Environmental Protection Agency § 63.606

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20 percent of the baseline average value determined as a requirement of §63.606(c)(4), (d)(4), or (e)(2). 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, but, in no instance shall the adjustment be reduced to less than ±10 percent. The owner or operator must notify the Administrator of the baseline average values and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to §§63.607(c)(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(e) Each owner or operator of a new or existing purified phosphoric acid process line shall:

(1) Install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the stack gas exit temperature for each chiller stack.

(2) Measure and record the concentration of methyl isobutyl ketone in each product acid stream and each raffinate stream once daily.


§ 63.606 Performance tests and compliance provisions.

(a)(1) On or before the applicable compliance date in §63.609 and once per
annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section.

(2) As required by §63.7(a)(2) and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each new wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section.

(b) In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR part 60, appendix A, or other methods and procedures as specified in this section, except as provided in §63.7(f).

(c) Each owner or operator of a new or existing wet-process phosphoric acid process line or superphosphoric acid process line shall determine compliance with the applicable total fluorides standards in §63.602 or §63.603 as follows:

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

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

Where:

- \( E \) = emission rate of total fluorides, g/metric ton (lbton) of equivalent \( P_2O_5 \) feed.
- \( C_{si} \) = concentration of total fluorides from emission point “i,” mg/dscm (mg/dscf).
- \( Q_{si} \) = 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, metric ton/hr (ton/hr).
- \( K \) = conversion factor, 1000 mg/g (453,600 mg/lb).

(2) Method 13A or 13B (40 CFR part 60, appendix A) shall be used to determine the total fluorides concentration (\( C_{sa} \)) and volumetric flow rate (\( Q_{sa} \)) of the effluent gas from each of the emission points. If Method 13B is used, the fusion of the filtered material described in Section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in section 7.3.3 and 7.3.4 in Method 13A, may be omitted. 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 using the following equation:

\[ P = M_p R_p \]

Where:

- \( M_p \) = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).
- \( R_p \) = \( P_2O_5 \) content, decimal fraction.

(i) The accountability system described in §63.605(a) and (b) shall be used to determine the mass flow rate (\( M_p \)) of the phosphorus-bearing feed.

(ii) The \( P_2O_5 \) content (\( R_p \)) of the feed shall be determined using as appropriate the following methods (incorporated by reference—see 40 CFR 63.14) specified in the Book of Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, where applicable:

(A) Section IX, Methods of Analysis For Phosphate Rock, No. 1 Preparation of Sample.

(B) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-\( P_2O_5 \) or \( Ca_3(PO_4)_2 \), Method A-Volumetric Method.

(C) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-\( P_2O_5 \) or \( Ca_3(PO_4)_2 \), Method B-Gravimetric Quimociac Method.

(D) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-\( P_2O_5 \) or \( Ca_3(PO_4)_2 \), Method C-Spectrophotometric Method.

(E) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-\( P_2O_5 \), Method A-Volumetric Method.
(F) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus–P\(_2\)O\(_5\), Method B-Gravimetric Quimociac Method.

(G) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus–P\(_2\)O\(_5\), Method C-Spectrophotometric Method.

(4) To comply with §63.605(d) (1) or (2), the owner or operator shall use the monitoring systems in §63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic average of the one-hour averages determined during the three test runs shall be used as the baseline average values for the purposes of §63.605(d) (1) or (2).

(e) Each owner or operator of a new or existing phosphate rock calciner shall demonstrate compliance with the particulate matter standards in §§63.602 and 63.603 as follows:

(1) Method 5 (40 CFR part 60, appendix A) shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 60 minutes and 1.70 dscm.

(2) To comply with §63.605(d) (1) or (2), the owner or operator shall use the monitoring systems in §63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system during each of the particulate matter runs. The arithmetic average of the one-hour averages determined during the three test runs shall be used as the baseline average values for the purposes of §63.605(d) (1) or (2).

§63.607 Notification, recordkeeping, and reporting requirements.

(a) Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9.

(b) Each owner or operator subject to the requirements of this subpart shall comply with the recordkeeping requirements in §63.10.

(c) The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 as follows:

(1) Performance test report. As required by §63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in §63.9.

(2) Excess emissions report. As required by §63.10, the owner or operator of an affected source shall submit an excess

\[ E = \frac{(C_s Q_{sd})}{(PK)} \]

Where:

E = emission rate of particulate matter, kg/Mg (lb/ton) of phosphate rock feed.

C_s = concentration of particulate matter, g/dscm (g/dscf).

Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).

P = phosphate rock feed rate, Mg/hr (ton/hr).

K = conversion factor, 1000 g/kg (453.6 g/lb).