

Air Pollution Control Board

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Air Pollution Control District
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NOTICE OF WORKSHOP

TO DISCUSS THE ADOPTION OF NEW SOURCE PERFORMANCE STANDARDS SUBPART UUU -STANDARDS OF PERFORMANCE FOR CALCINERS AND DRYERS IN MINERAL INDUSTRIES

The San Diego Air Pollution Control District will hold a public meeting to consider comments concerning the proposed adoption by reference of New Source Performance Standards (NSPS) Subpart UUU - Standards of Performance for Calciners and Dryers in Mineral Industries. Adoption by reference is the first step for the District to seek authority to implement and enforce this subpart.

Comments and questions concerning NSPS Subpart UUU may be submitted in writing before, or made at, the workshop which is scheduled as follows:

DATE:

AUGUST 4, 1999

TIME:

1:00 p.m. to 2:00 p.m.

PLACE:

Air Pollution Control District

Conference Room 139 9150 Chesapeake Drive San Diego, CA 92123

Subpart UUU regulates particulate emissions from calciners and dryers in mineral processing plants. It was adopted by Environmental Protection Agency (EPA) in 1992 and subsequently amended in 1993 to provide minor corrections.

The District is proposing to amend Regulation X (Standard of Performance for New Stationary Sources) by adding a Federal Register reference for Subpart UUU. The reference will include the subpart's first adoption date (57 FR 444503, September 28, 1992), and its subsequent amendment date (58 FR 40591, July 29, 1993). Amended Regulation X will be submitted to the Air Pollution Control Board for adoption at a noticed public hearing. The District will then request EPA delegation to implement and enforce Subpart UUU locally.

The following is a summary of Subpart UUU:

Applicability

This subpart applies to each calciner and dryer at mineral processing plants that commenced construction, modification, or reconstruction after April 23, 1986. Mineral processing plants are defined as facilities that process or produce minerals such as feldspar, roofing granules, perlite, or vermiculite.

Emission Control Requirements

Subpart UUU requires the concentration of particulate matter from calciners and dryers at the affected facility not exceed 0.040 grain per dry standard cubic foot (gr/dscf). In addition, the opacity of emissions from such equipment must not exceed 10 percent, unless a wet scrubber is used to control emissions.

Monitoring Requirements

Subpart UUU requires continuous emissions monitoring for opacity unless a wet scrubber is used to control emissions. Some process units, such as perlite expansion furnaces, are exempt from this requirement unless they use a wet scrubbing control device.

Recordkeeping and Reporting Requirements

Subpart UUU specifies recordkeeping and reporting requirements for those process units which have continuous opacity monitoring devices. These requirements do not apply to some process units, such as perlite expansion furnaces using a dry control device (for example, a baghouse).

NSPS Subpart A - General Provisions requires facilities subject to Subpart UUU that commence construction, modification, or reconstruction after April 23, 1986, to periodically report certain activities to the administrating authority (EPA). These reports include notifications of new construction/reconstruction activities, anticipated start up dates, physical or operational change, initial performance testing, and semiannual reports of particulate emission standard exceedances.

Upon adoption by reference of Subpart UUU by the San Diego County Air Pollution Control Board, the District will apply to EPA for delegation of authority to enforce and implement this subpart. All reports required by Subparts UUU and A must be submitted to the District after EPA delegates authority to the District.

Test Methods

Measurements of particulate matter emissions for determining compliance with the emission control requirements of Subpart UUU must be conducted using EPA Test Method 5 for measuring particulate emissions concentration, and EPA Test Method 9 for measuring opacity.

Sources in San Diego County subject to NSPS Subpart UUU

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There is presently one facility in the District subject to Subpart UUU. This facility complies with all the requirements of this subpart.

Additional Information

If you would like a copy of the NSPS Subpart UUU please contact Juanita Ogata at (858) 694-8851 or visit the District's Web Site at www.sdapcd.co.san-diego.ca.us. If you have any questions concerning this proposal, please contact Alta Stengel at (858) 694-2510 or Natalie Zlotin at (858) 694-3312.

RICHARD J. SMITASsistant Director

RJS:AS:ls 6/30/99

Subpart UUU—Standards of Performance for Calciners and Dryers in Mineral Industries

SOURCE: 57 FR 44503, Sept. 28, 1992, unless otherwise noted.

§ 60.730 Applicability and designation of affected facility.

(a) The affected facility to which the provisions of this subpart apply is each calciner and dryer at a mineral processing plant. Feed and product conveyors are not considered part of the affected facility. For the brick and related clay products industry, only the calcining and drying of raw materials prior to firing of the brick are covered.

(b) An affected facility that is subject to the provisions of subpart LL, Metallic Mineral Processing Plants, is not subject to the provisions of this subpart. Also, the following processes and process units used at mineral processing plants are not subject to the provisions of this subpart: vertical shaft kilns in the magnesium compounds industry; the chlorination-oxidation process in the titanium dioxide industry; coating kilns, mixers, and aerators in the roofing granules industry; and tunnel kilns, tunnel dryers, apron dryers, and grinding equipment that also dries the process material used in any of the 17 mineral industries (as defined in § 60.731, "Mineral processing plant").

(c) The owner or operator of any facility under paragraph (a) of this section that commences construction, modification, or reconstruction after April 23, 1986, is subject to the requirements of this subpart.

§ 60.731 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act and in subpart A of this part.

Calciner means the equipment used to remove combined (chemically bound) water and/or gases from mineral material through direct or indirect heating. This definition includes expansion furnaces and multiple hearth furnaces.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more affected facilities.

Dryer means the equipment used to remove uncombined (free) water from mineral material through direct or indirect heating.

Installed in series means a calciner and dryer installed such that the exhaust gases from one flow through the other and then the combined exhaust gases are discharged to the atmosphere.

Mineral processing plant means any facility that processes or produces any of the following min-

erals, their concentrates or any mixture of which the majority (>50 percent) is any of the following minerals or a combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller's earth, gypsum, industrial sand, kaolin, lightweight aggregate, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, and vermiculite.

§ 60.732 Standards for particulate matter.

Each owner or operator of any affected facility that is subject to the requirements of this subpart shall comply with the emission limitations set forth in this section on and after the date on which the initial performance test required by § 60.8 is completed, but not later than 180 days after the initial startup, whichever date comes first. No emissions shall be discharged into the atmosphere from any affected facility that:

(a) Contains particulate matter in excess of 0.092 gram per dry standard cubic meter (g/dscm) [0.040 grain per dry standard cubic foot (gr/dscf)] for calciners and for calciners and dryers installed in series and in excess of 0.057 g/dscm for dryers;

(b) Exhibits greater than 10 percent opacity, unless the emissions are discharged from an affected facility using a wet scrubbing control device.

§ 60.733 Reconstruction.

The cost of replacement of equipment subject to high temperatures and abrasion on processing equipment shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital cost that would be required to construct a comparable new facility" under § 60.15. Calciner and dryer equipment subject to high temperatures and abrasion are: end seals, flights, and refractory lining.

§ 60.734 Monitoring of emissions and operations.

(a) With the exception of the process units described in paragraphs (b), (c), and (d) of this section, the owner or operator of an affected facility subject to the provisions of this subpart who uses a dry control device to comply with the mass emission standard shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control device.

(b) In lieu of a continuous opacity monitoring system, the owner or operator of a ball clay vibrating grate dryer, a bentonite rotary dryer, a diatomite flash dryer, a diatomite rotary calciner, a feldspar rotary dryer, a fire clay rotary dryer, an industrial sand fluid bed dryer, a kaolin rotary

calciner, a pertite rotary dryer, a roofing granules fluid bed dryer, a roofing granules rotary dryer, a talc rotary calciner, a titanium dioxide spray dryer, a titanium dioxide fluid bed dryer, a vermiculite fluid bed dryer, or a vermiculite rotary dryer who uses a dry control device may have a certified visible emissions observer measure and record three 6-minute averages of the opacity of visible emissions to the atmosphere each day of operation in accordance with Method 9 of appendix A of part 60.

(c) The owner or operator of a ball clay rotary dryer, a diatomite rotary dryer, a feldspar fluid bed dryer, a fuller's earth rotary dryer, a gypsum rotary dryer, a gypsum flash calciner, gypsum kettle calciner, an industrial sand rotary dryer, a kaolin rotary dryer, a kaolin multiple hearth furnace, a perlite expansion furnace, a talc flash dryer, a talc rotary dryer, a titanium dioxide direct or indirect rotary dryer or a vermiculite expansion furnace who uses a dry control device is exempt from the monitoring requirements of this section.

(d) The owner or operator of an affected facility subject to the provisions of this subpart who uses a wet scrubber to comply with the mass emission standard for any affected facility shall install, calibrate, maintain, and operate monitoring devices that continuously measure and record the pressure loss of the gas stream through the scrubber and the scrubbing liquid flow rate to the scrubber. The pressure loss monitoring device must be certified by the manufacturer to be accurate within 5 percent of water column gauge pressure at the level of operation. The liquid flow rate monitoring device must be certified by the manufacturer to be accurate within 5 percent of design scrubbing liquid flow rate.

§ 60.735 Recordkeeping and reporting requirements.

- (a) Records of the measurements required in § 60.734 of this subpart shall be retained for at least 2 years.
- (b) Each owner or operator who uses a wet scrubber to comply with § 60.732 shall determine and record once each day, from the recordings of the monitoring devices in § 60.734(d), an arithmetic average over a 2-hour period of both the change in pressure of the gas stream across the scrubber and the flowrate of the scrubbing liquid.
- (c) Each owner or operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by § 60.734 of this subpart. For the purpose of these reports, exceedances are defined as follows:
- (1) All 6-minute periods during which the average opacity from dry control devices is greater than 10 percent; or

(2) Any daily 2-hour average of the wet scrubber pressure drop determined as described in § 60.735(b) that is less than 90 percent of the average value recorded according to § 60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard; or

(3) Each daily wet scrubber liquid flow rate recorded as described in § 60.735(b) that is less than 80 percent or greater than 120 percent of the average value recorded according to § 60.736(c) during the most recent performance test that demonstrated compliance with the particulate matter standard.

(d) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Clean Air Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with this section provided that they comply with the requirements established by the State.

[57 FR 44503, Sept. 28, 1992, as amended at 58 FR 40591, July 29, 1993]

§ 60.736 Test methods and procedures.

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the particulate matter standards in § 60.732 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity from stack emissions.

(c) During the initial performance test of a wet scrubber, the owner or operator shall use the monitoring devices of § 60.734(d) to determine the average change in pressure of the gas stream across the scrubber and the average flowrate of the scrubber liquid during each of the particulate matter runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 60.735(c).

§60.737 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: No restrictions.