§ 60.222

phosphorus pentoxide, fed to the process.

[40 FR 33155, Aug. 6, 1975]

§ 60.222 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 30 g/megagram (Mg) of equivalent \( P_2O_5 \) feed (0.060 lb/ton).

[40 FR 33155, Aug. 6, 1975, as amended at 65 FR 61757, Oct. 17, 2000]

§ 60.223 Monitoring of operations.

(a) The owner or operator of any granular diammonium phosphate plant subject to the provisions of this subpart shall install, calibrate, maintain, and operate a flow monitoring device which can be used to determine the mass flow of phosphorus-bearing 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 granular diammonium phosphate plant shall maintain a daily record of equivalent \( P_2O_5 \) feed rate 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 §60.224(b)(3).

(c) The owner or operator of any granular diammonium phosphate plant 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 the scrubbing system. The monitoring device shall have an accuracy of ±5 percent over its operating range.


§ 60.224 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 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 standard in §60.222 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 \( P_2O_5 \) 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 associated with the affected facility.
- \( P \) = equivalent \( P_2O_5 \) 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 \( P_2O_5 \) 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 §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 §60.17) shall be used to determine the \( P_2O_5 \) content \( R_p \) of the feed.