

Technical Support Document
June 2009

I. General Comments:

A. Source Information

1. CPC Southwest Materials, Inc—Portable Crushing and Screening Plant
2. Site Location: Various locations around Pima County.
3. Mailing Address: 6601 N. Casa Grande Hwy, Tucson, AZ 85743

B. Background

This Class II Air Quality permit is a new permit to be issued to CPC Southwest Materials, Inc, the Permittee, for their portable crushing and screening plant. This facility previously held an ATO under the ADEQ portable crushing and screening general permit. The factor that resulted in CPC Southwest Materials, Inc. exclusion from applicability under the general permit was the upper limit on PM₁₀ emissions of 13.64 tpy; Controlled emissions at the facility, operating at 8760 hours per year, is approximately 65.7 tpy (not considering the diesel fired generator).

The facility is a *synthetic minor source of NO_x and PM₁₀* and a *true minor source of CO, SO_x, VOC, and HAPs*. The Permittee has accepted a voluntary operational hour limitation on the diesel fired generator, pursuant to PCC 17.12.190.B, to avoid designation as Major Source that would require a Class I permit. This source is stationary as defined by Title 17 of the Pima County Code, Title 18 of the Arizona Revised Statutes, and the Clean Air Act.

C. Attainment Classification

The facility is located in an area which is currently in attainment for all criteria pollutants though there is no prohibition from relocating to the Rillito non-attainment area.

II. Source Description

A. Process Description

The facility operates a portable crushing and screening plant which includes two crushers, one rated at 610 and the other at 485 tons per hour. The facility also operates a 1000 kW diesel fired generator (limited to 5840 hours per year).

B. Air Pollution Control Equipment

The majority of production lines are controlled by water application via misting and spray bars. Additionally, the Permittee operates a baghouse at the silo.

III. Regulatory History

A. Testing & Inspections

Inspections on 6/22/05, 4/2/03, 1/24/01 and 7/9/99 found this facility to be “in compliance with permit conditions” An inspection on 4/17/02 resulted in an Notice of Violation (NOV) for recordkeeping and exceeding operational hour limitations. Correspondence on file from 1/29/03, 1/20/99 and 12/2/98 account for approximately one half of the equipment subject to NSPS initial tests having been completed. A request was made to the source to complete the NSPS testing for the remaining affected equipment prior to the issuance of this permit.

B. Excess Emissions

No direct report of excess emissions is documented, although hourly operating limitations were exceeded, and documented, during the inspection of 4/17/02.

IV. Emissions Estimates

The facility is a Synthetic Minor source of NO_x and PM₁₀ and is a True Minor source of CO, SO_x, VOC, and HAPs. The following emission rates are for reference purposes only and are not intended to be enforced by direct measurement unless otherwise noted in the permit:

Pollutant	Uncontrolled Emissions (tpy)	Controlled Emissions (tpy)
NO _x	141.0	94.0
CO	32.3	21.5
SO _x	42.8	28.5
PM ₁₀	417.0	68.4
VOC	4.1	2.8
HAPs	Negligible	Negligible

V. Applicable Requirements

Abbreviations: Code of Federal Regulations (CFR)
New Source Performance Standards (NSPS)
Pima County Code (PCC)

40 CFR 60:

Subpart OOO - Standards of performance for Nonmetallic Mineral Processing Plants

(PCC) Title 17, Chapter 17.16:

- 17.16.010 Local rules and standards; Applicability of more than one standard
- 17.16.020 Noncompliance with Applicable Standards
- 17.16.040 Standards and applicability (includes NESHAP)
- 17.16.050 Visibility Limiting Standard
- 17.16.060 Fugitive Dust Producing Activities
- 17.16.100 Particulate Materials
- 17.16.110 Storage Piles

- 17.16.340 Standards of performance for stationary rotating machinery
- 17.16.370 Standards of Performance for Gravel or Crushed Stone Processing Plants
- Table 17.16.040 Emissions-discharge opacity limiting standards

VI. Permit Contents

A. Applicability:

The Specific Conditions address the following categories of equipment:

- New Source Performance Standards (NSPS) Affected Facilities:
[Crushing and Screening Facilities: Crushers, Grinding Mills, Screening Operations, Bucket Elevators, Belt Conveyors, Bagging Operations, Storage Bins and Enclosed Truck or Railcar Loading Station that commenced construction, reconstruction or modification after **August 31, 1983**]
- Non-NSPS Affected Facilities:
[Non-NSPS Crushing and Screening Facilities, Diesel fired Combustion Engine (generator) Facility-wide, Non-NSPS]
- Facility-Wide Operations

B. Emission Limits & Standards:

NSPS Affected Facilities:

NSPS Crushing and Screening Facilities

Particulate Matter Standard	40 CFR 60.672(a)
Opacity Standards	40 CFR 60.672 (b), (d), (c), & (h)
Operations and Maintenance Requirement	40 CFR 60.11 (d), & PCC 17.16.020.A
Circumvention	40 CFR 60.12

Non-NSPS Facilities

Non-NSPS Crushing and Screening Facilities

Particulate Matter Standards	PCC 17.16.370.A, B.2 & C
Process Weight Determination Requirement	PCC 17.16.370.F
Fugitive Emissions Standards	PCC 17.16.370.E

Conditions for the Generator

Visibility Limiting Standards	PCC 17.16.340.E, PCC 17.16.040 & Table PCC 17.16.040
Fuel Limitation	PCC 17.12.185.A.2
Operational Hour Limitations	PCC 17.12.195.B

Facility-wide Requirements

Pollution Control Requirement	PCC 17.12.185.A.2, PCC 17.16.100.A PCC 17.16.370.D
Fugitive Emission Standards	PCC 17.16.060.A, A.1&.A.2, PCC 17.16.100.C & PCC 17.16.110.A
Opacity Standard	PCC 17.16.040.A & Table 17.16.040
Concealment of Emissions	PCC 17.20.040

Local rules and standards-applicability
of more than one standard

PCC 17.16.010.B

Facility-Wide Operations:

Co-location Restriction	PCC 17.12.190
Relocation Restrictions	PCC 17.12.300.A & C
Portable Source Standard	PCC 17.12.300.B
Opacity Standard	PCC 17.16.040 & Table PCC 17.16.040
Visibility Limiting Standard	PCC 17.16.050.A & D, D.2 & D.3
Odor Limiting Standard	PCC 17.16.030
Facility Changes	PCC 17.12.245 or PCC 17.12.255, or PCC 17.12.260

C. Monitoring Requirements:

(PCC 17.12.185.A.3)

NSPS Affected Facilities:

NSPS Crushing and Screening Facilities
Particulate Matter
Opacity

Non-NSPS Affected Facilities:

Non-NSPS Crushing and Screening Facilities
Particulate Matter
Process Weight Determination

Conditions for the Generator
Visibility Limiting Standards
Fuel Limitation
Operational Hour Limitation

Facility-wide Non-NSPS Requirements
Baghouse Inspection
Opacity

Facility-Wide Operations:
Pollution Control

D. Recordkeeping Requirements:

(PCC 17.12.185.A.4)

NSPS Affected Facilities:

NSPS Crushing and Screening Facilities
Visible Emission Log

Non-NSPS Affected Facilities:

Non-NSPS Crushing and Screening Facilities
Calibration and Maintenance Records of Monitoring Devices
Production Rates PCC 17.16.370.G

Conditions for the Generator
Opacity Records PCC 17.16.010.C & PCC17.16.340.I
Fuel Limitation Records
Operational Hour Limitation
(12-month rolling total of hours) PCC 17.12.185A.4 & PCC 17.12.190

Facility-wide Non-NSPS Requirements
Baghouse Inspection Log
Visible Emissions Log

Facility-Wide Operations:

Pollution Control
Retention of Records PCC 17.24.020.A
Permit Posting PCC 17.12.080

E. Reporting Requirements: (PCC 17.12.185.A.5)

NSPS Affected Facilities:

NSPS Crushing and Screening Facilities
Performance Tests 40 CFR 60.676(f)
Notification Requirements 40 CFR 60.7(a) & 40 CFR 60.676(g)

Non-NSPS Affected Facilities:

Non-NSPS Crushing and Screening Facilities
See Additional Permit Requirements

Conditions for the Generator
Fuel Limitation PCC 17.16.340.J
See Additional Permit Requirements

Source-Wide Operations:

See Additional Permit Requirements

F. Testing Requirements: (PCC 17.12.050 & PCC 17.20.010)

NSPS Affected Facilities:

NSPS Crushing and Screening Facilities
Initial Performance Testing 40 CFR 60.8(a)
Conditions of Performance Testing 40 CFR 60.8(c), (d), (f) & (g)
Particulate Matter 40 CFR 60.675(b)(1)
Opacity 40 CFR 60.675(c)(1)
Fugitive Emissions 40 CFR 60.675(c)(3) & (c)(4)

Non-NSPS Affected Facilities:

Particulate Matter EPA Reference Method 5, Appendix A in
40 CFR 60
Opacity EPA Reference Method 9, Appendix A in
40 CFR 60

Facility-Wide Operations:

Opacity EPA Reference Method 9, Appendix A in
40 CFR 60
Alternative Test Method Appendix A in 40 CFR 60 & PCC
17.12.045.D

G Miscellaneous comments:

Additional Permit Requirements

Compliance with Permit Conditions	PCC 17.12.185.A.7.a & b, 17.12.185.A.5, 17.12.040, 17.12.185.A.9 & 17.12.510
Permit Revision, Reopening, Revocation, and Reissuance, or Termination for Cause. Duty to Provide Information Severability Clause	PCC 17.12.185.A.7.c PCC 17.12.165.G, 17.12.185.A.7.e PCC 17.12.185.A.6

VII. IMPACTS TO AMBIENT AIR QUALITY

Not a major source thus no studies are required.

VIII. CONTROL TECHNOLOGY DETERMINATION

No control technologies needed to be determined.

IX. PREVIOUS PERMIT CONDITIONS

This source previously held a General Crushing and Screening Permit that expired August 24, 2005.

