Potential To Emit Calculator for Concrete Batch Plants

5/22/2018

This spreadsheet helps estimate a facility's potential to emit. It is provided for the convenience of the permitted community. Emission factor sources are subject to revision or correction. It is the permittee's responsibility to determine their emissions. The permittee should consult with the reviewing authority to determine the appropriateness of this calculator for its source.

If you have one or more of the following units that are exempt from the Indian Country Minor NSR Program, please contact your EPA Regional office before you use this calculator to determine whether you need to obtain a minor NSR permit: Internal combustion engines used for landscaping purposes; Emergency generators, designed solely for the purpose of providing electrical power during power outages; in nonattainment areas classified as Serious or lower, the total maximum manufacturer's site-rated hp of all units shall be below 500; in attainment areas, the total maximum manufacturer's site-rated hp of all units shall be below 1,000; Stationary internal combustion engines with a manufacturer's site-rated hp of less than 5; and Furnaces or boilers used for space heating that use only gaseous fuel, with a total maximum heat input (i.e., from all units combined) of in nonattainment areas classified as Serious or lower, 5 MMBtu/hr or less; in nonattainment areas classified as Severe or Extreme, 2 MMBtu/hr or less; and in attainment areas, 10 MMBtu/hr or less.

Directions: Enter the facility's information below in the cells with **red text**.
Write the letter "Y" or "N" next to each fuel type to indicate that the facility does or does not burn that type of fuel.

Enter the maximum capacity information for the equipment at your concrete batch mix operation (lines 14 - 24)
OR
Enter the maximum number of yards of concrete your plant can deliver (maximum production capacity) in one year (line 26).

If you operate multiple facilities of the same type (more than one aggregate conveyor, more than one generator), enter the total rated capacity.

The potential emissions of criteria pollutants and hazardous air pollutants for the facility will be displayed under the "Output" tab.

This calculator does not calculate non-emergency engines. Contact your reviewing authority if you use non-emergency engines to power your operations.

If the throughput capacity of a piece of equipment limits (or bottlenecks) the maximum throughput of other equipment, then input the bottlenecked capacity of that other equipment, but only if it impacts output of product.

Facility Profile

Plant Equipment Maximum Throughput Capacity	Amount	Units	
Railcar/Barge/Truck Sand Unloading		tons/hr	Total
Railcar/Barge/Truck Aggregate Unloading		tons/hr	Total
Cement - Unloading to Elevated Storage		tons/hr	Total
Cement Supplement - Unloading to Elevated Storage		tons/hr	Total
Sand - Transfer to Conveyor		tons/hr	Total
Aggregate - Transfer to Conveyor		tons/hr	Total
Sand - Transfer to Elevated Storage		tons/hr	Total
Aggregate - Transfer to Elevated Storage		tons/hr	Total
Weigh Hopper Loading (Sand and Aggregate Only)		tons/hr	Total
Mixer Loading (Cement and Cement Supplement Only)		tons/hr	Total
Transit Mix Truck Loading (Cement and Cement Supp. Only)		tons/hr	Total

Plant Maximum Production Capacity	698880	Yards Mix/yr

Is the Dry Mix and Water Mixed Prior to Loading (Mixer Loading) or After Loading (Truck Loading)? [Choose One]	**Mixer Loading**

Engines and Heaters		units				
Natural Gas-fired Auxiliary Heater(s) Capacity -		MMBtu/hr	Total			
Propane-fired Auxiliary Heater(s) Capacity -	1.4	MMBtu/hr	Total	Fuel Sulfur %	0.0015	Default = 0.0015
Distillate/Diesel-fired Auxiliary Heater(s) Capacity -		MMBtu/hr	Total	Fuel Sulfur %	0.0015	Default = 0.0015
Diesel-fired Non-Emergency Engine(s) Size -		hp	Total	Fuel Sulfur %	0.0015	Default = 0.0015
Diesel-fired Emergency Generator(s) Size -		hp	Total	Fuel Sulfur %	0.0015	Default = 0.0015
Natural Gas/Propane-fired Emergency Generator(s) Size -		hp	Total	Fuel Sulfur %	0.0015	Default = 0.0015
Gasoline-fired Emergency Generator(s) Size -		hp	Total	Fuel Sulfur %	0.0015	Default = 0.0015

MMBtu = million British thermal units
hp = horsepower

Site Parameters units

Potential To Emit Calculator for Concrete Batch Plants

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Summary - Total Potential to Emit									
tons/yr									
	Pollutant								
Process	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_X	CO	VOC	Single HAP	Total HAPs
Materials Handling and Loading	17.72	6.16	0.80	-	-	-	-	-	-
Auxiliary Heater(s)	0.05	0.05	0.05	0.00	0.87	0.50	0.07	-	0.00
Non-Emergency Engines	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Emergency Generators	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.0000
Vehicle Traffic	1.91	0.55							
Storage Piles	0.0004	0.0002							
Solvent Degreasing							0.00		0.0000
Controlled Emissions (ton/yr)	**19.68**	**6.75**	**0.85**	**0.00**	**0.87**	**0.50**	**0.07**	**0.00**	**0.000**

Note: Emissions from vehicle traffic and storage piles are considered fugitive emissions and are not counted towards PTE, as concrete batching is not one of the 28 listed source categories.

Potential To Emit Calculator for Concre

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Controlled Emissions from Concrete Batch Mix Materials H

Calculation Methodology

Plant Equipment Maximum Throughput Capacity	Throughput		Emiss
Materials Handling Process	tons/hr	Controlled?	PM
Railcar/Barge/Truck Sand Unloading	0	y	0.0021
Railcar/Barge/Truck Aggregate Unloading	0	y	0.0069
Cement - Unloading to Elevated Storage	0	y	0.00099
Cement Supplement - Unloading to Elevated Storage	0	y	0.0089
Sand - Transfer to Conveyor	0	y	0.0021
Aggregate - Transfer to Conveyor	0	0	0.0069
Sand - Transfer to Elevated Storage	0	y	0.0021
Aggregate - Transfer to Elevated Storage	0	y	0.0069
Weigh Hopper Loading	0	y	0.0048
Mixer Loading	0	y	0.0184
Truck Loading	0	y	0.098
OR			
	Yards Mix/yr		Emissi
Plant Maximum Production Capacity	698880	Controlled?	PM
Railcar/Barge/Truck Sand Unloading	698880	y	0.0015
Railcar/Barge/Truck Aggregate Unloading	698880	y	0.0064
Cement - Unloading to Elevated Storage	698880	y	0.0002
Cement Supplement - Unloading to Elevated Storage	698880	y	0.0003
Sand - Transfer to Conveyor	698880	y	0.0015
Aggregate - Transfer to Conveyor	698880	0	0.0064
Sand - Transfer to Elevated Storage	698880	y	0.00015
Aggregate - Transfer to Elevated Storage	698880	y	0.00064
Weigh Hopper Loading	698880	y	0.00079
Mixer Loading	698880	y	0.005189
Truck Loading	698880	y	0.027636
PTE (ton/yr)			

Note:

Assume that transfer of sand and aggregate to elevated storage and weigh hopper loading has a capture/con

Emission factors are from AP-42, Chapter 11.12, Concrete Batching, Tables 11.12-2, 11.12-3, 11.12-4, and 1

PM 2.5 emission factors are from AP-42, Chapter 11.12, Concrete Batching, Background Documer

Assumes equipment is controlled, as required by GP

Methodology

PTE (ton/yr) = Throughput (tons/hr) x EF (lb/ton) x 8760 hr x 1 ton/2000 lb

PTE (ton/yr) = Yards mix/yr x EF (lb/yard) x 1 ton/2000 lb

ete Batch Plants

andling - Criteria Pollutants

Purple values are pulled from other worksheet
Blue values are results

sion Factor (lb/ton)		Potential to Emit		
PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
0.00099	0.0001287	0.00	0.00	0.00
0.0033	0.000429	0.00	0.00	0.00
0.00034	0.0000442	0.00	0.00	0.00
0.0049	0.000637	0.00	0.00	0.00
0.00099	0.0001287	0.00	0.00	0.00
0.0033	0.000429	0.00	0.00	0.00
0.00099	0.0001287	0.00	0.00	0.00
0.0033	0.000429	0.00	0.00	0.00
0.0028	0.000364	0.00	0.00	0.00
0.0055	0.000715	0.00	0.00	0.00
0.0263	0.003419	0.00	0.00	0.00

ion Factor (lb/yard)		Potential to Emit		
PM_{10}	$PM_{2.5}$	PM	PM_{10}	$PM_{2.5}$
0.0007	0.000091	0.52	0.24	0.03
0.0031	0.000403	2.24	1.08	0.14
0.0001	0.000013	0.07	0.03	0.00
0.0002	0.000026	0.10	0.07	0.01
0.0007	0.000091	0.52	0.24	0.03
0.0031	0.000403	2.24	1.08	0.14
0.00007	0.0000091	0.05	0.02	0.00
0.00031	0.0000403	0.22	0.11	0.01
0.00038	0.0000494	0.28	0.13	0.02
0.001551	0.0002016	1.81	0.54	0.07
0.007417	0.0009642	9.7	2.6	0.3

		17.72	**6.16**	**0.80**

ıtrol efficiency of 90%.

.1.12-6. (June 2006)

ıt, Table 17.1. (June 2006)

Potential To Emit Calculator for Concrete I

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Emissions from Auxiliary Heaters - Criteria Pollutants and Ha

Natural Gas-fired Auxiliary Heater(s) Capacity - 0 (MMBtu/hr)
Propane-fired Auxiliary Heater(s) Capacity - 1.4 (MMBtu/hr)
Distillate/Diesel-fired Auxiliary Heater(s) Capacity - 0 (MMBtu/hr)

Worst Case PTE (ton/yr)

PM	PM_{10}	$PM_{2.5}$	SO_2
0.05	**0.05**	**0.05**	**0.00**

Fuel Type: **Natural Gas** Used

	Pollutant			
	PM	PM_{10}[2]	$PM_{2.5}$	SO_2
Emission Factor[1] (lb/MMSCF)	7.6	7.6	7.6	0.6
PTE (ton/yr)	**0.00**	**0.00**	**0.00**	**0.00**

Note:
1. Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, and 1.4-4 (upd
2. Assumed PM and $PM_{2.5}$ emissions are equal to PM_{10} emissions.

Methodology
PTE (ton/yr) = Heat Input (MMBtu/hr) x 1 MMSCF/1,020 MMBtu x EF (lb/MMSCF) x 8760 h

Fuel Type: **Propane** Used Y Sulfur Content:

	Pollutant			
	PM	PM_{10}[2]	$PM_{2.5}$	SO_2
Emission Factor[1] (lbs/kgal)	0.7	0.7	0.7	0.00015
PTE (ton/yr)	**0.05**	**0.05**	**0.05**	**0.00**

Note:
1. Emission factors are from AP-42, Chapter 1.5, Tables 1.5 (updated 07/08).
2. Assumed PM and $PM_{2.5}$ emissions are equal to PM_{10} emissions.

Methodology
PTE (ton/yr) = Heat Input (MMBtu/hr) x 1 kgal/91.5 MMBtu x EF (lb/kgal) x 8760 hr/yr x 1 to

Fuel Type: **Liquid Fuel** Used Sulfur Content:

	Pollutant			
	PM^2	PM_{10}	$PM_{2.5}$	SO_2
Emission Factor[1] (lb/kgal)	2.0	3.3	2.55	0.213
PTE (ton/yr)	**0.00**	**0.00**	**0.00**	**0.00**

Note:
1. Emission factors are from AP-42, Chapter 1.3, Tables 1.3-1, 1.3-2, 1.3-3, 1.3-9, and 1.3-
2. Assume PM emissions are equal to PM10 emissions

Methodology
PTE (ton/yr) = Heat Input (MMBtu/hr) x 1 kgal/140 MMBtu x EF (lb/kgal) x 8760 hr/yr x 1 tor

Batch Plants

zardous Air Pollutants

Purple values are pulled from other worksheet
Blue values are results

NO_X	CO	VOC	HAPs
0.87	**0.50**	**0.07**	**0.00**

NO_X	CO	VOC	HAPs
100	84	5.5	1.89
0.00	**0.00**	**0.00**	**0.00**

ated 07/98).

r/yr x 1 ton/2000 lb

0.0015 %

NO_X	CO	VOC	HAPs
13	7.5	1.0	
0.87	**0.50**	**0.07**	**0.00**

n/2000 lb

0.0015 %

NO_X	CO	VOC	HAPs
20	5.0	0.34	0.5537
0.00	**0.00**	**0.00**	**0.00**

Potential To Emit Calculator for Concrete Bat

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Emissions from Non-Emergency Generator Engine - Criteria Pollutants and

Diesel-fired Emergency Generator Engine Size: 0 hp

Worst Case PTE (ton/yr)

PM	PM_{10}	$PM_{2.5}$	SO_2
0.00	**0.00**	**0.00**	**0.00**

Engine Type: **Diesel Engine (<= 600 hp)** Used: Yes

	Pollutant			
	PM^2	PM_{10}	$PM_{2.5}^2$	SO_2
Emission Factor[1] (lbs/hp-hr)	2.20E-03	2.20E-03	2.20E-03	2.05E-03
PTE (ton/yr)	**0.00**	**0.00**	**0.00**	**0.00**

Note:

1. Emission factors are from AP-42, Chapter 3.3, Tables 3.3-1 and 3.3-2 (updated 10/96).
2. Assume PM and $PM_{2.5}$ emissions are equal to PM_{10} emissions.
3. Assume TOC (total organic compounds) emissions equal to VOC emissions.
4. Assume 500 hours/yr of operation for an emergency engine

Methodology

PTE (ton/yr) = Engine Capacity (hp) x EF (lb/hp-hr) x 500 hr x 1 ton/2000 lb

Engine Type: **Diesel (> 600 hp)** Used: No Sulfur Content:

	Pollutant			
	PM	PM_{10}	$PM_{2.5}^2$	SO_2
Emission Factor[1] (lbs/hp-hr)	0.0007	0.0007	0.0007	1.21E-05
Limited PTE (ton/yr)	**0.00**	**0.00**	**0.00**	**0.00**

Note:

1. Emission factors are from AP-42, Chapter 3.4, Tables 3.4-1 and 3.4-2 for Large Stationary Die
2. Assume $PM_{2.5}$ emissions are equal to PM_{10} emissions.
3. Assume TOC (total organic compounds) emissions equal to VOC emissions.
4. Assume 500 hours/yr of operation for an emergency engine

Methodology

PTE (ton/yr) = Engine Capacity (hp) x EF (lb/hp-hr) x 500 hr x 1 ton/2000 lb

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l Hazardous Air Pollutants

Purple values are pulled from other worksheet
Blue values are results

NO_X	CO	VOC	HAPs
0.00	**0.00**	**0.00**	**0.0000**

NO_X	CO	VOC^3	HAPs
3.10E-02	6.68E-03	2.47E-03	2.65328E-05
0.00	**0.00**	**0.00**	**0.0000**

0.0015 %

NO_X	CO	VOC^3	HAPs
0.024	5.50E-03	7.05E-04	2.99739E-05
0.00	**0.00**	**0.00**	**0.0000**

esel and Dual Fuel Engines (updated 10/96).

Potential To Emit Calculator for Concrete Bat

5/22/2018

Emissions from Emergency Generator Engine - Criteria Pollutants and H

Diesel-fired Emergency Generator Engine Size: 0 hp
Gasoline-fired Emergency Generator Engine Size: 0 hp

Worst Case PTE (ton/yr)

PM	PM_{10}	$PM_{2.5}$	SO_2
0.00	**0.00**	**0.00**	**0.00**

Engine Type: **Diesel Engine (<= 600 hp)** Used: Yes

	Pollutant			
	PM^2	PM_{10}	$PM_{2.5}^2$	SO_2
Emission Factor[1] (lbs/hp-hr)	2.20E-03	2.20E-03	2.20E-03	2.05E-03
PTE (ton/yr)	**0.00**	**0.00**	**0.00**	**0.00**

Note:
1. Emission factors are from AP-42, Chapter 3.3, Tables 3.3-1 and 3.3-2 (updated 10/96).
2. Assume PM and $PM_{2.5}$ emissions are equal to PM_{10} emissions.
3. Assume TOC (total organic compounds) emissions equal to VOC emissions.
4. Assume 500 hours/yr of operation for an emergency engine

Methodology
PTE (ton/yr) = Engine Capacity (hp) x EF (lb/hp-hr) x 500 hr x 1 ton/2000 lb

Engine Type: **Diesel (> 600 hp)** Used: No Sulfur Content:

	Pollutant			
	PM	PM_{10}	$PM_{2.5}^2$	SO_2
Emission Factor[1] (lbs/hp-hr)	0.0007	0.0007	0.0007	1.21E-05
Limited PTE (ton/yr)	**0.00**	**0.00**	**0.00**	**0.00**

Note:
1. Emission factors are from AP-42, Chapter 3.4, Tables 3.4-1 and 3.4-2 for Large Stationary Die
2. Assume $PM_{2.5}$ emissions are equal to PM_{10} emissions.
3. Assume TOC (total organic compounds) emissions equal to VOC emissions.
4. Assume 500 hours/yr of operation for an emergency engine

Methodology
PTE (ton/yr) = Engine Capacity (hp) x EF (lb/hp-hr) x 500 hr x 1 ton/2000 lb

Engine Type: **Gasoline** Used: No

	Pollutant			
	PM	PM_{10}	$PM_{2.5}^2$	SO_2
Emission Factor[1] (lbs/hp-hr)	7.21E-04	7.21E-04	7.21E-04	5.91E-04
Limited PTE (ton/yr)	**0.00**	**0.00**	**0.00**	**0.00**

Note:

1. Emission factors are from AP-42, Chapter 3.3, Table 3.3-1 for Uncontrolled gasoline and Dies
2. Assume PM and $PM_{2.5}$ emissions are equal to PM_{10} emissions.
3. Assume TOC (total organic compounds) emissions equal to VOC emissions.
4. Assume 500 hours/yr of operation for an emergency engine

Methodology

PTE (ton/yr) = Engine Capacity (hp) x EF (lb/hp-hr) x 500 hr x 1 ton/2000 lb

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lazardous Air Pollutants

Purple values are pulled from other worksheet
Blue values are results

NO_X	CO	VOC	HAPs
0.00	**0.00**	**0.00**	**0.0000**

NO_X	CO	VOC^3	HAPs
3.10E-02	6.68E-03	2.47E-03	2.65328E-05
0.00	**0.00**	**0.00**	**0.0000**

0.0015 %

NO_X	CO	VOC^3	HAPs
0.024	5.50E-03	7.05E-04	2.99739E-05
0.00	**0.00**	**0.00**	**0.0000**

esel and Dual Fuel Engines (updated 10/96).

NO_X	CO	VOC^3
0.011	6.96E-03	2.05E-02
0.00	**0.00**	**0.00**

el Industrial Engines (updated 10/96).

Potential To Emit Calculator fo

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Emissions from Vehicle Traff

AP 42 Emission Factors - Paved Roads

According to AP 42, Chapter 13.2.1 - Paved Roads (01/2011), the PM/PM10/PM2.5 emission factors for p

$E_{ext} = (k\ (sL)^{0.91}\ (W)^{1.02})\ (1 - p/(4 \times 365))$

Where:

E_{ext} = emission factor (lb/vehicle mile traveled)

	k = empirical constant =	0.011	for PM
		0.0022	for PM10
		0.00054	for PM2.5
	sL = road surface silt loading (g/m^2) =	12.0	(g/m^2)
Transit Mix Truck	w = mean vehicle weight (tons) =	25.0	tons
Gravel/Sand Delivery Truck	w = mean vehicle weight (tons) =	25.0	tons
Other Delivery Truck	w = mean vehicle weight (tons) =	1.0	tons
	p = number of days per year with 0.01 inches precipitation =	50	days

Transit Mix Truck
Gravel/Sand Delivery Truck
Other Delivery Truck

AP 42 Emission Factors - Unpaved Roads

According to AP 42, Section 13.2.2 Unpaved Roads (11/2006), the PM/PM10/PM2.5 emission factors for

$E_{ext} = k\ (s/12)^{a}\ (W/3)^{b} \times (365\text{-}p)/365$

Where:

E_{ext} = emission factor (lb/vehicle mile traveled)

	k = particle size multiplier =	4.9	for PM
		1.5	for PM10
		0.15	for PM2.5
	s = surface material silt content (%) =	8.5	
Transit Mix Truck	W = mean vehicle weight =	25.0	tons
Gravel/Sand Delivery Truck	W = mean vehicle weight =	25.0	tons
Other Delivery Truck	W = mean vehicle weight =	1.0	tons
	a = empirical constant =	0.7	PM
	a = empirical constant =	0.9	PM10/PM2.5
	b = empirical constant =	0.45	
	p = number of days per year with 0.01 inches precipitation =	50	

Transit Mix Truck
Gravel/Sand Delivery Truck

Other Delivery Truck

Potential to Emit

Vehicle Traffic

Road Type	Vehicle Type	Avg. Wt. (tons)	Trips/year
Paved Roads	Transit Mix Truck	25	0
Paved Roads	Gravel/Sand Delivery Truck	25	0
Paved Roads	Other Delivery Truck	1	0
Unpaved Roads	Transit Mix Truck	33	3500
Unpaved Roads	Gravel/Sand Delivery Truck	40	2400
Unpaved Roads	Other Delivery Truck	40	30
PTE (ton/yr)			

Methodology:

PTE (tons/yr) = Trips/yr x Distance (miles) x Emission Factor (lb/mile) x 1 ton/2,000 lbs

Controlled Emissions PM/PM10

The source will use periodic sweeping to control the fugitive dust emissions.

Control Efficiency From Sweeping (%): 50% [EPA will assume 50% contro

PM Emissions After Control (tons/yr) = PTE Before Control (tons/yr) x (1

PM10 Emissions After Control (tons/yr) = PTE Before Control (tons/yr) x (1

or Concrete Batch Plants

ic - Criteria Pollutants

Purple values are pulled from other worksheet
Blue values are results

paved roads can be estimated from the following equ

Reference:
AP-42, Table 13.2.1-1
AP-42, Table 13.2.1-1
AP-42, Table 13.2.1-1
AP 42, Table 13.2.1-3
Provided by Applicant
Provided by Applicant
Provided by Applicant
Provided by Applicant

Emission Factors (lb/mile)		
PM	**PM10**	**PM2.5**
2.72	**0.54**	**0.13**
2.72	**0.54**	**0.13**
0.10	**0.02**	**0.01**

unpaved roads can be estimated from the following equation:

Reference:
AP 42, Table 13.2.2-2
AP 42, Table 13.2.2-2
AP 42, Table 13.2.2-2
AP 42, Table 13.2.2-1
Provided by Applicant
Provided by Applicant
Provided by Applicant
AP 42, Table 13.2.2-2
AP 42, Table 13.2.2-2
AP 42, Table 13.2.2-2
Provided by Applicant

Emission Factors (lb/mile)		
PM	**PM10**	**PM2.5**
8.62	**2.46**	**0.25**
8.62	**2.46**	**0.25**

2.03	**0.58**	**0.06**

Distance (miles)	Pollutant PM	PM_{10}	$PM_{2.5}$
0.1	0.000	0.000	0.000
0.1	0.000	0.000	0.000
0.1	0.000	0.000	0.000
0.15	2.264	0.647	0.065
0.15	1.552	0.444	0.044
0.15	0.005	0.001	0.000
	3.82	**1.09**	**0.11**

l from following fugitive dust control plan for roadways.]

- Control Efficiency From Sweeping/Watering (%)) =	**1.91**
- Control Efficiency From Sweeping/Watering (%)) =	**0.55**

Potential To Emit Calculator for Concrete Batc

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Emissions from Storage Piles - Criteria Pollutants

Average Wind Speed	5	(mph)	Purple value
Moisture Content of Storage Piles	5	(%)	Blue values a
Maximum Throughput Rate	131.4	(tons/hr)	

Emission Factors:

According to AP-42, Chapter 13.2.4 - Aggregate Handling and Storage Piles, the PM/PM10 emi
can be estimated from the following equation:

$$Ef = (0.0032 \times (U/5)^{1.3} \times k)/(M/2)^{1.4}$$

where:

Ef = Emission Facto
k = Particle size r
U = Mean wind spee
M = Moisture cor

PM Emission Factor =	0.0009
PM10 Emission Factor =	0.00031
PM2.5 Emission Factor =	0.00005

	PM	PM_{10}	$PM_{2.5}$
Emission Factor (lbs/ton)	0.0009	0.00031	0.00005
PTE (ton/yr)	**0.0009**	**0.00031**	**0.00005**

Methodology

Uncontrolled PM/PM10 (tons/yr) = Maximum Throughput Rate (tons/hr) x Emission Factor (lbs/t

Controlled Emissions PM/PM10

The source will use periodic sweeping to control the fugitive dust emissions.

Control Efficiency From Watering (%): 50%

[EPA will assume 50% control from following fugitive dust control plan for roadways.]

PM Emissions After Control (tons/yr) = PTE Before Control (tons/yr) x (1 - Control Efficiency

PM10 Emissions After Control (tons/yr) = PTE Before Control (tons/yr) x (1 - Control Efficiency

h Plants

s are pulled from other worksheet
are results

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ssion factors for storage piles

or (lbs/ton)
multiplier = 1 for PM and 0.35 for PM10
ed (mph) = 5
ntent (%) = 5.0

lbs/ton process
lbs/ton process
lbs/ton process

Pollutant			
SO_2	NO_X	CO	VOC
0.00	0.00	0.00	0.00
0	**0**	**0**	**0**

on) x 8,760 hr/yr x 1 ton/2,000 lbs

From Sweeping/Watering (%)) = **0.00044**
From Sweeping/Watering (%)) = **0.00016**

Potential To Emit Calculator for Coı

5/22/2018

Emissions from Solvent Degreasers - Criteria Pollutar

INPUT THE FOLLOWING INFORMATION ABOUT ONSITE SOLVENT U

Annual Solvent Use/Purchases (gal/year)	0	
Solvent Density (lbs/gal)	8.34	
Solvent VOC Content (%)	100	Note: Enter whole nur
Solvent HAP Content (%)	100	Note: Enter whole nur
Solvent Sent Offsite for Recycling (gal/yr)	0	

	Pollutant	
	VOC	HAPs
PTE (ton/yr)	**0.00**	**0.00**
Controlled Emissions (ton/yr)	**0.00**	**0.00**

Methodology

PTE (ton/yr) = Solvent Use (gal/yr) x Density (lb/gal) x % VOC Content x 1 ton/2,000 lb

Controlled Emissions (ton/yr) = PTE (ton/yr) x (1 - (Recycled Solvent (gal/yr)/Purchased S

ncrete Batch Plants

nts and Hazardous Air Pollutants

Purple values are pulled from other worksheet
Blue values are results

SE

nber for percent. If VOC content is 50 percent, enter "50".
nber for percent. If HAP content is 50 percent, enter "50".

Solvent (gal/yr)))