APPENDIX D

AVIATION EMISSIONS AND AIR QUALITY

1 Introduction

The U.S. Environmental Protection Agency (USEPA) sets National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The USEPA identifies the following seven criteria air pollutants for which NAAQS are applicable: Carbon Monoxide (CO), Lead (Pb), Nitrogen Dioxide (NO_2), Ozone (O_3), Particulate Matter (PM_{10} and $PM_{2.5}$), and Sulfur Dioxide (SO_2). [1] [2] The USEPA describes these pollutants as "criteria" air pollutants because the agency regulates them by developing human health-based and/or environmentally based criteria (science-based guidelines) for setting permissible levels (EPA, 2026).

Geographic areas found to be in violation of one or more NAAQS are classified as nonattainment areas. Nonattainment designations are generally based on the degree of nonattainment (e.g., serious, severe, moderate, marginal), which dictates the deadline (i.e., the attainment year) by which the area must be brought back into attainment with a NAAQS. States with nonattainment areas must develop a State Implementation Plan (SIP) demonstrating how the area will be brought back into attainment with the NAAQS within designated timeframes. Areas where concentrations of the criteria pollutants are below (i.e., within) the NAAQS are classified as attainment areas. Lastly, areas with prior nonattainment status that have since transitioned to attainment are known as maintenance areas.

The King County Department of Executive Services (Airport Sponsor) proposes to rehabilitate Runway 14R-32L and relocate its full-length parallel Taxiway B west to meet current Federal Aviation Administration (FAA) design standards and recommendations. To do so, the sponsor must demolish certain existing facilities, acquire additional land, complete various enabling and support projects, and reconstruct existing Airport infrastructure. Collectively, these various elements, along with the proposed Runway 14R-32L rehabilitation and the Taxiway B relocation, constitute the Proposed Action.

Construction of the Proposed Action is anticipated to begin in 2028 and last for approximately 10 years. All construction activities associated with the Proposed Action would occur in King County, Washington. **Table D-1** shows the attainment status for each criteria pollutant for King County, according to the USEPA.

[1] NAAQS are seven criteria pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter 10, particulate matter 2.5, and sulfur dioxide.

[2] Lead was excluded from the construction emission inventory because modern construction equipment and activities do not emit lead in measurable quantities. The U.S phased out leaded gasoline for on-road vehicles with a complete ban by January 1, 1996, under the Clean Air Act, and diesel fuel, commonly used in construction equipment, never contained lead additives.

Table D-1: King County Attainment Status per Criteria Pollutant

Criteria Pollutant	Attainment Status
Carbon Monoxide (CO)	Attainment
Lead (Pb)	Attainment
Nitrogen Dioxide (NO_2)	Attainment
8-hour Ozone (O_3) 2008	Attainment
8-hour Ozone (O_3) 2015	Attainment
Particulate Matter-10 (PM_{10})	Attainment
Particulate Matter-2.5 ($PM_{2.5}$)	Attainment
Sulfur Dioxide (SO_2)	Attainment

Source: (USEPA, 2026)

For actions in attainment areas, the FAA identifies four screening criteria used to determine whether additional air quality analysis is required (See **Table D-2**).[3] These screening criteria address potential changes in aircraft operations, aircraft delay, vehicle miles traveled (VMT), and construction vehicle or ground support equipment (GSE) activity. The four FAA screening criteria were applied to the Proposed Action.

Table D-2: FAA Air Quality Handbook Screening Criteria for Attainment Areas

FAA Screening Criteria Question	Proposed Action Response
Will the FAA decision result in an increase of more than 14,000 commercial aircraft operations per year, or if the project is in an Ozone Transportation Region (OTR), more than 5,000 general aviation aircraft operations per year?	No, the Proposed Action would not increase operations at the Airport either during construction or operation and is not in an OTR./a/
Will the FAA decision result in an increase of more than 340,000 minutes of aircraft delay per year?	No, during Phase 3a and 3b construction of the Proposed Action, aircraft would continue to use the existing Runway 14R-32L. During Phase 3c construction, the runway would be closed for approximately 61 days. These construction phases would not result in aircraft delays. During operation of the Proposed Action, runway thresholds for

[3] FAA. (2024, July 24). Technical Support Document for Attainment Area Screening Methodology. Retrieved April 22, 2026, from Aviation Emissions and Air Quality Handbook

FAA Screening Criteria Question	Proposed Action Response
	commercial operations would remain unchanged (see **Exhibit 1-6**).
Will the FAA decision result in an additional 25 million Vehicle Miles Traveled (VMT) per year?	No, peak construction years would generate up to about 7.6 million VMT annually. Operation of the Proposed Action would not result in additional VMT as the Proposed Action would not increase operations at the Airport.
Will the FAA decision result in the use of more than 125 construction vehicles or GSE during a year, or if the project is in the OTR, 50 construction vehicles or GSE during a year?	No, the construction of the Proposed Action is anticipated to use approximately 55 construction vehicles per year, dependent on the construction phase. Operation of the Proposed Action would not increase or change the type of operations at the Airport and therefore, is not anticipated to use more than 125 GSE in a year and is not in an OTR.

Note: /a/ - The CAA sets specific requirements for a group of northeast states that make up the Ozone Transport Region (OTR), as defined under 42 U.S.C. Section 7511c(a), and includes the following states: Connecticut, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Maine, Virginia, and the District of Columbia.
Source: FAA, 2024; RS&H, 2026.

Although a construction emissions inventory (CEI) was not required to determine air quality significance based on the results of the FAA screening criteria, a quantitative construction emissions analysis was prepared to further evaluate construction-related emissions using the USEPA Motor Vehicle Emission Simulator (MOVES4). This CEI assessment was prepared to disclose the Proposed Action's potential construction-related air emissions. This CEI was prepared in support of the National Environmental Policy Act (NEPA) documentation, focusing on construction-related emissions generated by the Proposed Action. Construction of the Proposed Action is anticipated to begin in 2028 and last for approximately ten years.[4]

[4] Construction would take place in years 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036 and 2037.

2 Construction Emissions Inventory Approach

Construction of the Proposed Action includes earthwork, grading, leveling, construction equipment storage, and movement activities that are sources of off-road, on-road, and fugitive dust emissions.

– Non-road Emission Sources

Non-road sources associated with the Proposed Action's construction include exhaust from heavy construction equipment (e.g., dozers, and pavers) and fugitive dust emissions.

– On-road Emission Sources

On-road emission sources associated with the Proposed Action's construction include material delivery vehicles (e.g., trucks carrying concrete) and passenger vehicles transporting construction personnel to and from the job site.

– Fugitive Emissions

Paving or dust emission sources associated with the Proposed Action's construction include asphalt storage, material movement on paved and unpaved roads, soil handling, un-stabilized land, and wind erosion. Paving or dust emissions were based on the number of months for construction.

Construction emissions are estimated based on the following factors: construction schedule; the number of construction vehicles and/or equipment; the types of construction vehicles and/or equipment; types of fuel used to power the equipment and vehicles; vehicle and equipment hourly activity/vehicle miles traveled; construction materials used and their quantities; and the duration of construction.

2.1 MOtor Vehicle Emissions Simulator 5.0 (MOVES5.0)

This CEI used the USEPA's MOtor Vehicle Emissions Simulator 5.0 (MOVES5.0) to analyze the Proposed Action's potential non-road and on-road construction emissions.

2.1.1 Construction Emissions Inventory Inputs

The Proposed Action's construction components are shown in **Table D-3**. The Proposed Action's cost estimates and typical construction practices were used to develop the Non-Road CEI inputs for each construction year are presented in **Tables D-4** through **D-13.** Inputs were coordinated with construction management engineers and were based on engineering judgment and past experience with airport construction projects. MOVES5.0 emission factors and load factors were developed to determine the non-road and on-road emissions from the construction of the Proposed Action.

Table D-3: Proposed Action Construction Components

Component Name	Construction Year
Building Demolition (D6-D9)	March 2028 - October 2031
Building Facility Projects (F1-F3)	March 2028 – October 2031
Support Projects (S1-S6)	March 2031 – October 2033
Pavement Projects (Airfield) (P1-P8)	March 2031 - October 2037
Pavement Projects (Landside) (P9-P11)	March 2031 - October 2037
Pavement Demolition (D1 – D5)	March 2032 - October 2037

Source: King County International Airport - Boeing Field (BFI) 2026; RS&H 2026

Table D-4: 2028 Non-Road Construction Emissions Inventory Inputs

Equipment Type	Fuel Type	Horsepower	Operating Hours
40 Ton Crane	Diesel	300	60.00
Backhoe	Diesel	100	80.00
Bob Cat	Diesel	75	506.08
Concrete Ready Mix Trucks	Diesel	600	15.00
Dump Truck	Diesel	600	506.08
Excavator with Bucket	Diesel	175	253.03
Fork Truck	Diesel	100	410.00
Generator Sets	Diesel	40	253.03
High Lift	Diesel	100	110.00
Man Lift	Diesel	75	300.00
Man Lift (Fascia Construction)	Diesel	75	30.00
Material Deliveries	Diesel	600	2.00
Pickup Truck	Diesel	600	295.20
Survey Crew Trucks	Diesel	600	2.50
Tool Truck	Diesel	600	100.00
Tractor Trailer- Material Delivery	Diesel	600	43.00
Tractor Trailer- Steel Deliveries	Diesel	600	4.00
Tractor Trailers Temp Fac.	Diesel	600	1.00
		Total	**2,970.90**

Source: RS&H 2026, MOVES5.0

Table D-5: 2029 Non-Road Construction Emissions Inventory Inputs

Equipment Type	Fuel Type	Horsepower	Operating Hours
40 Ton Crane	Diesel	300	60.00
Backhoe	Diesel	100	80.00
Bob Cat	Diesel	75	506.08
Concrete Ready Mix Trucks	Diesel	600	15.00
Dump Truck	Diesel	600	506.08
Excavator with Bucket	Diesel	175	253.03
Fork Truck	Diesel	100	410.00
Generator Sets	Diesel	40	253.03
High Lift	Diesel	100	110.00
Man Lift	Diesel	75	300.00
Man Lift (Fascia Construction)	Diesel	75	30.00
Material Deliveries	Diesel	600	2.00
Pickup Truck	Diesel	600	295.20
Survey Crew Trucks	Diesel	600	2.50
Tool Truck	Diesel	600	100.00
Tractor Trailer- Material Delivery	Diesel	600	43.00
Tractor Trailer- Steel Deliveries	Diesel	600	4.00
Tractor Trailers Temp Fac.	Diesel	600	1.00
		Total	**2,970.90**

Source: RS&H 2026, MOVES5.0

Table D-6: 2030 Non-Road Construction Emissions Inventory Inputs

Equipment Type	Fuel Type	Horsepower	Operating Hours
40 Ton Crane	Diesel	300	60.00
Backhoe	Diesel	100	80.00
Bob Cat	Diesel	75	506.08
Concrete Ready Mix Trucks	Diesel	600	15.00
Dump Truck	Diesel	600	506.08
Excavator with Bucket	Diesel	175	253.03
Fork Truck	Diesel	100	410.00
Generator Sets	Diesel	40	253.03
High Lift	Diesel	100	110.00
Man Lift	Diesel	75	300.00
Man Lift (Fascia Construction)	Diesel	75	30.00

Equipment Type	Fuel Type	Horsepower	Operating Hours
Material Deliveries	Diesel	600	2.00
Pickup Truck	Diesel	600	295.20
Survey Crew Trucks	Diesel	600	2.50
Tool Truck	Diesel	600	100.00
Tractor Trailer- Material Delivery	Diesel	600	43.00
Tractor Trailer- Steel Deliveries	Diesel	600	4.00
Tractor Trailers Temp Fac.	Diesel	600	1.00
		Total	**2,970.90**

Source: RS&H 2026, MOVES5.0

Table D-7: 2031 Non-Road Construction Emissions Inventory Inputs

Equipment Type	Fuel Type	Horsepower	Operating Hours
40 Ton Crane	Diesel	300	60.00
Asphalt Paver	Diesel	175	121.68
Backhoe	Diesel	100	80.00
Bob Cat	Diesel	75	506.08
Chain Saw	Diesel	11	32.60
Chipper/Stump Grinder	Diesel	100	32.60
Cold Planer	Diesel	175	175.98
Concrete Ready Mix Trucks	Diesel	600	15.00
Concrete Saws	Diesel	40	1,585.42
Concrete Truck	Diesel	600	528.27
Crack Cleaner	Diesel	40	9.25
Crack Filler (Trailer Mounted)	Diesel	100	9.25
Curb/Gutter Paver	Diesel	175	134.97
Dozer	Diesel	175	606.30
Dump Truck	Diesel	600	3,750.81
Dump Truck (12 cy)	Diesel	600	1,793.87
Excavator	Diesel	175	1,783.33
Excavator with Bucket	Diesel	175	253.03
Flatbed Truck	Diesel	600	2,013.97
Fork Truck	Diesel	100	410.00
Generator Sets	Diesel	40	253.03
Grader	Diesel	300	31.45
High Lift	Diesel	100	110.00
Hydralic Hammer	Diesel	175	1,585.42

Equipment Type	Fuel Type	Horsepower	Operating Hours
Hydroseeder	Diesel	600	13.65
Loader	Diesel	150	211.73
Man Lift	Diesel	75	300.00
Man Lift (Fascia Construction)	Diesel	75	30.00
Material Deliveries	Diesel	600	2.00
Off-Road Truck	Diesel	600	13.65
Other General Equipment	Diesel	175	4,709.07
Pickup Truck	Diesel	600	5,814.74
Pumps	Diesel	11	26.07
Roller	Diesel	100	574.77
Scraper	Diesel	600	39.02
Skid Steer Loader	Diesel	75	658.89
Surfacing Equipment (Grooving)	Diesel	25	155.77
Survey Crew Trucks	Diesel	600	2.50
Sweepers	Diesel	175	175.98
Tool Truck	Diesel	600	100.00
Tractor Trailer- Material Delivery	Diesel	600	43.00
Tractor Trailer- Steel Deliveries	Diesel	600	4.00
Tractor Trailers Temp Fac.	Diesel	600	1.00
Tractors/Loader/Backhoe	Diesel	100	893.22
		Total	**31,057.27**

Table D-8: 2032 Non-Road Construction Emissions Inventory Inputs

Equipment Type	Fuel Type	Horsepower	Operating Hours
Asphalt Paver	Diesel	175	121.68
Chain Saw	Diesel	11	32.60
Chipper/Stump Grinder	Diesel	100	32.60
Cold Planer	Diesel	175	175.98
Concrete Saws	Diesel	40	1,585.42
Concrete Truck	Diesel	600	442.38
Crack Cleaner	Diesel	40	9.25
Crack Filler (Trailer Mounted)	Diesel	100	9.25
Curb/Gutter Paver	Diesel	175	134.97
Dozer	Diesel	175	982.73
Dump Truck	Diesel	600	2,901.18

Equipment Type	Fuel Type	Horsepower	Operating Hours
Dump Truck (12 cy)	Diesel	600	1,793.87
Excavator	Diesel	175	2,159.77
Flatbed Truck	Diesel	600	2,013.97
Grader	Diesel	300	31.45
Hydralic Hammer	Diesel	175	1,585.42
Hydroseeder	Diesel	600	13.65
Loader	Diesel	150	211.73
Off-Road Truck	Diesel	600	13.65
Other General Equipment	Diesel	175	4,365.52
Pickup Truck	Diesel	600	5,928.87
Pumps	Diesel	11	26.07
Roller	Diesel	100	574.77
Scraper	Diesel	600	39.02
Skid Steer Loader	Diesel	75	315.33
Surfacing Equipment (Grooving)	Diesel	25	155.77
Sweepers	Diesel	175	175.98
Tractors/Loader/Backhoe	Diesel	100	549.67
Vibratory Compactor	Diesel	6	269.93
Water Truck	Diesel	600	1,135.98
		Total	**27,788.45**

Table D-9: 2033 Non-Road Construction Emissions Inventory Inputs

Equipment Type	Fuel Type	Horsepower	Operating Hours
Asphalt Paver	Diesel	175	121.68
Chain Saw	Diesel	11	32.60
Chipper/Stump Grinder	Diesel	100	32.60
Cold Planer	Diesel	175	175.98
Concrete Saws	Diesel	40	1,585.42
Concrete Truck	Diesel	600	442.38
Crack Cleaner	Diesel	40	9.25
Crack Filler (Trailer Mounted)	Diesel	100	9.25
Curb/Gutter Paver	Diesel	175	134.97
Dozer	Diesel	175	982.73
Dump Truck	Diesel	600	2,969.18
Dump Truck (12 cy)	Diesel	600	1,793.87

Equipment Type	Fuel Type	Horsepower	Operating Hours
Excavator	Diesel	175	2,227.77
Flatbed Truck	Diesel	600	2,013.97
Grader	Diesel	300	31.45
Hydralic Hammer	Diesel	175	1,585.42
Hydroseeder	Diesel	600	13.65
Loader	Diesel	150	211.73
Off-Road Truck	Diesel	600	13.65
Other General Equipment	Diesel	175	4,501.52
Pickup Truck	Diesel	600	6,064.87
Pumps	Diesel	11	26.07
Roller	Diesel	100	574.77
Scraper	Diesel	600	39.02
Skid Steer Loader	Diesel	75	315.33
Surfacing Equipment (Grooving)	Diesel	25	155.77
Sweepers	Diesel	175	175.98
Tractors/Loader/Backhoe	Diesel	100	549.67
Vibratory Compactor	Diesel	6	269.93
Water Truck	Diesel	600	1,135.98
		Total	**28,196.45**

Table D-10: 2034 Non-Road Construction Emissions Inventory Inputs

Equipment Type	Fuel Type	Horsepower	Operating Hours
Asphalt Paver	Diesel	175	121.68
Chain Saw	Diesel	11	32.60
Chipper/Stump Grinder	Diesel	100	32.60
Cold Planer	Diesel	175	175.98
Concrete Saws	Diesel	40	1,585.42
Concrete Truck	Diesel	600	442.38
Crack Cleaner	Diesel	40	9.25
Crack Filler (Trailer Mounted)	Diesel	100	9.25
Curb/Gutter Paver	Diesel	175	134.97
Dozer	Diesel	175	982.73
Dump Truck	Diesel	600	2,901.18
Dump Truck (12 cy)	Diesel	600	1,793.87
Excavator	Diesel	175	2,159.77

Equipment Type	Fuel Type	Horsepower	Operating Hours
Flatbed Truck	Diesel	600	2,013.97
Grader	Diesel	300	31.45
Hydralic Hammer	Diesel	175	1,585.42
Hydroseeder	Diesel	600	13.65
Loader	Diesel	150	211.73
Off-Road Truck	Diesel	600	13.65
Other General Equipment	Diesel	175	4,365.52
Pickup Truck	Diesel	600	5,928.87
Pumps	Diesel	11	26.07
Roller	Diesel	100	574.77
Scraper	Diesel	600	39.02
Skid Steer Loader	Diesel	75	315.33
Surfacing Equipment (Grooving)	Diesel	25	155.77
Sweepers	Diesel	175	175.98
Tractors/Loader/Backhoe	Diesel	100	549.67
Vibratory Compactor	Diesel	6	269.93
Water Truck	Diesel	600	1,135.98
Asphalt Paver	Diesel	175	121.68
Chain Saw	Diesel	11	32.60
Chipper/Stump Grinder	Diesel	100	32.60
Cold Planer	Diesel	175	175.98
Concrete Saws	Diesel	40	1,585.42
		Total	**27,788.45**

Table D-11: 2035 Non-Road Construction Emissions Inventory Inputs

Equipment Type	Fuel Type	Horsepower	Operating Hours
Asphalt Paver	Diesel	175	121.68
Chain Saw	Diesel	11	32.60
Chipper/Stump Grinder	Diesel	100	32.60
Cold Planer	Diesel	175	175.98
Concrete Saws	Diesel	40	1,585.42
Concrete Truck	Diesel	600	442.38
Crack Cleaner	Diesel	40	9.25
Crack Filler (Trailer Mounted)	Diesel	100	9.25
Curb/Gutter Paver	Diesel	175	134.97

Equipment Type	Fuel Type	Horsepower	Operating Hours
Dozer	Diesel	175	982.73
Dump Truck	Diesel	600	2,901.18
Dump Truck (12 cy)	Diesel	600	1,793.87
Excavator	Diesel	175	2,159.77
Flatbed Truck	Diesel	600	2,013.97
Grader	Diesel	300	31.45
Hydralic Hammer	Diesel	175	1,585.42
Hydroseeder	Diesel	600	13.65
Loader	Diesel	150	211.73
Off-Road Truck	Diesel	600	13.65
Other General Equipment	Diesel	175	4,365.52
Pickup Truck	Diesel	600	5,928.87
Pumps	Diesel	11	26.07
Roller	Diesel	100	574.77
Scraper	Diesel	600	39.02
Skid Steer Loader	Diesel	75	315.33
Surfacing Equipment (Grooving)	Diesel	25	155.77
Sweepers	Diesel	175	175.98
Tractors/Loader/Backhoe	Diesel	100	549.67
Vibratory Compactor	Diesel	6	269.93
Water Truck	Diesel	600	1,135.98
		Total	**27,788.45**

Table D-12: 2036 Non-Road Construction Emissions Inventory Inputs

Equipment Type	Fuel Type	Horsepower	Operating Hours
Asphalt Paver	Diesel	175	121.68
Chain Saw	Diesel	11	32.60
Chipper/Stump Grinder	Diesel	100	32.60
Cold Planer	Diesel	175	175.98
Concrete Saws	Diesel	40	1,585.42
Concrete Truck	Diesel	600	442.38
Crack Cleaner	Diesel	40	9.25
Crack Filler (Trailer Mounted)	Diesel	100	9.25
Curb/Gutter Paver	Diesel	175	134.97
Dozer	Diesel	175	982.73

Equipment Type	Fuel Type	Horsepower	Operating Hours
Dump Truck	Diesel	600	2,901.18
Dump Truck (12 cy)	Diesel	600	1,793.87
Excavator	Diesel	175	2,159.77
Flatbed Truck	Diesel	600	2,013.97
Grader	Diesel	300	31.45
Hydralic Hammer	Diesel	175	1,585.42
Hydroseeder	Diesel	600	13.65
Loader	Diesel	150	211.73
Off-Road Truck	Diesel	600	13.65
Other General Equipment	Diesel	175	4,365.52
Pickup Truck	Diesel	600	5,928.87
Pumps	Diesel	11	26.07
Roller	Diesel	100	574.77
Scraper	Diesel	600	39.02
Skid Steer Loader	Diesel	75	315.33
Surfacing Equipment (Grooving)	Diesel	25	155.77
Sweepers	Diesel	175	175.98
Tractors/Loader/Backhoe	Diesel	100	549.67
Vibratory Compactor	Diesel	6	269.93
Water Truck	Diesel	600	1,135.98
		Total	**27,788.45**

Table D-13: 2037 Non-Road Construction Emissions Inventory Inputs

Equipment Type	Fuel Type	Horsepower	Operating Hours
Asphalt Paver	Diesel	175	121.68
Chain Saw	Diesel	11	32.60
Chipper/Stump Grinder	Diesel	100	32.60
Cold Planer	Diesel	175	175.98
Concrete Saws	Diesel	40	1,585.42
Concrete Truck	Diesel	600	442.38
Crack Cleaner	Diesel	40	9.25
Crack Filler (Trailer Mounted)	Diesel	100	9.25
Curb/Gutter Paver	Diesel	175	134.97
Dozer	Diesel	175	982.73
Dump Truck	Diesel	600	2,901.18

Equipment Type	Fuel Type	Horsepower	Operating Hours
Dump Truck (12 cy)	Diesel	600	1,793.87
Excavator	Diesel	175	2,159.77
Flatbed Truck	Diesel	600	2,013.97
Grader	Diesel	300	31.45
Hydralic Hammer	Diesel	175	1,585.42
Hydroseeder	Diesel	600	13.65
Loader	Diesel	150	211.73
Off-Road Truck	Diesel	600	13.65
Other General Equipment	Diesel	175	4,365.52
Pickup Truck	Diesel	600	5,928.87
Pumps	Diesel	11	26.07
Roller	Diesel	100	574.77
Scraper	Diesel	600	39.02
Skid Steer Loader	Diesel	75	315.33
Surfacing Equipment (Grooving)	Diesel	25	155.77
Sweepers	Diesel	175	175.98
Tractors/Loader/Backhoe	Diesel	100	549.67
Vibratory Compactor	Diesel	6	269.93
Water Truck	Diesel	600	1,135.98
		Total	**27,788.45**

The development of Vehicle Miles Traveled (VMT) was based on engineering judgment and past experience with airport construction projects. The calculation of VMT was developed by using the number of construction employees and the number of expected equipment types during the construction of the Proposed Action. The distance traveled by employees and material deliveries for the Proposed Action were based on a 30-mile round trip per passenger car and a 40-mile round trip per material delivery that would originate from King County. The round-trip distance was applied to each passenger and material delivery vehicle and multiplied by each day of construction to develop the total VMT used for the on-road analysis from MOVES5.0. Refer to **Tables D-14** through **D-23** for the VMT used for construction years 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036 and 2037, respectively.

Table D-14: 2028 On-Road Construction Emissions Inventory Inputs

Equipment	Fuel Type	VMT[/a/]
Single Unit Short-haul Truck	Diesel	8,696.25
Combination Short-haul Truck	Diesel	40.00
Passenger Car	Gasoline	2,607,412.50

Note: /a/ - VMT = vehicle miles traveled
Source: MOVES5.0, RS&H 2026

Table D-15: 2029 On-Road Construction Emissions Inventory Inputs

Equipment	Fuel Type	VMT[/a/]
Single Unit Short-haul Truck	Diesel	8,696.25
Combination Short-haul Truck	Diesel	40.00
Passenger Car	Gasoline	2,607,412.5

Note: /a/ - VMT = vehicle miles traveled
Source: MOVES5.0, RS&H 2026

Table D-16: 2030 On-Road Construction Emissions Inventory Inputs

Equipment	Fuel Type	VMT[/a/]
Single Unit Short-haul Truck	Diesel	8,696.25
Combination Short-haul Truck	Diesel	40.00
Passenger Car	Gasoline	2,607,412.50

Note: /a/ - VMT = vehicle miles traveled
Source: MOVES5.0, RS&H 2026

Table D- 17: 2031 On-Road Construction Emissions Inventory Inputs

Equipment	Fuel Type	VMT[/a/]
Single Unit Short-haul Truck	Diesel	493,331.75
Combination Short-haul Truck	Diesel	12,766.00
Passenger Car	Gasoline	6,609,675.50

Note: /a/ - VMT = vehicle miles traveled
Source: MOVES5.0, RS&H 2026

Table D-18: 2032 On-Road Construction Emissions Inventory Inputs

Equipment	Fuel Type	VMT[/a/]
Single Unit Short-haul Truck	Diesel	209,852.83
Combination Short-haul Truck	Diesel	12,726.00
Passenger Car	Gasoline	5,296,244.67

Note: /a/ - VMT = vehicle miles traveled
Source: MOVES5.0, RS&H 2026

Table D-19: 2033 On-Road Construction Emissions Inventory Inputs

Equipment	Fuel Type	VMT[/a/]
Single Unit Short-haul Truck	Diesel	209,852.83
Combination Short-haul Truck	Diesel	12,726.00
Passenger Car	Gasoline	7,413,937.67

Note: /a/ - VMT = vehicle miles traveled
Source: MOVES5.0, RS&H 2026

Table D-20: 2034 On-Road Construction Emissions Inventory Inputs

Equipment	Fuel Type	VMT[/a/]
Single Unit Short-haul Truck	Diesel	209,852.83
Combination Short-haul Truck	Diesel	12,726.00
Passenger Car	Gasoline	5,296,244.67

Note: /a/ - VMT = vehicle miles traveled
Source: MOVES5.0, RS&H 2026

Table D-21: 2035 On-Road Construction Emissions Inventory Inputs

Equipment	Fuel Type	VMT[/a/]
Single Unit Short-haul Truck	Diesel	209,852.83
Combination Short-haul Truck	Diesel	12,726.00
Passenger Car	Gasoline	5,296,244.67

Note: /a/ - VMT = vehicle miles traveled
Source: MOVES5.0, RS&H 2026

Table D-22: 2036 On-Road Construction Emissions Inventory Inputs

Equipment	Fuel Type	VMT[/a/]
Single Unit Short-haul Truck	Diesel	209,852.83
Combination Short-haul Truck	Diesel	12,726.00
Passenger Car	Gasoline	5,296,244.67

Note: /a/ - VMT = vehicle miles traveled
Source: MOVES5.0, RS&H 2026

Table D-23: 2037 On-Road Construction Emissions Inventory Inputs

Equipment	Fuel Type	VMT[/a/]
Single Unit Short-haul Truck	Diesel	209,852.83
Combination Short-haul Truck	Diesel	12,726.00
Passenger Car	Gasoline	5,296,244.67

Note: /a/ - VMT = vehicle miles traveled
Source: MOVES5.0, RS&H 2026

2.1.2 Construction Emissions Inventory Results

Tables D-24 through **D-33** show the criteria pollutants, as well as the greenhouse gas emissions (GHGs) in tons per year during the Proposed Action's construction. The primary greenhouse gas emissions are Carbon Dioxide (CO_2), Methane (CH_4), and Nitrous Oxide (N_2O) and are disclosed for informational purposes.

Table D-24: 2028 Proposed Action Results (Tons Per Year)

							GHGs		
2028	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx	CO_2	CH_4	N_2O
Non-road	0.06	0.01	0.21	0.01	0.01	0.00	269.71	N/A	N/A
On-road	8.37	0.13	0.45	0.01	0.01	0.00	757.29	0.03	0.01
Fugitive	0.00	0.00	0.00	0.01	N/A	0.00	N/A	N/A	N/A
Total	8.43	0.15	0.66	0.03	0.02	0.01	1027.00	0.03	0.01
de minimis Threshold	100	100	100	100	100	100	N/A/a/	N/A/a/	N/A/a/
Exceeds de minimis?	No	No	No	No	No	No	N/A	N/A	N/A

/a/ - N/A = not applicable.
Totals may not sum due to rounding
Source: MOVES5.0, RS&H 2026

Table D-25: 2029 Proposed Action Results (Tons Per Year)

							GHGs		
2029	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx	CO_2	CH_4	N_2O
Non-road	0.05	0.01	0.18	0.01	0.01	0.00	268.00	N/A	N/A
On-road	8.37	0.13	0.45	0.01	0.01	0.00	757.29	0.03	0.01
Fugitive	0.00	0.00	0.00	0.01	N/A	0.00	N/A	N/A	N/A
Total	8.42	0.14	0.63	0.03	0.02	0.01	1,025.30	0.03	0.01
de minimis Threshold	100	100	100	100	100	100	N/A/a/	N/A/a/	N/A/a/
Exceeds de minimis?	No	No	No	No	No	No	N/A	N/A	N/A

/a/ - N/A = not applicable.
Totals may not sum due to rounding
Source: MOVES5.0, RS&H 2026

Table D-26: 2030 Proposed Action Results (Tons Per Year)

							GHGs		
2030	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx	CO_2	CH_4	N_2O
Non-road	0.04	0.01	0.18	0.01	0.01	0.00	268.00	N/A	N/A
On-road	8.37	0.13	0.45	0.01	0.01	0.00	757.29	0.03	0.01
Fugitive	0.00	0.00	0.00	0.01	N/A	0.00	N/A	N/A	N/A
Total	8.41	0.14	0.63	0.03	0.02	0.01	1,025.30	0.03	0.01
de minimis Threshold	100	100	100	100	100	100	N/A/a/	N/A/a/	N/A/a/
Exceeds de minimis?	No	No	No	No	No	No	N/A	N/A	N/A

/a/ - N/A = not applicable.
Totals may not sum due to rounding
Source: MOVES5.0, RS&H 2026

Table D-27: 2031 Proposed Action Results (Tons Per Year)

							GHGs		
2031	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx	CO_2	CH_4	N_2O
Non-road	0.31	0.09	1.27	0.07	0.07	0.01	3,915.20	N/A	N/A
On-road	21.97	0.47	2.66	0.11	0.10	0.01	2,369.62	0.09	0.06
Fugitive	2.12	7.95	0.13	0.64	N/A	0.02	N/A	N/A	N/A
Total	24.40	8.51	4.06	0.82	0.16	0.05	6,284.82	0.09	0.06
de minimis Threshold	100	100	100	100	100	100	N/A/a/	N/A/a/	N/A/a/
Exceeds de minimis?	No	No	No	No	No	No	N/A	N/A	N/A

/a/ - N/A = not applicable.
Totals may not sum due to rounding
Source: MOVES5.0, RS&H 2026

Table D-28: 2032 Proposed Action Results (Tons Per Year)

							GHGs		
2032	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx	CO_2	CH_4	N_2O
Non-road	0.23	0.08	1.03	0.06	0.05	0.01	3,657.61	N/A	N/A
On-road	17.33	0.32	1.58	0.06	0.05	0.01	1,734.62	0.07	0.03
Fugitive	2.12	11.08	0.13	0.81	N/A	0.02	N/A	N/A	N/A
Total	19.67	11.48	2.74	0.92	0.11	0.04	5,392.23	0.07	0.03
de minimis Threshold	100	100	100	100	100	100	N/A/a/	N/A/a/	N/A/a/
Exceeds de minimis?	No	No	No	No	No	No	N/A	N/A	N/A

/a/ - N/A = not applicable.
Totals may not sum due to rounding
Source: MOVES5.0, RS&H 2026

Table D-29: 2033 Proposed Action Results (Tons Per Year)

							GHGs		
2033	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx	CO_2	CH_4	N_2O
Non-road	0.22	0.08	1.03	0.05	0.05	0.01	3,712.83	N/A	N/A
On-road	24.11	0.43	1.92	0.06	0.06	0.01	2,343.21	0.10	0.03
Fugitive	2.12	11.08	0.13	0.81	N/A	0.02	N/A	N/A	N/A
Total	26.46	11.58	3.08	0.93	0.11	0.05	6,056.04	0.10	0.03
de minimis Threshold	100	100	100	100	100	100	N/A/a/	N/A/a/	N/A/a/
Exceeds de minimis?	No	No	No	No	No	No	N/A	N/A	N/A

/a/ - N/A = not applicable.
Totals may not sum due to rounding
Source: MOVES5.0, RS&H 2026

Table D-30: 2034 Proposed Action Results (Tons Per Year)

							GHGs		
2034	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx	CO_2	CH_4	N_2O
Non-road	0.21	0.07	1.01	0.05	0.05	0.01	3,657.63	N/A	N/A
On-road	17.33	0.32	1.58	0.06	0.05	0.01	1,734.62	0.07	0.03
Fugitive	2.12	11.08	0.13	0.81	N/A	0.02	N/A	N/A	N/A
Total	19.66	11.47	2.72	0.92	0.10	0.04	5,392.25	0.07	0.03
de minimis Threshold	100	100	100	100	100	100	N/A/a/	N/A/a/	N/A/a/
Exceeds de minimis?	No	No	No	No	No	No	N/A	N/A	N/A

/a/ - N/A = not applicable.
Totals may not sum due to rounding
Source: MOVES5.0, RS&H 2026

Table D-31: 2035 Proposed Action Results (Tons Per Year)

							GHGs		
2035	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx	CO_2	CH_4	N_2O
Non-road	0.21	0.07	1.01	0.05	0.05	0.01	3,657.63	N/A	N/A
On-road	17.33	0.32	1.58	0.06	0.05	0.01	1,734.62	0.07	0.03
Fugitive	2.12	11.08	0.13	0.81	N/A	0.02	N/A	N/A	N/A
Total	19.66	11.47	2.72	0.92	0.10	0.04	5,392.26	0.07	0.03
de minimis Threshold	100	100	100	100	100	100	N/A/a/	N/A/a/	N/A/a/
Exceeds de minimis?	No	No	No	No	No	No	N/A	N/A	N/A

/a/ - N/A = not applicable.
Totals may not sum due to rounding
Source: MOVES5.0, RS&H 2026

Table D-32: 2036 Proposed Action Results (Tons Per Year)

							GHGs		
2036	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx	CO_2	CH_4	N_2O
Non-road	0.20	0.07	1.00	0.05	0.05	0.01	3,657.88	N/A	N/A
On-road	17.33	0.32	1.58	0.06	0.05	0.01	1,734.62	0.07	0.03
Fugitive	2.12	11.08	0.13	0.81	N/A	0.02	N/A	N/A	N/A
Total	19.65	11.47	2.71	0.91	0.10	0.04	5,392.51	0.07	0.03
de minimis Threshold	100	100	100	100	100	100	N/A/a/	N/A/a/	N/A/a/
Exceeds de minimis?	No	No	No	No	No	No	N/A	N/A	N/A

/a/ - N/A = not applicable.
Totals may not sum due to rounding
Source: MOVES5.0, RS&H 2026

Table D-33: 2037 Proposed Action Results (Tons Per Year)

							GHGs		
2037	CO	VOC	NOx	PM_{10}	$PM_{2.5}$	SOx	CO_2	CH_4	N_2O
Non-road	0.19	0.07	1.00	0.05	0.05	0.01	3,656.22	N/A	N/A
On-road	17.33	0.32	1.58	0.06	0.05	0.01	1,734.62	0.07	0.03
Fugitive	2.12	11.08	0.13	0.81	N/A	0.02	N/A	N/A	N/A
Total	19.64	11.47	2.70	0.91	0.10	0.04	5,390.84	0.07	0.03
de minimis Threshold	100	100	100	100	100	100	N/A/a/	N/A/a/	N/A/a/
Exceeds de minimis?	No	No	No	No	No	No	N/A	N/A	N/A

/a/ - N/A = not applicable.
Totals may not sum due to rounding
Source: MOVES5.0, RS&H 2026

As shown in **Tables D-24 through D-33** project-related emission levels for NAAQS pollutants are below the *de minimis* thresholds. As such, a formal General Conformity Determination is not required for this Proposed Action. In addition, the Proposed Action would not significantly affect air quality, since no criteria pollutant would exceed its respective *de minimis* threshold.

Construction Emissions Inventory Calculations

Nonroad Emissions - 2028

Inputs							MOVES5 Emission Factors (g-hp-hr)							Emissions (Tons per Year)						
Year	Equipment Type	MOVES5 Equipment Type	Average Horsepower	Load Factor	Fuel Type	Operating Hours	CO	NOx	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2
2028	40 Ton Crane	Cranes	300	0.59	Diesel	60.00	0.028633	0.139727	0.001404	0.011724	531.0082	0.008183	0.007938	0.000335	0.000137	0.001636	9.58E-05	9.29E-05	1.64E-05	6.216304
2028	Backhoe	Tractors/Loaders/Backhoes	100	0.21	Diesel	80.00	2.153099	2.357108	0.002047	0.379113	694.8899	0.299431	0.290449	0.003987	0.000702	0.004365	0.000555	0.000538	3.79E-06	1.286862
2028	Bob Cat	Tractors/Loaders/Backhoes	75	0.29	Diesel	506.08	2.244356	3.534904	0.002047	0.408889	694.8003	0.302685	0.293604	0.027232	0.004961	0.04289	0.003673	0.003562	2.48E-05	8.430254
2028	Concrete Ready Mix Trucks	Off-Highway Trucks	600	0.59	Diesel	15.00	0.024036	0.120021	0.001415	0.010087	536.8019	0.007193	0.006978	0.000141	5.9E-05	0.000703	4.21E-05	4.08E-05	8.28E-06	3.142065
2028	Dump Truck	Off-Highway Trucks	600	0.59	Diesel	506.08	0.024036	0.120021	0.001415	0.010087	536.8019	0.007193	0.006978	0.004747	0.001992	0.023702	0.001421	0.001378	0.00028	106.008
2028	Excavator with Bucket	Excavators	175	0.59	Diesel	253.03	0.137698	0.939209	0.001583	0.017523	596.1059	0.021095	0.020462	0.003965	0.000505	0.027047	0.000607	0.000589	4.56E-05	17.16657
2028	Fork Truck	Rough Terrian Forklifts	100	0.59	Diesel	410.00	0.137698	0.939209	0.001583	0.017523	596.1059	0.021095	0.020462	0.003672	0.000467	0.025044	0.000563	0.000546	4.22E-05	15.89519
2028	Generator Sets	Other Construction Equipment	40	0.59	Diesel	253.03	0.279099	2.529207	0.001569	0.092482	595.88	0.020485	0.01987	0.001837	0.000609	0.016648	0.000135	0.000131	1.03E-05	3.922299
2028	High Lift	Rough Terrian Forklifts	100	0.59	Diesel	110.00	0.137698	0.939209	0.001583	0.017523	596.1059	0.021095	0.020462	0.000985	0.000125	0.006719	0.000151	0.000146	1.13E-05	4.264564
2028	Man Lift	Rough Terrian Forklifts	75	0.59	Diesel	300.00	0.274022	2.591673	0.001583	0.059667	595.9744	0.026589	0.025791	0.00401	0.000873	0.037925	0.000389	0.000377	2.32E-05	8.721048
2028	Man Lift (Fascia Construction)	Rough Terrian Forklifts	75	0.59	Diesel	30.00	0.274022	2.591673	0.001583	0.059667	595.9744	0.026589	0.025791	0.000401	8.73E-05	0.003792	3.89E-05	3.77E-05	2.32E-06	0.872105
2028	Material Deliveries	Off-Highway Trucks	600	0.59	Diesel	2.00	0.024036	0.120021	0.001415	0.010087	536.8019	0.007193	0.006978	1.88E-05	7.87E-06	9.37E-05	5.61E-06	5.45E-06	1.1E-06	0.418942
2028	Pickup Truck	Off-Highway Trucks	600	0.59	Diesel	295.20	0.024036	0.120021	0.001415	0.010087	536.8019	0.007193	0.006978	0.002769	0.001162	0.013826	0.000829	0.000804	0.000163	61.83583
2028	Survey Crew Trucks	Off-Highway Trucks	600	0.59	Diesel	2.50	0.024036	0.120021	0.001415	0.010087	536.8019	0.007193	0.006978	2.34E-05	9.84E-06	0.000117	7.02E-06	6.81E-06	1.38E-06	0.523677
2028	Tool Truck	Off-Highway Trucks	600	0.59	Diesel	100.00	0.024036	0.120021	0.001415	0.010087	536.8019	0.007193	0.006978	0.000938	0.000394	0.004683	0.000281	0.000272	5.52E-05	20.9471
2028	Tractor Trailer- Material Delivery	Off-Highway Trucks	600	0.59	Diesel	43.00	0.024036	0.120021	0.001415	0.010087	536.8019	0.007193	0.006978	0.000403	0.000169	0.002014	0.000121	0.000117	2.37E-05	9.007252
2028	Tractor Trailer- Steel Deliveries	Off-Highway Trucks	600	0.59	Diesel	4.00	0.024036	0.120021	0.001415	0.010087	536.8019	0.007193	0.006978	3.75E-05	1.57E-05	0.000187	1.12E-05	1.09E-05	2.21E-06	0.837884
2028	Tractor Trailers Temp Fac.	Off-Highway Trucks	600	0.59	Diesel	1.00	0.024036	0.120021	0.001415	0.010087	536.8019	0.007193	0.006978	9.38E-06	3.94E-06	4.68E-05	2.81E-06	2.72E-06	5.52E-07	0.209471

Source: RS&H 2026; MOVES5.0

Total						
0.055511	0.01228	0.211439	0.008926	0.008658	0.000715	269.7054

Nonroad Emissions - 2029

Inputs							MOVES5 Emission Factors (g-hp-hr)							Emissions (Tons per Year)						
Year	Equipment Type	MOVES5 Equipment Type	Average Horsepower	Load Factor	Fuel Type	Operating Hours	CO	NOx	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2
2029	40 Ton Crane	Cranes	300	0.59	Diesel	60.00	0.023631	0.124688	0.001401	0.010534	531.009	0.007085	0.006873	0.000277	0.000123	0.001460	0.000083	0.000080	0.000016	6.216314
2029	Backhoe	Tractors/Loaders/Backhoes	100	0.21	Diesel	80.00	1.877728	2.163225	0.00202	0.32897	695.0372	0.260742	0.252921	0.003477	0.000609	0.004006	0.000483	0.000468	0.000004	1.287134
2029	Bob Cat	Tractors/Loaders/Backhoes	75	0.29	Diesel	506.08	1.974444	3.405075	0.00202	0.360385	694.9378	0.264228	0.256301	0.023957	0.004373	0.041315	0.003206	0.003110	0.000025	8.431922
2029	Concrete Ready Mix Trucks	Off-Highway Trucks	600	0.59	Diesel	15.00	0.021114	0.114908	0.001414	0.009724	536.8014	0.006645	0.006445	0.000124	0.000057	0.000673	0.000039	0.000038	0.000008	3.142062
2029	Dump Truck	Off-Highway Trucks	600	0.59	Diesel	506.08	0.021114	0.114908	0.001414	0.009724	536.8014	0.006645	0.006445	0.004170	0.001920	0.022692	0.001312	0.001273	0.000279	106.007925
2029	Excavator with Bucket	Excavators	175	0.59	Diesel	253.03	0.052317	0.173611	0.001415	0.008647	536.8055	0.011791	0.011437	0.001507	0.000249	0.005000	0.000340	0.000329	0.000041	15.458844
2029	Fork Truck	Rough Terrian Forklifts	100	0.59	Diesel	410.00	0.088258	0.89182	0.001576	0.011823	596.1217	0.015839	0.015363	0.002353	0.000315	0.023780	0.000422	0.000410	0.000042	15.895615
2029	Generator Sets	Other Construction Equipment	40	0.59	Diesel	253.03	0.278151	2.528437	0.001569	0.092411	595.8792	0.020244	0.019637	0.001831	0.000608	0.016643	0.000133	0.000129	0.000010	3.922294
2029	High Lift	Rough Terrian Forklifts	100	0.59	Diesel	110.00	0.088258	0.89182	0.001576	0.011823	596.1217	0.015839	0.015363	0.000631	0.000085	0.006380	0.000113	0.000110	0.000011	4.264677
2029	Man Lift	Rough Terrian Forklifts	75	0.59	Diesel	300.00	0.226019	2.565257	0.001575	0.054488	595.988	0.02137	0.020729	0.003307	0.000797	0.037538	0.000313	0.000303	0.000023	8.721247
2029	Man Lift (Fascia Construction)	Rough Terrian Forklifts	75	0.59	Diesel	30.00	0.226019	2.565257	0.001575	0.054488	595.988	0.02137	0.020729	0.000331	0.000080	0.003754	0.000031	0.000030	0.000002	0.872125
2029	Material Deliveries	Off-Highway Trucks	600	0.59	Diesel	2.00	0.021114	0.114908	0.001414	0.009724	536.8014	0.006645	0.006445	0.000016	0.000008	0.000090	0.000005	0.000005	0.000001	0.418942
2029	Pickup Truck	Off-Highway Trucks	600	0.59	Diesel	295.20	0.021114	0.114908	0.001414	0.009724	536.8014	0.006645	0.006445	0.002432	0.001120	0.013237	0.000765	0.000742	0.000163	61.835774
2029	Survey Crew Trucks	Off-Highway Trucks	600	0.59	Diesel	2.50	0.021114	0.114908	0.001414	0.009724	536.8014	0.006645	0.006445	0.000021	0.000009	0.000112	0.000006	0.000006	0.000001	0.523677
2029	Tool Truck	Off-Highway Trucks	600	0.59	Diesel	100.00	0.021114	0.114908	0.001414	0.009724	536.8014	0.006645	0.006445	0.000824	0.000379	0.004484	0.000259	0.000252	0.000055	20.947078
2029	Tractor Trailer- Material Delivery	Off-Highway Trucks	600	0.59	Diesel	43.00	0.021114	0.114908	0.001414	0.009724	536.8014	0.006645	0.006445	0.000354	0.000163	0.001928	0.000111	0.000108	0.000024	9.007244
2029	Tractor Trailer- Steel Deliveries	Off-Highway Trucks	600	0.59	Diesel	4.00	0.021114	0.114908	0.001414	0.009724	536.8014	0.006645	0.006445	0.000033	0.000015	0.000179	0.000010	0.000010	0.000002	0.837883
2029	Tractor Trailers Temp Fac.	Off-Highway Trucks	600	0.59	Diesel	1.00	0.021114	0.114908	0.001414	0.009724	536.8014	0.006645	0.006445	0.000008	0.000004	0.000045	0.000003	0.000003	0.000001	0.209471

Source: RS&H 2026; MOVES5.0

Total						
0.045653	0.010916	0.183315	0.007636	0.007407	0.000709	268.000227

Nonroad Emissions - 2030

Inputs							MOVES5 Emission Factors (g-hp-hr)							Emissions (Tons per Year)						
Year	Equipment Type	MOVES5 Equipment Type	Average Horsepower	Load Factor	Fuel Type	Operating Hours	CO	NOx	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2
2030	40 Ton Crane	Cranes	300	0.59	Diesel	60.00	0.022536	0.121766	0.001401	0.010294	531.0094	0.00681	0.006606	0.000264	0.000121	0.001425	7.97E-05	7.73E-05	1.64E-05	6.216319
2030	Backhoe	Tractors/Loaders/Backhoes	100	0.21	Diesel	80.00	1.615317	1.977118	0.001994	0.28094	695.1784	0.22333	0.216631	0.002991	0.00052	0.003661	0.000414	0.000401	3.69E-06	1.287396
2030	Bob Cat	Tractors/Loaders/Backhoes	75	0.29	Diesel	506.08	1.717291	3.280284	0.001994	0.313928	695.0712	0.227041	0.22023	0.020836	0.003809	0.039801	0.002755	0.002672	2.42E-05	8.433541
2030	Concrete Ready Mix Trucks	Off-Highway Trucks	600	0.59	Diesel	15.00	0.019756	0.112565	0.001414	0.009555	536.8014	0.006375	0.006184	0.000116	5.59E-05	0.000659	3.73E-05	3.62E-05	8.28E-06	3.142062
2030	Dump Truck	Off-Highway Trucks	600	0.59	Diesel	506.08	0.019756	0.112565	0.001414	0.009555	536.8014	0.006375	0.006184	0.003901	0.001887	0.022229	0.001259	0.001221	0.000279	106.0079
2030	Excavator with Bucket	Excavators	175	0.59	Diesel	253.03	0.049636	0.169245	0.001414	0.008278	536.8046	0.011029	0.010698	0.001429	0.000238	0.004874	0.000318	0.000308	4.07E-05	15.45882
2030	Fork Truck	Rough Terrian Forklifts	100	0.59	Diesel	410.00	0.061636	0.866585	0.001572	0.008833	596.1321	0.012968	0.012579	0.001644	0.000236	0.023108	0.000346	0.000335	4.19E-05	15.89589
2030	Generator Sets	Other Construction Equipment	40	0.59	Diesel	253.03	0.277648	2.528062	0.001569	0.092368	595.8792	0.02013	0.019526	0.001828	0.000608	0.016641	0.000133	0.000129	1.03E-05	3.922294
2030	High Lift	Rough Terrian Forklifts	100	0.59	Diesel	110.00	0.061636	0.866585	0.001572	0.008833	596.1321	0.012968	0.012579	0.000441	6.32E-05	0.0062	9.28E-05	9E-05	1.12E-05	4.264752
2030	Man Lift	Rough Terrian Forklifts	75	0.59	Diesel	300.00	0.19933	2.550586	0.001571	0.051726	595.9951	0.018431	0.017878	0.002917	0.000757	0.037323	0.00027	0.000262	2.3E-05	8.721351
2030	Man Lift (Fascia Construction)	Rough Terrian Forklifts	75	0.59	Diesel	30.00	0.19933	2.550586	0.001571	0.051726	595.9951	0.018431	0.017878	0.000292	7.57E-05	0.003732	2.7E-05	2.62E-05	2.3E-06	0.872135
2030	Material Deliveries	Off-Highway Trucks	600	0.59	Diesel	2.00	0.019756	0.112565	0.001414	0.009555	536.8014	0.006375	0.006184	1.54E-05	7.46E-06	8.78E-05	4.98E-06	4.83E-06	1.1E-06	0.418942
2030	Pickup Truck	Off-Highway Trucks	600	0.59	Diesel	295.20	0.019756	0.112565	0.001414	0.009555	536.8014	0.006375	0.006184	0.002276	0.001101	0.012967	0.000734	0.000712	0.000163	61.83578
2030	Survey Crew Trucks	Off-Highway Trucks	600	0.59	Diesel	2.50	0.019756	0.112565	0.001414	0.009555	536.8014	0.006375	0.006184	1.93E-05	9.32E-06	0.00011	6.22E-06	6.03E-06	1.38E-06	0.523677
2030	Tool Truck	Off-Highway Trucks	600	0.59	Diesel	100.00	0.019756	0.112565	0.001414	0.009555	536.8014	0.006375	0.006184	0.000771	0.000373	0.004392	0.000249	0.000241	5.52E-05	20.94708
2030	Tractor Trailer- Material Delivery	Off-Highway Trucks	600	0.59	Diesel	43.00	0.019756	0.112565	0.001414	0.009555	536.8014	0.006375	0.006184	0.000331	0.00016	0.001889	0.000107	0.000104	2.37E-05	9.007244
2030	Tractor Trailer- Steel Deliveries	Off-Highway Trucks	600	0.59	Diesel	4.00	0.019756	0.112565	0.001414	0.009555	536.8014	0.006375	0.006184	3.08E-05	1.49E-05	0.000176	9.95E-06	9.65E-06	2.21E-06	0.837883
2030	Tractor Trailers Temp Fac.	Off-Highway Trucks	600	0.59	Diesel	1.00	0.019756	0.112565	0.001414	0.009555	536.8014	0.006375	0.006184	7.71E-06	3.73E-06	4.39E-05	2.49E-06	2.41E-06	5.52E-07	0.209471

Source: RS&H 2026; MOVES5.0

Total						
0.04011	0.01004	0.179318	0.006843	0.006638	0.000708	268.0026

Nonroad Emissions - 2031

Inputs							MOVES5 Emission Factors (g-hp-hr)							Emissions (Tons per Year)						
Year	Equipment Type	MOVES5 Equipment Type	Average Horsepower	Load Factor	Fuel Type	Operating Hours	CO	NOx	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2
2031	40 Ton Crane	Cranes	300	0.59	Diesel	60.00	0.021826	0.119818	0.0014	0.010135	531.0109	0.006647	0.006448	0.000255509	0.000118642	0.001402664	7.7814E-05	7.54795E-05	1.63914E-05	6.216336
2031	Asphalt Paver	Pavers	175	0.59	Diesel	121.68	0.058513	0.184178	0.001417	0.00956	536.8034	0.013368	0.012967	0.000810359	0.000132395	0.002550739	0.000185141	0.000179587	1.96271E-05	7.434349
2031	Backhoe	Tractors/Loaders/Backhoes	100	0.21	Diesel	80.00	1.409496	1.830802	0.001974	0.24318	695.2902	0.193858	0.188042	0.002610236	0.000450342	0.003390449	0.000359004	0.000348234	3.65556E-06	1.287603
2031	Bob Cat	Tractors/Loaders/Backhoes	75	0.29	Diesel	506.08	1.515783	3.182249	0.001974	0.277414	695.1842	0.197765	0.191833	0.018391523	0.003365961	0.038611341	0.002399553	0.002327572	2.39459E-05	8.434912
2031	Chain Saw	Other Construction Equipment	11	0.59	Diesel	32.60	2.458183	4.183293	0.002183	0.837676	593.754	0.238309	0.23116	0.000573301	0.000195364	0.000975634	5.55788E-05	5.39115E-05	5.09162E-07	0.138476
2031	Chipper/Stump Grinder	Other Construction Equipment	100	0.59	Diesel	32.60	0.09325	0.896728	0.001576	0.012411	596.1189	0.016479	0.015985	0.000197708	2.6314E-05	0.00190124	3.4939E-05	3.38908E-05	3.34246E-06	1.263889
2031	Cold Planer	Other Construction Equipment	175	0.59	Diesel	175.98	0.065276	0.204461	0.00142	0.011556	536.798	0.014885	0.014438	0.001307434	0.000231454	0.004095228	0.000298138	0.000289194	2.84337E-05	10.75175
2031	Concrete Ready Mix Trucks	Off-Highway Trucks	600	0.59	Diesel	15.00	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	0.000112277	5.55124E-05	0.000653183	3.6632E-05	3.55331E-05	8.27393E-06	3.142067
2031	Concrete Saws	Other Construction Equipment	40	0.59	Diesel	1,585.42	0.277612	2.528039	0.001569	0.092365	595.8794	0.020123	0.019519	0.01144988	0.003809527	0.104266709	0.000829944	0.000805046	6.47027E-05	24.57652
2031	Concrete Truck	Off-Highway Trucks	600	0.59	Diesel	528.27	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	0.003954194	0.001955045	0.023003891	0.001290111	0.00125141	0.000291393	110.6578
2031	Crack Cleaner	Other Construction Equipment	40	0.59	Diesel	9.25	0.277612	2.528039	0.001569	0.092365	595.8794	0.020123	0.019519	6.68035E-05	2.22264E-05	0.000608337	4.84225E-06	4.69698E-06	3.77503E-07	0.14339
2031	Crack Filler (Trailer Mounted)	Other Construction Equipment	100	0.59	Diesel	9.25	0.09325	0.896728	0.001576	0.012411	596.1189	0.016479	0.015985	5.60982E-05	7.4664E-06	0.000539462	9.91368E-06	9.61626E-06	9.48398E-07	0.358619
2031	Curb/Gutter Paver	Pavers	175	0.59	Diesel	134.97	0.058513	0.184178	0.001417	0.00956	536.8034	0.013368	0.012967	0.00089882	0.000146847	0.002829185	0.000205352	0.000199191	2.17697E-05	8.245906
2031	Dozer	Crawler Tractor/Dozers	175	0.59	Diesel	606.30	0.054342	0.176959	0.001415	0.008936	536.8052	0.012336	0.011966	0.003749874	0.000616626	0.01221113	0.000851267	0.000825728	9.76769E-05	37.04255
2031	Dump Truck	Off-Highway Trucks	600	0.59	Diesel	3,750.81	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	0.028075378	0.013881117	0.163331142	0.009159985	0.008885199	0.002068932	785.6873
2031	Dump Truck (12 cy)	Off-Highway Trucks	600	0.59	Diesel	1,793.87	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	0.013427347	0.006638791	0.078114848	0.00438086	0.004249441	0.000989489	375.7633
2031	Excavator	Excavators	175	0.59	Diesel	1,783.33	0.048976	0.168269	0.001414	0.00819	536.8044	0.010832	0.010507	0.009940531	0.0016624	0.034153308	0.002198572	0.002132615	0.000286896	108.9545
2031	Excavator with Bucket	Excavators	175	0.59	Diesel	253.03	0.048976	0.168269	0.001414	0.00819	536.8044	0.010832	0.010507	0.001410394	0.000235867	0.00484578	0.00031194	0.000302582	4.07058E-05	15.45881
2031	Flatbed Truck	Off-Highway Trucks	600	0.59	Diesel	2,013.97	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	0.015074827	0.007453343	0.087699216	0.004918373	0.004770829	0.001110895	421.8678
2031	Fork Truck	Rough Terrian Forklifts	100	0.59	Diesel	410.00	0.04944	0.855021	0.00157	0.007475	596.1363	0.011577	0.01123	0.001318324	0.000199314	0.022799167	0.000308705	0.000299444	4.18571E-05	15.896
2031	Generator Sets	Other Construction Equipment	40	0.59	Diesel	253.03	0.277612	2.528039	0.001569	0.092365	595.8794	0.020123	0.019519	0.001827347	0.000607982	0.016640473	0.000132455	0.000128481	1.03262E-05	3.922296
2031	Grader	Graders	300	0.59	Diesel	31.45	0.020958	0.115065	0.001414	0.009769	536.7994	0.006663	0.006463	0.000128602	5.99465E-05	0.000706064	4.08876E-05	3.96609E-05	8.67844E-06	3.293915
2031	High Lift	Rough Terrian Forklifts	100	0.59	Diesel	110.00	0.04944	0.855021	0.00157	0.007475	596.1363	0.011577	0.01123	0.000353697	5.34745E-05	0.00611685	8.28233E-05	8.03386E-05	1.123E-05	4.264782
2031	Hydralic Hammer	Other Construction Equipment	175	0.59	Diesel	1,585.42	0.065276	0.204461	0.00142	0.011556	536.798	0.014885	0.014438	0.011778549	0.002085148	0.036893513	0.002685898	0.002605323	0.000256157	96.86144
2031	Hydroseeder	Other Construction Equipment	600	0.59	Diesel	13.65	0.3425	0.893042	0.001524	0.050423	536.6832	0.051452	0.049908	0.001824326	0.000268578	0.004756795	0.000274058	0.000265836	8.11779E-06	2.858647
2031	Loader	Tractors/Loaders/Backhoes	150	0.24	Diesel	211.73	0.572511	1.120732	0.001777	0.178152	626.0274	0.12302	0.119329	0.004743598	0.001476093	0.009285938	0.001019293	0.000988714	1.47271E-05	5.187014
2031	Man Lift	Rough Terrian Forklifts	75	0.59	Diesel	300.00	0.186712	2.54354	0.001569	0.050447	596	0.016967	0.016458	0.002732201	0.000738209	0.037220276	0.000248276	0.000240827	2.29629E-05	8.721423
2031	Man Lift (Fascia Construction)	Rough Terrian Forklifts	75	0.59	Diesel	30.00	0.186712	2.54354	0.001569	0.050447	596	0.016967	0.016458	0.00027322	7.38209E-05	0.003722028	2.48276E-05	2.40827E-05	2.29629E-06	0.872142
2031	Material Deliveries	Off-Highway Trucks	600	0.59	Diesel	2.00	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	1.49703E-05	7.40165E-06	8.7091E-05	4.88426E-06	4.73774E-06	1.10319E-06	0.418942
2031	Off-Road Truck	Off-Highway Trucks	600	0.59	Diesel	13.65	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	0.000102172	5.05163E-05	0.000594396	3.33351E-05	3.23351E-05	7.52928E-06	2.859281
2031	Other General Equipment	Other Construction Equipment	175	0.59	Diesel	4,709.07	0.065276	0.204461	0.00142	0.011556	536.798	0.014885	0.014438	0.034985153	0.006193396	0.109582698	0.007977769	0.007738442	0.000760847	287.702
2031	Pickup Truck	Off-Highway Trucks	600	0.59	Diesel	5,814.74	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	0.043524151	0.021519347	0.25320582	0.014200363	0.013774373	0.003207384	1218.02
2031	Pumps	Other Construction Equipment	11	0.59	Diesel	26.07	2.458183	4.183293	0.002183	0.837676	593.754	0.238309	0.23116	0.000458407	0.000156211	0.000780109	4.44403E-05	4.31072E-05	4.07121E-07	0.110724
2031	Roller	Rollers	100	0.59	Diesel	574.77	0.067051	0.870358	0.001572	0.008353	596.1327	0.014197	0.013771	0.002506442	0.000312226	0.032534779	0.000530685	0.000514764	5.87794E-05	22.28399
2031	Scraper	Scrapers	600	0.59	Diesel	39.02	0.032992	0.135858	0.001419	0.011205	536.7958	0.00879	0.008527	0.00050231	0.000170594	0.002068454	0.000133832	0.000129817	2.15995E-05	8.172766
2031	Skid Steer Loader	Skid Steer Loaders	75	0.21	Diesel	658.89	3.530155	4.154504	0.002169	0.646729	694.0976	0.479513	0.465128	0.040382515	0.007398133	0.047524628	0.005485292	0.005320744	2.48142E-05	7.939993
2031	Surfacing Equipment (Grooving)	Other Construction Equipment	25	0.59	Diesel	155.77	1.487357	3.762251	0.002188	0.351575	595.1483	0.170028	0.164928	0.003766937	0.000890412	0.00952842	0.00043062	0.000417702	5.54244E-06	1.507295
2031	Survey Crew Trucks	Off-Highway Trucks	600	0.59	Diesel	2.50	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	1.87129E-05	9.25207E-06	0.000108864	6.10533E-06	5.92218E-06	1.37899E-06	0.523678
2031	Sweepers	Other Construction Equipment	175	0.59	Diesel	175.98	0.065276	0.204461	0.00142	0.011556	536.798	0.014885	0.014438	0.001307434	0.000231454	0.004095228	0.000298138	0.000289194	2.84337E-05	10.75175
2031	Tool Truck	Off-Highway Trucks	600	0.59	Diesel	100.00	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	0.000748514	0.000370083	0.004354552	0.000244213	0.000236887	5.51595E-05	20.94711
2031	Tractor Trailer- Material Delivery	Off-Highway Trucks	600	0.59	Diesel	43.00	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	0.000321861	0.000159136	0.001872457	0.000105012	0.000101861	2.37186E-05	9.007258
2031	Tractor Trailer- Steel Deliveries	Off-Highway Trucks	600	0.59	Diesel	4.00	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	2.99406E-05	1.48033E-05	0.000174182	9.76853E-06	9.47549E-06	2.20638E-06	0.837884
2031	Tractor Trailers Temp Fac.	Off-Highway Trucks	600	0.59	Diesel	1.00	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	7.48514E-06	3.70083E-06	4.35455E-05	2.44213E-06	2.36887E-06	5.51595E-07	0.209471
2031	Tractors/Loader/Backhoe	Tractors/Loaders/Backhoes	100	0.24	Diesel	893.22	1.409496	1.830802	0.001974	0.24318	695.2902	0.193858	0.188042	0.032844847	0.005666702	0.042662349	0.004517388	0.004381861	4.59983E-05	16.20203
2031	Vibratory Compactor	Plate Compactors	6	0.43	Diesel	269.93	2.4549	4.182937	0.002162	0.837125	587.9673	0.237371	0.23025	0.001884588	0.000642648	0.003211176	0.00018222	0.00017676	1.65965E-06	0.451373
2031	Water Truck	Off-Highway Trucks	600	0.59	Diesel	1,135.98	0.019182	0.111592	0.001414	0.009484	536.8023	0.006258	0.006071	0.008502997	0.004204078	0.049466979	0.002774222	0.002690999	0.000626603	237.9557

Source: RS&H 2026; MOVES5.0

Total						
0.309251798	0.0945679	1.265220319	0.069405919	0.067323816	0.010328034	3915.205

Nonroad Emissions - 2032

Inputs							MOVES5 Emission Factors (g-hp-hr)							Emissions (Tons per Year)						
Year	Equipment Type	MOVES5 Equipment Type	Average Horsepower	Load Factor	Fuel Type	Operating Hours	CO	NOx	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2
2032	Asphalt Paver	Pavers	175	0.59	Diesel	121.68	0.055893	0.179695	0.001416	0.009176	536.8023	0.012695	0.012315	0.000774	0.000127	0.002489	0.000176	0.000171	0.000020	7.434334
2032	Chain Saw	Other Construction Equipment	11	0.59	Diesel	32.60	2.46114	4.183594	0.002183	0.837872	593.7548	0.239069	0.231896	0.000574	0.000195	0.000976	0.000056	0.000054	0.000001	0.138476
2032	Chipper/Stump Grinder	Other Construction Equipment	100	0.59	Diesel	32.60	0.065722	0.870465	0.001572	0.009278	596.1306	0.0135	0.013095	0.000139	0.000020	0.001846	0.000029	0.000028	0.000003	1.263914
2032	Cold Planer	Other Construction Equipment	175	0.59	Diesel	175.98	0.055049	0.180623	0.001416	0.009293	536.8022	0.012455	0.012082	0.001103	0.000186	0.003618	0.000249	0.000242	0.000028	10.751830
2032	Concrete Saws	Other Construction Equipment	40	0.59	Diesel	1,585.42	0.277945	2.528217	0.001569	0.092387	595.8791	0.020188	0.019582	0.011464	0.003810	0.104274	0.000833	0.000808	0.000065	24.576505
2032	Concrete Truck	Off-Highway Trucks	600	0.59	Diesel	442.38	0.019035	0.111321	0.001413	0.009465	536.7993	0.006241	0.006054	0.003286	0.001634	0.019217	0.001077	0.001045	0.000244	92.666013
2032	Crack Cleaner	Other Construction Equipment	40	0.59	Diesel	9.25	0.277945	2.528217	0.001569	0.092387	595.8791	0.020188	0.019582	0.000067	0.000022	0.000608	0.000005	0.000005	0.000000	0.143390
2032	Crack Filler (Trailer Mounted)	Other Construction Equipment	100	0.59	Diesel	9.25	0.065722	0.870465	0.001572	0.009278	596.1306	0.0135	0.013095	0.000040	0.000006	0.000524	0.000008	0.000008	0.000001	0.358626
2032	Curb/Gutter Paver	Pavers	175	0.59	Diesel	134.97	0.055893	0.179695	0.001416	0.009176	536.8023	0.012695	0.012315	0.000859	0.000141	0.002760	0.000195	0.000189	0.000022	8.245889
2032	Dozer	Crawler Tractor/Dozers	175	0.59	Diesel	982.73	0.050445	0.170423	0.001414	0.008384	536.8048	0.011276	0.010937	0.005642	0.000938	0.019062	0.001261	0.001223	0.000158	60.041101
2032	Dump Truck	Off-Highway Trucks	600	0.59	Diesel	2,901.18	0.019035	0.111321	0.001413	0.009465	536.7993	0.006241	0.006054	0.021550	0.010716	0.126027	0.007066	0.006854	0.001600	607.710719
2032	Dump Truck (12 cy)	Off-Highway Trucks	600	0.59	Diesel	1,793.87	0.019035	0.111321	0.001413	0.009465	536.7993	0.006241	0.006054	0.013325	0.006626	0.077925	0.004369	0.004238	0.000989	375.761155
2032	Excavator	Excavators	175	0.59	Diesel	2,159.77	0.049009	0.168276	0.001414	0.008191	536.806	0.010852	0.010526	0.012047	0.002014	0.041364	0.002668	0.002588	0.000347	131.953472
2032	Flatbed Truck	Off-Highway Trucks	600	0.59	Diesel	2,013.97	0.019035	0.111321	0.001413	0.009465	536.7993	0.006241	0.006054	0.014960	0.007439	0.087486	0.004905	0.004758	0.001111	421.865491
2032	Grader	Graders	300	0.59	Diesel	31.45	0.019683	0.11254	0.001414	0.009567	536.8027	0.006399	0.006207	0.000121	0.000059	0.000691	0.000039	0.000038	0.000009	3.293936
2032	Hydralic Hammer	Other Construction Equipment	175	0.59	Diesel	1,585.42	0.055049	0.180623	0.001416	0.009293	536.8022	0.012455	0.012082	0.009933	0.001677	0.032592	0.002247	0.002180	0.000255	96.862189
2032	Hydroseeder	Other Construction Equipment	600	0.59	Diesel	13.65	0.296758	0.786662	0.00151	0.044448	536.701	0.045235	0.043878	0.001581	0.000237	0.004190	0.000241	0.000234	0.000008	2.858741
2032	Loader	Tractors/Loaders/Backhoes	150	0.24	Diesel	211.73	0.497264	0.992822	0.001762	0.155576	626.0929	0.107965	0.104726	0.004120	0.001289	0.008226	0.000895	0.000868	0.000015	5.187557
2032	Off-Road Truck	Off-Highway Trucks	600	0.59	Diesel	13.65	0.019035	0.111321	0.001413	0.009465	536.7993	0.006241	0.006054	0.000101	0.000050	0.000593	0.000033	0.000032	0.000008	2.859265
2032	Other General Equipment	Other Construction Equipment	175	0.59	Diesel	4,365.52	0.055049	0.180623	0.001416	0.009293	536.8022	0.012455	0.012082	0.027351	0.004617	0.089744	0.006189	0.006003	0.000703	266.714427
2032	Pickup Truck	Off-Highway Trucks	600	0.59	Diesel	5,928.87	0.019035	0.111321	0.001413	0.009465	536.7993	0.006241	0.006054	0.044040	0.021898	0.257549	0.014439	0.014006	0.003270	1241.919386
2032	Pumps	Other Construction Equipment	11	0.59	Diesel	26.07	2.46114	4.183594	0.002183	0.837872	593.7548	0.239069	0.231896	0.000459	0.000156	0.000780	0.000045	0.000043	0.000000	0.110725
2032	Roller	Rollers	100	0.59	Diesel	574.77	0.063565	0.86733	0.001572	0.008177	596.1341	0.01371	0.013299	0.002376	0.000306	0.032422	0.000512	0.000497	0.000059	22.284047
2032	Scraper	Scrapers	600	0.59	Diesel	39.02	0.023472	0.118976	0.001415	0.010025	536.8024	0.00703	0.006819	0.000357	0.000153	0.001811	0.000107	0.000104	0.000022	8.172867
2032	Skid Steer Loader	Skid Steer Loaders	75	0.21	Diesel	315.33	2.946414	3.881705	0.002109	0.548357	694.3842	0.407949	0.395711	0.016131	0.003002	0.021251	0.002233	0.002166	0.000012	3.801516
2032	Surfacing Equipment (Grooving)	Other Construction Equipment	25	0.59	Diesel	155.77	1.489145	3.762511	0.002188	0.351657	595.1489	0.17057	0.165453	0.003771	0.000891	0.009529	0.000432	0.000419	0.000006	1.507296
2032	Sweepers	Other Construction Equipment	175	0.59	Diesel	175.98	0.055049	0.180623	0.001416	0.009293	536.8022	0.012455	0.012082	0.001103	0.000186	0.003618	0.000249	0.000242	0.000028	10.751830
2032	Tractors/Loader/Backhoe	Tractors/Loaders/Backhoes	100	0.24	Diesel	549.67	1.233264	1.704952	0.001957	0.210837	695.3853	0.168525	0.16347	0.017685	0.003023	0.024449	0.002417	0.002344	0.000028	9.971684
2032	Vibratory Compactor	Plate Compactors	6	0.43	Diesel	269.93	2.441373	4.181643	0.002162	0.836577	587.9724	0.233981	0.226961	0.001874	0.000642	0.003210	0.000180	0.000174	0.000002	0.451377
2032	Water Truck	Off-Highway Trucks	600	0.59	Diesel	1,135.98	0.019035	0.111321	0.001413	0.009465	536.7993	0.006241	0.006054	0.008438	0.004196	0.049347	0.002767	0.002684	0.000627	237.954369

Source: RS&H 2026; MOVES5.0

Total						
0.225270	0.076255	1.028178	0.055921	0.054244	0.009640	3657.612128

Nonroad Emissions - 2033

Inputs							MOVES5 Emission Factors (g-hp-hr)							Emissions (Tons per Year)						
Year	Equipment Type	MOVES5 Equipment Type	Average Horsepower	Load Factor	Fuel Type	Operating Hours	CO	NOx	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2
2033	Asphalt Paver	Pavers	175	0.59	Diesel	121.68	0.053506	0.175624	0.001415	0.008828	536.802	0.012074	0.011712	0.000741	0.000122	0.002432	0.000167	0.000162	1.96E-05	7.43433
2033	Chain Saw	Other Construction Equipment	11	0.59	Diesel	32.60	2.461948	4.183667	0.002183	0.837924	593.7541	0.239277	0.232099	0.000574	0.000195	0.000976	5.58E-05	5.41E-05	5.09E-07	0.138476
2033	Chipper/Stump Grinder	Other Construction Equipment	100	0.59	Diesel	32.60	0.053357	0.858738	0.00157	0.007906	596.1336	0.012055	0.011694	0.000113	1.68E-05	0.001821	2.56E-05	2.48E-05	3.33E-06	1.26392
2033	Cold Planer	Other Construction Equipment	175	0.59	Diesel	175.98	0.050256	0.17087	0.001414	0.008403	536.8075	0.011143	0.010808	0.001007	0.000168	0.003422	0.000223	0.000216	2.83E-05	10.75194
2033	Concrete Saws	Other Construction Equipment	40	0.59	Diesel	1,585.42	0.278038	2.528261	0.001569	0.092393	595.8799	0.020206	0.0196	0.011467	0.003811	0.104276	0.000833	0.000808	6.47E-05	24.57654
2033	Concrete Truck	Off-Highway Trucks	600	0.59	Diesel	442.38	0.019038	0.111323	0.001413	0.009465	536.8012	0.006244	0.006056	0.003286	0.001634	0.019217	0.001078	0.001045	0.000244	92.66634
2033	Crack Cleaner	Other Construction Equipment	40	0.59	Diesel	9.25	0.278038	2.528261	0.001569	0.092393	595.8799	0.020206	0.0196	6.69E-05	2.22E-05	0.000608	4.86E-06	4.72E-06	3.78E-07	0.14339
2033	Crack Filler (Trailer Mounted)	Other Construction Equipment	100	0.59	Diesel	9.25	0.053357	0.858738	0.00157	0.007906	596.1336	0.012055	0.011694	3.21E-05	4.76E-06	0.000517	7.25E-06	7.03E-06	9.45E-07	0.358628
2033	Curb/Gutter Paver	Pavers	175	0.59	Diesel	134.97	0.053506	0.175624	0.001415	0.008828	536.802	0.012074	0.011712	0.000822	0.000136	0.002698	0.000185	0.00018	2.17E-05	8.245885
2033	Dozer	Crawler Tractor/Dozers	175	0.59	Diesel	982.73	0.049007	0.168276	0.001414	0.008191	536.8073	0.010851	0.010526	0.005481	0.000916	0.018821	0.001214	0.001177	0.000158	60.04138
2033	Dump Truck	Off-Highway Trucks	600	0.59	Diesel	2,969.18	0.019038	0.111323	0.001413	0.009465	536.8012	0.006244	0.006056	0.022058	0.010967	0.128982	0.007234	0.007017	0.001638	621.9569
2033	Dump Truck (12 cy)	Off-Highway Trucks	600	0.59	Diesel	1,793.87	0.019038	0.111323	0.001413	0.009465	536.8012	0.006244	0.006056	0.013327	0.006626	0.077926	0.00437	0.004239	0.000989	375.7625
2033	Excavator	Excavators	175	0.59	Diesel	2,227.77	0.049018	0.168278	0.001414	0.008192	536.8083	0.010858	0.010532	0.012429	0.002077	0.042667	0.002753	0.00267	0.000358	136.1086
2033	Flatbed Truck	Off-Highway Trucks	600	0.59	Diesel	2,013.97	0.019038	0.111323	0.001413	0.009465	536.8012	0.006244	0.006056	0.014962	0.007439	0.087487	0.004907	0.00476	0.001111	421.867
2033	Grader	Graders	300	0.59	Diesel	31.45	0.019132	0.111512	0.001414	0.009481	536.8016	0.006261	0.006073	0.000117	5.82E-05	0.000684	3.84E-05	3.73E-05	8.67E-06	3.293929
2033	Hydralic Hammer	Other Construction Equipment	175	0.59	Diesel	1,585.42	0.050256	0.17087	0.001414	0.008403	536.8075	0.011143	0.010808	0.009068	0.001516	0.030832	0.002011	0.00195	0.000255	96.86315
2033	Hydroseeder	Other Construction Equipment	600	0.59	Diesel	13.65	0.256222	0.691041	0.001498	0.039233	536.7156	0.039686	0.038495	0.001365	0.000209	0.003681	0.000211	0.000205	7.98E-06	2.858819
2033	Loader	Tractors/Loaders/Backhoes	150	0.24	Diesel	211.73	0.430456	0.876134	0.001747	0.13477	626.1528	0.094598	0.09176	0.003567	0.001117	0.007259	0.000784	0.00076	1.45E-05	5.188053
2033	Off-Road Truck	Off-Highway Trucks	600	0.59	Diesel	13.65	0.019038	0.111323	0.001413	0.009465	536.8012	0.006244	0.006056	0.000101	5.04E-05	0.000593	3.33E-05	3.23E-05	7.53E-06	2.859275
2033	Other General Equipment	Other Construction Equipment	175	0.59	Diesel	4,501.52	0.050256	0.17087	0.001414	0.008403	536.8075	0.011143	0.010808	0.025748	0.004305	0.087543	0.005709	0.005537	0.000724	275.0262
2033	Pickup Truck	Off-Highway Trucks	600	0.59	Diesel	6,064.87	0.019038	0.111323	0.001413	0.009465	536.8012	0.006244	0.006056	0.045056	0.022401	0.26346	0.014776	0.014333	0.003345	1270.412
2033	Pumps	Other Construction Equipment	11	0.59	Diesel	26.07	2.461948	4.183667	0.002183	0.837924	593.7541	0.239277	0.232099	0.000459	0.000156	0.00078	4.46E-05	4.33E-05	4.07E-07	0.110724
2033	Roller	Rollers	100	0.59	Diesel	574.77	0.06065	0.864801	0.001571	0.008031	596.1336	0.013312	0.012913	0.002267	0.0003	0.032327	0.000498	0.000483	5.87E-05	22.28403
2033	Scraper	Scrapers	600	0.59	Diesel	39.02	0.019077	0.111582	0.001414	0.009474	536.8016	0.006148	0.005964	0.00029	0.000144	0.001699	9.36E-05	9.08E-05	2.15E-05	8.172854
2033	Skid Steer Loader	Skid Steer Loaders	75	0.21	Diesel	315.33	2.523574	3.680542	0.002066	0.474153	694.5998	0.352448	0.341875	0.013816	0.002596	0.02015	0.00193	0.001872	1.13E-05	3.802696
2033	Surfacing Equipment (Grooving)	Other Construction Equipment	25	0.59	Diesel	155.77	1.489636	3.762585	0.002188	0.351679	595.1478	0.170719	0.165597	0.003773	0.000891	0.009529	0.000432	0.000419	5.54E-06	1.507294
2033	Sweepers	Other Construction Equipment	175	0.59	Diesel	175.98	0.050256	0.17087	0.001414	0.008403	536.8075	0.011143	0.010808	0.001007	0.000168	0.003422	0.000223	0.000216	2.83E-05	10.75194
2033	Tractors/Loader/Backhoe	Tractors/Loaders/Backhoes	100	0.24	Diesel	549.67	1.072262	1.589755	0.00194	0.181508	695.4719	0.14556	0.141193	0.015376	0.002603	0.022797	0.002087	0.002025	2.78E-05	9.972927
2033	Vibratory Compactor	Plate Compactors	6	0.43	Diesel	269.93	2.434037	4.180926	0.002162	0.836099	587.9726	0.232093	0.22513	0.001869	0.000642	0.00321	0.000178	0.000173	1.66E-06	0.451377
2033	Water Truck	Off-Highway Trucks	600	0.59	Diesel	1,135.98	0.019038	0.111323	0.001413	0.009465	536.8012	0.006244	0.006056	0.008439	0.004196	0.049348	0.002768	0.002685	0.000627	237.9552

Source: RS&H 2026; MOVES5.0

Total						
0.218684	0.075488	1.029166	0.054875	0.053228	0.009783	3712.826

Nonroad Emissions - 2034

Inputs							MOVES5 Emission Factors (g-hp-hr)							Emissions (Tons per Year)						
Year	Equipment Type	MOVES5 Equipment Type	Average Horsepower	Load Factor	Fuel Type	Operating Hours	CO	NOx	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2
2034	Asphalt Paver	Paver	175	0.59	Diesel	121.68	0.051067	0.171535	0.001414	0.008479	536.8067	0.011425	0.011082	0.000707	0.000117	0.002376	0.000158	0.000153	0.000020	7.434395
2034	Chain Saw	Other Construction Equipment	11	0.59	Diesel	32.60	2.459922	4.183467	0.002183	0.837794	593.7543	0.238755	0.231593	0.000574	0.000195	0.000976	0.000056	0.000054	0.000001	0.138476
2034	Chipper/Stump Grinder	Other Construction Equipment	100	0.59	Diesel	32.60	0.049292	0.854873	0.00157	0.00747	596.1365	0.011482	0.011137	0.000105	0.000016	0.001812	0.000024	0.000024	0.000003	1.263927
2034	Cold Planer	Other Construction Equipment	175	0.59	Diesel	175.98	0.048548	0.168184	0.001414	0.008177	536.8065	0.010572	0.010255	0.000972	0.000164	0.003369	0.000212	0.000205	0.000028	10.751917
2034	Concrete Saws	Other Construction Equipment	40	0.59	Diesel	1,585.42	0.277808	2.528144	0.001569	0.092378	595.8799	0.020161	0.019556	0.011458	0.003810	0.104271	0.000832	0.000807	0.000065	24.576537
2034	Concrete Truck	Off-Highway Trucks	600	0.59	Diesel	442.38	0.01904	0.111323	0.001413	0.009466	536.8012	0.006245	0.006058	0.003287	0.001634	0.019217	0.001078	0.001046	0.000244	92.666341
2034	Crack Cleaner	Other Construction Equipment	40	0.59	Diesel	9.25	0.277808	2.528144	0.001569	0.092378	595.8799	0.020161	0.019556	0.000067	0.000022	0.000608	0.000005	0.000005	0.000000	0.143390
2034	Crack Filler (Trailer Mounted)	Other Construction Equipment	100	0.59	Diesel	9.25	0.049292	0.854873	0.00157	0.00747	596.1365	0.011482	0.011137	0.000030	0.000004	0.000514	0.000007	0.000007	0.000001	0.358630
2034	Curb/Gutter Paver	Pavers	175	0.59	Diesel	134.97	0.051067	0.171535	0.001414	0.008479	536.8067	0.011425	0.011082	0.000784	0.000130	0.002635	0.000175	0.000170	0.000022	8.245956
2034	Dozer	Crawler Tractor/Dozers	175	0.59	Diesel	982.73	0.048891	0.168252	0.001414	0.008188	536.8072	0.01078	0.010457	0.005468	0.000916	0.018819	0.001206	0.001170	0.000158	60.041370
2034	Dump Truck	Off-Highway Trucks	600	0.59	Diesel	2,901.18	0.01904	0.111323	0.001413	0.009466	536.8012	0.006245	0.006058	0.021555	0.010716	0.126029	0.007070	0.006858	0.001600	607.712865
2034	Dump Truck (12 cy)	Off-Highway Trucks	600	0.59	Diesel	1,793.87	0.01904	0.111323	0.001413	0.009466	536.8012	0.006245	0.006058	0.013328	0.006626	0.077927	0.004372	0.004241	0.000989	375.762482
2034	Excavator	Excavators	175	0.59	Diesel	2,159.77	0.049022	0.168278	0.001414	0.008192	536.8063	0.01086	0.010534	0.012050	0.002014	0.041365	0.002669	0.002589	0.000347	131.953542
2034	Flatbed Truck	Off-Highway Trucks	600	0.59	Diesel	2,013.97	0.01904	0.111323	0.001413	0.009466	536.8012	0.006245	0.006058	0.014963	0.007439	0.087488	0.004908	0.004761	0.001111	421.866980
2034	Grader	Graders	300	0.59	Diesel	31.45	0.018994	0.111308	0.001413	0.009461	536.8014	0.006203	0.006017	0.000117	0.000058	0.000683	0.000038	0.000037	0.000009	3.293928
2034	Hydralic Hammer	Other Construction Equipment	175	0.59	Diesel	1,585.42	0.048548	0.168184	0.001414	0.008177	536.8065	0.010572	0.010255	0.008760	0.001475	0.030348	0.001908	0.001850	0.000255	96.862966
2034	Hydroseeder	Other Construction Equipment	600	0.59	Diesel	13.65	0.218567	0.601902	0.001486	0.034423	536.7296	0.034476	0.033442	0.001164	0.000183	0.003206	0.000184	0.000178	0.000008	2.858894
2034	Loader	Tractors/Loaders/Backhoes	150	0.24	Diesel	211.73	0.369954	0.768505	0.001733	0.115777	626.2094	0.081881	0.079425	0.003065	0.000959	0.006368	0.000678	0.000658	0.000014	5.188522
2034	Off-Road Truck	Off-Highway Trucks	600	0.59	Diesel	13.65	0.01904	0.111323	0.001413	0.009466	536.8012	0.006245	0.006058	0.000101	0.000050	0.000593	0.000033	0.000032	0.000008	2.859275
2034	Other General Equipment	Other Construction Equipment	175	0.59	Diesel	4,365.52	0.048548	0.168184	0.001414	0.008177	536.8065	0.010572	0.010255	0.024121	0.004063	0.083564	0.005253	0.005095	0.000702	266.716570
2034	Pickup Truck	Off-Highway Trucks	600	0.59	Diesel	5,928.87	0.01904	0.111323	0.001413	0.009466	536.8012	0.006245	0.006058	0.044050	0.021899	0.257554	0.014449	0.014016	0.003270	1241.923771
2034	Pumps	Other Construction Equipment	11	0.59	Diesel	26.07	2.459922	4.183467	0.002183	0.837794	593.7543	0.238755	0.231593	0.000459	0.000156	0.000780	0.000045	0.000043	0.000000	0.110724
2034	Roller	Rollers	100	0.59	Diesel	574.77	0.056901	0.86154	0.001571	0.007843	596.1342	0.012769	0.012386	0.002127	0.000293	0.032205	0.000477	0.000463	0.000059	22.284052
2034	Scraper	Scrapers	600	0.59	Diesel	39.02	0.018974	0.111507	0.001414	0.009464	536.8012	0.006075	0.005893	0.000289	0.000144	0.001698	0.000092	0.000090	0.000022	8.172848
2034	Skid Steer Loader	Skid Steer Loaders	75	0.21	Diesel	315.33	2.236971	3.539756	0.002038	0.420837	694.7566	0.310948	0.301619	0.012247	0.002304	0.019379	0.001702	0.001651	0.000011	3.803555
2034	Surfacing Equipment (Grooving)	Other Construction Equipment	25	0.59	Diesel	155.77	1.488414	3.762416	0.002188	0.351625	595.1525	0.170347	0.165237	0.003770	0.000891	0.009529	0.000431	0.000418	0.000006	1.507306
2034	Sweepers	Other Construction Equipment	175	0.59	Diesel	175.98	0.048548	0.168184	0.001414	0.008177	536.8065	0.010572	0.010255	0.000972	0.000164	0.003369	0.000212	0.000205	0.000028	10.751917
2034	Tractors/Loader/Backhoe	Tractors/Loaders/Backhoes	100	0.24	Diesel	549.67	0.92042	1.481466	0.001925	0.154496	695.5507	0.124639	0.1209	0.013199	0.002215	0.021244	0.001787	0.001734	0.000028	9.974057
2034	Vibratory Compactor	Plate Compactors	6	0.43	Diesel	269.93	2.432362	4.18077	0.002162	0.835987	587.9733	0.231661	0.224711	0.001867	0.000642	0.003210	0.000178	0.000173	0.000002	0.451378
2034	Water Truck	Off-Highway Trucks	600	0.59	Diesel	1,135.98	0.01904	0.111323	0.001413	0.009466	536.8012	0.006245	0.006058	0.008440	0.004196	0.049348	0.002769	0.002685	0.000627	237.955209

Source: RS&H 2026; MOVES5.0

Total						
0.210097	0.073497	1.010481	0.053010	0.051419	0.009637	3657.631778

Nonroad Emissions - 2035

Inputs							MOVES5 Emission Factors (g-hp-hr)							Emissions (Tons per Year)						
Year	Equipment Type	MOVES5 Equipment Type	Average Horsepower	Load Factor	Fuel Type	Operating Hours	CO	NOx	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2
2035	Asphalt Paver	Pavers	175	0.59	Diesel	121.68	0.049378	0.168837	0.001414	0.008242	536.8074	0.010959	0.01063	0.000684	0.000114	0.002338	0.000152	0.000147	0.000020	7.434405
2035	Chain Saw	Other Construction Equipment	11	0.59	Diesel	32.60	2.458475	4.183328	0.002183	0.837696	593.7545	0.238383	0.231232	0.000573	0.000195	0.000976	0.000056	0.000054	0.000001	0.138476
2035	Chipper/Stump Grinder	Other Construction Equipment	100	0.59	Diesel	32.60	0.049151	0.854735	0.00157	0.007466	596.1365	0.01139	0.011049	0.000104	0.000016	0.001812	0.000024	0.000023	0.000003	1.263927
2035	Cold Planer	Other Construction Equipment	175	0.59	Diesel	175.98	0.048408	0.168157	0.001414	0.008172	536.8076	0.010488	0.010173	0.000970	0.000164	0.003368	0.000210	0.000204	0.000028	10.751939
2035	Concrete Saws	Other Construction Equipment	40	0.59	Diesel	1,585.42	0.277645	2.528058	0.001569	0.092367	595.8795	0.020129	0.019525	0.011451	0.003810	0.104268	0.000830	0.000805	0.000065	24.576522
2035	Concrete Truck	Off-Highway Trucks	600	0.59	Diesel	442.38	0.019047	0.111325	0.001413	0.009466	536.801	0.006251	0.006064	0.003288	0.001634	0.019218	0.001079	0.001047	0.000244	92.666305
2035	Crack Cleaner	Other Construction Equipment	40	0.59	Diesel	9.25	0.277645	2.528058	0.001569	0.092367	595.8795	0.020129	0.019525	0.000067	0.000022	0.000608	0.000005	0.000005	0.000000	0.143390
2035	Crack Filler (Trailer Mounted)	Other Construction Equipment	100	0.59	Diesel	9.25	0.049151	0.854735	0.00157	0.007466	596.1365	0.01139	0.011049	0.000030	0.000004	0.000514	0.000007	0.000007	0.000001	0.358630
2035	Curb/Gutter Paver	Pavers	175	0.59	Diesel	134.97	0.049378	0.168837	0.001414	0.008242	536.8074	0.010959	0.01063	0.000759	0.000127	0.002594	0.000168	0.000163	0.000022	8.245967
2035	Dozer	Crawler Tractor/Dozers	175	0.59	Diesel	982.73	0.048834	0.168241	0.001414	0.008186	536.8062	0.010746	0.010424	0.005462	0.000916	0.018818	0.001202	0.001166	0.000158	60.041258
2035	Dump Truck	Off-Highway Trucks	600	0.59	Diesel	2,901.18	0.019047	0.111325	0.001413	0.009466	536.801	0.006251	0.006064	0.021563	0.010717	0.126032	0.007077	0.006865	0.001600	607.712629
2035	Dump Truck (12 cy)	Off-Highway Trucks	600	0.59	Diesel	1,793.87	0.019047	0.111325	0.001413	0.009466	536.801	0.006251	0.006064	0.013333	0.006626	0.077928	0.004376	0.004245	0.000989	375.762337
2035	Excavator	Excavators	175	0.59	Diesel	2,159.77	0.049039	0.168282	0.001414	0.008192	536.8079	0.01087	0.010544	0.012054	0.002014	0.041366	0.002672	0.002592	0.000347	131.953937
2035	Flatbed Truck	Off-Highway Trucks	600	0.59	Diesel	2,013.97	0.019047	0.111325	0.001413	0.009466	536.801	0.006251	0.006064	0.014969	0.007439	0.087490	0.004913	0.004766	0.001111	421.866817
2035	Grader	Graders	300	0.59	Diesel	31.45	0.018976	0.111302	0.001413	0.00946	536.8007	0.006187	0.006001	0.000116	0.000058	0.000683	0.000038	0.000037	0.000009	3.293924
2035	Hydralic Hammer	Other Construction Equipment	175	0.59	Diesel	1,585.42	0.048408	0.168157	0.001414	0.008172	536.8076	0.010488	0.010173	0.008735	0.001475	0.030343	0.001892	0.001836	0.000255	96.863165
2035	Hydroseeder	Other Construction Equipment	600	0.59	Diesel	13.65	0.186472	0.522738	0.001475	0.030431	536.7408	0.030056	0.029155	0.000993	0.000162	0.002784	0.000160	0.000155	0.000008	2.858953
2035	Loader	Tractors/Loaders/Backhoes	150	0.24	Diesel	211.73	0.316745	0.671	0.001721	0.098622	626.2577	0.070569	0.068452	0.002624	0.000817	0.005560	0.000585	0.000567	0.000014	5.188922
2035	Off-Road Truck	Off-Highway Trucks	600	0.59	Diesel	13.65	0.019047	0.111325	0.001413	0.009466	536.801	0.006251	0.006064	0.000101	0.000050	0.000593	0.000033	0.000032	0.000008	2.859274
2035	Other General Equipment	Other Construction Equipment	175	0.59	Diesel	4,365.52	0.048408	0.168157	0.001414	0.008172	536.8076	0.010488	0.010173	0.024052	0.004060	0.083550	0.005211	0.005055	0.000702	266.717115
2035	Pickup Truck	Off-Highway Trucks	600	0.59	Diesel	5,928.87	0.019047	0.111325	0.001413	0.009466	536.801	0.006251	0.006064	0.044065	0.021901	0.257559	0.014463	0.014029	0.003270	1241.923290
2035	Pumps	Other Construction Equipment	11	0.59	Diesel	26.07	2.458475	4.183328	0.002183	0.837696	593.7545	0.238383	0.231232	0.000458	0.000156	0.000780	0.000044	0.000043	0.000000	0.110724
2035	Roller	Rollers	100	0.59	Diesel	574.77	0.054729	0.859652	0.001571	0.007733	596.1348	0.012481	0.012107	0.002046	0.000289	0.032135	0.000467	0.000453	0.000059	22.284075
2035	Scraper	Scrapers	600	0.59	Diesel	39.02	0.018928	0.111458	0.001414	0.009459	536.7994	0.00605	0.005869	0.000288	0.000144	0.001697	0.000092	0.000089	0.000022	8.172820
2035	Skid Steer Loader	Skid Steer Loaders	75	0.21	Diesel	315.33	2.001766	3.423828	0.002016	0.376525	694.8874	0.276325	0.268034	0.010959	0.002061	0.018744	0.001513	0.001467	0.000011	3.804271
2035	Surfacing Equipment (Grooving)	Other Construction Equipment	25	0.59	Diesel	155.77	1.487537	3.762288	0.002188	0.351584	595.1509	0.170082	0.164979	0.003767	0.000890	0.009529	0.000431	0.000418	0.000006	1.507302
2035	Sweepers	Other Construction Equipment	175	0.59	Diesel	175.98	0.048408	0.168157	0.001414	0.008172	536.8076	0.010488	0.010173	0.000970	0.000164	0.003368	0.000210	0.000204	0.000028	10.751939
2035	Tractors/Loader/Backhoe	Tractors/Loaders/Backhoes	100	0.24	Diesel	549.67	0.785417	1.384088	0.001911	0.130601	695.6192	0.105939	0.102761	0.011263	0.001873	0.019848	0.001519	0.001474	0.000027	9.975038
2035	Vibratory Compactor	Plate Compactors	6	0.43	Diesel	269.93	2.433535	4.180874	0.002162	0.836065	587.9722	0.231963	0.225004	0.001868	0.000642	0.003210	0.000178	0.000173	0.000002	0.451377
2035	Water Truck	Off-Highway Trucks	600	0.59	Diesel	1,135.98	0.019047	0.111325	0.001413	0.009466	536.801	0.006251	0.006064	0.008443	0.004196	0.049349	0.002771	0.002688	0.000627	237.955116

Source: RS&H 2026; MOVES5.0

Total							
0.206056	0.072737	1.007059	0.052379	0.050808	0.009637	3657.633843

Nonroad Emissions - 2036

Inputs							MOVES5 Emission Factors (g-hp-hr)							Emissions (Tons per Year)						
Year	Equipment Type	MOVES5 Equipment Type	Average Horsepower	Load Factor	Fuel Type	Operating Hours	CO	NOx	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2
2036	Asphalt Paver	Pavers	175	0.59	Diesel	121.68	0.048921	0.168259	0.001414	0.008189	536.8073	0.010799	0.010475	0.000678	0.000113	0.002330	0.000150	0.000145	0.000020	7.434404
2036	Chain Saw	Other Construction Equipment	11	0.59	Diesel	32.60	2.458674	4.183349	0.002183	0.83771	593.7549	0.238435	0.231282	0.000573	0.000195	0.000976	0.000056	0.000054	0.000001	0.138476
2036	Chipper/Stump Grinder	Other Construction Equipment	100	0.59	Diesel	32.60	0.049147	0.854732	0.00157	0.007466	596.1352	0.011388	0.011047	0.000104	0.000016	0.001812	0.000024	0.000023	0.000003	1.263924
2036	Cold Planer	Other Construction Equipment	175	0.59	Diesel	175.98	0.048405	0.168156	0.001414	0.008172	536.8082	0.010486	0.010171	0.000970	0.000164	0.003368	0.000210	0.000204	0.000028	10.751950
2036	Concrete Saws	Other Construction Equipment	40	0.59	Diesel	1,585.42	0.277668	2.528069	0.001569	0.092369	595.88	0.020134	0.01953	0.011452	0.003810	0.104268	0.000830	0.000805	0.000065	24.576543
2036	Concrete Truck	Off-Highway Trucks	600	0.59	Diesel	442.38	0.019052	0.111327	0.001413	0.009467	536.802	0.006257	0.006069	0.003289	0.001634	0.019218	0.001080	0.001048	0.000244	92.666487
2036	Crack Cleaner	Other Construction Equipment	40	0.59	Diesel	9.25	0.277668	2.528069	0.001569	0.092369	595.88	0.020134	0.01953	0.000067	0.000022	0.000608	0.000005	0.000005	0.000000	0.143390
2036	Crack Filler (Trailer Mounted)	Other Construction Equipment	100	0.59	Diesel	9.25	0.049147	0.854732	0.00157	0.007466	596.1352	0.011388	0.011047	0.000030	0.000004	0.000514	0.000007	0.000007	0.000001	0.358629
2036	Curb/Gutter Paver	Pavers	175	0.59	Diesel	134.97	0.048921	0.168259	0.001414	0.008189	536.8073	0.010799	0.010475	0.000751	0.000126	0.002585	0.000166	0.000161	0.000022	8.245966
2036	Dozer	Crawler Tractor/Dozers	175	0.59	Diesel	982.73	0.04884	0.168243	0.001414	0.008186	536.8061	0.01075	0.010427	0.005463	0.000916	0.018818	0.001202	0.001166	0.000158	60.041249
2036	Dump Truck	Off-Highway Trucks	600	0.59	Diesel	2,901.18	0.019052	0.111327	0.001413	0.009467	536.802	0.006257	0.006069	0.021569	0.010717	0.126034	0.007083	0.006871	0.001600	607.713823
2036	Dump Truck (12 cy)	Off-Highway Trucks	600	0.59	Diesel	1,793.87	0.019052	0.111327	0.001413	0.009467	536.802	0.006257	0.006069	0.013337	0.006627	0.077930	0.004380	0.004248	0.000989	375.763075
2036	Excavator	Excavators	175	0.59	Diesel	2,159.77	0.049053	0.168284	0.001413	0.008193	536.8041	0.010879	0.010553	0.012058	0.002014	0.041366	0.002674	0.002594	0.000347	131.952994
2036	Flatbed Truck	Off-Highway Trucks	600	0.59	Diesel	2,013.97	0.019052	0.111327	0.001413	0.009467	536.802	0.006257	0.006069	0.014973	0.007440	0.087491	0.004917	0.004769	0.001111	421.867646
2036	Grader	Graders	300	0.59	Diesel	31.45	0.018983	0.111304	0.001413	0.00946	536.8006	0.006193	0.006007	0.000116	0.000058	0.000683	0.000038	0.000037	0.000009	3.293923
2036	Hydralic Hammer	Other Construction Equipment	175	0.59	Diesel	1,585.42	0.048405	0.168156	0.001414	0.008172	536.8082	0.010486	0.010171	0.008734	0.001475	0.030343	0.001892	0.001835	0.000255	96.863269
2036	Hydroseeder	Other Construction Equipment	600	0.59	Diesel	13.65	0.159756	0.456086	0.001465	0.027155	536.7506	0.026347	0.025556	0.000851	0.000145	0.002429	0.000140	0.000136	0.000008	2.859006
2036	Loader	Tractors/Loaders/Backhoes	150	0.24	Diesel	211.73	0.273948	0.58944	0.00171	0.084294	626.3013	0.061068	0.059236	0.002270	0.000698	0.004884	0.000506	0.000491	0.000014	5.189284
2036	Off-Road Truck	Off-Highway Trucks	600	0.59	Diesel	13.65	0.019052	0.111327	0.001413	0.009467	536.802	0.006257	0.006069	0.000101	0.000050	0.000593	0.000033	0.000032	0.000008	2.859279
2036	Other General Equipment	Other Construction Equipment	175	0.59	Diesel	4,365.52	0.048405	0.168156	0.001414	0.008172	536.8082	0.010486	0.010171	0.024050	0.004060	0.083550	0.005210	0.005054	0.000702	266.717404
2036	Pickup Truck	Off-Highway Trucks	600	0.59	Diesel	5,928.87	0.019052	0.111327	0.001413	0.009467	536.802	0.006257	0.006069	0.044078	0.021902	0.257563	0.014475	0.014041	0.003270	1241.925730
2036	Pumps	Other Construction Equipment	11	0.59	Diesel	26.07	0.019052	0.111327	0.001413	0.009467	536.802	0.006257	0.006069	0.000004	0.000002	0.000021	0.000001	0.000001	0.000000	0.100104
2036	Roller	Rollers	100	0.59	Diesel	574.77	0.051918	0.857217	0.00157	0.007591	596.1352	0.012108	0.011744	0.001941	0.000284	0.032044	0.000453	0.000439	0.000059	22.284087
2036	Scraper	Scrapers	600	0.59	Diesel	39.02	0.018911	0.111421	0.001414	0.009456	536.7992	0.006052	0.00587	0.000288	0.000144	0.001696	0.000092	0.000089	0.000022	8.172817
2036	Skid Steer Loader	Skid Steer Loaders	75	0.21	Diesel	315.33	1.800864	3.325024	0.001997	0.338703	694.9997	0.246532	0.239135	0.009859	0.001854	0.018203	0.001350	0.001309	0.000011	3.804886
2036	Surfacing Equipment (Grooving)	Other Construction Equipment	25	0.59	Diesel	155.77	1.487066	3.762209	0.002556	0.351563	694.9895	0.169934	0.164836	0.003766	0.000890	0.009528	0.000430	0.000417	0.000006	1.760157
2036	Sweepers	Other Construction Equipment	175	0.59	Diesel	175.98	0.048405	0.168156	0.001414	0.008172	536.8082	0.010486	0.010171	0.000970	0.000164	0.003368	0.000210	0.000204	0.000028	10.751950
2036	Tractors/Loader/Backhoe	Tractors/Loaders/Backhoes	100	0.24	Diesel	549.67	0.669011	1.299389	0.001899	0.109899	695.6797	0.089576	0.086888	0.009593	0.001576	0.018633	0.001284	0.001246	0.000027	9.975907
2036	Vibratory Compactor	Plate Compactors	6	0.43	Diesel	269.93	2.436755	4.181198	0.002162	0.836276	587.9707	0.232793	0.225809	0.001871	0.000642	0.003210	0.000179	0.000173	0.000002	0.451376
2036	Water Truck	Off-Highway Trucks	600	0.59	Diesel	1,135.98	0.019052	0.111327	0.001413	0.009467	536.802	0.006257	0.006069	0.008446	0.004196	0.049350	0.002773	0.002690	0.000627	237.955584

Source: RS&H 2026; MOVES5.0

Total						
0.202251	0.071939	1.003416	0.051851	0.050295	0.009637	3657.883318

Nonroad Emissions - 2037

Inputs							MOVES5 Emission Factors (g-hp-hr)							Emissions (Tons per Year)						
Year	Equipment Type	MOVES5 Equipment Type	Average Horsepower	Load Factor	Fuel Type	Operating Hours	CO	NOx	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2
2037	Asphalt Paver	Pavers	175	0.59	Diesel	121.68	0.048804	0.168236	0.001414	0.008185	536.8062	0.010728	0.010406	0.000676	0.000113	0.00233	0.000149	0.000144	1.96E-05	7.434388
2037	Chain Saw	Other Construction Equipment	11	0.59	Diesel	32.60	2.458103	4.183287	0.002183	0.837673	593.7542	0.238289	0.23114	0.000573	0.000195	0.000976	5.56E-05	5.39E-05	5.09E-07	0.138476
2037	Chipper/Stump Grinder	Other Construction Equipment	100	0.59	Diesel	32.60	0.049187	0.854769	0.00157	0.007467	596.1351	0.011414	0.011071	0.000104	1.58E-05	0.001812	2.42E-05	2.35E-05	3.33E-06	1.263924
2037	Cold Planer	Other Construction Equipment	175	0.59	Diesel	175.98	0.048444	0.168164	0.001414	0.008173	536.8065	0.01051	0.010194	0.00097	0.000164	0.003368	0.000211	0.000204	2.83E-05	10.75192
2037	Concrete Saws	Other Construction Equipment	40	0.59	Diesel	1,585.42	0.277603	2.528039	0.001569	0.092365	595.8795	0.020121	0.019517	0.01145	0.00381	0.104267	0.00083	0.000805	6.47E-05	24.57652
2037	Concrete Truck	Off-Highway Trucks	600	0.59	Diesel	442.38	0.019044	0.111325	0.001413	0.009466	536.8031	0.006249	0.006061	0.003287	0.001634	0.019218	0.001079	0.001046	0.000244	92.66667
2037	Crack Cleaner	Other Construction Equipment	40	0.59	Diesel	9.25	0.277603	2.528039	0.001569	0.092365	595.8795	0.020121	0.019517	6.68E-05	2.22E-05	0.000608	4.84E-06	4.7E-06	3.78E-07	0.14339
2037	Crack Filler (Trailer Mounted)	Other Construction Equipment	100	0.59	Diesel	9.25	0.049187	0.854769	0.00157	0.007467	596.1351	0.011414	0.011071	2.96E-05	4.49E-06	0.000514	6.87E-06	6.66E-06	9.44E-07	0.358629
2037	Curb/Gutter Paver	Pavers	175	0.59	Diesel	134.97	0.048804	0.168236	0.001414	0.008185	536.8062	0.010728	0.010406	0.00075	0.000126	0.002584	0.000165	0.00016	2.17E-05	8.245949
2037	Dozer	Crawler Tractor/Dozers	175	0.59	Diesel	982.73	0.04884	0.168243	0.001414	0.008186	536.8061	0.01075	0.010427	0.005463	0.000916	0.018818	0.001202	0.001166	0.000158	60.04125
2037	Dump Truck	Off-Highway Trucks	600	0.59	Diesel	2,901.18	0.019044	0.111325	0.001413	0.009466	536.8031	0.006249	0.006061	0.021559	0.010716	0.126031	0.007074	0.006862	0.0016	607.715
2037	Dump Truck (12 cy)	Off-Highway Trucks	600	0.59	Diesel	1,793.87	0.019044	0.111325	0.001413	0.009466	536.8031	0.006249	0.006061	0.013331	0.006626	0.077928	0.004374	0.004243	0.000989	375.7638
2037	Excavator	Excavators	175	0.59	Diesel	2,159.77	0.049031	0.16828	0.001414	0.008192	536.805	0.010866	0.01054	0.012052	0.002014	0.041365	0.002671	0.002591	0.000347	131.9532
2037	Flatbed Truck	Off-Highway Trucks	600	0.59	Diesel	2,013.97	0.019044	0.111325	0.001413	0.009466	536.8031	0.006249	0.006061	0.014966	0.007439	0.087489	0.004911	0.004763	0.001111	421.8685
2037	Grader	Graders	300	0.59	Diesel	31.45	0.018999	0.11131	0.001413	0.009462	536.8021	0.006208	0.006022	0.000117	5.81E-05	0.000683	3.81E-05	3.7E-05	8.67E-06	3.293932
2037	Hydralic Hammer	Other Construction Equipment	175	0.59	Diesel	1,585.42	0.048444	0.168164	0.001414	0.008173	536.8065	0.01051	0.010194	0.008741	0.001475	0.030344	0.001896	0.001839	0.000255	96.86298
2037	Hydroseeder	Other Construction Equipment	600	0.59	Diesel	13.65	0.137295	0.399663	0.001457	0.024377	536.7589	0.023246	0.022548	0.000731	0.00013	0.002129	0.000124	0.00012	7.76E-06	2.85905
2037	Loader	Tractors/Loaders/Backhoes	150	0.24	Diesel	211.73	0.239199	0.52168	0.001701	0.072448	626.3349	0.05308	0.051488	0.001982	0.0006	0.004322	0.00044	0.000427	1.41E-05	5.189562
2037	Off-Road Truck	Off-Highway Trucks	600	0.59	Diesel	13.65	0.019044	0.111325	0.001413	0.009466	536.8031	0.006249	0.006061	0.000101	5.04E-05	0.000593	3.33E-05	3.23E-05	7.53E-06	2.859285
2037	Other General Equipment	Other Construction Equipment	175	0.59	Diesel	4,365.52	0.048444	0.168164	0.001414	0.008173	536.8065	0.01051	0.010194	0.02407	0.004061	0.083554	0.005222	0.005065	0.000702	266.7166
2037	Pickup Truck	Off-Highway Trucks	600	0.59	Diesel	5,928.87	0.019044	0.111325	0.001413	0.009466	536.8031	0.006249	0.006061	0.044058	0.0219	0.257557	0.014457	0.014023	0.00327	1241.928
2037	Pumps	Other Construction Equipment	11	0.59	Diesel	26.07	2.458103	4.183287	0.002183	0.837673	593.7542	0.238289	0.23114	0.000458	0.000156	0.00078	4.44E-05	4.31E-05	4.07E-07	0.110724
2037	Roller	Rollers	100	0.59	Diesel	574.77	0.049804	0.855383	0.00157	0.007485	596.1354	0.011812	0.011458	0.001862	0.00028	0.031975	0.000442	0.000428	5.87E-05	22.2841
2037	Scraper	Scrapers	600	0.59	Diesel	39.02	0.018911	0.111396	0.001414	0.009456	536.799	0.006065	0.005884	0.000288	0.000144	0.001696	9.23E-05	8.96E-05	2.15E-05	8.172815
2037	Skid Steer Loader	Skid Steer Loaders	75	0.21	Diesel	315.33	1.625444	3.238691	0.00198	0.305585	695.0966	0.220289	0.21368	0.008899	0.001673	0.017731	0.001206	0.00117	1.08E-05	3.805416
2037	Surfacing Equipment (Grooving)	Other Construction Equipment	25	0.59	Diesel	155.77	1.487313	3.762242	0.002188	0.351573	595.1471	0.170014	0.164913	0.003767	0.00089	0.009528	0.000431	0.000418	5.54E-06	1.507292
2037	Sweepers	Other Construction Equipment	175	0.59	Diesel	175.98	0.048444	0.168164	0.001414	0.008173	536.8065	0.01051	0.010194	0.00097	0.000164	0.003368	0.000211	0.000204	2.83E-05	10.75192
2037	Tractors/Loader/Backhoe	Tractors/Loaders/Backhoes	100	0.24	Diesel	549.67	0.049187	0.854769	0.00157	0.007467	596.1351	0.011414	0.011071	0.000705	0.000107	0.012257	0.000164	0.000159	2.25E-05	8.548456
2037	Vibratory Compactor	Plate Compactors	6	0.43	Diesel	269.93	2.441378	4.181663	0.002162	0.836579	587.9692	0.233982	0.226963	0.001874	0.000642	0.00321	0.00018	0.000174	1.66E-06	0.451375
2037	Water Truck	Off-Highway Trucks	600	0.59	Diesel	1,135.98	0.019044	0.111325	0.001413	0.009466	536.8031	0.006249	0.006061	0.008442	0.004196	0.049348	0.00277	0.002687	0.000627	237.956

Source: RS&H 2026; MOVES5.0

Total						
0.192344	0.070323	0.996384	0.050504	0.048989	0.009631	3656.219

Onroad Emissions - 2028

Inputs						MOVES5 Emission Factors (g/miles)								Emissions (Tons per Year)								
Year	Equipment Type	MOVES5 Equipment Type	On-Road Activity	Fuel Type	Vehicle Miles Traveled	CO	NOx	CH4	N2O	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2	CH4	N2O
2028	Cement Mixer	Single Unit Short-Haul Truck	Material Delivery	Diesel	578.25	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.000884	0.000154	0.001791	0.000091	0.000084	0.000002	0.525192	0.000006	0.000049
2028	Dump Truck Subbase Material	Single Unit Short-Haul Truck	Material Delivery	Diesel	308.25	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.000471	0.000082	0.000955	0.000049	0.000045	0.000001	0.279966	0.000003	0.000026
2028	Passenger Car	Passenger Car	Employee Commute	Gasoline	2,607,412.50	2.907541	0.145628	0.011968	0.001531	0.001654	0.045389	260.7086	0.003582	0.003169	8.356841	0.130457	0.418565	0.010296	0.009108	0.004753	749.327529	0.034397	0.004400
2028	Tractor Trailer	Combination Short-haul Truck	Material Delivery	Diesel	40.00	2.257775	5.380069	0.015484	0.173302	0.005308	0.198618	1566.201	0.170634	0.156982	0.000100	0.000009	0.000237	0.000008	0.000007	0.000000	0.069058	0.000001	0.000008
2028	Dump Truck	Single Unit Short-Haul Truck	Material Delivery	Diesel	7,809.75	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.011934	0.002086	0.024184	0.001233	0.001134	0.000024	7.093163	0.000083	0.000661
															Total								
															8.370230	0.132788	0.445731	0.011677	0.010379	0.004780	757.294909	0.034491	0.005143

Source: RS&H 2026; MOVES5.0

Onroad Emissions - 2029

Inputs						MOVES5 Emission Factors (g/miles)								Emissions (Tons per Year)								
Year	Equipment Type	MOVES5 Equipment Type	On-Road Activity	Fuel Type	Vehicle Miles Traveled	CO	NOx	CH4	N2O	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2	CH4	N2O
2029	Cement Mixer	Single Unit Short-Haul Truck	Material Delivery	Diesel	578.25	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.000884	0.000154	0.001791	0.000091	0.000084	0.000002	0.525192	0.000006	0.000049
2029	Dump Truck Subbase Material	Single Unit Short-Haul Truck	Material Delivery	Diesel	308.25	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.000471	0.000082	0.000955	0.000049	0.000045	0.000001	0.279966	0.000003	0.000026
2029	Passenger Car	Passenger Car	Employee Commute	Gasoline	2,607,412.50	2.907541	0.145628	0.011968	0.001531	0.001654	0.045389	260.7086	0.003582	0.003169	8.356841	0.130457	0.418565	0.010296	0.009108	0.004753	749.327529	0.034397	0.004400
2029	Tractor Trailer	Combination Short-haul Truck	Material Delivery	Diesel	40.00	2.257775	5.380069	0.015484	0.173302	0.005308	0.198618	1566.201	0.170634	0.156982	0.000100	0.000009	0.000237	0.000008	0.000007	0.000000	0.069058	0.000001	0.000008
2029	Dump Truck	Single Unit Short-Haul Truck	Material Delivery	Diesel	7809.75	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.011934	0.002086	0.024184	0.001233	0.001134	0.000024	7.093163	0.000083	0.000661

Source: RS&H 2026; MOVES5.0

Total									
8.370230	0.132788	0.445731	0.011677	0.010379	0.004780	757.294909	0.034491	0.005143	

Onroad Emissions - 2030

Inputs						MOVES5 Emission Factors (g/miles)									Emissions (Tons per Year)								
Year	Equipment Type	MOVES5 Equipment Type	On-Road Activity	Fuel Type	Vehicle Miles Traveled	CO	NOx	CH4	N2O	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2	CH4	N2O
2030	Cement Mixer	Single Unit Short-Haul Truck	Material Delivery	Diesel	578.25	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.000884	0.000154	0.001791	0.000091	0.000084	0.000002	0.525192	0.000006	0.000049
2030	Dump Truck Subbase Material	Single Unit Short-Haul Truck	Material Delivery	Diesel	308.25	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.000471	0.000082	0.000955	0.000049	0.000045	0.000001	0.279966	0.000003	0.000026
2030	Passenger Car	Passenger Car	Employee Commute	Gasoline	2,607,412.50	2.907541	0.145628	0.011968	0.001531	0.001654	0.045389	260.7086	0.003582	0.003169	8.356841	0.130457	0.418565	0.010296	0.009108	0.004753	749.327529	0.034397	0.004400
2030	Tractor Trailer	Combination Short-haul Truck	Material Delivery	Diesel	40.00	2.257775	5.380069	0.015484	0.173302	0.005308	0.198618	1566.201	0.170634	0.156982	0.000100	0.000009	0.000237	0.000008	0.000007	0.000000	0.069058	0.000001	0.000008
2030	Dump Truck	Single Unit Short-Haul Truck	Material Delivery	Diesel	7809.75	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.011934	0.002086	0.024184	0.001233	0.001134	0.000024	7.093163	0.000083	0.000661
															Total								
															8.370230	0.132788	0.445731	0.011677	0.010379	0.004780	757.294909	0.034491	0.005143

Source: RS&H 2026; MOVES5.0

Onroad Emissions - 2031

Inputs						MOVES5 Emission Factors (g/miles)								Emissions (Tons per Year)								
Year	Equipment Type	MOVES5 Equipment Type	On-Road Activity	Fuel Type	Vehicle Miles Traveled	CO	NOx	CH4	N2O	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2	CH4	N2O
2031	Asphalt 18 Wheeler	Combination Short-haul Truck	Material Delivery	Diesel	12,726.00	2.257775	5.380069	0.015484	0.173302	0.005308	0.198618	1566.201	0.170634	0.156982	0.031672	0.002786	0.075472	0.002394	0.002202	0.000074	21.970801	0.000217	0.002431
2031	Cement Mixer	Single Unit Short-haul Truck	Material Delivery	Diesel	18,454.25	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.028200	0.004929	0.057147	0.002914	0.002681	0.000057	16.760973	0.000197	0.001561
2031	Demolition - Building	Single Unit Short-haul Truck	Material Delivery	Diesel	348,369.75	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.532347	0.093042	1.078795	0.055005	0.050605	0.001081	316.404948	0.003717	0.029475
2031	Dump Truck - Asphalt	Single Unit Short-haul Truck	Material Delivery	Diesel	18,028.50	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.027550	0.004815	0.055829	0.002847	0.002619	0.000056	16.374288	0.000192	0.001525
2031	Dump Truck Subbase Material	Single Unit Short-haul Truck	Material Delivery	Diesel	108,479.25	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.165768	0.028973	0.335927	0.017128	0.015758	0.000337	98.525694	0.001157	0.009178
2031	Passenger Car	Passenger Car	Employee Commune	Diesel	6,609,675.50	2.907541	0.145628	0.011968	0.001531	0.001654	0.045389	260.7086	0.003582	0.003169	21.184224	0.330703	1.061043	0.026101	0.023089	0.012048	1899.512183	0.087196	0.011153
2031	Tractor Trailer	Combination Short-haul Truck	Material Delivery	Diesel	40.00	2.257775	5.380069	0.015484	0.173302	0.005308	0.198618	1566.201	0.170634	0.156982	0.000100	0.000009	0.000237	0.000008	0.000007	0.000000	0.069058	0.000001	0.000008

Source: RS&H 2026; MOVES5.0

Total								
21.969861	0.465257	2.664450	0.106396	0.096960	0.013654	2369.617944	0.092676	0.055331

Onroad Emissions - 2032

Inputs						MOVES5 Emission Factors (g/miles)								Emissions (Tons per Year)								
Year	Equipment Type	MOVES5 Equipment Type	On-Road Activity	Fuel Type	Vehicle Miles Traveled	CO	NOx	CH4	N2O	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2	CH4	N2O
2032	Asphalt 18 Wheeler	Combination Short-haul Truck	Material Delivery	Diesel	12,726.00	2.257775	5.380069	0.015484	0.173302	0.005308	0.198618	1566.201	0.170634	0.156982	0.031672	0.002786	0.075472	0.002394	0.002202	0.000074	21.970801	0.000217	0.002431
2032	Dump Truck	Single Unit Short-haul Truck	Material Delivery	Diesel	83,653.33	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.127832	0.022342	0.259049	0.013208	0.012152	0.000260	75.977689	0.000892	0.007078
2032	Dump Truck - Asphalt	Single Unit Short-haul Truck	Material Delivery	Diesel	18,028.50	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.027550	0.004815	0.055829	0.002847	0.002619	0.000056	16.374288	0.000192	0.001525
2032	Dump Truck Subbase Material	Single Unit Short-haul Truck	Material Delivery	Diesel	108,171.00	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.165297	0.028890	0.334973	0.017079	0.015713	0.000336	98.245728	0.001154	0.009152
2032	Passenger Car	Passenger Car	Employee Commute	Gasoline	5,296,244.67	2.907541	0.145628	0.011968	0.001531	0.001654	0.045389	260.7086	0.003582	0.003169	16.974636	0.264988	0.850199	0.020914	0.018501	0.009654	1522.053733	0.069869	0.008937

Source: RS&H 2026; MOVES5.0

Total								
17.326986	0.323821	1.575522	0.056442	0.051187	0.010380	1734.622238	0.072325	0.029123

Onroad Emissions - 2033

Inputs						MOVES5 Emission Factors (g/miles)									Emissions (Tons per Year)								
Year	Equipment Type	MOVES5 Equipment Type	On-Road Activity	Fuel Type	Vehicle Miles Traveled	CO	NOx	CH4	N2O	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2	CH4	N2O
2033	Asphalt 18 Wheeler	Combination Short-haul Truck	Material Delivery	Diesel	12,726.00	2.257775	5.380069	0.015484	0.173302	0.005308	0.198618	1566.201	0.170634	0.156982	0.031672	0.002786	0.075472	0.002394	0.002202	0.000074	21.970801	0.000217	0.002431
2033	Dump Truck	Single Unit Short-haul Truck	Material Delivery	Diesel	83,653.33	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.127832	0.022342	0.259049	0.013208	0.012152	0.000260	75.977689	0.000892	0.007078
2033	Dump Truck - Asphalt	Single Unit Short-haul Truck	Material Delivery	Diesel	18,028.50	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.027550	0.004815	0.055829	0.002847	0.002619	0.000056	16.374288	0.000192	0.001525
2033	Dump Truck Subbase Material	Single Unit Short-haul Truck	Material Delivery	Diesel	108,171.00	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.165297	0.028890	0.334973	0.017079	0.015713	0.000336	98.245728	0.001154	0.009152
2033	Passenger Car	Passenger Car	Employee Commute	Gasoline	7,413,937.67	2.907541	0.145628	0.011968	0.001531	0.001654	0.045389	260.7086	0.003582	0.003169	23.761910	0.370942	1.190150	0.029277	0.025899	0.013514	2130.643920	0.097805	0.012510

Source: RS&H 2026; MOVES5.0

Total								
24.114261	0.429776	1.915472	0.064805	0.058585	0.014240	2343.212426	0.100261	0.032696

Onroad Emissions - 2034

Inputs						MOVES5 Emission Factors (g/miles)									Emissions (Tons per Year)								
Year	Equipment Type	MOVES5 Equipment Type	On-Road Activity	Fuel Type	Vehicle Miles Traveled	CO	NOx	CH4	N2O	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2	CH4	N2O
2034	Asphalt 18 Wheeler	Combination Short-haul Truck	Material Delivery	Diesel	12,726.00	2.257775	5.380069	0.015484	0.173302	0.005308	0.198618	1566.201	0.170634	0.156982	0.031672	0.002786	0.075472	0.002394	0.002202	0.000074	21.970801	0.000217	0.002431
2034	Dump Truck	Single Unit Short-haul Truck	Material Delivery	Diesel	83,653.33	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.127832	0.022342	0.259049	0.013208	0.012152	0.000260	75.977689	0.000892	0.007078
2034	Dump Truck - Asphalt	Single Unit Short-haul Truck	Material Delivery	Diesel	18,028.50	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.027550	0.004815	0.055829	0.002847	0.002619	0.000056	16.374288	0.000192	0.001525
2034	Dump Truck Subbase Material	Single Unit Short-haul Truck	Material Delivery	Diesel	108,171.00	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.165297	0.028890	0.334973	0.017079	0.015713	0.000336	98.245728	0.001154	0.009152
2034	Passenger Car	Passenger Car	Employee Commute	Gasoline	5,296,244.67	2.907541	0.145628	0.011968	0.001531	0.001654	0.045389	260.7086	0.003582	0.003169	16.974636	0.264988	0.850199	0.020914	0.018501	0.009654	1522.053733	0.069869	0.008937

Source: RS&H 2026; MOVES5.0

Total								
17.326986	0.323821	1.575522	0.056442	0.051187	0.010380	1734.622238	0.072325	0.029123

Onroad Emissions - 2035

Inputs						MOVES5 Emission Factors (g/miles)									Emissions (Tons per Year)								
Year	Equipment Type	MOVES5 Equipment Type	On-Road Activity	Fuel Type	Vehicle Miles Traveled	CO	NOx	CH4	N2O	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2	CH4	N2O
2035	Asphalt 18 Wheeler	Combination Short-haul Truck	Material Delivery	Diesel	12,726.00	2.257775	5.380069	0.015484	0.173302	0.005308	0.198618	1566.201	0.170634	0.156982	0.031672	0.002786	0.075472	0.002394	0.002202	0.000074	21.970801	0.000217	0.002431
2035	Dump Truck	Single Unit Short-haul Truck	Material Delivery	Diesel	83,653.33	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.127832	0.022342	0.259049	0.013208	0.012152	0.000260	75.977689	0.000892	0.007078
2035	Dump Truck - Asphalt	Single Unit Short-haul Truck	Material Delivery	Diesel	18,028.50	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.027550	0.004815	0.055829	0.002847	0.002619	0.000056	16.374288	0.000192	0.001525
2035	Dump Truck Subbase Material	Single Unit Short-haul Truck	Material Delivery	Diesel	108,171.00	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.165297	0.028890	0.334973	0.017079	0.015713	0.000336	98.245728	0.001154	0.009152
2035	Passenger Car	Passenger Car	Employee Commute	Gasoline	5,296,244.67	2.907541	0.145628	0.011968	0.001531	0.001654	0.045389	260.7086	0.003582	0.003169	16.974636	0.264988	0.850199	0.020914	0.018501	0.009654	1522.053733	0.069869	0.008937

Source: RS&H 2026; MOVES5.0

Total								
17.326986	0.323821	1.575522	0.056442	0.051187	0.010380	1734.622238	0.072325	0.029123

Onroad Emissions - 2036

Inputs						MOVES5 Emission Factors (g/miles)									Emissions (Tons per Year)								
Year	Equipment Type	MOVES5 Equipment Type	On-Road Activity	Fuel Type	Vehicle Miles Traveled	CO	NOx	CH4	N2O	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2	CH4	N2O
2036	Asphalt 18 Wheeler	Combination Short-haul Truck	Material Delivery	Diesel	12,726.00	2.257768	5.351908	0.015484	0.173302	0.005308	0.198617	1566.195	0.170633	0.156982	0.031672	0.002786	0.075077	0.002394	0.002202	0.000074	21.970714	0.000217	0.002431
2036	Dump Truck	Single Unit Short-haul Truck	Material Delivery	Diesel	83,653.33	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.127832	0.022342	0.259049	0.013208	0.012152	0.000260	75.977689	0.000892	0.007078
2036	Dump Truck - Asphalt	Single Unit Short-haul Truck	Material Delivery	Diesel	18,028.50	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.027550	0.004815	0.055829	0.002847	0.002619	0.000056	16.374288	0.000192	0.001525
2036	Dump Truck Subbase Material	Single Unit Short-haul Truck	Material Delivery	Diesel	108,171.00	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.165297	0.028890	0.334973	0.017079	0.015713	0.000336	98.245728	0.001154	0.009152
2036	Passenger Car	Passenger Car	Employee Commute	Gasoline	5296244.667	2.907541	0.145628	0.011968	0.001531	0.001654	0.045389	260.7086	0.003582	0.003169	16.974636	0.264988	0.850199	0.020914	0.018501	0.009654	1522.053733	0.069869	0.008937

Source: RS&H 2026; MOVES5.0

Total								
17.326986	0.323821	1.575127	0.056442	0.051187	0.010380	1734.622151	0.072325	0.029123

Onroad Emissions - 2037

Inputs						MOVES5 Emission Factors (g/miles)									Emissions (Tons per Year)								
Year	Equipment Type	MOVES5 Equipment Type	On-Road Activity	Fuel Type	Vehicle Miles Traveled	CO	NOx	CH4	N2O	SO2	VOC	CO2	PM10	PM2.5	CO	VOC	NOx	PM10	PM2.5	SO2	CO2	CH4	N2O
2037	Asphalt 18 Wheeler	Combination Short-haul Truck	Material Delivery	Diesel	12,726.00	2.257768	5.351908	0.015484	0.173302	0.005308	0.198617	1566.195	0.170633	0.156982	0.031672	0.002786	0.075077	0.002394	0.002202	0.000074	21.970714	0.000217	0.002431
2037	Dump Truck	Single Unit Short-haul Truck	Material Delivery	Diesel	83,653.33	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.127832	0.022342	0.259049	0.013208	0.012152	0.000260	75.977689	0.000892	0.007078
2037	Dump Truck - Asphalt	Single Unit Short-haul Truck	Material Delivery	Diesel	18,028.50	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.027550	0.004815	0.055829	0.002847	0.002619	0.000056	16.374288	0.000192	0.001525
2037	Dump Truck Subbase Material	Single Unit Short-haul Truck	Material Delivery	Diesel	108,171.00	1.386271	2.809259	0.009678	0.076754	0.002816	0.242289	823.9413	0.143238	0.131778	0.165297	0.028890	0.334973	0.017079	0.015713	0.000336	98.245728	0.001154	0.009152
2037	Passenger Car	Passenger Car	Employee Commute	Gasoline	5,296,244.67	2.907541	0.145628	0.011968	0.001531	0.001654	0.045389	260.7086	0.003582	0.003169	16.974636	0.264988	0.850199	0.020914	0.018501	0.009654	1522.053733	0.069869	0.008937

Source: RS&H 2026; MOVES5.0

Total								
17.326986	0.323821	1.575127	0.056442	0.051187	0.010380	1734.622151	0.072325	0.029123

Fugitive Emissions

Year	Project	Fugitive Type	Variable	Units	Pollutants
2028	Building - 10000 sqft- 1 story	Concrete Mixing/Batching	PM10 = 0.037 x V	4.275	PM10
2028	Building - 10000 sqft- 1 story	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	5.975	PM10
2028	Building - 10000 sqft- 1 story	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	17.675	PM10
2029	Building - 10000 sqft- 1 story	Concrete Mixing/Batching	PM10 = 0.037 x V	4.28E+00	PM10
2029	Building - 10000 sqft- 1 story	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	5.98E+00	PM10
2029	Building - 10000 sqft- 1 story	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	17.675	PM10
2030	Building - 10000 sqft- 1 story	Concrete Mixing/Batching	PM10 = 0.037 x V	4.275	PM10
2030	Building - 10000 sqft- 1 story	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	5.975	PM10
2030	Building - 10000 sqft- 1 story	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	17.675	PM10
2031	Rehabilitate Runway	Asphalt Drying	VOC = A x AR x VD x EF x D	58814.633	VOC
2031	Rehabilitate Runway	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	262.7	PM10
2031	Rehabilitate Runway	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	3836.0167	CO
2031	Rehabilitate Runway	Asphalt Storage and Batching	NOx = (0.025) x T	239.51667	Nox
2031	Rehabilitate Runway	Asphalt Storage and Batching	SOx = (0.0046) x T	44.066667	Sox
2031	Rehabilitate Runway	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	118.8	VOC
2031	Rehabilitate Runway	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	264.91667	PM10
2031	Rehabilitate Runway	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	75.833333	PM10
2031	Rehabilitate Runway	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	448.73333	PM10
2031	Rehabilitate Runway	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0006397	PM10
2031	Access Road	Asphalt Drying	VOC = A x AR x VD x EF x D	6258.75	VOC
2031	Access Road	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	27.95	PM10
2031	Access Road	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	408.21667	CO
2031	Access Road	Asphalt Storage and Batching	NOx = (0.025) x T	25.483333	NOx
2031	Access Road	Asphalt Storage and Batching	SOx = (0.0046) x T	4.6833333	SOx
2031	Access Road	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	12.65	VOC
2031	Access Road	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	49.75	PM10
2031	Access Road	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	11.966667	PM10
2031	Access Road	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	6.807E-05	PM10
2031	Access Road	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	47.75	PM10
2031	Building - 10000 sqft- 1 story	Concrete Mixing/Batching	PM10 = 0.037 x V	4.275	PM10
2031	Building - 10000 sqft- 1 story	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	5.975	PM10
2031	Building - 10000 sqft- 1 story	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	17.675	PM10
2031	Fencing	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	52.9	PM10
2031	Fencing	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	17.9	PM10
2032	Demolition - Asphalt	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	213.1	PM10
2032	Demolition - Asphalt	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0003038	PM10
2032	Demolition - Asphalt	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	160.1	PM10
2032	Demolition - Asphalt	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	49.9	PM10
2032	Rehabilitate Runway	Asphalt Drying	VOC = A x AR x VD x EF x D	58814.633	VOC
2032	Rehabilitate Runway	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	262.7	PM10
2032	Rehabilitate Runway	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	3836.0167	CO
2032	Rehabilitate Runway	Asphalt Storage and Batching	NOx = (0.025) x T	239.51667	Nox
2032	Rehabilitate Runway	Asphalt Storage and Batching	SOx = (0.0046) x T	44.066667	Sox
2032	Rehabilitate Runway	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	118.8	VOC
2032	Rehabilitate Runway	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	264.91667	PM10
2032	Rehabilitate Runway	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	75.833333	PM10
2032	Rehabilitate Runway	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	448.73333	PM10
2032	Rehabilitate Runway	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0006397	PM10
2032	Access Road	Asphalt Drying	VOC = A x AR x VD x EF x D	6258.75	VOC
2032	Access Road	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	27.95	PM10
2032	Access Road	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	408.21667	CO
2032	Access Road	Asphalt Storage and Batching	NOx = (0.025) x T	25.483333	NOx
2032	Access Road	Asphalt Storage and Batching	SOx = (0.0046) x T	4.6833333	SOx
2032	Access Road	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	12.65	VOC
2032	Access Road	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	49.75	PM10
2032	Access Road	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	11.966667	PM10
2032	Access Road	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	6.807E-05	PM10
2032	Access Road	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	47.75	PM10
2033	Demolition - Asphalt	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	213.1	PM10
2033	Demolition - Asphalt	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0003038	PM10
2033	Demolition - Asphalt	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	160.1	PM10
2033	Demolition - Asphalt	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	49.9	PM10
2033	Rehabilitate Runway	Asphalt Drying	VOC = A x AR x VD x EF x D	58814.633	VOC
2033	Rehabilitate Runway	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	262.7	PM10
2033	Rehabilitate Runway	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	3836.0167	CO
2033	Rehabilitate Runway	Asphalt Storage and Batching	NOx = (0.025) x T	239.51667	Nox

2033	Rehabilitate Runway	Asphalt Storage and Batching	SOx = (0.0046) x T	44.066667	Sox
2033	Rehabilitate Runway	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	118.8	VOC
2033	Rehabilitate Runway	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	2.65E+02	PM10
2033	Rehabilitate Runway	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	75.833333	PM10
2033	Rehabilitate Runway	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	448.73333	PM10
2033	Rehabilitate Runway	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0006397	PM10
2033	Access Road	Asphalt Drying	VOC = A x AR x VD x EF x D	6258.75	VOC
2033	Access Road	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	2.80E+01	PM10
2033	Access Road	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	408.21667	CO
2033	Access Road	Asphalt Storage and Batching	NOx = (0.025) x T	25.483333	NOx
2033	Access Road	Asphalt Storage and Batching	SOx = (0.0046) x T	4.6833333	SOx
2033	Access Road	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	12.65	VOC
2033	Access Road	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	49.75	PM10
2033	Access Road	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	11.966667	PM10
2033	Access Road	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	6.807E-05	PM10
2033	Access Road	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	47.75	PM10
2033	Drainage System	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	0.02739	PM10
2033	Drainage System	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	0	PM10
2034	Demolition - Asphalt	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	213.1	PM10
2034	Demolition - Asphalt	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0003038	PM10
2034	Demolition - Asphalt	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	160.1	PM10
2034	Demolition - Asphalt	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	49.9	PM10
2034	Rehabilitate Runway	Asphalt Drying	VOC = A x AR x VD x EF x D	58814.633	VOC
2034	Rehabilitate Runway	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	262.7	PM10
2034	Rehabilitate Runway	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	3836.0167	CO
2034	Rehabilitate Runway	Asphalt Storage and Batching	NOx = (0.025) x T	239.51667	Nox
2034	Rehabilitate Runway	Asphalt Storage and Batching	SOx = (0.0046) x T	44.066667	Sox
2034	Rehabilitate Runway	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	118.8	VOC
2034	Rehabilitate Runway	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	264.91667	PM10
2034	Rehabilitate Runway	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	75.833333	PM10
2034	Rehabilitate Runway	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	448.73333	PM10
2034	Rehabilitate Runway	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0006397	PM10
2034	Access Road	Asphalt Drying	VOC = A x AR x VD x EF x D	6258.75	VOC
2034	Access Road	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	27.95	PM10
2034	Access Road	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	408.21667	CO
2034	Access Road	Asphalt Storage and Batching	NOx = (0.025) x T	25.483333	NOx
2034	Access Road	Asphalt Storage and Batching	SOx = (0.0046) x T	4.6833333	SOx
2034	Access Road	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	12.65	VOC
2034	Access Road	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	49.75	PM10
2034	Access Road	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	11.966667	PM10
2034	Access Road	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	6.807E-05	PM10
2034	Access Road	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	47.75	PM10
2035	Demolition - Asphalt	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	213.1	PM10
2035	Demolition - Asphalt	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0003038	PM10
2035	Demolition - Asphalt	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	160.1	PM10
2035	Demolition - Asphalt	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	49.9	PM10
2035	Rehabilitate Runway	Asphalt Drying	VOC = A x AR x VD x EF x D	58814.633	VOC
2035	Rehabilitate Runway	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	262.7	PM10
2035	Rehabilitate Runway	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	3836.0167	CO
2035	Rehabilitate Runway	Asphalt Storage and Batching	NOx = (0.025) x T	239.51667	Nox
2035	Rehabilitate Runway	Asphalt Storage and Batching	SOx = (0.0046) x T	44.066667	Sox
2035	Rehabilitate Runway	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	118.8	VOC
2035	Rehabilitate Runway	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	264.91667	PM10
2035	Rehabilitate Runway	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	75.833333	PM10
2035	Rehabilitate Runway	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	448.73333	PM10
2035	Rehabilitate Runway	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0006397	PM10
2035	Access Road	Asphalt Drying	VOC = A x AR x VD x EF x D	6258.75	VOC
2035	Access Road	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	27.95	PM10
2035	Access Road	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	408.21667	CO
2035	Access Road	Asphalt Storage and Batching	NOx = (0.025) x T	25.483333	NOx
2035	Access Road	Asphalt Storage and Batching	SOx = (0.0046) x T	4.6833333	SOx
2035	Access Road	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	12.65	VOC
2035	Access Road	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	49.75	PM10
2035	Access Road	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	11.966667	PM10
2035	Access Road	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	6.807E-05	PM10
2035	Access Road	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	47.75	PM10
2036	Demolition - Asphalt	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	213.1	PM10
2036	Demolition - Asphalt	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0003038	PM10
2036	Demolition - Asphalt	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	160.1	PM10
2036	Demolition - Asphalt	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	49.9	PM10
2036	Rehabilitate Runway	Asphalt Drying	VOC = A x AR x VD x EF x D	58814.633	VOC
2036	Rehabilitate Runway	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	262.7	PM10
2036	Rehabilitate Runway	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	3836.0167	CO

2036	Rehabilitate Runway	Asphalt Storage and Batching	NOx = (0.025) x T	239.51667	Nox
2036	Rehabilitate Runway	Asphalt Storage and Batching	SOx = (0.0046) x T	44.066667	Sox
2036	Rehabilitate Runway	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	118.8	VOC
2036	Rehabilitate Runway	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	264.91667	PM10
2036	Rehabilitate Runway	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	75.833333	PM10
2036	Rehabilitate Runway	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	448.73333	PM10
2036	Rehabilitate Runway	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0006397	PM10
2036	Access Road	Asphalt Drying	VOC = A x AR x VD x EF x D	6258.75	VOC
2036	Access Road	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	27.95	PM10
2036	Access Road	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	408.21667	CO
2036	Access Road	Asphalt Storage and Batching	NOx = (0.025) x T	25.483333	NOx
2036	Access Road	Asphalt Storage and Batching	SOx = (0.0046) x T	4.6833333	SOx
2036	Access Road	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	12.65	VOC
2036	Access Road	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	49.75	PM10
2036	Access Road	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	11.966667	PM10
2036	Access Road	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	6.807E-05	PM10
2036	Access Road	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	47.75	PM10
2037	Demolition - Asphalt	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	213.1	PM10
2037	Demolition - Asphalt	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0003038	PM10
2037	Demolition - Asphalt	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	160.1	PM10
2037	Demolition - Asphalt	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	49.9	PM10
2037	Rehabilitate Runway	Asphalt Drying	VOC = A x AR x VD x EF x D	58814.633	VOC
2037	Rehabilitate Runway	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	262.7	PM10
2037	Rehabilitate Runway	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	3836.0167	CO
2037	Rehabilitate Runway	Asphalt Storage and Batching	NOx = (0.025) x T	239.51667	Nox
2037	Rehabilitate Runway	Asphalt Storage and Batching	SOx = (0.0046) x T	44.066667	Sox
2037	Rehabilitate Runway	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	118.8	VOC
2037	Rehabilitate Runway	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	264.91667	PM10
2037	Rehabilitate Runway	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	75.833333	PM10
2037	Rehabilitate Runway	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	448.73333	PM10
2037	Rehabilitate Runway	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	0.0006397	PM10
2037	Access Road	Asphalt Drying	VOC = A x AR x VD x EF x D	6258.75	VOC
2037	Access Road	Asphalt Storage and Batching	PM10 = (0.027 + 0.00042) x T	27.95	PM10
2037	Access Road	Asphalt Storage and Batching	CO = (0.4 + 0.0004) x T	408.21667	CO
2037	Access Road	Asphalt Storage and Batching	NOx = (0.025) x T	25.483333	NOx
2037	Access Road	Asphalt Storage and Batching	SOx = (0.0046) x T	4.6833333	SOx
2037	Access Road	Asphalt Storage and Batching	VOC = (0.0082 + 0.0042) x T	12.65	VOC
2037	Access Road	Material Movement (Unpaved Roads)	PM10 = 1.5 x [(s/12)^0.9] x [(Wt./3)^0.45] x VMT	49.75	PM10
2037	Access Road	Material Movement (Paved Roads)	PM10 = 0.0022 x (sL^0.91) x (Wt^1.02) x VMT	11.966667	PM10
2037	Access Road	Unstabilized Land and Wind Erosion	PM10 = 0.38 x A x TPConv x (1-CE) x t / 2000	6.807E-05	PM10
2037	Access Road	Soil Handling	PM10 = T x 0.35 x 0.0032 x [(u/5)^1.3] / [(m/2)^1.4]	47.75	PM10

Source: RS&H 2026