

1 **Pollution Control Agency** RECEIVED

2 **Adopted Permanent Rules Relating to Concrete Manufacturing Plant Standards of**
3 **Performance** 99 OCT 21 AM 10:07
ADMINISTRATIVE
HEARINGS

4 **7011.0850 DEFINITIONS.**

5 Subpart 1. **Scope.** The definitions in this part apply to the terms used in parts
6 7011.0850 to 7011.0890. The definitions in parts 7005.0100, 7007.0100, and 7011.0060
7 apply to the terms used in parts 7011.0850 to 7011.0890, unless the terms are otherwise
8 defined in this part.

9 Subp. 2. **Aggregate.** "Aggregate" means any combination of sand, gravel, and crushed
10 stone or other material serving a similar purpose in their natural or processed state.

11 Subp. 3. **Cementitious material.** "Cementitious material" means a powdered
12 substance which consists of any combination of the following:

13 A. material manufactured from calcined carbonate rock (burned lime) and clay;

14 B. fly ash generated from coal burning that meets the requirements outlined in
15 ASTM C 618-96, as found in the Annual Book of American Society for Testing and
16 Materials Standards (ASTM), 100 Barr Harbor Drive, West Conshohocken, PA
17 19428-2959, volume 4.02 (1996). This document is incorporated by reference and is
18 subject to frequent change. It is available through the Minitex interlibrary loan system;

19 C. pulverized blast furnace slag; or

20 D. any other similar fine substance that, when mixed with water, forms a cohesive,
21 adhesive material that will harden into a rigid substance.

22 Subp. 4. **Concrete.** "Concrete" means a material consisting of a coarse and fine
23 aggregate bound by a paste of cementitious material and water, with admixtures added
24 to achieve various properties, which then sets into a hard and rigid substance.

25 Subp. 5. **Concrete manufacturing plant.** "Concrete manufacturing plant" means a
26 facility that manufactures concrete, both hardened and unhardened, for sale.

7011.0850

1 Subp. 6. **Fabric filter.** "Fabric filter" means a control device in which the incoming gas
2 stream passes through a porous filter forming a dust cake.

3 **7011.0852 STANDARDS OF PERFORMANCE FOR CONCRETE**
4 **MANUFACTURING PLANTS.**

5 No owner or operator of a concrete manufacturing plant shall cause to be discharged
6 into the atmosphere from the concrete manufacturing plant any emissions which:

7 A. contain particulate matter in excess of the limits allowed by parts 7011.0700 to
8 7011.0735; or

9 B. exhibit greater than 20 percent opacity.

10 **7011.0854 CONCRETE MANUFACTURING PLANT CONTROL EQUIPMENT**
11 **REQUIREMENTS.**

12 Subpart 1. **Operation of concrete manufacturing plant control equipment.** Unless
13 otherwise allowed in a state or part 70 permit, emissions during cementitious material
14 receiving from cement silos and other cementitious material storage devices shall pass
15 through a fabric filter. For concrete manufacturing plants in operation on the effective
16 date of this part, the owner or operator must install control equipment no later than 12
17 months after the effective date of this part. For concrete manufacturing plants not in
18 operation on the effective date of this part, the control equipment must be installed prior
19 to operation of any concrete manufacturing plant.

20 Subp. 2. **Operation and maintenance of fabric filter control equipment.** The owner
21 or operator of a concrete manufacturing plant shall perform the following on each piece
22 of control equipment required in subpart 1:

23 A. properly operate and maintain the control equipment to function as it was
24 designed. Proper operation and maintenance includes effective performance, adequate
25 funding, and adequate operator staffing and training;

26 B. thoroughly conduct an internal and external inspection of control equipment at

1 least annually, which often requires shutting down temporarily, and maintain a record
2 of the activities conducted in the inspection including the activities completed, the date
3 the activity was completed, and any corrective action taken; and

4 C. maintain a record of parts replaced, repaired, or modified.

5 Subp. 3. **Monitoring of fabric filter control equipment.** During cementitious material
6 receiving, the owner or operator of a concrete manufacturing plant, or a designee, shall
7 observe the outlet of each piece of control equipment required in subpart 1 for any
8 visible emissions once each day cementitious material is received, and record the date
9 and time period during which the observation was made and whether or not any visible
10 emissions were observed. If visible emissions are observed, the owner or operator, or a
11 designee, shall take all practical steps to modify operations to reduce the emissions and
12 shall take corrective action to eliminate visible emissions prior to the following business
13 day. The commissioner may require feasible and practical modifications in the operation
14 to reduce emissions of air pollutants.

15 Subp. 4. **Record retention.** The owner or operator shall maintain the records required
16 by this part for a minimum of five years from the date the record was made. The owner
17 or operator shall maintain records for the current calendar year of operation at the
18 concrete manufacturing plant. For all years prior to the current calendar year, the owner
19 or operator shall maintain records at either the concrete manufacturing plant or at an
20 office of the owner or operator of the concrete manufacturing plant.

21 **7011.0857 PREVENTING PARTICULATE MATTER FROM BECOMING**
22 **AIRBORNE.**

23 No owner or operator of a concrete manufacturing plant shall cause or permit the
24 handling, use, transporting, or storage of any material in a manner which may allow
25 avoidable amounts of particulate matter to become airborne from a concrete
26 manufacturing plant.

1 No owner or operator of a concrete manufacturing plant shall cause or permit a
2 building or its appurtenances, a road, a driveway, or an open area to be constructed,
3 used, repaired, or demolished without applying all such reasonable measures as may be
4 required to prevent particulate matter from becoming airborne. The owner or operator
5 of a concrete manufacturing plant shall take reasonable precautions to prevent the
6 discharge of visible fugitive dust emissions beyond the lot line of the property on which
7 the emissions originate. The commissioner may require such reasonable measures as
8 may be necessary to prevent particulate matter from becoming airborne including, but
9 not limited to, application of water; application of commercially available dust
10 suppressants; paving; frequent cleaning and sweeping of roads, driveways, and parking
11 lots; use of curtains or socks for truck loading operations; use of water sprays during
12 truck loading operations; use of water or commercially available dust suppressants on
13 stockpiles or aggregate transfer points; and the planting and maintenance of vegetative
14 ground cover.

15 **7011.0858 NOISE.**

16 The owner or operator of a concrete manufacturing plant shall comply with the noise
17 pollution control rules in chapter 7030.

18 **7011.0859 SHUTDOWN AND BREAKDOWN PROCEDURES.**

19 In the event of a shutdown or breakdown of process or control equipment that causes
20 any increase in emissions of any regulated air pollutant, the owner or operator of a
21 stationary source shall comply with the notification, operation changes, and all other
22 requirements in part 7019.1000.

23 **7011.0860 NO PERMIT REQUIRED.**

24 Subpart 1. **Criteria.** Any owner or operator of a concrete manufacturing plant
25 otherwise required to obtain a permit under part 7007.0200 or 7007.0250 may elect not to
26 obtain a permit under part 7007.0200 or 7007.0250 provided the conditions in items A to
27 D are met.

7011.0860

1 A. Production shall be limited to less than 300,000 tons of unhardened concrete in
2 any calendar year for owners or operators that elect not to receive emissions reduction
3 credit for road dust control. Production shall be limited to less than 360,000 tons of
4 unhardened concrete in any calendar year for owners or operators that elect to receive
5 credit for road dust control on unpaved roads by:

6 (1) recording the date and time of the road dust control action and the initials of
7 the person making the record;

8 (2) recording the amount of water or dust suppressant applied; and

9 (3) if a commercially available dust suppressant is used, applying it in
10 accordance with the manufacturer's guidelines.

11 B. The concrete manufacturing plant shall contain only the following emission
12 units and activities:

13 (1) storage piles, aggregate transfer, cementitious material transfer; weigh
14 hopper loading, mixers, mixer loading; truck loading; block forming equipment; mobile
15 vehicle sources such as trucks, front end loaders, and forklifts; and aggregate heaters
16 used solely to improve the flowability of aggregate used in manufacturing concrete
17 burning only natural gas, propane, and/or No. 1 or No. 2 fuel oil;

18 (2) individual indirect heating equipment, as defined in part 7011.0500, subpart
19 9, with a rated heat input capacity less than 10,000,000 Btu per hour burning only
20 natural gas, propane, and/or No. 1 or No. 2 fuel oil;

21 (3) nonmobile internal combustion engines, such as emergency generators,
22 burning less than 37,500 gallons per calendar year of gasoline, No. 1 fuel oil, or No. 2
23 fuel oil combined; or

24 (4) miscellaneous:

25 (a) total usage or purchase of less than 500 gallons of VOC-containing

1 material or 200 gallons of VOC, including hazardous air pollutant-containing VOC,
2 combined in any calendar year from sources such as parts washers, form release agents,
3 painting, and sealers. Under this unit, if the owner ~~of~~ or operator ships VOC off site for
4 recycling, the amount recycled may be subtracted from the amount of VOC purchased
5 or used. "Recycling" means the reclamation or reuse, as defined in part 7045.0020, of a
6 VOC. If the owner or operator ships VOC off site for recycling, the owner or operator
7 shall keep records of the amount of material shipped off site for recycling and the
8 calculations done to determine the amount to subtract. Records may be material safety
9 data sheets, invoices, shipping papers, or hazardous waste manifests; or

10 (b) any of the insignificant activities listed in part 7007.1300, subpart 2 or 3.

11 C. The concrete manufacturing plant may not be located in areas designated as
12 nonattainment for PM₁₀.

13 D. Crushing operations may be located at the concrete manufacturing plant site
14 and shall not be considered part of the concrete manufacturing plant unless more than
15 50 percent of the material processed by the crusher or crushers is used by the concrete
16 manufacturing plant in the manufacture of concrete. The owner or operator of the
17 crusher and associated operations shall obtain an air emissions permit for the crusher or
18 crushers and associated operations if they are described under part 7007.0200 or
19 7007.0250.

20 Subp. 2. **Recordkeeping.** The owner or operator of a concrete manufacturing plant
21 shall comply with the recordkeeping listed in items A to D. The owner or operator shall
22 maintain the records required by this subpart at the concrete manufacturing plant for a
23 minimum of five years from the date the record was made. The owner or operator shall
24 maintain records for the current calendar year of operation at the concrete
25 manufacturing plant. For all years prior to the current calendar year, the owner or
26 operator shall maintain records at either the concrete manufacturing plant or at an office
27 of the owner or operator of the concrete manufacturing plant.

1 A. The owner or operator shall maintain records of the calendar year production of
2 unhardened concrete in tons to demonstrate compliance with subpart 1, item A.

3 B. The owner or operator shall maintain records of the gallons of VOC-containing
4 materials, including hazardous air pollutant-containing VOC, used or purchased in each
5 calendar year to demonstrate compliance with subpart 1, item B, subitem (4), unit (a), or
6 records to demonstrate compliance with part 7007.1300, subpart 3, item H, subitem (1).

7 C. The owner or operator shall maintain records of the types of fuel combusted in
8 nonmobile emissions units in each calendar year to demonstrate compliance with
9 subpart 1, item B, subitems (1) to (3), and maintain records of the amounts of fuel
10 combusted in nonmobile internal combustion engines to demonstrate compliance with
11 subpart 1, item B, subitem (3).

12 D. If the owner or operator elects to receive emissions reduction credit for road
13 dust control, the owner or operator shall maintain records to demonstrate compliance
14 with subpart 1, item A, subitems (1) and (2).

15 Subp. 3. **Grounds for ineligibility.** The following constitute grounds for the agency
16 to require a company to apply for a permit under part 7007.0200 or 7007.0250:

17 A. the owner or operator fails to meet or comply with any of the conditions or
18 requirements in subpart 1 or 2;

19 B. there exists at the concrete manufacturing plant unresolved noncompliance with
20 applicable state or federal pollution control statutes or rules administered by the agency
21 or conditions of a previous or existing air emission permit, and the owner or operator
22 will not undertake a schedule of compliance to resolve the noncompliance;

23 C. an owner or operator has knowingly submitted false or misleading information
24 to the agency;

25 D. the unpermitted facility or activity would endanger human health or the
26 environment;

1 E. if air quality specific conditions or limits not contained in parts 7011.0850 to
2 7011.0860 were assumed:

3 (1) as a mitigation measure in an environmental impact statement; or

4 (2) in obtaining a negative declaration in an environmental assessment
5 worksheet; or

6 F. if the concrete manufacturing plant is subject to a new source performance
7 standard other than Code of Federal Regulations, title 40, part 60, subpart Kb, Standards
8 of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid
9 Storage Vessels) for Which Construction, Reconstruction or Modification Commenced
10 after July 23, 1984, incorporated by reference in part 7011.1520, item C, if all storage
11 vessels subject to this standard at the stationary source each have a capacity greater than
12 or equal to 40 cubic meters and less than 75 cubic meters.

13 Subp. 4. **Permit requirement procedures.** If the agency requires a concrete
14 manufacturing plant to apply for a permit under subpart 3, the agency shall give notice
15 to the owner or operator of its intention to require a permit application. This notice shall
16 require the owner or operator to submit a permit application for the concrete
17 manufacturing plant within three months of the receipt of the notice.