

**2.74 Calciners and Dryers in Mineral Industries****2.74.1 Applicability and Designation of Affected Facility**

- (a) The affected facility to which the provisions of this source category 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 §2.107, Metallic Mineral Processing Plants, is not subject to the provisions of this source category. 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 40CFR60.731, "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 source category.

**2.74.2 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 source category 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 perlite 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.
- (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 source category 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.

- 2.74.3
- (a) Records of the measurements required in §2.74.2 shall be retained for at least 2 years.
  - (b) Each owner or operator who uses a wet scrubber to comply with the applicable standard shall determine and record, from the recordings of the monitoring devices in §2.74.2, an arithmetic average over each 2-hour period (defined as any one of each 12 equal divisions in a 24-hour time 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 §2.74.2. 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 2-hour average of the wet scrubber pressure drop determined as described in §2.74.3(b) that is less than 90 percent of the average value recorded according to §2.74.4(c) during the most recent performance test that demonstrated compliance with the particulate matter standard; or
    - (3) Each 2-hour average of the wet scrubber liquid flow rate recorded as described in §2.74.3(b) that is less than 80 percent or greater than 120 percent of the average value recorded according to §2.74.4(c) during the most recent performance test that demonstrated compliance with the particulate matter standard.

2.74.4 Test Methods and Procedures

- (a) In conducting the performance tests required in Section 1.2, 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 Section 1.2(b).
- (b) The owner or operator shall determine compliance with the particulate matter standards 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 Section 1.3 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 §2.74.2 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 §2.74.3(e).