

Source Category:	Locomotives
SCC Code:	2285002006 Diesel Line Haul Locomotives: Class I operations
	2285002007 Diesel Line Haul Locomotives: Class II/III operations
	2285002008 Diesel Line Haul Locomotives: Passenger Trains
	2285002009 Diesel Line Haul Locomotives: Commuter lines
	2285002010 Diesel Yard Operations
Pollutants of Concern:	PM10, PM2.5, VOC, NO_x, CO, SO_x, 28 HAPs
How is the PM National Emission Inventory developed for this category?	
Current Methodology (see also the link to the NEI Methodology Description):	
<ul style="list-style-type: none"> • National emissions calculated using national activity data on U.S. distillate fuel oil consumption by railroads and emission. • U.S. distillate fuel sales for railroads was disaggregated into different railroad categories by ratio of SCC activity to total (e.g., class I ratio = class I length density/ all railroad length density). • PM10 emission factors: PM10: 9.2 g/gallon (yard operations) PM10: 6.7 g/gallon (all line haul operations) • PM2.5 emission factor PM2.5: 8.28 g/gallon (yard operations) PM2.5: 6.03 g/gallon (all line haul operations) • Emissions for Class I, Class II/III, Commuter, and Passenger railways were spatially allocated to counties based on the DOT's railroad traffic GIS data set. Yard locomotive emissions were assigned to urban areas with Class I railroad activity. 	
Current Variables/Assumptions Used:	
<ul style="list-style-type: none"> • National fuel use data for railroads. • National emissions determined using national emission factors and activity data (fuel usage). • National estimate of fuel consumption by operation type 	
Uncertainties / Shortcomings of Current Methods:	

- National activity data used rather than State/local/tribal.
- National estimate for mix of operations used rather than location specific value.

How can State, Local, and Tribal agencies improve upon this methodology?

- Review emission estimates to ensure that they are representative.
- County-level allocation based on reasonable data.
- Inventory local equipment, especially yard locomotives.
- Obtain more representative fuel consumption estimates at the local or State-level.
[Local Railroads, State Department of Transportation, Bureau of Rail Freight]

Where can I find Additional Information and Guidance?

EPA Contact: Laurel M Driver
 Emission Factor and Inventory Group
 U.S. Environmental Protection Agency
 D205-01
 USEPA Mailroom
 Research Triangle Park, NC 27711
 Telephone: 919 541-2859
 E-mail: driver.laurel@epa.gov

Additional Information on Emissions from Locomotive Sources	http://www.epa.gov/otaq/locomotv.htm
Emission Factor for Locomotives	http://www.epa.gov/otaq/regs/nonroad/locomotv/fm/42097051.pdf
Mobile Source Emission Inventory Guidance Document	http://www.epa.gov/otaq/inventory/r92009.pdf
NEI Methodology Description	http://www.epa.gov/ttn/chief/net/index.html#doc