Environmental Protection Agency

§ 60.242

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

\[ E = \left( \sum_{i=1}^{N} C_{si} Q_{sdi} \right) / (PK) \]

where:
- E = emission rate of total fluorides, g/Mg (lb/ton) of equivalent P\(_2\)O\(_5\) feed.
- \( C_{si} \) = concentration of total fluorides from emission point “i,” mg/dscm (gr/dscf).
- \( Q_{sdi} \) = volumetric flow rate of effluent gas from emission point “i,” dscm/hr (dscf/hr).
- N = number of emission points in the affected facility.
- P = equivalent P\(_2\)O\(_5\) feed rate, Mg/hr (ton/hr).
- K = conversion factor, 1000 mg/g (7,000 gr/lb).

(2) Method 13A or 13b shall be used to determine the total fluorides concentration (\( C_{si} \)) and volumetric flow rate (\( Q_{sdi} \)) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P\(_2\)O\(_5\) feed rate (P) shall be computed for each run using the following equation:

\[ P = M_p R_p \]

where:
- \( M_p \) = total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).
- \( R_p \) = P\(_2\)O\(_5\) content, decimal fraction.

(i) The accountability system of § 60.233(a) shall be used to determine the mass flow rate (\( M_p \)) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference—see § 60.17) shall be used to determine the P\(_2\)O\(_5\) content (\( R_p \)) of the feed.

Subpart X—Standards of Performance for the Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities

§ 60.240 Applicability and designation of affected facility.

(a) The affected facility to which the provisions of this subpart apply is each granular triple superphosphate storage facility. For the purpose of this subpart, the affected facility includes any combination of: Storage or curing piles, conveyors, elevators, screens and mills.

(b) Any facility under paragraph (a) of this section that commences construction or modification after October 22, 1974, is subject to the requirements of this subpart.

[42 FR 37938, July 25, 1977]

§ 60.241 Definitions.

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

(a) Granular triple superphosphate storage facility means any facility curing or storing fresh granular triple superphosphate.

(b) Total fluorides means elemental fluorine and all fluoride compounds as measured by reference methods specified in § 60.244, or equivalent or alternative methods.

(c) Equivalent P\(_2\)O\(_5\) stored means the quantity of phosphorus, expressed as phosphorus pentoxide, being cured or stored in the affected facility.

(d) Fresh granular triple superphosphate means granular triple superphosphate produced within the preceding 72 hours.


§ 60.242 Standard for fluorides.

(a) On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain total fluorides in excess of 0.25 g/hr/megagram (Mg) of equivalent P\(_2\)O\(_5\) stored (5.0 \( \times \) 10\(^{-4}\) lb/hr/ton of equivalent P\(_2\)O\(_5\) stored).

(b) No owner or operator subject to the provisions of this subpart shall ship fresh granular triple superphosphate from an affected facility.

§ 60.243 Monitoring of operations.

(a) The owner or operator of any granular triple superphosphate storage facility subject to the provisions of this subpart shall maintain an accurate account of triple superphosphate in storage to permit the determination of the amount of equivalent P$_2$O$_5$ stored.

(b) The owner or operator of any granular triple superphosphate storage facility subject to the provisions of this subpart shall maintain a daily record of total equivalent P$_2$O$_5$ stored by multiplying the percentage P$_2$O$_5$ content, as determined by § 60.244(c)(3), times the total mass of granular triple superphosphate stored.

(c) The owner or operator of any granular triple superphosphate storage facility subject to the provisions of this subpart shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across any process scrubbing system. The monitoring device shall have an accuracy of ±5 percent over its operating range.

(d) The owner or operator of any granular triple superphosphate storage facility subject to the provisions of this subpart shall develop for approval by the Administrator a site-specific methodology including sufficient recordkeeping for the purposes of demonstrating compliance with § 60.242(b).

§ 60.244 Test methods and procedures.

(a) The owner or operator shall conduct performance tests required in § 60.8 only when the following quantities of product are being cured or stored in the facility.

1. Total granular triple superphosphate is at least 10 percent of the building capacity, and

2. Fresh granular triple superphosphate is at least 6 percent of the total amount of triple superphosphate, or

3. If the provision in paragraph (a)(2) of this section exceeds production capabilities for fresh granular triple superphosphate, fresh granular triple superphosphate is equal to at least 5 days maximum production.

(b) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures 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).

(c) The owner or operator shall determine compliance with the total fluorides standard in § 60.242 as follows:

1. The emission rate (E) of total fluorides shall be computed for each run using the following equation:

\[
E = \sum_{i=1}^{N} \frac{C_{si} Q_{sdi}}{PK}
\]

where:

- \( E \) = emission rate of total fluorides, g/hr/Mg (lb/hr/ton) of equivalent P$_2$O$_5$ stored.
- \( C_{si} \) = concentration of total fluorides from emission point “i,” mg/dscm (gr/dscf).
- \( Q_{sdi} \) = volumetric flow rate of effluent gas from emission point “i,” dscm/hr (dscf/hr).
- \( N \) = number of emission points in the affected facility.
- P = equivalent P$_2$O$_5$ stored, metric tons (tons).
- K = conversion factor, 1000 mg/g (7,000 gr/lb).

2. Method 13A or 13B shall be used to determine the total fluorides concentration (C$_{a}$) and volumetric flow rate (Q$_{a}$) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

3. The equivalent P$_2$O$_5$ feed rate (P) shall be computed for each run using the following equation:

\[
P = M_p R_p
\]

where:

- \( M_p \) = amount of product in storage, Mg (ton).
- \( R_p \) = P$_2$O$_5$ content of product in storage, weight fraction.

(i) The accountability system of § 60.243(a) shall be used to determine the amount of product (M$_a$) in storage.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference—see § 60.17) shall be used to determine the P$_2$O$_5$ content (R$_p$) of the product in storage.

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EDITORIAL NOTE: At 65 FR 61757, Oct. 17, 2000, in §60.244, paragraph (c)(1) was amended. However, the instruction, which read in part, “revising the words “metric ton” the words “(453,600 mg/lb)” in the definition of the term “K” to read “(7,000 gr/lb).” . . . ” could not be incorporated because of inaccurate amendatory language.

Subpart Y—Standards of Performance for Coal Preparation and Processing Plants

SOURCE: 74 FR 51977, Oct. 8, 2009, unless otherwise noted.

§ 60.250 Applicability and designation of affected facility.

(a) The provisions of this subpart apply to affected facilities in coal preparation and processing plants that process more than 181 megagrams (Mg) (200 tons) of coal per day.

(b) The provisions in §§60.251, 60.252(a), 60.253(a), 60.254(a), 60.255(a), and 60.256(a) of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after October 27, 1974, and on or before April 28, 2008: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(c) The provisions in §§60.251, 60.252(b)(1) and (c), 60.253(b), 60.254(b), 60.255(b) through (h), 60.256(b) and (c), 60.257, and 60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after October 27, 1974, and on or before April 28, 2008: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems, transfer and loading systems.

(d) The provisions in §§60.251, 60.252(b)(1) through (3), and (c), 60.253(b), 60.254(b) and (c), 60.255(b) through (h), 60.256(b) and (c), 60.257, and 60.258 of this subpart are applicable to any of the following affected facilities that commenced construction, reconstruction or modification after May 27, 2009: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, transfer and loading systems, and open storage piles.

§ 60.251 Definitions.

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

(a) Anthracite means coal that is classified as anthracite according to the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see §60.17).

(b) Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust loadings) in the exhaust of a fabric filter to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

(c) Bituminous coal means solid fossil fuel classified as bituminous coal by ASTM D388 (incorporated by reference—see §60.17).

(d) Coal means:

(1) For units constructed, reconstructed, or modified on or before May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference—see §60.17).

(2) For units constructed, reconstructed, or modified after May 27, 2009, all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference—see §60.17), and coal refuse.

(e) Coal preparation and processing plant means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.

(f) Coal processing and conveying equipment means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This