

Road Construction Emissions Model, Version 9.0.0

| Daily Emission Estimates for -> TS30L Levee Project | | | | | | | | | | | | | | |
|---|---------------|--------------|---------------|----------------------|------------------------|------------------------------|-----------------------|-------------------------|-------------------------------|---------------|---------------|---------------|---------------|----------------|
| Project Phases (Pounds) | ROG (lbs/day) | CO (lbs/day) | NOx (lbs/day) | Total PM10 (lbs/day) | Exhaust PM10 (lbs/day) | Fugitive Dust PM10 (lbs/day) | Total PM2.5 (lbs/day) | Exhaust PM2.5 (lbs/day) | Fugitive Dust PM2.5 (lbs/day) | SOx (lbs/day) | CO2 (lbs/day) | CH4 (lbs/day) | N2O (lbs/day) | CO2e (lbs/day) |
| Grubbing/Land Clearing | 2.03 | 35.03 | 4.19 | 50.22 | 0.22 | 50.00 | 10.59 | 0.19 | 10.40 | 0.07 | 6,497.46 | 2.05 | 0.07 | 6,570.29 |
| Grading/Excavation | 6.13 | 108.98 | 14.37 | 50.70 | 0.70 | 50.00 | 11.00 | 0.60 | 10.40 | 0.21 | 20,367.25 | 6.19 | 0.34 | 20,624.30 |
| Drainage/Utilities/Sub-Grade | 2.04 | 36.26 | 4.77 | 50.24 | 0.24 | 50.00 | 10.60 | 0.20 | 10.40 | 0.07 | 6,766.35 | 2.05 | 0.11 | 6,851.77 |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum (pounds/day) | 6.13 | 108.98 | 14.37 | 50.70 | 0.70 | 50.00 | 11.00 | 0.60 | 10.40 | 0.21 | 20,367.25 | 6.19 | 0.34 | 20,624.30 |
| Total (tons/construction project) | 0.73 | 13.07 | 1.72 | 7.28 | 0.08 | 7.20 | 1.57 | 0.07 | 1.50 | 0.03 | 2,441.64 | 0.74 | 0.04 | 2,472.40 |

Notes:
 Project Start Year -> 2024
 Project Length (months) -> 12
 Total Project Area (acres) -> 55
 Maximum Area Disturbed/Day (acres) -> 5
 Water Truck Used? -> Yes

| Phase | Total Material Imported/Exported Volume (yd ³ /day) | | Daily VMT (miles/day) | | | |
|------------------------------|--|---------|-----------------------|-----------------|----------------|-------------|
| | Soil | Asphalt | Soil Hauling | Asphalt Hauling | Worker Commute | Water Truck |
| Grubbing/Land Clearing | 2 | 0 | 22 | 0 | 120 | 0 |
| Grading/Excavation | 111 | 0 | 132 | 0 | 300 | 150 |
| Drainage/Utilities/Sub-Grade | 22 | 0 | 44 | 0 | 120 | 50 |
| Paving | 0 | 0 | 0 | 0 | 0 | 0 |

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.


| Total Emission Estimates by Phase for -> TS30L Levee Project | | | | | | | | | | | | | | |
|---|------------------|-----------------|------------------|-------------------------|---------------------------|---------------------------------|--------------------------|----------------------------|----------------------------------|------------------|------------------|------------------|------------------|-----------------|
| Project Phases (Tons for all except CO2e. Metric tonnes for CO2e) | ROG (tons/phase) | CO (tons/phase) | NOx (tons/phase) | Total PM10 (tons/phase) | Exhaust PM10 (tons/phase) | Fugitive Dust PM10 (tons/phase) | Total PM2.5 (tons/phase) | Exhaust PM2.5 (tons/phase) | Fugitive Dust PM2.5 (tons/phase) | SOx (tons/phase) | CO2 (tons/phase) | CH4 (tons/phase) | N2O (tons/phase) | CO2e (MT/phase) |
| Grubbing/Land Clearing | 0.01 | 0.21 | 0.03 | 0.30 | 0.00 | 0.30 | 0.06 | 0.00 | 0.06 | 0.00 | 38.98 | 0.01 | 0.00 | 35.76 |
| Grading/Excavation | 0.66 | 11.77 | 1.55 | 5.48 | 0.08 | 5.40 | 1.19 | 0.06 | 1.12 | 0.02 | 2,199.66 | 0.67 | 0.04 | 2,020.71 |
| Drainage/Utilities/Sub-Grade | 0.06 | 1.09 | 0.14 | 1.51 | 0.01 | 1.50 | 0.32 | 0.01 | 0.31 | 0.00 | 202.99 | 0.06 | 0.00 | 186.48 |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Maximum (tons/phase) | 0.66 | 11.77 | 1.55 | 5.48 | 0.08 | 5.40 | 1.19 | 0.06 | 1.12 | 0.02 | 2199.66 | 0.67 | 0.04 | 2,020.71 |
| Total (tons/construction project) | 0.73 | 13.07 | 1.72 | 7.28 | 0.08 | 7.20 | 1.57 | 0.07 | 1.50 | 0.03 | 2441.64 | 0.74 | 0.04 | 2,242.95 |

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.

Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.

CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

The CO2e emissions are reported as metric tons per phase.

| Road Construction Emissions Model Data Entry Worksheet | | Version 9.0.0 | |
|--|---------------------------------------|--|--------------------------------------|
| <p>Note: Required data input sections have a yellow background. Optional data input sections have a blue background. Only areas with a yellow or blue background can be modified. Program defaults have a white background. The user is required to enter information in cells D10 through D24, E28 through G35, and D38 through D41 for all project types. Please use "Clear Data Input & User Overrides" button first before changing the Project Type or begin a new project.</p> | | <p>To begin a new project, click this button to clear data previously entered. This button will only work if you opted not to disable macros when loading this spreadsheet.</p> | |
|  | | | |
| Input Type | | | |
| Project Name | TS204 Levee Project | | |
| Construction Start Year | 2024 | Enter a Year between 2014 and 2040 (inclusive) | |
| Project Type | 4 | 1) New Road Construction : Project to build a roadway from bare ground, which generally requires more site preparation than widening an existing roadway 2) Road Widening : Project to add a new lane to an existing roadway 3) Bridge/Overpass Construction : Project to build an elevated roadway, which generally requires some different equipment than a new roadway, such as a crane 4) Other Linear Project Type: Non-roadway project such as a pipeline, transmission line, or levee construction | |
| Project Construction Time | 12.00 | months | |
| Working Days per Month | 24.00 | days (assume 22 if unknown) | |
| Predominant Soil/Site Type: Enter 1, 2, or 3 <small>(for project within "Sacramento County", follow soil type selection instructions in cells E18 to E20 otherwise see instructions provided in cells J18 to J22)</small> | 2 | 1) Sand Gravel : Use for quaternary deposits (Delta/West County) 2) Weathered Rock-Earth : Use for Laguna formation (Jackson Highway area) or the lone formation (Scott Road, Rancho Murieta) 3) Blasted Rock : Use for Salt Springs Slate or Copper Hill Volcanics (Folsom South of Highway 50, Rancho Murieta) | |
| Project Length | 1.20 | miles | |
| Total Project Area | 55.00 | acres | |
| Maximum Area Disturbed/Day | 5.00 | acres | |
| Water Trucks Used? | 1 | 1. Yes 2. No | |
| Material Hauling Quantity Input | | | |
| Material Type | Phase | Haul Truck Capacity (yd ³) (assume 20 if unknown) | Import Volume (yd ³ /day) |
| Soil | Grubbing/Land Clearing | 20.00 | 2.00 |
| | Grading/Excavation | 20.00 | 111.00 |
| | Drainage/Utilities/Sub-Grade Paving | 20.00 | 22.00 |
| Asphalt | Grubbing/Land Clearing | | |
| | Grading/Excavation | | |
| | Drainage/Utilities/Sub-Grade Paving | | |
| Mitigation Options | | | |
| On-road Fleet Emissions Mitigation | 2010 and Newer On-road Vehicles Fleet | Select "2010 and Newer On-road Vehicles Fleet" option when the on-road heavy-duty truck fleet for the project will be limited to vehicles of model year 2010 or newer | |
| Off-road Equipment Emissions Mitigation | Tier 4 Equipment | Select "20% NOx and 45% Exhaust PM reduction" option if the project will be required to use a lower emitting off-road construction fleet. The SMAQMD Construction Mitigation Calculator can be used to confirm compliance with this mitigation measure (http://www.airquality.org/Businesses/CEQA-Land-Use-Planning/Mitigation). | |
| Will all off-road equipment be tier 4? | All Tier 4 Equipment | Select "Tier 4 Equipment" option if some or all off-road equipment used for the project meets CARB Tier 4 Standard | |
| The remaining sections of this sheet contain areas that require modification when "Other Project Type" is selected. | | | |

Please note that the soil type instructions provided in cells E18 to E20 are specific to Sacramento County. Maps available from the California Geologic Survey (see weblink below) can be used to determine soil type outside Sacramento County.

http://www.conservation.ca.gov/cgs/information/geologic_mapping/Pages/googlemaps.aspx#regionalseries

Note: The program's estimates of construction period phase length can be overridden in cells D50 through D53, and F50 through F53.

| Construction Periods | User Override of Construction Months | Program Calculated Months | User Override of Phase Starting Date | Program Default Phase Starting Date |
|------------------------------|--------------------------------------|---------------------------|--------------------------------------|-------------------------------------|
| Grubbing/Land Clearing | 0.50 | 1.20 | | 1/1/2024 |
| Grading/Excavation | 9.00 | 5.40 | | 1/17/2024 |
| Drainage/Utilities/Sub-Grade | 2.50 | 3.60 | | 10/1/2024 |
| Paving | 0.00 | 1.80 | | 1/2/2025 |
| Totals (Months) | | 12 | | |

Note: Soil Hauling emission default values can be overridden in cells D61 through D64, and F61 through F64.

| Soil Hauling Emissions | | User Override of Miles/Round Trip | Program Estimate of Miles/Round Trip | User Override of Truck Round Trips/Day | Default Values Round Trips/Day | Calculated Daily VMT | | | | |
|--|------|-----------------------------------|--------------------------------------|--|--------------------------------|----------------------|----------|------|------|----------|
| User Input | | | | | | | | | | |
| Miles/round trip: Grubbing/Land Clearing | | 22.00 | | | 1 | 22.00 | | | | |
| Miles/round trip: Grading/Excavation | | 22.00 | | | 0 | 152.00 | | | | |
| Miles/round trip: Drainage/Utilities/Sub-Grade | | 22.00 | | | 2 | 44.00 | | | | |
| Miles/round trip: Paving | | | | | 0 | 0.00 | | | | |
| 2010+ Model Year Mitigation Option Emission Rates | | | | | | | | | | |
| | ROG | CO | NOx | PM10 | PM2.5 | SOx | CO2 | CH4 | N2O | CO2e |
| Grubbing/Land Clearing (grams/mile) | 0.03 | 0.41 | 3.02 | 0.11 | 0.05 | 0.02 | 1,693.55 | 0.00 | 0.27 | 1,772.92 |
| Grading/Excavation (grams/mile) | 0.03 | 0.41 | 3.02 | 0.11 | 0.05 | 0.02 | 1,693.55 | 0.00 | 0.27 | 1,772.92 |
| Drainage/Utilities/Sub-Grade (grams/mile) | 0.03 | 0.41 | 3.02 | 0.11 | 0.05 | 0.02 | 1,693.27 | 0.00 | 0.27 | 1,772.62 |
| Paving (grams/mile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grubbing/Land Clearing (grams/trip) | 0.00 | 0.00 | 4.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grading/Excavation (grams/trip) | 0.00 | 0.00 | 4.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage/Utilities/Sub-Grade (grams/trip) | 0.00 | 0.00 | 4.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving (grams/trip) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling Emissions | | | | | | | | | | |
| | ROG | CO | NOx | PM10 | PM2.5 | SOx | CO2 | CH4 | N2O | CO2e |
| Pounds per day - Grubbing/Land Clearing | 0.00 | 0.02 | 0.16 | 0.01 | 0.00 | 0.00 | 82.14 | 0.00 | 0.01 | 85.95 |
| Tons per const. Period - Grubbing/Land Clearing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.49 | 0.00 | 0.00 | 0.52 |
| Pounds per day - Grading/Excavation | 0.01 | 0.12 | 0.94 | 0.03 | 0.01 | 0.00 | 492.84 | 0.00 | 0.08 | 515.94 |
| Tons per const. Period - Grading/Excavation | 0.00 | 0.01 | 0.10 | 0.00 | 0.00 | 0.00 | 53.25 | 0.00 | 0.01 | 55.72 |
| Pounds per day - Drainage/Utilities/Sub-Grade | 0.00 | 0.04 | 0.31 | 0.01 | 0.00 | 0.00 | 164.25 | 0.00 | 0.03 | 171.95 |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 4.93 | 0.00 | 0.00 | 5.16 |
| Pounds per day - Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tons per const. Period - Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total tons per construction project | 0.00 | 0.01 | 0.11 | 0.00 | 0.00 | 0.00 | 58.65 | 0.00 | 0.01 | 61.40 |

Note: Asphalt Hauling emission default values can be overridden in cells D91 through D94, and F91 through F94.

| Asphalt Hauling Emissions | | User Override of Miles/Round Trip | Program Estimate of Miles/Round Trip | User Override of Truck Round Trips/Day | Default Values Round Trips/Day | Calculated Daily VMT | | | | |
|--|------|-----------------------------------|--------------------------------------|--|--------------------------------|----------------------|----------|------|------|----------|
| User Input | | | | | | | | | | |
| Miles/round trip: Grubbing/Land Clearing | | | | | 0 | 0.00 | | | | |
| Miles/round trip: Grading/Excavation | | | | | 0 | 0.00 | | | | |
| Miles/round trip: Drainage/Utilities/Sub-Grade | | | | | 0 | 0.00 | | | | |
| Miles/round trip: Paving | | | | | 0 | 0.00 | | | | |
| 2010+ Model Year Mitigation Option Emission Rates | | | | | | | | | | |
| | ROG | CO | NOx | PM10 | PM2.5 | SOx | CO2 | CH4 | N2O | CO2e |
| Grubbing/Land Clearing (grams/mile) | 0.03 | 0.41 | 3.02 | 0.11 | 0.05 | 0.02 | 1,693.55 | 0.00 | 0.27 | 1,772.92 |
| Grading/Excavation (grams/mile) | 0.03 | 0.41 | 3.02 | 0.11 | 0.05 | 0.02 | 1,693.55 | 0.00 | 0.27 | 1,772.92 |
| Drainage/Utilities/Sub-Grade (grams/mile) | 0.03 | 0.41 | 3.02 | 0.11 | 0.05 | 0.02 | 1,693.27 | 0.00 | 0.27 | 1,772.62 |
| Paving (grams/mile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grubbing/Land Clearing (grams/trip) | 0.00 | 0.00 | 4.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grading/Excavation (grams/trip) | 0.00 | 0.00 | 4.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage/Utilities/Sub-Grade (grams/trip) | 0.00 | 0.00 | 4.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving (grams/trip) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Emissions | | | | | | | | | | |
| | ROG | CO | NOx | PM10 | PM2.5 | SOx | CO2 | CH4 | N2O | CO2e |
| Pounds per day - Grubbing/Land Clearing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tons per const. Period - Grubbing/Land Clearing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Pounds per day - Grading/Excavation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tons per const. Period - Grading/Excavation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Pounds per day - Drainage/Utilities/Sub-Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Pounds per day - Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tons per const. Period - Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total tons per construction project | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Note: Worker commute default values can be overridden in cells D121 through D126.

| Worker Commute Emissions | | User Override of Worker Commute Default Values | Default Values | Calculated Daily Trips | Calculated Daily VMT | | | | | |
|---|------|--|----------------|------------------------|----------------------|------|--------|------|------|--------|
| User Input | | | | | | | | | | |
| Miles/one-way trip | | 10 | | | | | | | | |
| One-way trips/day | | 2 | | | | | | | | |
| No. of employees: Grubbing/Land Clearing | | 6 | | 12 | 120.00 | | | | | |
| No. of employees: Grading/Excavation | | 15 | | 30 | 300.00 | | | | | |
| No. of employees: Drainage/Utilities/Sub-Grade | | 6 | | 12 | 120.00 | | | | | |
| No. of employees: Paving | | | | 0 | 0.00 | | | | | |
| Emission Rates | | | | | | | | | | |
| | ROG | CO | NOx | PM10 | PM2.5 | SOx | CO2 | CH4 | N2O | CO2e |
| Grubbing/Land Clearing (grams/mile) | 0.01 | 0.84 | 0.06 | 0.05 | 0.02 | 0.00 | 306.70 | 0.00 | 0.01 | 308.54 |
| Grading/Excavation (grams/mile) | 0.01 | 0.84 | 0.06 | 0.05 | 0.02 | 0.00 | 306.70 | 0.00 | 0.01 | 308.54 |
| Drainage/Utilities/Sub-Grade (grams/mile) | 0.01 | 0.84 | 0.06 | 0.05 | 0.02 | 0.00 | 306.55 | 0.00 | 0.01 | 308.39 |
| Paving (grams/mile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grubbing/Land Clearing (grams/trip) | 0.98 | 2.66 | 0.27 | 0.00 | 0.00 | 0.00 | 65.99 | 0.07 | 0.03 | 76.61 |
| Grading/Excavation (grams/trip) | 0.98 | 2.66 | 0.27 | 0.00 | 0.00 | 0.00 | 65.99 | 0.07 | 0.03 | 76.61 |
| Drainage/Utilities/Sub-Grade (grams/trip) | 0.98 | 2.66 | 0.27 | 0.00 | 0.00 | 0.00 | 65.96 | 0.07 | 0.03 | 76.57 |
| Paving (grams/trip) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Emissions | | | | | | | | | | |
| | ROG | CO | NOx | PM10 | PM2.5 | SOx | CO2 | CH4 | N2O | CO2e |
| Pounds per day - Grubbing/Land Clearing | 0.03 | 0.29 | 0.02 | 0.01 | 0.01 | 0.00 | 82.88 | 0.00 | 0.00 | 83.65 |
| Tons per const. Period - Grubbing/Land Clearing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 | 0.00 | 0.00 | 0.50 |
| Pounds per day - Grading/Excavation | 0.07 | 0.73 | 0.06 | 0.03 | 0.01 | 0.00 | 207.21 | 0.01 | 0.01 | 209.13 |
| Tons per const. Period - Grading/Excavation | 0.01 | 0.08 | 0.01 | 0.00 | 0.00 | 0.00 | 22.38 | 0.00 | 0.00 | 22.59 |
| Pounds per day - Drainage/Utilities/Sub-Grade | 0.03 | 0.29 | 0.02 | 0.01 | 0.01 | 0.00 | 82.84 | 0.00 | 0.00 | 83.61 |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 2.49 | 0.00 | 0.00 | 2.51 |
| Pounds per day - Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tons per const. Period - Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total tons per construction project | 0.01 | 0.09 | 0.01 | 0.00 | 0.00 | 0.00 | 25.36 | 0.00 | 0.00 | 25.63 |

Note: Water Truck default values can be overridden in cells D153 through D156, I153 through I156, and F153 through F156.

| Water Truck Emissions | User Override of | Program Estimate of | User Override of Truck | Default Values | Calculated | User Override of | Default Values | Calculated |
|----------------------------------|------------------------|------------------------|-------------------------|-------------------------|------------|------------------|------------------|------------|
| User Input | Default # Water Trucks | Number of Water Trucks | Round Trips/Vehicle/Day | Round Trips/Vehicle/Day | Trips/day | Miles/Round Trip | Miles/Round Trip | Daily VMT |
| Grubbing/Land Clearing - Exhaust | | | | | | | | 0.00 |
| Grading/Excavation - Exhaust | 3 | | 10.00 | | | 5.00 | | 150.00 |
| Drainage/Utilities/Subgrade | 1 | | 10.00 | | | 5.00 | | 50.00 |
| Paving | | | | | | | | 0.00 |

| 2010+ Model Year Mitigation Option Emission Rates | ROG | CO | NOx | PM10 | PM2.5 | SOx | CO2 | CH4 | N2O | CO2e |
|---|------------|-----------|------------|-------------|--------------|------------|------------|------------|------------|-------------|
| Grubbing/Land Clearing (grams/mile) | 0.03 | 0.41 | 3.02 | 0.11 | 0.05 | 0.02 | 1,693.55 | 0.00 | 0.27 | 1,772.92 |
| Grading/Excavation (grams/mile) | 0.03 | 0.41 | 3.02 | 0.11 | 0.05 | 0.02 | 1,693.55 | 0.00 | 0.27 | 1,772.92 |
| Drainage/Utilities/Sub-Grade (grams/mile) | 0.03 | 0.41 | 3.02 | 0.11 | 0.05 | 0.02 | 1,693.27 | 0.00 | 0.27 | 1,772.62 |
| Paving (grams/mile) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grubbing/Land Clearing (grams/trip) | 0.00 | 0.00 | 4.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Grading/Excavation (grams/trip) | 0.00 | 0.00 | 4.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drainage/Utilities/Sub-Grade (grams/trip) | 0.00 | 0.00 | 4.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Paving (grams/trip) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Emissions | ROG | CO | NOx | PM10 | PM2.5 | SOx | CO2 | CH4 | N2O | CO2e |
| Pounds per day - Grubbing/Land Clearing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tons per const. Period - Grubbing/Land Clearing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Pounds per day - Grading/Excavation | 0.01 | 0.13 | 1.29 | 0.04 | 0.02 | 0.01 | 560.05 | 0.00 | 0.09 | 598.29 |
| Tons per const. Period - Grading/Excavation | 0.00 | 0.01 | 0.14 | 0.00 | 0.00 | 0.00 | 60.49 | 0.00 | 0.01 | 63.32 |
| Pounds per day - Drainage/Utilities/Sub-Grade | 0.00 | 0.04 | 0.43 | 0.01 | 0.01 | 0.00 | 186.65 | 0.00 | 0.03 | 195.40 |
| Tons per const. Period - Drainage/Utilities/Sub-Grade | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 5.60 | 0.00 | 0.00 | 5.66 |
| Pounds per day - Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Tons per const. Period - Paving | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total tons per construction project | 0.00 | 0.02 | 0.15 | 0.00 | 0.00 | 0.00 | 66.08 | 0.00 | 0.01 | 69.18 |

Note: Fugitive dust default values can be overridden in cells D183 through D185.

| Fugitive Dust | User Override of Max | Default | PM10 | PM10 | PM2.5 | PM2.5 |
|---|-----------------------|---------------------|------------|-----------------|------------|-----------------|
| | Acreage Disturbed/Day | Maximum Acreage/Day | pounds/day | tons/per period | pounds/day | tons/per period |
| Fugitive Dust - Grubbing/Land Clearing | | | 50.00 | 0.30 | 10.40 | 0.06 |
| Fugitive Dust - Grading/Excavation | | | 50.00 | 5.40 | 10.40 | 1.12 |
| Fugitive Dust - Drainage/Utilities/Subgrade | | | 50.00 | 1.50 | 10.40 | 0.31 |

Equipment default values for horsepower and hours/day can be overridden in cells D403 through D436 and F403 through F436.

| Equipment | User Override of Horsepower | Default Values Horsepower | User Override of Hours/day | Default Values Hours/day |
|------------------------------------|-----------------------------|---------------------------|----------------------------|--------------------------|
| Aerial Lifts | | 63 | | 8 |
| Air Compressors | | 78 | | 8 |
| Bore/Drill Rigs | | 221 | | 8 |
| Cement and Mortar Mixers | | 9 | | 8 |
| Concrete/Industrial Saws | | 81 | | 8 |
| Cranes | | 231 | | 8 |
| Crawler Tractors | | 212 | | 8 |
| Crushing/Proc. Equipment | | 85 | | 8 |
| Excavators | | 158 | | 8 |
| Forklifts | | 89 | | 8 |
| Generator Sets | | 84 | | 8 |
| Graders | | 187 | | 8 |
| Off-Highway Tractors | | 124 | | 8 |
| Off-Highway Trucks | | 402 | | 8 |
| Other Construction Equipment | | 172 | | 8 |
| Other General Industrial Equipment | | 88 | | 8 |
| Other Material Handling Equipment | | 168 | | 8 |
| Pavers | | 130 | | 8 |
| Paving Equipment | | 132 | | 8 |
| Plate Compactors | | 8 | | 8 |
| Pressure Washers | | 13 | | 8 |
| Pumps | | 84 | | 8 |
| Rollers | | 80 | | 8 |
| Rough Terrain Forklifts | | 100 | | 8 |
| Rubber Tired Dozers | | 247 | | 8 |
| Rubber Tired Loaders | | 203 | | 8 |
| Scrapers | | 367 | | 8 |
| Signal Boards | | 6 | | 8 |
| Skid Steer Loaders | | 65 | | 8 |
| Surfacing Equipment | | 263 | | 8 |
| Sweepers/Scrubbers | | 64 | | 8 |
| Tractors/Loaders/Backhoes | | 97 | | 8 |
| Trenchers | | 78 | | 8 |
| Welders | | 46 | | 8 |

END OF DATA ENTRY SHEET