? 0

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
1	Grading (Access Road Rehabilitation)	Tractor	1	40	84	1600	0		53.8	8	480	50
		grader	1	40	85	1650	0		54.6	8	480	51
		dozer	1	40	82	1700	0		51.3	8	480	47
		front end loader	1	40	79	1750	0		48.1	8	480	44
		grader	1	40	85	2400	0		51.3	8	480	47
		dozer	1	40	82	2450	0		48.1	8	480	44
		backhoe	1	40	78	2500	0		44.0	8	480	40
		dozer	1	40	82	2550	0		47.8	8	480	44
		grader	1	40	85	3200	0		48.8	8	480	45
							Total Aggregate Noise Exposure from Grading (Access Road Rehabilitation) Phase					**56.4**
2	Grading (Laydown/Staging/Site Grading)	excavator	1	40	81	1600	0		50.8	8	480	47
		grader	1	40	85	1650	0		54.6	8	480	51
		dozer	1	40	82	1700	0		51.3	8	480	47
		front end loader	1	40	79	1750	0		48.1	8	480	44
		backhoe	1	40	78	1625	0		47.7	8	480	44
		excavator	1	40	81	2450	0		47.1	8	480	43
		scraper	1	40	84	2500	0		50.0	8	480	46
		excavator	1	40	81	2550	0		46.8	8	480	43
		grader	1	40	85	2425	0		51.2	8	480	47
		front end loader	1	40	79	3250	0		42.7	8	480	39
		dozer	1	40	82	3300	0		45.5	8	480	42
		tractor	1	40	84	3350	0		47.4	8	480	43
		excavator	1	40	81	3225	0		44.7	8	480	41
		scraper	1	40	84	4050	0		45.8	8	480	42
		front end loader	1	40	79	4100	0		40.7	8	480	37
		excavator	1	40	81	4150	0		42.6	8	480	39
							Total Aggregate Noise Exposure from Grading (Laydown/Staging/Site Grading) Phase					**56.8**
3	Construction (Line 1)	crane	1	16	81	1600	0		50.8	8	480	43
		man lift	1	20	75	1650	0		44.6	8	480	38
		all other equipment > 5 HP	1	50	85	1700	0		54.3	8	480	51
		jackhammer	1	20	85	1750	0		54.1	8	480	47
		man lift	1	20	75	2400	0		41.3	8	480	34
		crane	1	16	81	2450	0		47.1	8	480	39
		man lift	1	20	75	2500	0		41.0	8	480	34
		all other equipment > 5 HP	1	50	85	2550	0		50.8	8	480	48
		auger drill rig	1	20	84	3200	0		47.8	8	480	41
		man lift	1	20	75	3250	0		38.7	8	480	32
		crane	1	16	81	3300	0		44.5	8	480	37
		man lift	1	20	75	3350	0		38.4	8	480	31
		all other equipment > 5 HP	1	50	85	4000	0		46.9	8	480	44
		crane	1	16	81	4050	0		42.8	8	480	35
		man lift	1	20	75	4100	0		36.7	8	480	30
		all other equipment > 5 HP	1	50	85	4150	0		46.6	8	480	44
		jackhammer	1	20	85	4800	0		45.3	8	480	38
		man lift	1	20	75	4850	0		35.2	8	480	28
		crane	1	16	81	4900	0		41.1	8	480	33
		man lift	1	20	75	4950	0		35.0	8	480	28
		all other equipment > 5 HP	1	50	85	5600	0		44.0	8	480	41
		auger drill rig	1	20	84	5650	0		42.9	8	480	36

		man lift	1	20	75	5700	0		33.8	8	480	27
		crane	1	16	81	5750	0		39.7	8	480	32
		man lift	1	20	75	6400	0		32.8	8	480	26
		all other equipment > 5 HP	1	50	85	6450	0		42.7	8	480	40
		crane	1	16	81	6500	0		38.7	8	480	31
		man lift	1	20	75	6550	0		32.6	8	480	26
		all other equipment > 5 HP	1	50	85	7200	0		41.8	8	480	39
		jackhammer	1	20	85	7250	0		41.7	8	480	35
		man lift	1	20	75	7300	0		31.6	8	480	25
		crane	1	16	81	7350	0		37.6	8	480	30
		man lift	1	20	75	8000	0		30.9	8	480	24
		all other equipment > 5 HP	1	50	85	8050	0		40.8	8	480	38
		auger drill rig	1	20	84	8100	0		39.7	8	480	33
		man lift	1	20	75	8150	0		30.7	8	480	24
		crane	1	16	81	8800	0		36.0	8	480	28
		man lift	1	20	75	8850	0		30.0	8	480	23
		all other equipment > 5 HP	1	50	85	8900	0		39.9	8	480	37
		crane	1	16	81	8950	0		35.9	8	480	28
		auger drill rig	1	20	84	9600	0		38.3	8	480	31
		crane	1	16	81	9650	0		35.2	8	480	27
		man lift	1	20	75	9700	0		29.2	8	480	22
		all other equipment > 5 HP	1	50	85	9750	0		39.1	8	480	36
		backhoe	1	40	78	10400	0		31.6	8	480	28
		crane	1	16	81	10450	0		34.5	8	480	27
								Total Aggregate Noise Exposure from Construction (Line 1) Phase				**56.3**
4	Construction (Line 2)	crane	1	16	81	1850	0		49.6	8	480	42
		man lift	1	20	75	1900	0		43.3	8	480	36
		all other equipment > 5 HP	1	50	85	1950	0		53.1	8	480	50
		jackhammer	1	20	85	2000	0		52.9	8	480	46
		man lift	1	20	75	2650	0		40.5	8	480	33
		crane	1	16	81	2700	0		46.3	8	480	38
		man lift	1	20	75	2750	0		40.1	8	480	33
		all other equipment > 5 HP	1	50	85	2800	0		50.0	8	480	47
		auger drill rig	1	20	84	3450	0		47.2	8	480	40
		man lift	1	20	75	3500	0		38.0	8	480	31
		crane	1	16	81	3550	0		43.9	8	480	36
		man lift	1	20	75	3600	0		37.8	8	480	31
		all other equipment > 5 HP	1	50	85	4250	0		46.3	8	480	43
		crane	1	16	81	4300	0		42.2	8	480	34
		man lift	1	20	75	4350	0		36.1	8	480	29
		all other equipment > 5 HP	1	50	85	4400	0		46.0	8	480	43
		jackhammer	1	20	85	5050	0		44.8	8	480	38
		man lift	1	20	75	5100	0		34.8	8	480	28
		crane	1	16	81	5150	0		40.7	8	480	33
		man lift	1	20	75	5200	0		34.6	8	480	28
		all other equipment > 5 HP	1	50	85	5850	0		43.6	8	480	41
		auger drill rig	1	20	84	5900	0		42.5	8	480	36
		man lift	1	20	75	5950	0		33.4	8	480	26
		crane	1	16	81	6000	0		39.4	8	480	31
		man lift	1	20	75	6650	0		32.5	8	480	25
		all other equipment > 5 HP	1	50	85	6700	0		42.4	8	480	39
		crane	1	16	81	6750	0		38.3	8	480	30
		man lift	1	20	75	6800	0		32.3	8	480	25
		all other equipment > 5 HP	1	50	85	7450	0		41.5	8	480	38
		jackhammer	1	20	85	7500	0		41.4	8	480	34
		man lift	1	20	75	7550	0		31.4	8	480	24
		crane	1	16	81	7600	0		37.3	8	480	29
		man lift	1	20	75	8250	0		30.6	8	480	24

		all other equipment > 5 HP	1	50	85	8300	0		40.5	8	480	38
		auger drill rig	1	20	84	8350	0		39.5	8	480	32
		man lift	1	20	75	8400	0		30.4	8	480	23
		crane	1	16	81	9050	0		35.8	8	480	28
		man lift	1	20	75	9100	0		29.7	8	480	23
		all other equipment > 5 HP	1	50	85	9150	0		39.7	8	480	37
		crane	1	16	81	9200	0		35.6	8	480	28
		auger drill rig	1	20	84	9850	0		38.0	8	480	31
		crane	1	16	81	9900	0		35.0	8	480	27
		man lift	1	20	75	9950	0		29.0	8	480	22
		all other equipment > 5 HP	1	50	85	10000	0		38.9	8	480	36
		backhoe	1	40	78	10650	0		31.4	8	480	27
		crane	1	16	81	10700	0		34.3	8	480	26
									Total Aggregate Noise Exposure from Construction (Line 2) Phase			**55.5**
5	Grading (Line 1)	front end loader	1	40	79	1600	0		48.8	7	420	44
		grader	1	40	85	1650	0		54.6	7	420	50
		dozer	1	40	82	1700	0		51.3	8	480	47
		tractor	1	40	84	1750	0		53.1	8	480	49
		dozer	1	40	82	2400	0		48.3	8	480	44
		grader	1	40	85	2450	0		51.1	7	420	47
		backhoe	1	40	78	2500	0		44.0	7	420	39
		grader	1	40	85	2550	0		50.8	8	480	47
		dozer	1	40	82	3200	0		45.8	8	480	42
									Total Aggregate Noise Exposure from Grading (Line 1) Phase			**56.1**
6	Grading (Line 2)	front end loader	1	40	79	1850	0		47.6	7	420	43
		grader	1	40	85	1900	0		53.3	7	420	49
		dozer	1	40	82	1950	0		50.1	8	480	46
		tractor	1	40	84	2000	0		51.9	8	480	48
		front end loader	1	40	79	2650	0		44.5	8	480	40
		grader	1	40	85	2700	0		50.3	7	420	46
		backhoe	1	40	78	2750	0		43.1	7	420	39
		tractor	1	40	84	2800	0		49.0	8	480	45
		dozer	1	40	82	3450	0		45.2	8	480	41
									Total Aggregate Noise Exposure from Grading (Line 2) Phase			**54.8**

To User: bordered cells are inputs, unbordered cells have formulae
enter "0" to turn off air or grnd absorption terms, "1" to turn on

air abs? 0
grnd abs? 0

Project Phase No.	Project Phase Description	Comparable FHWA RCNM Construction Equipment Type	Quantity	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Source to NSR Distance (ft.)	*Temporary Barrier Insertion Loss (dB)*	*Additional Noise Reduction*	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
1	Grading (Access Road Rehabilitation)	Tractor	1	40	84	2600	0		49.6	8	480	46
		grader	1	40	85	2650	0		50.5	8	480	46
		dozer	1	40	82	2700	0		47.3	8	480	43
		front end loader	1	40	79	2750	0		44.1	8	480	40
		grader	1	40	85	3400	0		48.3	8	480	44
		dozer	1	40	82	3450	0		45.2	8	480	41
		backhoe	1	40	78	3500	0		41.0	8	480	37
		dozer	1	40	82	3550	0		44.9	8	480	41
		grader	1	40	85	4200	0		46.5	8	480	42
											Total Aggregate Noise Exposure from Grading (Access Road Rehabilitation) Phase	**52.7**
2	Grading (Laydown/Staging/Site Grading)	excavator	1	40	81	2600	0		46.6	8	480	43
		grader	1	40	85	2650	0		50.5	8	480	46
		dozer	1	40	82	2700	0		47.3	8	480	43
		front end loader	1	40	79	2750	0		44.1	8	480	40
		backhoe	1	40	78	2625	0		43.5	8	480	40
		excavator	1	40	81	3450	0		44.2	8	480	40
		scraper	1	40	84	3500	0		47.0	8	480	43
		excavator	1	40	81	3550	0		43.9	8	480	40
		grader	1	40	85	3425	0		48.2	8	480	44
		front end loader	1	40	79	4250	0		40.3	8	480	36
		dozer	1	40	82	4300	0		43.2	8	480	39
		tractor	1	40	84	4350	0		45.1	8	480	41
		excavator	1	40	81	4225	0		42.4	8	480	38
		scraper	1	40	84	5050	0		43.8	8	480	40
		front end loader	1	40	79	5100	0		38.8	8	480	35
		excavator	1	40	81	5150	0		40.7	8	480	37
											Total Aggregate Noise Exposure from Grading (Laydown/Staging/Site Grading) Phase	**53.4**
3	Construction (Line 1)	crane	1	16	81	2850	0		45.8	8	480	38
		man lift	1	20	75	2900	0		39.7	8	480	33
		all other equipment > 5 HP	1	50	85	2950	0		49.5	8	480	47
		jackhammer	1	20	85	3000	0		49.4	8	480	42
		man lift	1	20	75	2900	0		39.7	8	480	33
		crane	1	16	81	3650	0		43.7	8	480	36
		man lift	1	20	75	3700	0		37.6	8	480	31
		all other equipment > 5 HP	1	50	85	3750	0		47.4	8	480	44
		auger drill rig	1	20	84	3800	0		46.3	8	480	39
		man lift	1	20	75	3700	0		37.6	8	480	31
		crane	1	16	81	4450	0		41.9	8	480	34
		man lift	1	20	75	4500	0		35.9	8	480	29
		all other equipment > 5 HP	1	50	85	4550	0		45.8	8	480	43
		crane	1	16	81	4600	0		41.7	8	480	34
		man lift	1	20	75	4500	0		35.9	8	480	29
		all other equipment > 5 HP	1	50	85	5250	0		44.5	8	480	42
		jackhammer	1	20	85	5300	0		44.4	8	480	37
		man lift	1	20	75	5350	0		34.3	8	480	27
		crane	1	16	81	5400	0		40.3	8	480	32
		man lift	1	20	75	5300	0		34.4	8	480	27
		all other equipment > 5 HP	1	50	85	6050	0		43.3	8	480	40
		auger drill rig	1	20	84	6100	0		42.2	8	480	35
		man lift	1	20	75	6150	0		33.1	8	480	26
		crane	1	16	81	6200	0		39.1	8	480	31

		man lift	1	20	75	6100	0		33.2	8	480	26
		all other equipment > 5 HP	1	50	85	6850	0		42.2	8	480	39
		crane	1	16	81	6900	0		38.1	8	480	30
		man lift	1	20	75	6950	0		32.1	8	480	25
		all other equipment > 5 HP	1	50	85	7000	0		42.0	8	480	39
		jackhammer	1	20	85	6900	0		42.1	8	480	35
		man lift	1	20	75	7650	0		31.2	8	480	24
		crane	1	16	81	7700	0		37.2	8	480	29
		man lift	1	20	75	7750	0		31.1	8	480	24
		all other equipment > 5 HP	1	50	85	7800	0		41.1	8	480	38
		auger drill rig	1	20	84	7700	0		40.2	8	480	33
		man lift	1	20	75	8450	0		30.4	8	480	23
		crane	1	16	81	8500	0		36.3	8	480	28
		man lift	1	20	75	8550	0		30.3	8	480	23
		all other equipment > 5 HP	1	50	85	8600	0		40.2	8	480	37
		crane	1	16	81	8500	0		36.3	8	480	28
		auger drill rig	1	20	84	9250	0		38.6	8	480	32
		crane	1	16	81	9300	0		35.5	8	480	28
		man lift	1	20	75	9350	0		29.5	8	480	23
		all other equipment > 5 HP	1	50	85	9400	0		39.5	8	480	36
		backhoe	1	40	78	9300	0		32.5	8	480	29
		crane	1	16	81	10050	0		34.9	8	480	27
								Total Aggregate Noise Exposure from Construction (Line 1) Phase				**53.5**
4	Construction (Line 2)	crane	1	16	81	2600	0		46.6	8	480	39
		man lift	1	20	75	2650	0		40.5	8	480	33
		all other equipment > 5 HP	1	50	85	2700	0		50.3	8	480	47
		jackhammer	1	20	85	2750	0		50.1	8	480	43
		man lift	1	20	75	800	0		50.9	8	480	44
		crane	1	16	81	3400	0		44.3	8	480	36
		man lift	1	20	75	3450	0		38.2	8	480	31
		all other equipment > 5 HP	1	50	85	3500	0		48.0	8	480	45
		auger drill rig	1	20	84	3550	0		46.9	8	480	40
		man lift	1	20	75	1600	0		44.8	8	480	38
		crane	1	16	81	4200	0		42.5	8	480	34
		man lift	1	20	75	4250	0		36.3	8	480	29
		all other equipment > 5 HP	1	50	85	4300	0		46.2	8	480	43
		crane	1	16	81	4350	0		42.1	8	480	34
		man lift	1	20	75	2400	0		41.3	8	480	34
		all other equipment > 5 HP	1	50	85	5000	0		44.9	8	480	42
		jackhammer	1	20	85	5050	0		44.8	8	480	38
		man lift	1	20	75	5100	0		34.8	8	480	28
		crane	1	16	81	5150	0		40.7	8	480	33
		man lift	1	20	75	3200	0		38.8	8	480	32
		all other equipment > 5 HP	1	50	85	5800	0		43.6	8	480	41
		auger drill rig	1	20	84	5850	0		42.6	8	480	36
		man lift	1	20	75	5900	0		33.5	8	480	27
		crane	1	16	81	5950	0		39.4	8	480	31
		man lift	1	20	75	4000	0		36.9	8	480	30
		all other equipment > 5 HP	1	50	85	6600	0		42.5	8	480	40
		crane	1	16	81	6650	0		38.5	8	480	31
		man lift	1	20	75	6700	0		32.4	8	480	25
		all other equipment > 5 HP	1	50	85	6750	0		42.3	8	480	39
		jackhammer	1	20	85	4800	0		45.3	8	480	38
		man lift	1	20	75	7400	0		31.5	8	480	25
		crane	1	16	81	7450	0		37.5	8	480	30
		man lift	1	20	75	7500	0		31.4	8	480	24
		all other equipment > 5 HP	1	50	85	7550	0		41.4	8	480	38
		auger drill rig	1	20	84	5600	0		43.0	8	480	36
		man lift	1	20	75	8200	0		30.6	8	480	24
		crane	1	16	81	8250	0		36.6	8	480	29

		man lift	1	20	75	8300	0		30.5	8	480	24
		all other equipment > 5 HP	1	50	85	8350	0		40.5	8	480	37
		crane	1	16	81	6400	0		38.8	8	480	31
		auger drill rig	1	20	84	9000	0		38.8	8	480	32
		crane	1	16	81	9050	0		35.8	8	480	28
		man lift	1	20	75	9100	0		29.7	8	480	23
		all other equipment > 5 HP	1	50	85	9150	0		39.7	8	480	37
		backhoe	1	40	78	7200	0		34.8	8	480	31
		crane	1	16	81	9800	0		35.1	8	480	27
								Total Aggregate Noise Exposure from Construction (Line 2) Phase				**54.6**
5	Grading (Line 1)	front end loader	1	40	79	2850	0		43.8	7	420	39
		grader	1	40	85	2900	0		49.7	7	420	45
		dozer	1	40	82	2950	0		46.5	8	480	43
		tractor	1	40	84	3000	0		48.4	8	480	44
		dozer	1	40	82	3650	0		44.7	8	480	41
		grader	1	40	85	3700	0		47.6	7	420	43
		backhoe	1	40	78	3750	0		40.4	7	420	36
		grader	1	40	85	3800	0		47.3	8	480	43
		dozer	1	40	82	4450	0		42.9	8	480	39
								Total Aggregate Noise Exposure from Grading (Line 1) Phase				**51.8**
6	Grading (Line 2)	front end loader	1	40	79	2600	0		44.6	7	420	40
		grader	1	40	85	2650	0		50.5	7	420	46
		dozer	1	40	82	2700	0		47.3	8	480	43
		tractor	1	40	84	2750	0		49.1	8	480	45
		front end loader	1	40	79	3400	0		42.3	8	480	38
		grader	1	40	85	3450	0		48.2	7	420	44
		backhoe	1	40	78	3500	0		41.0	7	420	36
		tractor	1	40	84	3550	0		46.9	8	480	43
		dozer	1	40	82	4200	0		43.5	8	480	39
								Total Aggregate Noise Exposure from Grading (Line 2) Phase				**52.2**