

§ 422.51

40 CFR Ch. I (7-1-12 Edition)

Wet process phosphoric acid is dehydrated by application of heat and other processing acids such as vacuum and air stripping. The acid is concentrated up to 70-73% P₂O₅ in the defluorination process.

§ 422.51 Specialized definitions.

For the purpose of this subpart:

(a) Except as provided below, the general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

(b) The term *process waste water* means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. The term "process waste water" does not include contaminated non-process waste water, as defined below.

(c) The term *contaminated nonprocess waste water* shall mean any water including precipitation runoff, which during manufacturing or processing, comes into incidental contact with any raw material, intermediate product, finished product, by-product or waste product by means of:

(1) Precipitation runoff, (2) accidental spills, (3) accidental leaks caused by the failure of process equipment and which are repaired or the discharge of pollutants therefrom contained or terminated within the shortest reasonable time which shall not exceed 24 hours after discovery or when discovery should reasonably have been made, whichever is earliest, and (4) discharges from safety showers and related personal safety equipment, and from equipment washings for the purpose of safe entry, inspection and maintenance; provided that all reasonable measures have been taken to prevent, reduce, eliminate and control to the maximum extent feasible such contact and provided further that all reasonable measures have been taken that will mitigate the effects of such contact once it has occurred.

(d) The term *ten-year 24-hour rainfall event* shall mean the maximum precipitation event with a probable recurrence interval of once in 10 years as defined by the National Weather Service in technical paper no. 40, "Rainfall

Frequency Atlas of the United States," May 1961, and subsequent amendments or equivalent regional or State rainfall probability information developed therefrom.

(e) The term *25-year 24-hour rainfall event* shall mean the maximum precipitation event with a probable recurrence interval of once in 25 years as defined by the National Weather Service in technical paper no. 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments or equivalent regional or State rainfall probability information developed therefrom.

§ 422.52 Effluent limitations and guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.

(a) Subject to the provisions of paragraphs (b), (c) and (d) of this section, the following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available: There shall be no discharge of process wastewater pollutants to navigable waters.

(b) Process waste water pollutants from a cooling water recirculation system designed, constructed and operated to maintain a surge capacity equal to the runoff from the 10-year, 24-hour rainfall event may be discharged, after treatment to the standards set forth in paragraph (c) of this section, whenever chronic or catastrophic precipitation events cause the water level in the pond to rise into the surge capacity. Process waste water must be treated and discharged whenever the water level equals or exceeds the mid point of the surge capacity.

(c) The concentration of pollutants discharged in process wastewater pursuant to the limitations of paragraph (b) of this section shall not exceed the values listed in the following table:

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[Milligrams per liter]

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Total phosphorus (as P)	105	35
Fluoride (as F)	75	25
TSS	150	50
pH	(¹)	(¹)

¹ Within the range 6.0 to 9.5.

The total suspended solid limitation set forth in this paragraph shall be waived for process wastewater from a calcium sulfate storage pile runoff facility, operated separately or in combination with a water recirculation system, which is chemically treated and then clarified or settled to meet the other pollutant limitations set forth in this paragraph.

(d) The concentration of pollutants discharged in contaminated non-process wastewater shall not exceed the values listed in the following table:

[Milligrams per liter]

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Total phosphorus (as P)	105	35
Fluoride (as F)	75	25
pH	(¹)	(¹)

¹ Within the range 6.0 to 9.5.

§ 422.53 Effluent limitations and guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

The following limitations establish the quantity or quality of pollutants or properties, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable:

(a) Subject to the provisions of paragraphs (b), (c) and (d) of this section, the following limitations establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically

achievable: There shall be no discharge of process wastewater pollutants to navigable waters.

(b) Process waste water pollutants from a cooling water recirculation system designed, constructed and operated to maintain a surge capacity equal to the runoff from the 25-year, 24-hour rainfall event may be discharged, after treatment to the standards set forth in paragraph (c) of this section, whenever chronic or catastrophic precipitation events cause the water level in the pond to rise into the surge capacity. Process waste water must be treated and discharged whenever the water level equals or exceeds the mid point of the surge capacity.

(c) The concentration of pollutants discharged in process waste water pursuant to the limitations of paragraph (b) of this section shall not exceed the values listed in the following table:

[Milligrams per liter]

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Total phosphorus (as P)	105	35
Fluoride (as F)	75	25

(d) The concentration of pollutants discharged in contaminated non-process wastewater shall not exceed the values listed in the following table:

[Milligrams per liter]

Effluent characteristic	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed—
Total phosphorus (as P)	105	35
Fluoride (as F)	75	25

[41 FR 25977, June 23, 1976, as amended at 44 FR 50743, Aug. 29, 1979]

§ 422.54 [Reserved]

§ 422.55 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties, controlled by this section, which may be discharged by a new source subject to the provisions of this subpart: