



PACIFIC CUSTOM MATERIALS, INC.

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April 22, 2003

Ms. Brenda Cabral
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Pacific Custom Materials, Inc.
Port Costa Plant #10834
PM10 Sources Retained in Permit to Operate

Dear Ms. Cabral

Pacific Custom Materials, Inc. (PCM) has reviewed its current Permit to Operate for the Port Costa Plant. The plant is undergoing a reduction in the magnitude of operation. In fact, many PM10 sources in the current permit will not be utilized in the new, reduced plant configuration. The attached table lists the PM10 sources that can be retained in the Permit to Operate along with the Potential to Emit (PTE) values. These PM10 PTE values are based on calculations provided to PCM by the BA-AQMD and modified to reflect the anticipated reduced plant throughput.

The resulting PTE of approximately 17 tons/year of PM10 would make the plant a non-Major source for Title V permitting purposes. Consequently, PCM requests that the current Title V application be cancelled.

PCM requires that the PM10 sources identified in the attached table be retained in the Permit to Operate along with other currently permitted non-PM10 sources (e.g. gas/diesel tank).

Pursuant to discussions with Mr. Terry Carter of the BA-AQMD, PCM understands that the removal of sources from the permit will not prohibit PCM from applying for Emission Reduction Credits for those removed sources.

Thank you for your assistance with this matter.

Please call me at (661) 245-3736 or Gregory Knapp at (760) 245-5321 ext 319 with any questions.


George Stephens
Regional Production Manager

Pacific Custom Materials, Inc.
 Port Costa Plant #10834
 PM10 Sources To Be Retained In Permit To Operate
 Updated: April 30, 2003

Source No.	Source Description	Install Date	PCM Modified PTE
6	Screen (Whisper Vibe)	pre-1979	0.192
10	Shale silos (1)	pre-1979	0.144
11	Conveyors (23)	post-1979	1.932
19	Cemco crusher	post-1979	0.900
23	Grinding Plant	post-1979	0.036
25	Screen (Whisper Vibe)	post-1979	0.192
26	Screen (Whisper Vibe)	post-1979	0.192
27	Screen (Whisper Vibe)	post-1979	0.192
34	Sand Storage Bin No. 12 (1)	pre-1979	8.450
36	Bermed storage in quarry	post-1979	0.018
42	Conveyors (5)	post-1979	0.079
43	Screen	post-1979	0.315
44	Screen	post-1979	0.315
49	Jaw Crusher	post-1979	0.144
50	Screen /Hopper	post-1979	1.970
51	Powerscreen	post-1979	0.900
52	Screen	pre-1979	1.970
	Total		17.941

Pacific Custom Materials Inc.
Port Costa Plant #10834
April 30, 2003
Sources retained In Permit to Operate

S-6, Vibrating Screen (Clay & Soil Contaminated)

Abatement: A-2 (Bag House)

The throughput is based on 1538 tons/week, 52 weeks/year
with 50% recycle rate = 120,000 TPY

$$(0.0032 \text{ lb/ton}) (120,000 \text{ ton/yr}) (1/2,000 \text{ ton/lb}) = \mathbf{0.192 \text{ TPY}}$$

Emission factor from AP-42 Table 11.3-1 [brick manufacturing operations, screening with fabric filter]

S-10 Shale Silos (Drying Rock)

1 silo - No Abatement Device

The throughput is based on 1538 tons/week, 52 weeks/year
with 50% recycle rate = 120,000 TPY

$$(1) (0.0024 \text{ lb/ton}) (120,000 \text{ ton/yr}) (1/2,000 \text{ ton/lb}) = \mathbf{0.144 \text{ TPY}}$$

Emission factor 0.0024 is estimated for storage, ref color form for S-10

S-11 Conveyors, Lightweight Aggregate (Rock & Soil Contaminated)

23 Conveyors w/ No Abatement Device

The throughput is based on 1538 tons/week, 52 weeks/year
with 50% recycle rate = 120,000 TPY

$$(23) (0.0014 \text{ lb/ton}) (120,000 \text{ ton/yr}) (1/2,000 \text{ ton/lb}) = \mathbf{1.932 \text{ TPY}}$$

Emission factor from AP-42 Table 11.19.2-2 [aggregate processing (crushed stone), conveyor transfer point-uncontrolled]

S-19 Cemco Turbo Crusher (Crushing Rock)

Abatement: A-19 (Water Spray)

The throughput is based on 1538 tons/week, 52 weeks/year
with 50% recycle rate = 120,000 TPY

$$(0.015 \text{ lb/ton}) (120,000 \text{ ton/yr}) (1/2,000 \text{ ton/lb}) = \mathbf{0.9 \text{ TPY}}$$

Emission factor from AP-42 Table 11.19.2-2 [aggregate processing (crushed stone), fines crushing- uncontrolled]

S-23 Grinding Plant (Crushing Clay & Soil Contaminated)

Abatement: A-2 (Bag House)

The throughput is based on 1538 tons/week, 52 weeks/year
with 50% recycle rate = 120,000 TPY

$$(0.00059 \text{ lb/ton}) (120,000 \text{ ton/yr}) (1/2,000 \text{ ton/lb}) = \mathbf{0.036 \text{ TPY}}$$

Emission factor, AP-42 Table table 11.3-1 [brick manufacturing operations, primary crusher with fabric filter]

S-25, S-26, S-27 Vibrating Screen (Crushing Clay & Soil Contaminated)

Abatement: A-2 (Bag House)

The throughput is based on 1538 tons/week, 52 weeks/year
with 50% recycle rate = 120,000 TPY

$$(3) (0.0032 \text{ lb/ton}) (120,000 \text{ ton/yr}) (1/2,000 \text{ ton/lb}) = \mathbf{0.576 \text{ TPY}}$$

Emission factor, AP-42 Table 11.3-1 [brick manufacturing operations, screening with fabric filter]

S-34 Sand Storage Bin (Storage Clay & Soil Contaminated)

Abatement: A-16 (Bag House)

The throughput is based on 1538 tons/week, 52 weeks/year

$$(0.05 \text{ lb/ton}) (80,000 \text{ ton/yr}) (1/2,000 \text{ lb/ton}) (0.01\text{-control factor}) = 0.02 \text{ TPY}$$

Emission factor 0.05 is estimated for storage, ref color form for S-33 & A/N 917
Control factor- 0.01 is used considering Bag house efficiency of 99%

Alternate calculation:

$$(1500 \text{ scf/min}) (0.15 \text{ gr/scf}) (1\text{b}/7,000 \text{ gr}) (60 \text{ min/hr}) (8760 \text{ hr/yr}) (1/2,000 \text{ ton/lb}) = \mathbf{8.45 \text{ TPY}}$$

S-36 Bermed Storage in Quarry (Storage Clay & Soil Contaminated)
No Abatement Device

The throughput is based on 1538 tons/week, 52 weeks/year

$$\text{Emission factor, } E = k (0.0032) \frac{(U/5)^{1.3}}{(M/2)^{1.4}}$$

k= 0.35 (for particle size <10 micron, AP-42 Table 13.2.4, particle size multiplier)

U=8.2 mile/hr (Oakland, ref A-6 table, A/C 6206)

M=10 % (moisture content for clay, AP-42 Table 13.2.4-1)

$$E = 0.000223 \text{ lb/ton}$$

Total emission = 2 (0.000223 lb/ton) (80,000 ton/yr) (1/2000 ton/lb) = **0.018 TPY**
(Note: a factor of 2 is used to account for loading and unloading)

Emission factor, AP-42 Table 13.2.4 [aggregate handling and storage piles]

S-42 Conveyor system, Light Weight Aggregate (Conveying Minerals)
3 conveyors/2 bucket elevators Abatement: A-38 (Water Spray)

The throughput is based on Authority to Construct 8953, granted 10/28/92.

Emission factor for each drop:

$$(0.00038 \text{ lb/ton}) (84,000 \text{ ton/yr}) (1/2,000 \text{ ton/lb}) (5 \text{ drops}) = \mathbf{0.01578 \text{ TPY}}$$

The drop number of five is taken from A/C 8953

$$(0.00038 \text{ lb/ton}) (84,000 \text{ ton/yr}) (1/2,000 \text{ ton/lb}) (5) = \mathbf{0.0789 \text{ TPY}}$$

Emission factor for continuous batch drop equation, as per calculation used in A/N 8953

S-43 Rock Screening (Screening Minerals)
Abatement: A-39 (Water Spray)

The throughputs are based on Authority to Construct 8953, granted 10/28/92.

$$(0.015 \text{ lb/ton}) (42,000 \text{ ton/yr}) (1/2000 \text{ ton/lb}) = \mathbf{0.315 \text{ TPY}}$$

Emission factor, AP-42 Table 11.19.2-2 [aggregate processing (crushed stone), screening-uncontrolled]

S-44 Rock Screening (Screening Minerals)

Abatement: A-39 (Water Spray)

The throughputs are based on Authority to Construct 8953, granted 10/28/92.

$$(0.015 \text{ lb/ton}) (42,000 \text{ ton/yr}) (1/2000 \text{ ton/lb}) = \mathbf{0.315 \text{ TPY}}$$

Emission factor, AP-42 Table 11.19.2-2 [aggregate processing (crushed stone), screening-uncontrolled]

S-49 Jaw Crusher (Crushing Clay)

No Abatement Device

The throughput is based on 1538 tons/week, 52 weeks/year with 50% recycle rate = 120,000 TPY

$$(0.0024 \text{ lb/ton}) (120,000 \text{ ton/yr}) (1/2,000 \text{ ton/lb}) = \mathbf{0.144 \text{ TPY}}$$

Emission factor from AP-42 Table 11.19.2-2 [aggregate processing (crushed stone), tertiary crushing-uncontrolled]

S-50 Finished Product Screen/Hopper (Screening Clay)

No Abatement Device

The throughput is based on the hourly capacity of 30 ton/hr.

$$(0.015 \text{ lb/ton}) (262,800 \text{ ton/yr}) (1/2,000 \text{ ton/lb}) = \mathbf{1.97 \text{ TPY}}$$

Emission factor from AP-42 Table 11.19.2-2 [aggregate processing (crushed stone), screening-uncontrolled]

S-51 Power Screen Rock Screening (Screening Minerals)

Abatement: A-39 (Water Spray)

Application submitted March 2002

The throughput is based on 1538 tons/week, 52 weeks/year with 50% recycle rate = 120,000 TPY

$$(0.015 \text{ lb/ton}) (120,000 \text{ ton/yr}) (1/2000 \text{ ton/lb}) = \mathbf{0.9 \text{ TPY}}$$

Emission factor, AP-42 Table 11.19.2-2 [aggregate processing (crushed stone), screening-uncontrolled]

S-52 Rod Deck Screen (Screening Clay)
No Abatement Device

The throughput is based on the hourly capacity of 30 ton/hr.

$$(0.015 \text{ lb/ton}) (262,800 \text{ ton/yr}) (1/2,000 \text{ ton/lb}) = \mathbf{1.9710 \text{ TPY}}$$

Emission factor from AP-42 Table 11.19.2-2 [aggregate processing (crushed stone), screening-uncontrolled]