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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_2O_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 phosphorusbearing feed, Mg/hr (ton/hr).

 $R_p = P_2O_5$ content, decimal fraction.

- (i) The accountability system of $\S 60.223(a)$ 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 $\S60.17$) shall be used to determine the P_2O_5 content (R_p) of the feed.

[54 FR 6670, Feb. 14, 1989, as amended at 65 FR 61757, Oct. 17, 2000; 80 FR 50434, Aug. 19, 2015]

§ 60.225 Recordkeeping.

An affected facility as defined in §60.220(a) that commences construction, modification, or reconstruction after November 7, 2014 is subject to the requirements of this section. You must maintain the records identified as specified in §60.7(f) and in paragraphs (a) and (b) of this section. All records required by this subpart must be maintained on site for at least 5 years.

- (a) Records of the daily average pressure drop through the absorber.
- (b) Records of deviations. A deviation is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in paragraphs (b)(1) and (2) of this section being met.
- (1) A deviation occurs when the daily average value of a monitored operating parameter is less than the minimum pressure drop, or greater than the maximum pressure drop established in §60.223(d)(3).
- (2) A deviation occurs when the monitoring data are not available for at least 75 percent of the operating hours in a day.

[80 FR 50434, Aug. 19, 2015]

40 CFR Ch. I (7-1-17 Edition)

Subpart W—Standards of Performance for the Phosphate Fertilizer Industry: Triple Superphosphate Plants

§ 60.230 Applicability and designation of affected facility.

- (a) The affected facility to which the provisions of this subpart apply is each triple superphosphate plant having a design capacity of more than 15 tons of equivalent P_2O_5 feed per calendar day. For the purpose of this subpart, the affected facility includes any combination of: mixers, curing belts (dens), reactors, granulators, dryers, coolers, screens, mills, and facilities that store run-of-pile triple superphosphate.
- (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, as amended at 48 FR 7129, Feb. 17, 1983; 80 FR 50435, Aug. 19, 2015]

§ 60.231 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) Triple superphosphate plant means any facility manufacturing triple superphosphate by reacting phosphate rock with phosphoric acid. A run-ofpile triple superphosphate plant includes curing and storing.
- (b) Run-of-pile triple superphosphate means any triple superphosphate that has not been processed in a granulator and is composed of particles at least 25 percent by weight of which (when not caked) will pass through a 16 mesh screen
- (c) Total fluorides means elemental fluorine and all fluoride compounds as measured by reference methods specified in §60.234, or equivalent or alternative methods.
- (d) Equivalent P_2O_5 feed means the quantity of phosphorus, expressed as phosphorus pentoxide, fed to the process.

[40 FR 33156, Aug. 6, 1975]

§ 60.232 Standard for fluorides.

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 100 g/megagram (Mg) of equivalent P_2O_5 feed (0.20 lb/ton).

[40 FR 33156, Aug. 6, 1975, as amended at 65 FR 61757, Oct. 17, 2000]

§ 60.233 Monitoring of operations.

- (a) The owner or operator of any triple superphosphate plant subject to the provisions of this subpart shall install, calibrate, maintain, and operate a flow monitoring device that can be used to determine the mass flow of phosphorusbearing feed material to the process. The flow monitoring device shall have an accuracy of ± 5 percent over its operating range.
- (b) The owner or operator of any triple superphosphate plant shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate in Mg/hr of phosphorus-bearing feed using a flow monitoring device meeting the requirements of paragraph (a) of this section and then by proceeding according to $\S 60.234(b)(3)$.
- (c) Except as specified in paragraph (d) of this section, the owner or operator of any triple superphosphate plant subject to the provisions of this part shall install, calibrate, maintain, and operate a monitoring device that continuously measures and permanently records the total pressure drop across the absorber. The monitoring device shall have an accuracy of ±5 percent over its operating range.
- (d) Any facility under §60.230(a) that commences construction, modification, or reconstruction after November 7, 2014 is subject to the requirements of this paragraph instead of the requirements in paragraph (c) of this section. If an absorber is used to comply with §60.232, then the owner or operator shall continuously monitor pressure drop through the absorber and meet the requirements specified in paragraphs (d)(1) through (4) of this section.

- (1) The owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system (CMS) that continuously measures and permanently records the pressure at the gas stream inlet and outlet of the absorber. The pressure at the gas stream inlet of the absorber may be measured using amperage on the blower if a correlation between pressure and amperage is established.
- (2) The CMS must have an accuracy of ±5 percent over the normal range measured or 0.12 kilopascals (0.5 inches of water column), whichever is greater.
- (3) The owner or operator shall establish an allowable range for the pressure drop through the absorber. The allowable range is ±20 percent of the arithmetic average of the three test runs conducted during the performance test required in §60.8. The Administrator retains the right to reduce the ±20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard. However, the adjustment must not be reduced to less than ±10 percent under any instance.
- (4) The owner or operator shall demonstrate continuous compliance by maintaining the daily average pressure drop through the absorber to within the allowable range established in paragraph (d)(3) of this section. The daily average pressure drop through the absorber for each operating day shall be calculated using the data recorded by the monitoring system. If the emissions unit operation is continuous, the operating day is a 24-hour period. If the emissions unit operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average.

[80 FR 50435, Aug. 19, 2015]

§ 60.234 Test methods and procedures.

(a) 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

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and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the total fluorides standards in §60.232 as follows:

(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 P₂O₅ feed.

C_{si} = concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).

O_{eff} = volumetric flow rate of effluent gas

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.

 $P = \text{equivalent } P_2O_5 \text{ feed rate, Mg/hr (ton/hr)}.$ 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_2O_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).

 $R_p = P_2O_5$ content, decimal fraction.

(i) The accountability system of $\S 60.233(a)$ 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 $\S60.17$) shall be used to determine the P_2O_5 content (R_p) of the feed.

[54 FR 6670, Feb. 14, 1989; 54 FR 21344, May 17, 1989, as amended at 65 FR 61757, Oct. 17, 2000]

§ 60.235 Recordkeeping.

Any facility under §60.230(a) that commences construction, modification, or reconstruction after November 7, 2014 is subject to the requirements of this section. You must maintain the records identified as specified in $\S 60.7(f)$ and in paragraphs (a) and (b) of this section. All records required by this subpart must be maintained onsite for at least 5 years.

(a) Records of the daily average pressure drop through the absorber.

(b) Records of deviations. A deviation is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in paragraphs (b)(1) and (2) of this section being met.

(1) A deviation occurs when the daily average value of a monitored operating parameter is less than the minimum pressure drop, or greater than the maximum pressure drop established in §60.233(d)(3).

(2) A deviation occurs when the monitoring data are not available for at least 75 percent of the operating hours in a day.

[80 FR 50435, Aug. 19, 2015]

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.