

**ENVIRONMENTAL PROTECTION
AGENCY**
40 CFR Part 421
[OW-FRL-2981-7]
**Nonferrous Metals Manufacturing
Point Source Category Effluent
Limitations Guidelines, Pretreatment
Standards and New Source
Performance Standards**
AGENCY: Environmental Protection
Agency (EPA).

ACTION: Proposed rule.

SUMMARY: EPA is proposing amendments to the regulation which limits effluent discharges to waters of the United States and the introduction of pollutants into publicly owned treatment works by existing and new sources that conduct primary aluminum and secondary aluminum operations. EPA agreed to propose these amendments in two settlement agreements which resolved the various lawsuits challenging the final nonferrous metals manufacturing phase I regulation for these subcategories. The regulation was promulgated by EPA on March 8, 1984, 49 FR 8742.

The proposed amendments include: (1) Certain modifications of the effluent limitations for "best available technology economically achievable" (BAT), and "new source performance standards" (NSPS) for direct dischargers; and (2) certain modifications to the pretreatment standards for new and existing indirect dischargers (PSNS and PSES). After considering comments received in response to this proposal, EPA will promulgate a final rule.

DATES: Comments on this proposal must be submitted on or before June 19, 1986.

ADDRESS: Send comments to Ms. Eleanor J. Zimmerman, Industrial Technology Division (WH-552), Environmental Protection Agency, 401 M Street SW., Washington, DC 20460. Attention: ITD Docket Clerk, Proposed Nonferrous Metals Manufacturing Phase I Rule (WH-552).

The supporting information and all comments on this proposal will be available for inspection and copying at the EPA Public Information Reference Unit, Room 2404 (Rear) (EPA Library) 401 M Street SW., Washington, DC. The EPA information regulation (40 CFR Part 2) provides that a reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Questions regarding this notice may be addressed to Mr. Ernst P. Hall at (202) 382-7126.

SUPPLEMENTARY INFORMATION:

Organization of this notice:

- I. Legal authority
- II. Background
 - A. Rulemaking and Settlement Agreements
 - B. Effect of the Settlement Agreements
- III. Proposed Amendments to the Nonferrous Metals Manufacturing Phase I Regulation
- IV. Environmental Impact of the Proposed Amendments to the Nonferrous Metals Manufacturing Phase I Regulation
- V. Economic Impact of the Proposed Amendments
- VI. Solicitation of Comments
- VII. Executive Order 12291
- VIII. Regulatory Flexibility Analysis
- IX. OMB Review

I. Legal Authority

The regulation described in this notice is proposed under authority of sections 301, 304, 306, 307, 308, and 501 of the Clean Water Act (the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1251 et seq., as amended by the Clean Water Act of 1977, Pub. L. 95-217).

II. Background
A. Rulemaking and Settlement Agreements

On February 17, 1983, EPA proposed a regulation to establish Best Practicable Control Technology Currently Available (BPT), Best Available Technology Economically Achievable (BAT), and Best Conventional Pollutant Control Technology (BCT) effluent limitations guidelines and New Source Performance Standards (NSPS), Pretreatment Standards for Existing Sources (PSES), and Pretreatment Standards for New Sources (PSNS) for the nonferrous metals manufacturing phase I point source category (48 FR 7032). EPA published the final nonferrous metals manufacturing phase I regulation on March 8, 1984 (49 FR 8742). Those regulations affected 80 direct dischargers and 85 indirect dischargers. The preambles to the proposed and final nonferrous metals manufacturing phase I regulation describe the history of the rulemaking.

After publication of the nonferrous metals manufacturing phase I regulation, the Aluminum Association, Inc., Kaiser Aluminum and Chemical Corp., Reynolds Metals Company, the Aluminum Recycling Association, the American Mining Congress, Kennecott, Amax, ASARCO Inc., Mallinckrodt, Inc., the Secondary Lead Smelters Association and intervenor Gulf Coast Lead, and St. Joe Minerals Corporation filed petitions to review the regulation. These challenges were consolidated into one lawsuit by the United States Court of Appeals for the Fourth Circuit

(*Kennecott v. EPA*, 4th Cir. No. 84-1288 and Consolidated Cases). On December 26, 1985 the Fourth Circuit denied petitions to review the regulations for the primary lead, primary zinc, primary copper, metallurgical acid plants, secondary lead and the columbium-tantalum subcategories (780 F. 2d 445).

Earlier in November of 1985 four aluminum parties in the consolidated lawsuits entered into two settlement agreements which resolved issues raised by the petitioners related to the primary aluminum and secondary aluminum regulations. In the Settlement Agreements, EPA agreed to publish a notice of proposed rulemaking and to solicit comments regarding certain amendments to the final nonferrous metals manufacturing phase I regulation for these subcategories. If EPA promulgates amendments to the nonferrous metals manufacturing regulation and preamble language that are substantially the same as and do not alter the meaning of the proposed language, the petitioners have agreed to dismiss their lawsuits and not challenge the new amendments.

The amendments proposed today would allow increased discharges of pollutants for 24 direct discharging primary aluminum facilities, 14 indirect discharging secondary aluminum facilities, and 10 direct discharging secondary aluminum facilities. This proposal also affects new source performance standards for direct and indirect dischargers of these two subcategories.

B. Effect of the Settlement Agreements

As part of the Settlement Agreements, on November 25, 1985 the parties jointly requested the United States Court of Appeals for the Fourth Circuit to stay the effectiveness of those portions of 40 CFR Part 421 which EPA is proposing to amend, pending final action by EPA on the proposed amendments. The Court has not yet acted on this request.

Copies of the Settlement Agreements have been sent to all EPA Regional Offices and to applicable State permit-issuing authorities. All limitations and standards contained in the final nonferrous metals manufacturing phase I regulation published on March 8, 1984 which are not specifically listed in the attached proposed regulation are not affected by today's rulemaking.

**III. Proposed Amendments to the
Nonferrous Metals Manufacturing Phase
I Regulation**

Below are descriptions of the proposed amendments to the nonferrous metals manufacturing phase I regulation.

The proposed amendments are based upon proper operation of the same technologies as those which formed the basis of the final regulation that was promulgated on March 8, 1984. See the preamble to the regulation at 49 FR 8742, for the Agency's findings with respect to these technologies. Effluent limitations which do not change are signified by four asterisks in this proposed regulation.

A. Subpart B—Primary Aluminum Subcategory

1. Benzo(a)pyrene Limitations and Standards. EPA is proposing amendments to the BAT limitations and NSPS and PSNS for benzo(a)pyrene in §§ 421.23, 421.24, and 421.26. In 48 FR 7056 (February 17, 1983), the Agency proposed activated carbon adsorption as the model preliminary treatment technology for toxic organics, indicated by benzo(a)pyrene, in primary aluminum wastewaters. EPA proposed effluent limitations and standards based on an achievable concentration of 10 ug/l for benzo(a)pyrene, the level from the bench-scale study on POTW wastewater spiked with polynuclear aromatic hydrocarbons.

In the final regulation, the Agency decided not to rely on activated carbon because of another pilot-scale study, discussed in 48 FR 50908 (November 4, 1983), which evaluated treatment of primary aluminum potline scrubber blowdown and cathode reprocessing wastewater. The results of this study indicated that the toxic organic pollutants present were controlled through lime, settle and multimedia filtration ("lime, settle, and filter") treatment technology; removals by this technology exceeded 99 percent of all toxic organics present. In addition, benzo(a)pyrene appeared to be removed to the quantification limit of 10 ug/l by this technology. Thus, although the model treatment technology changed from activated carbon to lime, settle and filter, the concentration basis did not change between proposal and promulgation and no variability factors were adopted. We also proposed, in 1983, at-the-source limitations for toxic organic pollutants. These limitations were not promulgated because EPA was no longer relying on preliminary treatment to remove the toxic pollutants; rather, the model technology was centralized lime, settle and filter treatment.

In the final regulation, EPA applied the benzo(a)pyrene limitations to all of the processes since central treatment was expected (49 FR 8781 (March 8, 1984)). Under this approach processes which did not have benzo(a)pyrene

present were also given a discharge allowance in order to assist permit writers in developing effluent limitations for combined wastestreams. EPA is proposing today to: (a) Adopt differing 1-day and monthly average limitations for benzo(a)pyrene; (b) provide mass allowances for benzo(a)pyrene only in those processes that actually generate it; (c) clarify that the rule does not mandate at-the-source limitations for benzo(a)pyrene; and (d) clarify how analytical values at or below the detection limit are to be treated for compliance purposes.

Petitioners asserted that it was inappropriate to promulgate the same 1-day and monthly limits for benzo(a)pyrene because the pilot plant study referred to above showed some variability in treatment of the compound. In addition, the model treatment technology, lime, settle and filter, has some associated operating variability. EPA agrees with these points, and accordingly is proposing to change the benzo(a)pyrene effluent limitations and standards by increasing the daily maximum from 0.010 mg/l to 0.0337 mg/l and by adding a monthly maximum average of 0.0156 mg/l. These limitations were determined on the basis of statistical analysis of data on the treatability of benzo(a)pyrene obtained in the pilot study referenced above.

As a result of these changes, the limitations allowance for the discharge of benzo(a)pyrene will apply only to those processes that generate it. As noted, EPA provided such an allowance to encourage centralized treatment (49 FR 8781).

As part of the Settlement Agreement, industry has agreed that an allowance for benzo(a)pyrene is only needed in the processes that generate it. Consequently, EPA is proposing that there be no allowance for benzo(a)pyrene in building blocks § 421.23(o), (q), and (r), and the corresponding building blocks in NSPS and PSNS.

For those processes where benzo(a)pyrene is not present, the rule states (in the footnote to each relevant process) that there shall be no discharge allowance for this pollutant. This means that in calculating effluent limitations at the end of a combined treatment system, no allowance for benzo(a)pyrene shall be provided for these processes. In addition, this regulation does not require permit writers or the control authority to impose monitoring of benzo(a)pyrene at these processes (i.e. so-called at-the-source monitoring). However, monitoring could be required at the

discretion of the permitting or control authority. See 40 CFR 122.45(i).

EPA is also proposing to amend the specialized definition in § 421.21 to state that if a permittee chooses to analyze for benzo(a)pyrene using any EPA approved analytical method, then any non-detected values will be counted as zeros for purposes of determining compliance. This approach is consistent with the methodology for developing the benzo(a)pyrene limitations since the methodology used to develop the limitations treated the non-detected values from the pilot plant study as zeros. The detection limit for the approved EPA methods of GC/MS and gas chromatography are 0.0025 and 0.01 mg/l, respectively.

2. Fluoride Limitations and Standards. EPA is proposing amendments to the BAT limitations and NSPS and PSNS for fluoride in §§ 421.23, 421.24, and 421.26. In the final regulation for this subcategory, all of the fluoride limitations, except those for the cathode reprocessing segment (which were derived from the same pilot plant study described above), are based on long-term mean concentrations and variability factors obtained from the electrical and electronic component manufacturing phase II regulation with slight modifications (48 FR 55690 of December 14, 1983). The promulgated limits in the nonferrous regulation were 35 mg/l for the daily maximum and 20 mg/l for the monthly average with variability factors of 2.40 and 1.38, respectively.

Petitioners claimed that these limitations are not achievable in the primary aluminum subcategory because of the presence of complex fluoride ions and aluminum salts. In response, EPA is proposing to retain the long-term mean but to increase the variability factors (49 FR 8751, 8757). The fluoride limitations proposed today are based on the pooled variability factors calculated from data for seven metal pollutants in the combined metals data base. The variability factors EPA is now using are 4.10 and 1.82 for the daily and monthly variability factors, respectively.

The Agency believes that the variability associated with the metals data will more accurately represent the fluoride variability in this subcategory. These same variability factors were used to calculate the fluoride limitations in the final regulation for the cathode reprocessing building block (49 FR 8757). In addition, these are the same variability factors used for most other pollutants regulated in this subcategory, and in all other nonferrous metal manufacturing subcategories.

3. *Spent Potliner Leachate.* In the final regulations, EPA promulgated alternate treatment performance values for cathode reprocessing and potline scrubber liquor commingled with cathode reprocessing wastewaters. Petitioners have asserted that leachate resulting from runoff of spent potliners should also be subject to these alternate limitations under appropriate circumstances. Spent potliner leachate may receive the treatment performance values developed for cathode reprocessing provided:

(a) That the permit writer determines on a case-by-case basis that the wastewater matrices of cathode reprocessing and spent potliner leachate are compatible, and

(b) that the spent potliner leachate is not commingled with process or non-process wastewaters other than cathode reprocessing, or potline wet air pollution control operated in conjunction with cathode reprocessing.

Spent potliner leachate resulting from atmospheric precipitation runoff is considered to be a site-specific, non-scope waste stream by the Agency. For this reason, specific limitations are not provided for this waste stream in 40 CFR Part 421, §§ 421.23, 421.24, and 421.26. The brief guidance provided here was already implicit for direct discharges in a permit writer's authority to establish limitations for non-scope flows on a case-by-case, Best Professional Judgement (BPJ) basis and for new source indirect dischargers, through application of the combined wastestream formula.

As part of the Settlement Agreement, petitioners retained the right to petition EPA to amend 40 CFR 421.23(k) based upon new information not presently in the record demonstrating that additional allowances are required for cathode reprocessing when spent potliners are brought in from another plant for chemical recovery of cryolite. Section 122.62(a)(3) of the NPDES regulations provides that a permit may be modified during its term if the effluent limitations guidelines regulations on which the permit was based have been changed by promulgation of amended effluent limitations guidelines regulations, provided the permittee requests such modification in accordance with § 124.5 within 90 days after Federal Register notice of the action on which the request is based. Permit writers may include a reopener clause in any permit specifically recognizing this cause for modification of the permit limitations based on an amendment to 40 CFR 421.23(k) as long as such cause for modification is authorized under the then applicable regulations.

4. *Direct Chill Casting Contact Cooling.* EPA is proposing to amend the pH standards for new sources in § 421.24(k). In the final NSPS regulation for direct chill casting contact cooling the pH range was 7.0 to 10.0 at all times. Petitioners asserted that this pH range does not coincide with state water quality standards which are usually 6 to 9 standard units. EPA is proposing to modify this pH range to 6.0 to 10.0 at all times provided this stream is not commingled with other process wastewaters. If direct chill casting contact cooling water is commingled with process waters, it is subject to a pH range of 7.0 to 10.0 at all times. The data the Agency collected on this waste stream indicate that it may sometimes be relatively clean and compliance with NSPS may be possible without adjusting the pH. See Chapter V of the Supplemental Development Document for Primary Aluminum. Accordingly, the Agency has agreed to propose a broader pH requirement for direct chill casting contact cooling water if it is discharged separately without commingling with any other wastewater since the wider pH range will not affect achieving the mass limitations under these limited circumstances.

B. Subpart C—Secondary Aluminum Subcategory

1. *Ingot Conveyor Casting.* EPA is proposing amendments to the BAT limitations and NSPS, PSES, and PSNS in §§ 421.33(g), 421.34(g), 421.35(g), and 421.36(g). The ingot conveyor casting regulatory flow allowance used to develop the final limitations for these sections was 43 1/kkg. The Aluminum Recyclers Association claimed that this flow allowance is in error due to data interpretation mistakes and because EPA unnecessarily excluded the water usage of plants that reported achieving zero discharge.

EPA is proposing an amended flow allowance of 67 1/kkg, which is based on corrected water usage data from five plants (these data involving water usage and operating schedules were interpreted incorrectly by EPA in constructing the flow allowance in the final rule) and including three plants' water usage that reported achieving zero discharge. This is consistent with EPA's methodology throughout the nonferrous metals rulemaking, where EPA typically used water usage at zero discharging plants in determining what degree of flow reduction represents BAT, PSES, NSPS, and PSNS.

2. *Demagging Wet Air Pollution Control.* EPA is proposing to amend the BAT limitations and NSPS, PSES, and PSNS in §§ 421.33(d), 421.34(d),

421.35(d), and 421.36(d). The demagging wet air pollution control flow allowance used to develop the final rule was 697 1/kkg. Secondary aluminum petitioners have asserted that this allowance is incorrect due to a data interpretation error regarding the number of scrubbers associated with the water usage for one facility. EPA agrees that it made an error in this calculation and is proposing to adjust the water usage for this plant upwards. EPA is proposing to correct this regulatory flow allowance to 771 1/kkg.

IV. Environmental Impact of the Proposed Amendments to the Nonferrous Metals Manufacturing Phase I Regulation

The proposed amendments described above affect 48 facilities in the primary aluminum and secondary aluminum subcategories. These amendments would allow a greater discharge of pollutants for these facilities than was allowed by the March 1984 regulation. The increase in the mass of pollutants allowed to be discharged is not expected to be substantial, however. Each of these subcategories listed above is discussed below.

A. Primary Aluminum Subcategory

The proposed amendments for the primary aluminum subcategory would increase the limitations for the pollutants benzo(a)pyrene and fluoride, although, as noted earlier, for some processes there would be a decrease in the amount of benzo(a)pyrene which would be discharged, since EPA no longer is providing an allowance for processes not generating benzo(a)pyrene. The removal estimates for fluoride did not change because the long-term average treatment effectiveness value used to calculate the quantity of pollutant discharged is unchanged.

B. Secondary Aluminum Subcategory

The proposed amendments to the regulatory flow allowances for ingot conveyor casting contact cooling and demagging wet air pollution control flow allowances affect 24 facilities. Ten of these facilities are direct dischargers, while 14 are indirect dischargers.

The proposed amended ingot conveyor casting contact cooling regulatory flow would increase the allowable discharge of toxic metals by 0.2 kg/yr and 0.5 kg/yr for the indirect and direct dischargers, respectively. For the indirect dischargers, 0.9 kg/yr of additional aluminum could be discharged, while for the direct dischargers 2.1 kg/yr of additional

aluminum could be discharged. Increased discharge of the nonconventional pollutants ammonia and total phenols (as measured by the 4AAP method) is not expected from this proposed amendment since these pollutants are specific to other processes unaffected by this proposed rule.

For the direct discharging secondary aluminum plants, the proposed amendment for the demagging wet air pollution control flow allowance is expected to have only minor impact on the mass of pollutants discharged. Each of the direct dischargers is currently meeting the regulatory flow EPA is proposing for this waste stream. For the indirect dischargers, an additional 1.2 kg/yr of toxic metals and 4.0 kg/yr of aluminum are expected to be discharged. An increased discharge of ammonia and total phenols is not anticipated for the same reason given above.

V. Economic Impact of the Proposed Amendments

The proposed amendments do not alter the recommended technologies for complying with the nonferrous metals manufacturing phase I regulation. The Agency considered the economic impact of the regulation when the final regulation was promulgated (see 49 FR 8742). EPA concluded at that time that the regulation was economically achievable.

Since today's proposed amendments would slightly reduce regulatory requirements, EPA's conclusions as to economic impact and achievability are unaffected.

VI. Solicitation of Comments

EPA invites public participation in this rulemaking and requests comments on the proposed amendments discussed or set out in this notice. The Agency asks that comments be as specific as possible and that suggested revisions or corrections be supported by data.

VII. Executive Order 12291

Under Executive Order 12291, EPA must judge whether a regulation is "major" and therefore subject to the requirement of a Regulatory Impact Analysis. Major rules are defined as rules that impose an annual cost to the economy of \$100 million or more, or meet other economic criteria. This proposed regulation, which modestly reduces regulatory requirements, is not a major rule.

VIII. Regulatory Flexibility Analysis

Pub. L. 96-354 requires that EPA prepare a Regulatory Flexibility Analysis for regulations that have a

significant impact on a substantial number of small entities. In the preamble to the March 8, 1984 final nonferrous metals manufacturing phase I regulation, the Agency concluded that there would not be a significant impact on a substantial number of small entities (49 FR 8775.) For that reason, the Agency determined that a formal regulatory flexibility analysis was not required. That conclusion is equally applicable to these proposed amendments, since the amendments slightly reduce the regulatory requirements.

IX. OMB Review

This regulation was submitted to the Office of Management and Budget for review as required by Executive Order 12291. Any comments from OMB to EPA and any EPA response to those comments are available for public inspection at Room M2404, U.S. EPA, 401 M Street SW., Washington, DC 20460 from 9:00 a.m. to 4:00 p.m. Monday through Friday, excluding Federal holidays.

List of Subjects in 40 CFR Part 421

Metals, Nonferrous metals manufacturing, Water pollution control, waste treatment and disposal.

Dated: May 1, 1986.

Lee M. Thomas,
Administrator.

For the reasons stated above, EPA proposes to amend 40 CFR Part 421 as follows:

PART 421—NONFERROUS METALS MANUFACTURING POINT SOURCE CATEGORY

1. The authority citation for Part 421 continues to read as follows:

Authority: Secs. 301, 304(b), (c), (e), and (g), 306(b) and (c), 307, 308, and 501 of the Clean Water Act (the Federal Water Pollution Control Act Amendments of 1972, as amended by the Clean Water Act of 1977) (the "Act") 33 U.S.C. 1311, 1314(b), (c), (e), and (g), 1316(b) and (c), 1317(b) and (c), and 1361; 86 Stat. 816, Pub. L. 92-500; 91 Stat. 1567, Pub. L. 95-217.

2. Section 421.21 is amended by adding a new paragraph (c) to read as follows:

§ 421.21 Specialized definitions.

(c) If a permittee chooses to analyze for benzo(a)pyrene using any EPA approved method, then any "non-detected" measurements shall be considered zeros for the purpose of determining compliance with this regulation.

3. Section 421.23 is amended by revising the entries for benzo(a)pyrene and fluoride (if listed below) in paragraphs (a) through (h), (j) through (o), (q) and (r) to read as follows:

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

(a) Subpart B—Anode and Cathode Paste Plant Wet Air Pollution Control

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|-------------------------|-----------------------------|
| | | |
| Benzo(a)pyrene | 0.005 | 0.002 |
| Fluoride | 8.092 | 3.591 |

(b) Subpart B—Anode Contact Cooling and Briquette Quenching

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|-------------------------|-----------------------------|
| | | |
| Benzo(a)pyrene | 0.007 | 0.003 |
| Fluoride | 12.440 | 5.518 |

(c) Subpart B—Anode Bake Plant Wet Air Pollution Control (Closed Top Ring Furnace)

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|-------------------------|-----------------------------|
| | | |
| Benzo(a)pyrene | 0.146 | 0.067 |
| Fluoride | 257.300 | 114.200 |

(d) Subpart B—Anode Bake Plant Wet Air Pollution Control (Open Top Ring Furnace With Spray Tower Only)

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|-------------------------|-----------------------------|
| | | |
| Benzo(a)pyrene | 0.002 | 0.001 |

BAT EFFLUENT LIMITATIONS—Continued

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|-------------------------|-----------------------------|
| Fluoride..... | 2,975 | 1,320 |

(e) Subpart B—Anode Bake Plant Wet Air Pollution Control (Open Top Ring Furnace With Wet Electrostatic Precipitator and Spray Tower)

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
| | mg/kg (1b/million lbs) of anodes baked | |
| Benzo(a)pyrene..... | 0.025 | 0.011 |
| Fluoride..... | 43,440 | 19,270 |

(f) Subpart B—Anode Bake Plant Wet Air Pollution Control (Tunnel Kiln)

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
| | mg/kg (1b/million lbs) of anodes baked | |
| Benzo(a)pyrene..... | 0.038 | 0.018 |
| Fluoride..... | 67,710 | 30,050 |

(g) Subpart B—Cathode Reprocessing (Operated With Dry Potline Scrubbing and Not Commingled With Other Process or Nonprocess Waters)

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
| | mg/kg (1b/million lbs) of cryolite recovered | |
| Benzo(a)pyrene..... | 1.181 | 0.547 |

(h) Subpart B—Cathode Reprocessing (Operated With Dry Potline Scrubbing and Commingled With Other Process or Nonprocess Waters)

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
| | mg/kg (1b/million lbs) of cryolite recovered | |
| Benzo(a)pyrene..... | 1.181 | 0.547 |
| Fluoride..... | 2,084,000 | 924,800 |

(j) Subpart B—Potline Wet Air Pollution Control (Operated Without Cathode Reprocessing)

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (1b/million lbs) of aluminum produced from electrolytic reduction | |
| Benzo(a)pyrene..... | 0.028 | 0.013 |
| Fluoride..... | 49,860 | 22,130 |

(k) Subpart B—Potline Wet Air Pollution Control (Operated With Cathode Reprocessing and Not Commingled With Other Process or Nonprocess Waters)

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (1b/million lbs) of aluminum produced from electrolytic reduction | |
| Benzo(a)pyrene..... | 0.028 | 0.013 |

(l) Subpart B—Potline Wet Air Pollution Control (Operated With Cathode Reprocessing and Commingled With Other Process or Nonprocess Waters)

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (1b/million lbs) of aluminum produced from electrolytic reduction | |
| Benzo(a)pyrene..... | 0.028 | 0.013 |
| Fluoride..... | 49,860 | 22,130 |

(m) Subpart B—Potroom Wet Air Pollution Control

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (1b/million lbs) of aluminum produced from electrolytic reduction | |
| Benzo(a)pyrene..... | 0.056 | 0.026 |
| Fluoride..... | 98,770 | 43,830 |

(n) Subpart B—Potline SO₂ Emissions Wet Air Pollution Control

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (1b/million lbs) of aluminum produced from electrolytic reduction | |
| Benzo(a)pyrene..... | 0.045 | 0.021 |
| Fluoride..... | 79,790 | 35,400 |

(o) Subpart B—Degassing Wet Air Pollution Control

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (1b/million lbs) of aluminum produced from electrolytic reduction | |
| Benzo(a)pyrene..... | (¹) | (¹) |
| Fluoride..... | 155,300 | 68,880 |

¹ There shall be no discharge allowance for this pollutant

(q) Subpart B—Direct Chill Casting Contact Cooling

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (1b/million lbs) of aluminum produced from direct chill casting | |
| Benzo(a)pyrene..... | (¹) | (¹) |
| Fluoride..... | 79,080 | 35,090 |

¹ There shall be no discharge allowance for this pollutant.

(r) Subpart B—Continuous Rod Casting Contact Cooling

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (lb/million lbs) of aluminum product from rod casting | |
| Benzo(a)pyrene..... | (¹) | (¹) |
| Fluoride..... | 6.188 | 2.746 |

¹ There shall be no discharge allowance for this pollutant.

4. Section 421.24 is amended by revising the entries for benzo(a)pyrene, fluoride and pH (if listed below) in paragraphs (b), (d), (e), (h), (k) and (l) to read as follows:

§ 421.24 Standards of performance for new sources.

(b) Subpart B—Anode Contact Cooling and Briquette Quenching

NSPS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---------------------------------------|-----------------------------|
| | mg/kg (lb/million lbs) of anodes cast | |
| Benzo(a)pyrene..... | 0.007 | 0.003 |
| Fluoride..... | 12.440 | 5.518 |

(d) Subpart B—Cathode Reprocessing (Operated With Dry Potline Scrubbing and Not Commingled With Other Process or Nonprocess Waters)

NSPS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
| | mg/kg (lb/million lbs) of cryolite recovered | |
| Benzo(a)pyrene..... | 1.181 | 0.547 |

(e) Subpart B—Cathode Reprocessing (Operated With Dry Potline Scrubbing and Commingled With Other Process or Nonprocess Waters)

NSPS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
| | mg/kg (lb/million lbs) of cryolite recovered | |
| Benzo(a)pyrene..... | 1.181 | 0.547 |
| Fluoride..... | 2,084.000 | 924.800 |

(h) Subpart B—Potline SO₂ Emissions Wet Air Pollution Control

NSPS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | Mg/kg (lb/million lbs) of aluminum produced from electrolytic reduction | |
| Benzo(a)pyrene..... | 0.045 | 0.021 |
| Fluoride..... | 79.790 | 35.400 |

(k) Subpart B—Direct Chill Casting Contact Cooling

NSPS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | Mg/kg (lb/million lbs) of aluminum produced from direct chill casting | |
| Benzo(a)pyrene..... | (¹) | (¹) |
| Fluoride..... | 79.080 | 35.090 |
| pH..... | (²) | (²) |

¹ There shall be no discharge allowance for this pollutant.
² The pH shall be maintained within the range of 7.0 to 10.0 at all times except for those situations when this waste is discharged separately and without commingling with any other wastewater in which case the pH shall be within the range of 6.0 to 10.0 at all times.

(l) Subpart B—Continuous Rod Casting Contact Cooling

NSPS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
| | Mg/kg (lb/million lbs) of aluminum produced from rod casting | |
| Benzo(a)pyrene..... | (¹) | (¹) |
| Fluoride..... | 6.188 | 2.746 |

NSPS—Continued

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|-------------------------|-----------------------------|
| | | |

¹ There shall be no discharge allowance for this pollutant.

5. Section 421.26 is amended by revising the entries for benzo(a)pyrene and fluoride (if listed below) for paragraphs (b), (d), (e), (h), (k), (l) to read as follows:

§ 421.26 Pretreatment standards for new sources.

(b) Subpart B—Anode Contact Cooling and Briquette Quenching.

PSNS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---------------------------------------|-----------------------------|
| | mg/kg (lb/million lbs) of anodes cast | |
| Benzo(a)pyrene..... | 0.007 | 0.003 |
| Fluoride..... | 12.440 | 5.518 |

(d) Subpart B—Cathode Reprocessing (Operated With Dry Potline Scrubbing and Not Commingled With Other Process or Nonprocess Waters).

PSNS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
| | mg/kg (lb/million lbs) of cryolite recovered | |
| Benzo(a)pyrene..... | 1.181 | 0.547 |

(e) Subpart B—Cathode Reprocessing (Operated With Dry Potline Scrubbing and Commingled With Other Process or Nonprocess Waters).

PSNS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
| | mg/kg (lb/million lbs) of cryolite recovered | |
| Benzo(a)pyrene..... | 1.181 | 0.547 |
| Fluoride..... | 2,084.000 | 924.800 |

(h) Subpart B—Potline SO₂ Emissions Wet Air Pollution Control.

PSNS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (lb/million lbs) of aluminum produced from electrolytic reduction | |
| Benzo(a)pyrene..... | 0.045 | 0.021 |
| Fluoride..... | 79.790 | 35.400 |

(k) Subpart B—Direct Chill Casting Contact Cooling.

PSNS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (lb/million lbs) of aluminum produced from direct chill casting | |
| Benzo(a)pyrene..... | (¹) | (¹) |
| Fluoride..... | 79.080 | 35.090 |

¹ There shall be no discharge allowance for this pollutant.

(l) Subpart B—Continuous Rod Casting Contact Cooling.

PSNS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|--|-----------------------------|
| | mg/kg (lb/million lbs) of aluminum produced from rod casting | |
| Benzo(a)pyrene..... | (¹) | (¹) |
| Fluoride..... | 6.188 | 2.746 |

¹ There shall be no discharge allowance for this pollutant.

6. Section 421.33 is amended by revising paragraphs (d) and (g) to read as follows:

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

(d) Subpart C—Demagging Wet Air Pollution Control

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (lb/million lbs) of aluminum demagged | |
| Lead..... | 0.216 | 0.100 |
| Zinc..... | 0.786 | 0.324 |
| Aluminum..... | 4.711 | 2.090 |
| Ammonia (as N)..... | 102.800 | 45.180 |

(g) Subpart C—Ingot Conveyor Casting Contact Cooling (When

Chlorine Demagging Wet Air Pollution Control is Not Practiced On-Site).

BAT EFFLUENT LIMITATIONS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (lb/million lbs) of aluminum cast | |
| Lead..... | 0.019 | 0.009 |
| Zinc..... | 0.068 | 0.028 |
| Aluminum..... | 0.409 | 0.182 |
| Ammonia (as N)..... | 8.931 | 3.926 |

7. Section 421.34 is amended by revising paragraphs (d) and (g) to read as follows:

§ 421.34 Standards of performance for new sources.

(d) Subpart C—Demagging Wet Air Pollution Control

NSPS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (lb/million lbs) of aluminum demagged | |
| Lead..... | 0.216 | 0.100 |
| Zinc..... | 0.786 | 0.324 |
| Aluminum..... | 4.711 | 2.090 |
| Ammonia (as N)..... | 102.800 | 45.180 |
| Total suspended solids..... | 11.570 | 9.252 |
| Oil and grease..... | 7.710 | 7.710 |
| pH..... | (¹) | (¹) |

¹ Within the range of 7.0 to 10.0 at all times.

(g) Subpart C—Ingot Conveyor Casting Contact Cooling (When Chlorine Demagging Wet Air Pollution Control is Not Practiced On-Site).

NSPS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (lb/million lbs) of aluminum cast | |
| Lead..... | 0.019 | 0.009 |
| Zinc..... | 0.068 | 0.028 |
| Aluminum..... | 0.409 | 0.182 |
| Ammonia (as N)..... | 8.931 | 3.926 |
| Total suspended solids..... | 1.005 | 0.804 |
| Oil and grease..... | 0.670 | 0.670 |
| pH..... | (¹) | (¹) |

¹ Within the range of 7.0 to 10.0 at all times.

8. Section 421.35 is amended by revising paragraphs (d) and (g) to read as follows:

§ 421.35 Pretreatment standards for existing sources.

(d) Subpart C—Demagging Wet Air Pollution Control.

PSES

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | mg/kg (lb/million lbs) of aluminum demagged | |
| Lead..... | 0.216 | 0.100 |
| Zinc..... | 0.786 | 0.324 |
| Ammonia (as N)..... | 102.800 | 45.180 |

(g) Subpart C—Ingot Conveyor Casting Contact Cooling (When Chlorine Demagging Wet Air Pollution Control is Not Practiced On-Site).

PSES

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | Mg/kg (lb/million lbs) of aluminum cast | |
| Lead..... | 0.019 | 0.009 |
| Zinc..... | 0.068 | 0.028 |
| Ammonia (as N)..... | 8.931 | 3.926 |

9. Section 421.36 is amended by revising paragraphs (d) and (g) to read as follows:

§ 421.36 Pretreatment standards for new sources.

(d) Subpart C—Demagging Wet Air Pollution Control.

PSNS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | Mg/kg (lb/million lbs) of aluminum demagged | |
| Lead..... | 0.216 | 0.100 |
| Zinc..... | 0.786 | 0.324 |
| Ammonia (as N)..... | 102.800 | 45.180 |

(g) Subpart C—Ingot Conveyor Casting Contact Cooling (When Chlorine Demagging Wet Air Pollution Control is Not Practiced On-Site).

PSNS

| Pollutant or pollutant property | Maximum for any one day | Maximum for monthly average |
|---------------------------------|---|-----------------------------|
| | Mg/kg (lb/million lbs) of aluminum cast | |
| Lead..... | 0.019 | 0.009 |
| Zinc..... | 0.068 | 0.028 |
| Ammonia (as N)..... | 8.931 | 3.926 |