



## Emissions Inventory Help Sheet for Sand and Gravel Plants

### What do I need to report?

Include:

- all applicable sources from the list below.
- vehicles moving on unpaved areas on-site (see Help Sheet for Vehicle Travel on Unpaved Roads).
- gasoline storage (in tanks with capacity of 250-gallon or more, see Help Sheet for Fuel Storage and Handling).
- internal combustion engines (not emergency backup engines that operated a total of less than 200 hours, nor vehicle engines).

### How do I calculate my emissions?

Refer to the AQD Online Portal Emissions Inventory Instructions for more information. Remember that some material goes through some processes more than once. For example, if 50 tons of rock is sent through a crusher three times, the total material supplied to the crusher is 150 tons. Do not include wet processes at a wet plant.

Emission Unit type	Process Description	SCC Code	Uncontrolled Emission Factors			Emission Factor Unit	Control Efficiency
			PM	PM <sub>10</sub>	PM <sub>2.5</sub>		Fugitive Dust Suppression <sup>1</sup>
Material Handling (MAT)	Mining/plant feed, handling <sup>2</sup>	30502505	0.11	0.055	0.00825	lb/ton	99%
	Surge pile forming, handling <sup>2</sup>	30502505	0.11	0.055	0.00825	lb/ton	99%
	Pile forming, handling <sup>2</sup>	30502505	0.11	0.055	0.00825	lb/ton	99%
	Load out, handling with watering <sup>2</sup>	30502506	0.11	0.055	0.00825	lb/ton	99%
Crushing/Screening/ Handling (CSH)	Crushing (primary, secondary & tertiary) <sup>3</sup>	30502003	0.0054	0.0024	0.0024	lb/ton	95.9%
	Screening <sup>3</sup>	30502511	0.025	0.0087	0.0012	lb/ton	95.9%
	Fines screening <sup>3</sup>	30502021	0.3	0.072	0.022	lb/ton	95.9%
	Conveyor transfer point <sup>3</sup>	30502503	0.003	0.0011	0.00033	lb/ton	95.9%
Open Air Fugitive Source (FUG)	Stockpiles, raw material and product storage <sup>4</sup>	30502507	630	630	189	lb/acre-yr	90%

<sup>1</sup> The emission factors on this help sheet are uncontrolled. You may account for dust control efforts if you use water or other dust suppressants and if you are in full compliance with requirements of Rule 316, Nonmetallic Mineral Processing. To account for dust control efforts, add control equipment (fugitive dust suppression) to each emission process that is controlled with water or dust suppressants. The capture efficiency for fugitive dust suppression is 100% and the control efficiency for each process is listed in the table above.

<sup>2</sup> Reference: U.S. EPA, 1997. *Compilation of Air Pollutant Emission Factors AP-42*, Volume I: Stationary Point and Area Sources, fifth ed. Equation 13.2.4-1 (11/06).

<sup>3</sup> Reference: U.S. EPA, 1997. *Compilation of Air Pollutant Emission Factors AP-42*, Volume I: Stationary Point and Area Sources, fifth ed. Table 11.19.2-2 (8/04).

<sup>4</sup> Reference: U.S. EPA WebFIRE database. Available at: <http://cfpub.epa.gov/webfire/>.