
Emissions of polonium-210 to the ambient air from all calciners and nodulizing kilns at an elemental phosphorus plant shall not exceed a total of 2 curies a year; except that compliance with this standard may be conclusively shown if the elemental phosphorus plant:

(a) Installs a Hydro-Sonic® Tandem Nozzle Fixed Throat Free-Jet Scrubber System including four scrubber units,

(b) All four scrubber units are operated continuously with a minimum average over any 6-hour period of 40 inches (water column) of pressure drop across each scrubber during calcining of phosphate shale,

(c) The system is used to scrub emissions from all calciners and/or nodulizing kilns at the plant, and

equivalent to the reduction in emissions of benzene achieved by the controls required in this subpart. In doing so, the owner or operator shall comply with requirements of §61.244.

Subpart K—National Emission Standards for Radionuclide Emissions From Elemental Phosphorus Plants

SOURCE: 54 FR 51699, Dec. 15, 1989, unless otherwise noted.

§ 61.120 Applicability.

The provisions of this subpart are applicable to owners or operators of calciners and nodulizing kilns at elemental phosphorus plants.

§ 61.121 Definitions.

(a) Elemental phosphorus plant or plant means any facility that processes phosphate rock to produce elemental phosphorus. A plant includes all buildings, structures, operations, calciners and nodulizing kilns on one contiguous site.

(b) Calciner or Nodulizing kiln means a unit in which phosphate rock is heated to high temperatures to remove organic material and/or to convert it to a nodular form. For the purpose of this subpart, calciners and nodulizing kilns are considered to be similar units.


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equivalent to the reduction in emissions of benzene achieved by the controls required in this subpart. In doing so, the owner or operator shall comply with requirements of §61.244.
§ 61.123 Emission testing.

(a) Each owner or operator of an elemental phosphorus plant shall test emissions from the plant within 90 days of the effective date of this standard and annually thereafter. The Administrator may temporarily or permanently waive the annual testing requirement or increase the frequency of testing, if the Administrator determines that more testing is required.

(b) The Administrator shall be notified at least 30 days prior to an emission test so that EPA may, at its option, observe the test.

(c) An emission test shall be conducted at each operational calciner or nodulizing kiln. If emissions from a calciner or nodulizing kiln are discharged through more than one stack, then an emission test shall be conducted at each stack and the total emission rate from the calciner or kiln shall be the sum of the emission rates from each of the stacks.

(d) Each emission test shall consist of three sampling runs that meet the requirements of §61.125. The phosphate rock processing rate during each run shall be recorded. An emission rate in curies per Mg or curies per ton of phosphate rock processed shall be calculated for each run. The average of all three runs shall apply in computing the emission rate for the test. The annual polonium-210 emission rate from a calciner or nodulizing kiln shall be determined by multiplying the measured polonium-210 emission rate in curies per Mg or curies per ton of phosphate rock processed by the annual phosphate rock processing rate in Mg (tons). In determining the annual phosphate rock processing rate, the values used for operating hours and operating capacity shall be values that will maximize the expected processing rate. For determining compliance with the emission standard of §61.122, the total annual emission rate is the sum of the annual emission rates for all operating calciners and nodulizing kilns.

(e) If the owner or operator changes his operation in such a way as to increase his emissions of polonium-210, such as changing the type of rock processed, the temperature of the calciners or kilns, or increasing the annual phosphate rock processing rate, then a new emission test, meeting the requirements of this section, shall be conducted within 45 days under these conditions.

(f) Each owner or operator of an elemental phosphorus plant shall furnish the Administrator with a written report of the results of the emission test within 60 days of conducting the test. The report must provide the following information:

(1) The name and location of the facility.

(2) The name of the person responsible for the operation of the facility and the name of the person preparing the report (if different).

(3) A description of the effluent controls that are used on each stack, vent, or other release point and an estimate of the efficiency of each device.

(4) The results of the testing, including the results of each sampling run completed.

(5) The values used in calculating the emissions and the source of these data.

(6) Each report shall be signed and dated by a corporate officer in charge of the facility and contain the following declaration immediately above the signature line: “I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting