ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[IL–64–2–5807; FRL–5887–8]

RIN 2060–AE41

National Emission Standards for Hazardous Air Pollutants for Source Categories; National Emission Standards for Hazardous Air Pollutants for Steel Pickling Facilities—HCl Process

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule and notice of public hearing.

SUMMARY: This action proposes national emission standards for hazardous air pollutants (NESHAP) for new and existing hydrochloric acid (HCl) process steel pickling lines and HCl regeneration plants pursuant to section 112 of the Clean Air Act (Act) as amended in November 1990. Steel pickling lines that employ the HCl process and associated HCl acid regeneration plants have been identified by the EPA as potentially significant emitters of hydrochloric acid, a chemical identified in the Act as a hazardous air pollutant (HAP). Chronic exposure to HCl has been reported to cause gastritis, chronic bronchitis, dermatitis, and photosensitization. Acute inhalation exposure may cause coughing, hoarseness, inflammation and ulceration of the respiratory tract, chest pain, and pulmonary edema. Hydrochloric acid regeneration plants have been identified as significant emitters of HCl and chlorine (CL_2), the latter of which is also identified in the Act as a HAP. Acute exposure to high levels of CL_2 in humans results in chest pain, vomiting, toxic pneumonitis, pulmonary edema, and death. At lower levels CL_2 is a potent irritant to the eyes, the upper respiratory tract, and lungs. This rulemaking will affect steel pickling lines that use HCl as the primary acid, acid regeneration plants, and acid storage tanks. The purpose of the proposed rule is to reduce emissions of HCl by about 8,360 megagrams per year (Mg/yr) and CL_2 by about 19 Mg/yr. The NESHAP provides protection to the public by requiring all HCl pickling lines, acid regeneration plants, and acid storage tanks to meet emission standards that reflect the application of maximum achievable control technology (MACT).

DATES: *Comments.* Comments on the proposed rule must be received on or before November 17, 1997.

Public Hearing. If anyone contacts the EPA requesting to speak at a public hearing by October 9, 1997, a public hearing will be held on October 20, 1997, beginning at 10 a.m.

ADDRESSES: *Comments.* Written comments should be submitted (in duplicate, if possible) to: Docket No. A–95–43 at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (6102), 401 M Street, SW., Washington, DC 20460. The EPA requests that a separate copy of the comments also be sent to the contact person listed below. The docket is located at the above address in Room M–1500, Waterside Mall (ground floor).

A copy of today's notice, technical background information document, and other materials related to this rulemaking are available for review in the docket. Copies of this information may be obtained by request from the Air and Radiation Docket and Information Center by calling (202) 260–7548. A reasonable fee may be charged for copying docket materials.

Background Information Document. The background information document (BID) for the proposed standard may be obtained from the docket or the U.S. Environmental Protection Agency by contacting Mary Hinson, Emission Standards Division (MD–13), Research Triangle Park, NC 27511, telephone number (919) 541–5601.

Public Hearing. If anyone contacts the EPA requesting a public hearing by the required date (see **DATES**), the public hearing will be held at the EPA Office of Administration Auditorium, Research Triangle Park, NC. Persons interested in presenting oral testimony or inquiring as to whether a hearing is to be held should notify the contact person listed below.

FOR FURTHER INFORMATION CONTACT: Jim Maysilles, Metals Group, Emission Standards Division (MD–13), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711, telephone number (919) 541–3265, facsimile number (919) 541–5600, electronic mail address ''maysilles.jim@epamail.epa.gov.''.

SUPPLEMENTARY INFORMATION:

Regulated Entities

Entities potentially regulated by this action are those industrial facilities that perform steel pickling using the HCl process. Regulated categories and entities include:

Category	Examples of regulated entities
Industry	Steel pickling plants (SIC 3312, 3315, 3317) using HCl process.
Federal Government: Not affected.	
State/local/tribal governments: Not affected.	

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by final action on this proposal. This table lists the types of entities that the EPA is now aware could potentially be regulated by final action on this proposal. To determine whether your facility is regulated by final action on this proposal, you should carefully examine the applicability criteria in section V.A of this document, and in § 63.1155 of the proposed rule. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

Technology Transfer Network

The text of today's notice also is available on the Technology Transfer Network (TTN), one of EPA's electronic bulletin boards. The TTN provides information and technology exchange in various areas of air pollution control. The service is free, except for the cost of a phone call. Dial (919) 541–5742 for up to a 14,400 BPS modem. The TTN also is accessible through the Internet at ''TELNET ttnbbs.rtpnc.epa.gov.'' If more information on the TTN is needed, call the HELP line at (919) 541–5348. The HELP desk is staffed from 11 a.m. to 5 p.m.; a voice menu system is available at other times.

Electronic Access and Filing Addresses

The official record for this rulemaking, as well as the public version, has been established under Docket No. A–95–43 (including comments and data submitted electronically). A public version of this record, including printed, paper versions of electronic comments, which does not include any information claimed as confidential business information (CBI), is available for inspection from 8 a.m. to 5:30 p.m., Monday through Friday, excluding legal holidays. The official rulemaking record is located at the address in **ADDRESSES** at the beginning of this document.

Electronic comments can be sent directly to EPA's Air and Radiation Docket and Information Center at: ''A-

and-R-Docket@epamail.epa.gov.'' Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments and data will also be accepted on disks in WordPerfect in 5.1 file format or ASCII file format. All comments and data in electronic form must be identified by the docket number (A–95–43). No CBI should be submitted through electronic mail. Electronic comments on this proposed rule may be filed online at many Federal Depository Libraries.

Outline

The information in this preamble is organized as follows:

I. Statutory Authority

The statutory authority for this proposal is provided by sections 101, 112, 114, 116, and 301 of the Clean Air Act, as amended (42 U.S.C. 7401, 7412, 7414, 7416, and 7601).

II. Initial List of Categories of Major and Area Sources

Section 112 of the Act requires that the EPA promulgate regulations requiring the control of HAP emissions from major and area sources. The control of HAP emissions is achieved through promulgation of emission standards under sections 112(d) and 112(f) and operational and work practice standards under section 112(h) for categories of sources that emit HAP.

An initial list of categories of major and area sources of HAP selected for regulation in accordance with section 112(c) of the Act was published in the **Federal Register** on July 16, 1992 (57 FR 31576). ''Steel Pickling—HCl Process'' is one of the 174 categories of sources listed. The category consists of facilities engaged in the pickling of steel using HCl as the pickling acid. This category does not include facilities that pickle steel with other acids. The listing was based on the Administrator's determination that HCl steel pickling facilities may reasonably be anticipated to emit hydrochloric acid, one of the listed HAP, in quantities sufficient to designate them as major sources. Information subsequently collected by the EPA as part of this rulemaking confirms that more than three-fourths of HCl pickling facilities emit or have the potential to emit HCl at levels greater than 9.1 megagrams per year (Mg/yr) (10 standard tons per year (tpy)) and therefore are major sources.

III. Background

A. Description of Steel Pickling Source Category

The ''Steel Pickling—HCl Process'' source category includes any facility engaged in the pickling of steel using hydrochloric acid as the pickling acid. Steel pickling is the process in which the heavy oxide crust or mill scale that develops on the surface of steel during hot forming or heat treating is removed chemically in a bath of aqueous acid solution. Removal of the oxide layer is necessary to prepare the surface for subsequent shaping or finishing. The source category does not include facilities which pickle steel using acids other than HCl.

The category includes both continuous and batch pickling operations. In the continuous pickling process the steel is fed through a sequence of tanks in a countercurrent direction to the flow of the acid solution; next, the steel is passed through a series of rinse tanks or a rinsing section. In the batch pickling process, the steel is immersed in an acid solution until the scale or oxide film is removed, lifted from the bath, allowed to drain, and then rinsed by spraying or immersion in rinse tanks.

To obtain current data on the industry, the EPA compiled data supplied by the industry in response to an information collection request (ICR) issued in May 1992. Facilities on the mailing list were identified from trade publications and other generally available information. Information reported included capacity and annual production or processing rate as well as design information for existing air pollution control systems. Some data were reported for acid storage tanks.

Data were also reported on HCl regeneration plants, which are operated at several facilities that conduct HCl pickling. Regeneration plants are an integral part of the pickling operation at those facilities.

Based on the sources of information used to develop the mailing list and the completeness of responses, the EPA believes that the reported information comprises a data base that adequately describes the industry and its air pollution control equipment for development of the MACT standards.

According to the data base, one Federal agency and 77 privately owned companies operated 101 steel pickling facilities and 10 acid regeneration facilities during 1991. Operations were located in 20 States in seven EPA Regions. Eight of the facilities operating acid regeneration plants are collocated with pickling facilities, while two are stand-alone custom or toll facilities. Therefore, a total of 103 facilities in this source category were operating in 1991. Many of the facilities are located adjacent to integrated iron and steel manufacturing plants or mini-mills that produce electric-furnace steel from scrap.

Five types of pickling processes have been identified. Table 1 summarizes the number of facilities and production for each process type.

TABLE 1.—HCL STEEL PICKLING AND ACID REGENERATION PROCESSES

Process	Number of plants	Number of lines or units	1991 Production (10^6)
Continuous Pickling:			
Continuous Strip	36	64 (lines)	33.3 tons.
Push-Pull Strip	19	22 (lines)	4.5 tons.
Rod/Wire	20	55 (lines)	0.6 tons.
Tube	4	11 (lines)	0.5 tons.
Batch Pickling	26	59 (lines)	0.9 tons.
Pickling Total*	101	211 (lines)	39.8 tons.
Acid Regeneration	10	13 (units)	98.0 gal.

*Four facilities perform batch and continuous rod/wire pickling processes. Eight facilities have acid regeneration plants on site. The total number of facilities is 103.

Steel pickling operations are characterized by the form of metal processed and the type of pickling equipment used. The principal forms of steel pickled include coils of sheet or strip, rod, wire, pipe, and various discreet shapes. Pickling operations may be continuous, semicontinuous, and batch.

A reported 39.8 million tons of steel, valued at about $18 billion based on the price of hot-rolled strip, were pickled in 1991, representing 65 percent of the industry capacity.

Hydrochloric acid used in the pickling bath can be recovered as regenerated acid, typically 16 to 20 percent HCl, from the spent pickle liquor. A marketable iron oxide product is also produced as a byproduct of the spray roasting or fluidized bed roasting processes used in the acid plants. Waste liquor conversion and acid recovery are complete in both of these processes. Annual facility capacities range from 3.15 to 38.9 million gallons of acid.

In 1991, actual production of regenerated acid from the ten facilities was 98 million gallons, which is estimated to be more than 40 percent of pickling acid requirements for the industry for that year. Without the savings provided by use of the regenerated acid, additional costs would be incurred for treatment or disposal of the waste pickle liquor (K062) that are otherwise avoided.

B. Emissions

Pickling lines of all types employ processing tanks that contain HCl solution. Emissions of HCl in the forms of HCl gas and mist of HCl in water are formed at the surface of the acid bath. The EPA estimates that pickling facilities emit approximately 8,920 Mg/yr of HCl at the current level of control.

Acid regeneration plants produce emissions containing HCl that is not recovered as acid solution and also Cl_2, which is formed as an unwanted byproduct of the process. The EPA estimates that acid regeneration facilities emit about 390 Mg/yr of HCl and 35 Mg/yr of Cl_2. Emissions in the forms of HCl gas and acid mist from tanks used to store virgin or regenerated acid are released from uncontrolled tank vents. An estimated 24 Mg/yr of HCl is emitted from tanks nationwide.

C. Summary of Considerations Made in Developing This Rule

The Clean Air Act was created in part to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population. (See section 101(b)(1)). Section 112(b) of the Act lists HAP believed to cause adverse health or environmental effects. Section 112(d) of the Act requires that emission standards be promulgated for all categories and subcategories of major sources of these HAP and for many smaller ''area'' sources listed for regulation under section 112(c) in accordance with the schedules listed under section 112(e). On December 3, 1993, the EPA published a schedule for promulgating these standards (58 FR 63941).

In the 1993 Amendments to the Act, Congress specified that each standard for major sources must require the maximum reduction in emissions of HAP that the EPA determines is achievable considering cost, health and environmental impacts, and energy requirements. In essence, these MACT standards would ensure that all major sources of air toxic emissions achieve the level of control already being achieved by the better controlled and lower emitting sources in each category. This approach provides assurance to citizens that each major source of toxic air pollution will be required to effectively control its emissions. At the same time, this approach provides a level economic playing field, ensuring that facilities that employ cleaner processes and good emission controls are not disadvantaged relative to competitors with poorer controls.

Emission data collected during the development of this rule show that pollutants that are listed in section 112(b)(1) and are emitted by HCl steel pickling processes include hydrochloric acid and chlorine. Hydrochloric acid and chlorine emissions would be reduced by implementation of the proposed emission limits and equipment and operating standards.

Adverse health effects from exposure to HCl and Cl_2 have been documented.[1] Chronic occupational exposure to HCl has been reported to cause gastritis, chronic bronchitis, dermatitis, and photosensitization in workers. Prolonged exposure to low concentrations may also cause dental discoloration and erosion. Acute inhalation exposure may cause coughing, hoarseness, inflammation and ulceration of the respiratory tract, chest pain, and pulmonary edema in humans. No information is available on the reproductive, developmental, or carcinogenic effects of HCl in humans. The EPA has not classified HCl with respect to potential carcinogenicity.

Acute exposure to high levels (>30 parts per million (ppm) of Cl_2 in humans results in chest pain, vomiting, toxic pneumonitis, pulmonary edema, and death.[2] At lower levels (<3 ppm) Cl_2 is a potent irritant to the eyes, the upper respiratory tract, and lungs. Limited information is available on the chronic effects in humans. A recent epidemiologic study reported no

[1] Hydrochloric Acid. Hazardous Substance Data Bank. National Library of Medicine. National Institute of Health. Printouts dated August 13, 1992 and November 12, 1993. See also: Hydrogen Chloride. Integrated Risk Information System. U.S. Environmental Protection Agency. Printout dated July 10, 1995.

[2] Chlorine. Hazardous Substance Data Bank. National Library of Medicine. National Institute of Health. Printout dated August 18, 1993. See also: Chlorine. Integrated Risk Information System. U.S. Environmental Protection Agency. Printout dated September 1, 1995.

adverse effects in workers exposed to Cl_2 at 0 to 64 ppm over an average of 20 years. No information is available on the developmental, reproductive, or carcinogenic effects in humans via inhalation exposure. The EPA has not classified Cl_2 for carcinogenicity.

The EPA does recognize that the degree of adverse effects to health can range from mild to severe. The extent and degree to which the health effects may be experienced is dependent upon: (1) The ambient concentrations observed in the area (e. g., as influenced by emission rates, meteorological conditions, and terrain), (2) the frequency and duration of exposure, (3) characteristics of exposed individuals (e.g., genetics, age, pre-existing health conditions, and lifestyle) that vary significantly with the population, and (4) pollutant-specific characteristics (e.g., toxicity, half-life in the environment, bioaccumulation, and persistence).

IV. NESHAP Decision Process

A. Source of Authority for NESHAP Development

Section 112 specifically directs the EPA to develop a list of all categories of all major and such area sources as appropriate emitting one or more of the HAP listed in section 112(b). (See section 112(c)). Section 112 of the Act replaces the previous system of pollutant-by-pollutant health-based regulation that proved ineffective at controlling the high volumes and concentrations of HAP in air emissions. The provision directs that this deficiency be redressed by imposing technology-based controls on sources emitting HAP, and that these technology-based standards may later be reduced further to address residual risk that may remain even after imposition of technology-based controls. A major source is any source that emits or has the potential to emit considering controls 10 tpy or more of any one HAP or 25 tpy or more of any combination of HAP. The EPA published an initial list of source categories on July 16, 1992 (57 FR 31576), and may amend the list at any time.

B. Criteria for Development of NESHAP

The NESHAP are to be developed to control HAP emissions from both new and existing sources according to the statutory directives set out in section 112, as amended. The statute requires the standard to reflect the maximum degree of reduction of HAP emissions that is achievable taking into consideration the cost of achieving the emission reduction, any nonair quality health and environmental impacts, and energy requirements.

Emission reductions may be accomplished through application of measures, processes, methods, systems, or techniques, including, but not limited to: (1) Reducing the volume of, or eliminating emissions of, such pollutants through process changes, substitution of materials, or other modifications, (2) enclosing systems or processes to eliminate emissions, (3) collecting, capturing, or treating such pollutants when released from a process, stack, storage, or fugitive emissions point, (4) design, equipment, work practice, or operational standards (including requirements for operator training or certification) as provided in subsection (h), or (5) a combination of the above. (See section 112(d)(2)).

To develop a NESHAP, the EPA collects information about the industry, including information on emission source characteristics, control technologies, data from HAP emissions tests at well-controlled facilities, and information on the costs and other energy and environmental impacts of emission control techniques. The EPA uses this information to analyze possible regulatory approaches.

Although NESHAP are normally structured in terms of numerical emission limits, alternative approaches are sometimes necessary. In some cases, for example, physically measuring emissions from a source may be impossible, or at least impractical, because of technological and economic limitations. Section 112(h) authorizes the Administrator to promulgate a design, equipment, work practice, or operational standard, or a combination thereof, in those cases where it is not feasible to prescribe or enforce an emissions standard.

If sources in the source category are major sources, then a MACT standard is required for those major sources. The regulation of the area sources in a source category is discretionary. If there is a finding of a threat of adverse effects on human health or the environment, then the source category can be added to the list of area sources to be regulated.

C. Determining the MACT Floor

After the EPA has identified the specific source categories or subcategories of major sources to regulate under section 112, it must set MACT standards for each category or subcategory. Section 112 limits the EPA's discretion by establishing a minimum baseline or ''floor'' for standards. For new sources, the standards for a source category or subcategory cannot be less stringent than the emission control that is achieved in practice by the best-controlled similar source, as determined by the Administrator. (See section 112(d)(3)).

The standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent that the average emission limitation achieved by the best-performing 12 percent of existing sources (excluding certain sources) for categories and subcategories with 30 or more sources, or the best-performing 5 sources for categories or subcategories with fewer than 30 sources. (See section 112(d)(3)).

After the floor has been determined for a new or existing source in a source category or subcategory, the Administrator must set MACT standards that are no less stringent than the floor. Such standards must then be met by all sources within the category or subcategory.

Section 112(d)(2) specifies that the EPA shall establish standards that require the maximum degree of reduction in emissions of hazardous air pollutants

> * * * that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable * * *

In establishing standards, the Administrator may distinguish among classes, types, and sizes of sources within a category or subcategory. (See section 112(d)(1)). For example, the Administrator could establish two classes of sources within a category or subcategory based on size and establish a different emissions standard for each class, provided both standards are at least as stringent as the MACT floor for that class of sources.

The next step in establishing MACT standards is the investigation of regulatory alternatives. With MACT standards, only alternatives at least as stringent as the floor may be selected. Information about the industry is analyzed to develop model plant populations for projecting national impacts, including HAP emission reduction levels, costs, energy, and secondary impacts. Several regulatory alternative levels (which may be different levels of emissions control or different levels of applicability or both) are then evaluated to select the regulatory alternative that best reflects the appropriate MACT level.

The selected alternative may be more stringent than the MACT floor, but the

control level selected must be technically achievable. In selecting a regulatory alternative that represents MACT, the EPA considers the achievable emission reductions of HAP (and possibly other pollutants that are co-controlled), cost, and economic impacts, energy impacts, and other environmental impacts. The objective is to achieve the maximum degree of emissions reduction without unreasonable economic or other impacts. (See section 112(d)(2)). The regulatory alternatives selected for new and existing sources may be different because of different MACT floors, and separate regulatory decisions may be made for new and existing sources.

The selected regulatory alternative is then translated into a proposed regulation. The regulation implementing the MACT decision typically includes sections on applicability, standards, test methods and compliance demonstration, monitoring, reporting, and recordkeeping. The preamble to the proposed regulation provides an explanation of the rationale for the decision. The public is invited to comment on the proposed regulation during the public comment period. Based on an evaluation of these comments, the EPA reaches a final decision and promulgates the standard.

V. Summary of Proposed Standards

A. Sources To Be Regulated

The proposed NESHAP would apply to new and existing pickling lines that use an acid solution in which 50 percent or more by weight of the acid in solution is HCl, HCl regeneration plants, and adjunct tanks used to store virgin or regenerated HCl at steel pickling facilities or acid regeneration plants that are major sources or are part of a major source. A steel pickling line employing a pickling solution in which less than 50 percent by weight of the acid in solution is HCl would not be subject to the proposed NESHAP.

B. Emission Limits and Requirements

Emission limits are being proposed for HCl and Cl_2. For existing continuous and batch pickling lines, HCl emissions would be limited to either: (1) Emissions from an air pollution control device (APCD) with a minimum HCl collection efficiency of 97.5 percent; or (2) an HCl concentration no greater than 10 parts per million by volume (ppmv) in the APCD or process exhaust gas. For new or reconstructed continuous and batch pickling lines, HCl emissions would be limited to either: (1) Emissions from an APCD with a minimum HCl collection efficiency of 99 percent; or (2) a maximum HCl concentration of 3 ppmv in the exhaust gas.

Emissions of HCl from existing acid regeneration plants would be limited to a maximum concentration of 8 ppmv HCl in the exhaust gas. A limit of a maximum concentration of 3 ppmv HCl in the exhaust gas is proposed for new or reconstructed acid regeneration plants.

Emissions of Cl_2 from existing and new acid regeneration plants would be limited to either a maximum concentration of 4 ppmv Cl_2 in the exhaust gas or an optional source specific maximum concentration limitation to be established for each source. The way in which the optional limitation is established is described in section VII.E of this document, ''Selection of Emission Limits''.

Under the proposed rule, the owner or operator of an existing or new tank used to store virgin or regenerated acid would be required to cover and seal all openings on the tank and route emissions from the atmospheric vent to an APCD. Acid loading and unloading would be conducted either through enclosed lines or with a local fume capture system, ventilated through an APCD, at each point where the acid is exposed to the atmosphere.

C. Compliance Provisions

Compliance with the standards would need to be achieved within 24 months of promulgation for existing sources, and upon startup or the promulgation date, whichever is later, for new or reconstructed sources. As provided by section 112(i), an owner or operator may request the Administrator or applicable permitting authority in a State with an approved permit program to grant 1 additional year if necessary to install controls.

For pickling lines and acid regeneration plants, an initial performance test would be required to demonstrate compliance. Sampling locations for all compliance tests would be determined by EPA Method 1 in appendix A to 40 CFR part 60. Stack gas velocity and volumetric flow rate would be determined by EPA Method 2; gas analysis would be conducted according to EPA Reference Methods 3 and 4 in appendix A to 40 CFR part 60. Testing of HCl and Cl_2 emissions would be performed using EPA Method 26A, ''Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method'', in 40 CFR part 60, appendix A. If testing is conducted to demonstrate compliance with a collection efficiency limitation, sampling at the APCD inlet and at the outlet must be simultaneous. An average of three runs of sufficient duration to provide adequate samples for the expected concentration would be used to determine compliance. The owner or operator also would establish limiting values for control device operating parameters and regeneration process operating conditions based on the values measured during this test.

The installation of the required ventilation systems for acid storage tanks would be confirmed to the satisfaction of the Administrator by means of a visual inspection.

D. Monitoring Requirements

The proposed NESHAP allows two monitoring options for HCl, one option for Cl_2. For HCl, the owner or operator must either: (1) Monitor and record control device operating parameters and perform annual emission tests; or (2) operate a continuous emission monitoring system (CEMS) for the measurement and recording of HCl emissions. If a wet scrubber is used, the control device operating parameters monitored would be the pressure drop across the scrubber and the acidity of the scrubber effluent. The allowable range of values for pressure drop would be either the range of values recorded during multiple performance tests or a value within 1-inch of water column of the average value measured during the three test runs of one compliance test. Acidity would be monitored either by the use of instruments that measure acidity continuously or manual tests made once each shift for each operating day. If a device other than a wet scrubber is used, the owner or operator must monitor parameters appropriate for that device.

Each owner or operator also must develop and implement a written program to ensure the proper operation and maintenance of each emission control device and submit the written program to the applicable permitting authority as part of the operating permit. If a wet scrubber is used, the plan must include the minimum elements contained in the operating manual, e.g., it must: Require the manufacturer's recommended maintenance at the recommended intervals for pumps, scrubber fans and motors, and the exhaust system; require cleaning of the scrubber internals and mist eliminators at sufficient intervals to prevent fouling; and require periodic inspections of each scrubber to identify, repair, or replace specified elements as needed. If another type of control device is used, the owner or operator must develop and submit a similar written plan appropriate for the

device for approval by the applicable permitting authority.

If a defect is found during an inspection, the owner or operator must initiate corrective action procedures to remedy the defect within 1 working day of detection. Failure to perform the inspection as stated in the written maintenance plan or to initiate corrective actions would be a violation of the maintenance requirement.

Operation of the control device with excursions of operating parameters outside the ranges established during the initial performance test requires initiation of corrective action as specified by the maintenance requirement. Failure to initiate the required action is a violation of the maintenance requirements.

If excursions of control device operating parameters occur more often than six times during any 6-month reporting period, the owner or operator is required to install a CEMS and comply with all the requirements applicable to a continuous monitoring system (CMS) that are specified in § 63.8 in subpart A of 40 CFR part 63. For compliance with the exhaust gas concentration requirement, the CEMS shall be employed to monitor the process or control device exhaust gas. For compliance with the collection efficiency requirement, the CEMS shall be employed to monitor the APCD inlet and outlet gas streams. For compliance with the collection efficiency requirement, a single analyzer may be used to monitor both streams, with each stream being monitored 50 percent of the time during each 24-hour period.

For Cl_2, the owner or operator must perform annual emission tests and monitor and record roaster operating conditions. Operating conditions would include process offgas temperature and a measure of excess air fed to the process, the latter of which would consist of a measure of air feed rate, combustion fuel feed rate, and feed rate of iron in the spent liquor or any other acceptable combination of parameters. The operator could establish new allowable operating parameter values by conducting another performance test.

The owner or operator of a pickling facility would be found in violation of the emission limit if an annual performance test or reduced data from the CEMS show that the HCl emission limitation is being exceeded. The owner or operator of an acid regeneration plant would be found in violation of the emission limit if an annual emission test shows that the HCl and/or Cl_2 emission limitation is being exceeded, if reduced data from the CEMS show that the HCl emission limitation is being exceeded, or if the acid plant roaster is operated under conditions outside the values established during the initial performance test.

E. Notification, Recordkeeping, and Reporting Requirements

The owner or operator would be required to submit notifications described in the general provisions (40 CFR part 63, subpart A), which include initial notification of applicability, notifications of performance tests, and notification of compliance status.

As required by the general provisions, the owner or operator would be required to submit a report of performance test results; develop and implement a written startup, shutdown, and malfunction plan and report semiannually any events where the plan was not followed; and submit semiannual reports of excess emissions if any measured emissions are greater than the limits, or if any monitored parameters fall outside the range of values established during the performance test. If excess emissions are reported, a quarterly report would be required until there have been no excess emissions for one year; the owner or operator could then report semiannually unless excess emissions reoccur.

The owner or operator also would be required to maintain records required by the general provisions and records needed to document compliance with the standard. These records would mainly include operating parameter measurements, a copy of the written maintenance plan, and APCD inspection records.

All records must be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records for the most recent 2 years must be retained on site; records for the remaining 3 years may be retained off site but still must be readily available for review. The files may be retained on microfilm, microfiche, on a computer, or on computer or magnetic disks. The owner or operator may report required information on paper or a labeled computer disk using commonly available and compatible computer software.

VI. Summary of Environmental, Energy, and Economic Impacts

A. Facilities Affected by This NESHAP

The proposed standards would apply to all HCl steel pickling facilities and HCl regeneration facilities that are major sources or are part of a major source. The EPA estimates that approximately 80 pickling facilities and all 10 regeneration facilities emit HCl in amounts that are greater than major source levels (i. e., greater than 10 tpy). At least one regeneration facility is a major source for Cl_2.

Sixty-nine pickling facilities control emissions from all lines (119). In the remaining 32 facilities, 90 of 92 lines are uncontrolled. Twelve of the 13 acid regeneration processes are equipped with control systems. Of an estimated 369 storage tanks, about one-third, at 40 pickling and 4 acid regeneration facilities, are equipped with control equipment.

Many of the 69 controlled pickling facilities not already meeting the requirements of the proposed rule could possibly achieve compliance with minor equipment modifications or changes in operating conditions. Of the 32 facilities that would require additional control systems, 17 are batch picklers and 12 are continuous rod and wire picklers.

Many acid regeneration facilities may be able to comply with the proposed NESHAP using existing control equipment and operating procedures. Three plants are known to already meet the proposed standard for HCl, three plants are known to meet the standard for Cl_2. Other plants may already be in compliance or able to comply using only improved operating or maintenance procedures.

All impacts were estimated by determining the effect of the proposed regulation on model plants that were developed to represent the industry rather than estimating the impact on each facility on a case-by-case basis, which was considered impractical. Seventeen model plants were developed to represent the five types of pickling operations and one acid regeneration process. The model plants include small, medium, and large plant size variations (except for continuous tubing pickling, for which only small and large size variations were used) with associated emission control systems.

B. Air Quality Impacts

At current levels of control, nationwide HCl emissions from this source category are estimated to be 9,330 Mg/yr; 6,980 Mg/yr for continuous pickling lines, 1,940 Mg/yr for batch pickling lines, 390 Mg/yr for acid regeneration plants, and 24 Mg/yr from acid storage tanks. Nationwide Cl_2 emissions from acid regeneration plants are estimated to be 35 Mg/yr. Application of the proposed standards would reduce HCl emissions by approximately 8,360 Mg/yr to about 970 Mg/yr from all regulated sources, or about 90 percent, and Cl_2 emissions by

approximately 19 Mg/yr to about 16 Mg/yr, or about 54 percent.

C. Water Quality Impacts

The additional amount of water discharged from wet scrubbers would increase by approximately 460,000 cubic meters per year (m^3/yr) over current levels: 320,000 m^3/yr from continuous pickling processes, 130,000 m^3/yr from batch pickling processes, and 6,000 m^3/yr from acid regeneration plants. The portion of this water that would need to be treated on site prior to discharge is projected to be small because the scrubber discharge water can be, and is in many cases, recycled to the pickling process to provide makeup water and recover the acid values collected by the scrubber. The additional wastewater to be treated would be insignificant compared with the amount of waste pickle liquor generated by pickling operations. Treatment of both waste products can be accomplished by the same procedures.

D. Solid Waste Impacts

The volume of sludge generated by additional control could increase by up to 1,680 Mg/yr: 1,370 Mg/yr from continuous pickling processes, 280 Mg/yr from batch pickling processes, and 30 Mg/yr from acid regeneration plants. The sludge is produced by the treatment of scrubber discharge water. This amount of sludge is insignificant compared with the amount of sludge generated by treatment of waste pickle liquor. Also, the amount of sludge generated would be reduced proportionally by the amount of scrubber discharge water that is recycled to the pickling process, as described above in paragraph C, Water Quality Impacts.

E. Energy Impacts

Additional energy use is expected to result from implementation of the proposed standards. Increases would result from operation of additional ventilation systems and emission control devices. Energy use is expected to increase by about 10.2 million kilowatt hours per year (kWh/yr) over current levels. About 7.1 million additional kWh/yr would be needed for continuous pickling lines, 3.0 million kWh/yr for batch lines, and 140,000 kWh/yr for acid regeneration plants.

F. Cost Impacts

Nationwide capital costs of the proposed standards are estimated at $20 million with annual costs for operation and maintenance of about $7.1 million. Capital cost estimates include costs for purchasing new emission control devices (assumed to be scrubbers) for uncontrolled lines, upgrading existing scrubbers (assumed to be 40 percent of the cost of a new unit), and installing vent piping from acid storage tanks to the pickling line control device. Annual costs for these facilities are based on costs calculated for the model plants. Estimates of annual costs for facilities with existing controls include improved maintenance consisting of operating labor, shift supervision, materials, and overhead for each emission source based on the type and size of model plant. Annual costs were also added for upgrading existing scrubbers and for new control devices (assuming scrubbers), the costs for increased pressure drop, solids (sludge) disposal, wastewater treatment costs, and additional energy requirements.

Cost-to-sales ratios and percent increase in the cost of production statistics were estimated in order to determine the level of impact this regulation will have on steel pickling facilities and steel producers that conduct pickling activities. The analysis was completed on a national basis and for all 17 model plants. In addition, the ratios were evaluated on two alternative bases. The first utilizes all facilities in the industry to estimate the control cost per ton of steel produced. The second estimates the cost of control using only those facilities that will be required to install controls. The control costs were compared to the market price per ton of the relevant type of steel for each model plant to compute cost-to-sales ratios for each model plant. An average market price for steel was used to compute the national average ratio. Cost of production was estimated to be 93 percent of market price.

Nationally, the control costs for the steel pickling industry are 0.033 percent of sales revenues and represent a 0.035 percent increase in the cost of production. For those facilities that will be required to install controls to meet the MACT standard, the costs represent 0.052 percent of revenues and an increase in the cost of production of 0.056 percent. The costs for individual model plants vary from a low of 0.011 to a high of 0.79 percent increase in the cost of production and from 0.010 to 0.73 percent of revenues for all facilities in the industry. The costs range from 0.023 to 1.15 percent increase in the cost of production and from 0.021 to 1.07 percent of sales for the individual facilities required to install emission controls and incur costs.

The cost-to-sales ratios and percent increase in the cost of production are well below 1 percent for the industry as a whole and for the portion of the industry required to incur control costs as a result of this regulation. The costs on a model plant basis approximate or are less than a 1 percent increase in the cost of production and are an equivalent percent of sales for all model plants. The magnitude of the costs relative to production cost of the industry and sales revenues leads to a conclusion that this standard will not significantly adversely impact firms in the steel pickling industry. The results also indicate that a more sophisticated economic impact analysis is not required. No plant closures are anticipated nor are significant employment losses. Significant regional impacts are also not expected.

Costs for model pickling and acid regeneration facilities and acid storage tanks are given in the background information document, along with additional information on the model plant parameters.

G. Economic Impacts

Estimated annual costs of emission control for pickling steel would range from approximately $0.10 per ton of steel processed for large operations to $8.00 per ton of steel for facilities with low production rates. For producers of hot-rolled products, the estimated contribution of pickling and coiling to total steel production costs in 1992 was $7.27 per ton, or 2.3 percent of the total production cost. Based on these values, the cost of adding emission control systems can be proportionally higher for small producers and of comparable magnitude to the cost of pickling, but would still be small compared with the total cost of the steel product. The economic impact of the proposed rule on the industry as a whole is projected to be minor.

VII. Rationale for Selecting the Proposed Standards

This section describes the rationale for the decision made by the Administrator in selecting the proposed standards.

A. Selection of Source Category and Pollutants

Steel pickling facilities emit HCl, and acid regeneration facilities emit HCl and Cl_2. Both HCl and Cl_2 are among the HAP listed in section 112(b) of the Act.

In the most common type of continuous coil process used for steel strip, individual coils are welded end-to-end and continuously run through a series of, typically, three to four horizontal pickling tanks. Virgin or regenerated acid is added near the end where the strip exits; the pickling solution then cascades over weirs

toward the strip entry, countercurrent to the motion of the strip. The pickling liquor is typically maintained at 170 to 200°F by live steam injection or by internal or external heat exchange. The pickling section of a line may be up to 400 feet long. Following pickling, the material is rinsed with fresh water in another series of tanks to remove residual acid liquor. The rinsed material is then dried with heated air.

Hydrochloric acid is emitted as HCl gas by evaporation from the surface of the acid bath in the pickling tanks. Emissions may be substantial because of the high vapor pressure of HCl at high concentrations and temperatures. Also, mist of HCl in water can be produced by mechanical action such as agitation of the bath by steam sparging and movement of the steel through the bath.

A second, less common, type of continuous operation uses a vertical spray tower in which pickle liquor is sprayed onto moving strip in multiple vertical passes in an enclosed tower. Spray rinsing with fresh water follows. Currently, a total of three units are in operation in the country. Emissions are of a form similar to those from horizontal tanks, and emission control requirements are virtually the same.

Push-pull lines are physically similar to continuous lines. In this process, each coil is threaded through the pickling tanks separately. Push-pull lines are generally shorter than continuous lines because the speed is usually slower. The pickle liquor usually is maintained at 180°F or higher by external heat exchangers. Emissions are the same as those produced by continuous coil lines.

Continuous rod/wire and tubing lines are similar to but smaller than continuous strip lines. Emissions are of the same form as those from continuous coil and push-pull lines.

In batch lines, rod or wire in coils, pipe, and metal parts are dipped into the pickling tank until the scale is dissolved. When pickling is completed, the material is lifted from the bath, allowed to drain, and rinsed by spraying or by immersion in one or more rinse tanks. To reduce emissions, particularly from draining, batch pickling temperatures are usually lower, typically 100 to 105°F, than for continuous operations. Emissions from batch lines are produced in the same way as those from continuous lines and also from acid that is entrained in the steel removed from the bath, most of which subsequently flows or drips back into the bath.

Of the 13 acid regeneration plants identified at ten facilities, twelve are spray roaster designs; the other plant is a fluidized bed roaster. In the spray roasting process, waste pickle liquor is fed into a venturi evaporator where it is mixed with hot gas from the spray roaster. The liquor cools and cleans the gas of carryover iron oxide particles, while the gas evaporates some of the water and HCl in the liquor. Concentrated pickle liquor from the evaporator is fed to the roaster, in which the liquor is evaporated by hot gas fed to the chamber at about 1,200°C. The ferrous chloride reacts with oxygen and water vapor to form ferric oxide and HCl. The gases are drawn into the absorber, where the contained water and acid are condensed and combined with blowdown from the wet scrubber to form an acid solution containing 16 to 20 percent HCl. Exhaust from the absorber is usually drawn through a wet scrubber, which also acts as a final recovery system for HCl, provided that water without chemical additives is used as the scrubbing medium.

Equipment for the fluidized bed roasting process is similar, and emission control requirements are virtually the same as those for the spray roasting process.

Emissions of HCl that are not collected by the absorber or the wet scrubber are released from both types of regeneration plants.

Acid regeneration plants also emit Cl_2. Formation of Cl_2 increases as the operating temperature in the roaster decreases and as excess air increases. These processes are normally operated with sufficient excess air to insure that conversion to ferric iron is complete.

Acid storage tanks are present at nearly all facilities to contain the acid needed for pickling operations and the acid solution produced by the regeneration plants. These storage tanks are typically totally enclosed, except for loading and unloading of acid, with emissions from the atmospheric vent commonly routed to the pickling or acid plant emission control device or to a dedicated control device. Emissions from tanks in the form of HCl gas and acid mist are released from uncontrolled vents, especially during filling.

Emission tests at six continuous horizontal, one continuous vertical, and two push-pull steel pickling facilities and one acid regeneration facility showed that without controls, all of these facilities were major sources for HCl and the acid plant was a major source for Cl_2. With existing controls, one of the continuous horizontal pickling facilities was still a major source for HCl and the acid plant was still a major source for both HCl and Cl_2.

In order to assess emissions from other types of pickling operations, the EPA used an air emissions model for predicting HCl emission rates from open surface baths. This model, submitted to the EPA by a private engineering company that is experienced in the design and evaluation of emission control systems for steel pickling operations, takes into account the essential factors that affect emissions, including temperature, HCl concentration, concentration of dissolved ferrous chlorine, and air velocity across the tank surface. Application of this model showed that without controls, pickling operations of all five types can emit more than 10 tpy of HCl.

In view of the above findings, the EPA has determined that the source category includes all five types of pickling operations and also acid regeneration plants and that pickling operations are subject to regulation for emissions of HCl and acid plants for emissions of HCl and Cl_2, two of the HAP listed in section 112 of the Act. The standards being proposed would apply to all new and existing steel pickling lines that use the HCl process and all new and existing HCl regeneration plants.

The emission, equipment, and work practice standards being proposed would substantially limit emissions of HCl from the above sources. Lesser reductions of Cl_2 emissions from acid regeneration facilities would be achieved. The standards address HCl and Cl_2 directly rather than surrogates.

B. Selection of Affected Sources

The proposed standards apply to three types of emission sources at steel pickling and acid regeneration facilities: (1) Continuous and batch pickling lines using HCl as the pickling acid, (2) HCl regeneration plants, and (3) acid storage tank sources.

Affected process sources include all acid tanks employed in HCl pickling lines and all acid regeneration plants. In order to prevent acid fumes from invading the working environment, most pickling tanks are equipped with close fitting, overhead, push-pull, or side draft hoods exhausted through induced draft fans. Emissions from these tanks are found in the process exhaust gases that are discharged to the atmosphere. Standards are therefore being proposed to limit emissions of HCl from pickling tank exhaust gas vents.

Acid regeneration plant emissions are contained in the gases exhausted from the acid recovery or absorber unit. The proposed standards would limit HCl and Cl_2 emissions from absorber exhaust gases.

Fumes from the vents of acid storage tanks that are open to the atmosphere contain emissions of HCl. Acid storage tank vents were therefore selected for regulation. The proposed regulation would limit emissions of HCl from storage tanks by requiring that the tank atmospheric vents be equipped with APCDs and that any lines or vents used for transport of acid into or out of the tanks be enclosed or equipped with a local ventilation system exhausted through an APCD.

A fourth source considered for regulation was waste and wastewater treatment operations. The spent pickle liquor is typically managed by on site pretreatment and discharge to a publicly owned treatment works (POTW) or removal by waste disposal contractors. Available data indicate that wastewater treatment emissions are not significant because the low vapor pressure of HCl inhibits volatilization. For example, at 86°F the vapor pressure of HCl over a solution containing 4 percent HCl in water is below 0.0008 millimeters of mercury.[3]

C. Selection of Basis and Level for the Proposed Standards for Existing and New Sources

1. Background

As described previously in the NESHAP decision process discussion, section 112 establishes a minimum baseline, or ''floor'', for standards. For new sources, the standards cannot be less stringent than the emission control achieved in practice by the best controlled similar source. The standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best performing 12 percent of existing sources for categories and subcategories with 30 or more sources or the best performing five sources for categories or subcategories with fewer than 30 sources.

When setting standards above the floor, the EPA may distinguish among classes, types, and sizes of sources within a category or subcategory. Furthermore, consideration must be given to the incremental impacts on emission reduction, cost, economics, energy, and other environmental concerns. The objective is to achieve the maximum degree of emissions reduction without unreasonable adverse impacts.

Subcategorization within a source category is considered only when there is enough evidence to demonstrate clearly that sources contained in the source category are significantly dissimilar. The criteria to consider include process operations (including differences between continuous and batch operations), emission characteristics, control device applicability and costs, safety, and opportunities for pollution prevention.

Steel pickling processes are differentiated by the form of metal treated and the configuration and operating cycle of the process. The different types of continuous processes vary little except in size and ancillary equipment. Batch operations differ significantly from continuous operations in three ways: (1) The physical arrangement of the unit must allow the steel to be placed into and withdrawn from the top instead of the ends of the tank, (2) emissions may vary substantially between the immersion and draining phases of the operation, and (3) emission capture requirements are different for the two types of operations.

Pickling tanks for all types of continuous lines are typically equipped with lids or close fitting hoods. Emission capture systems for batch pickling tanks may consist of two separate units: A push-pull ventilation system to capture fumes from the tank surface, and a side draft hood to capture fumes from steel that is suspended above the tank to drain. Although some batch picklers use canopy hoods, at least 15 of the 26 batch facilities employ side draft hoods. Emissions ventilated through these hoods vary substantially because the drain phase occurs for only a portion of the pickling cycle. Because of the different emission characteristics, the EPA proposes to regulate continuous/semicontinuous pickling lines and batch pickling lines as separate subcategories.

The EPA also examined the processes, the process operations, and other factors to determine if separate classes of units, operations, or other criteria have an effect on air emissions. Acid emission rates are affected by tank size, acid concentration and temperature, iron concentration, ventilation system, gas flow rate, bath temperature control method, and degree of agitation in the tank. The performance requirements for an emission control system may be affected by these process variables. A qualitative review of the data revealed that processes that employ steam sparging for bath temperature control tended to produce more HCl emissions than processes employing heat exchange, but no differences in control device requirements or control efficiencies could be attributed to differences in temperature control method. No effect of other process variables on control device requirements or control efficiency could be identified. The EPA therefore did not identify separate subcategories of sources based on process variables.

2. Selection of MACT

The EPA has taken alternative approaches to establishing MACT floor conditions for new and existing sources depending on the type, quality, and applicability of available data. The three approaches most commonly examined include reliance on: (1) Information on State regulations and/or permit limitations, (2) source test data that characterize actual emissions discharged by sources, and (3) use of a technology floor and an accompanying demonstrated achievable emission level that accounts for process and air pollution control device variability.

No Federal air emission standards currently apply to steel pickling or acid regeneration sources. Four states have established emission limits for HCl, which range from 0.73 to 3 pounds per hour of HCl. At least 18 states and territories have established ambient air limits for HCl; these limits are values for allowable concentrations of HCl outside the facility boundaries or in adjacent neighborhoods downwind from the source.[4] These limits vary widely. For example, one-hour exposure limits range from 75 to 2,000 $\mu g/m^3$, and 24-hour limits range from 2.03 to 700 $\mu g/m^3$. Similarly, at least 18 states and territories have established ambient air limits for Cl_2.[5] One-hour exposure limits range from 29 to 69 $\mu g/m^3$, and 24-hour limits range from 3.6 to 75 $\mu g/m^3$. These standards cannot be directly related to the requirements of this rule.

Applicable test data to characterize actual emissions from pickling lines are available for only 10 of the 152 continuous pickling lines and none of the 59 batch pickling lines. These data points are too few to establish 12 percent MACT floors for pickling lines; 18 points would be required for continuous lines and seven points for batch lines.

By comparison with the limited utility of state regulations and source test data, a substantial body of information is available on the types, configurations, and operating conditions of air pollution control devices applied across the industry. This information was collected through the

[3] Perry, R.H., D.W. Green, and J.O. Maloney, eds. Chemical Engineers' Manual. 6th ed. McGraw-Hill. New York. 1984. p. 3–64.

[4] World-Wide Limits for Toxic and Hazardous Chemicals in Air, Water, and Soil. M. Sittig. Noyes Publications. Park Ridge, NJ. 1994. pp. 425–426.

[5] Reference 4. pp. 178–179.

comprehensive survey by the EPA of known HCl steel pickling facilities that was conducted in 1992 through the information collection request (ICR), which was approved by the Office of Management and Budget for NESHAP information gathering. This survey produced substantial information on the design and operation of emission control equipment but little information on actual emissions. The EPA therefore used the technology floor approach to establishing MACT for pickling lines.

For acid regeneration plants, sufficient source test data are available to pursue an actual emissions approach for determining MACT floors. Only five data points would be required to establish the floor for acid regeneration plants because there are fewer than 30 plants in this subcategory. Enough data were available to construct average or median emission values for both HCl and Cl_2.

Continuous pickling lines. Wet scrubbers are the only kind of device known to control HCl emissions from pickling lines of all types. MACT for continuous pickling lines is therefore wet scrubbing. The two variations of scrubbers employed are packed bed and sieve tray.

Data from the ICR responses show that emissions from 107 of 152 continuous pickling lines are controlled, including 60 of 64 continuous coil, all 22 push-pull coil, 19 of 55 rod/wire, and five of 11 tubing picklers. Twenty-five lines are controlled with sieve tray scrubbers, 41 with vertical packed bed scrubbers, 16 with horizontal packed bed scrubbers, 14 with packed bed scrubbers of unidentified configuration, eight with scrubbers in series, and three with unidentified types of systems.

The use of a droplet eliminator (DE) in conjunction with a wet scrubber is considered standard practice, and mesh pad or chevron (vane) type DEs were identified in 13 control systems; they are assumed to be employed in the majority of systems. Data were available to determine the effectiveness of vertical packed bed and sieve tray scrubbers in combination with both types of DEs. No distinction could be made in the effectiveness of the mesh pad and chevron devices. Both types are therefore considered to be equally effective.

The effectiveness of a scrubber may depend on the collection medium used. The medium used in pickling line scrubbers is either unneutralized water from plant or public sources or water to which an alkaline substance has been added. Most of the wet scrubbers employed to control pickling emissions use water as the collection medium, but alkaline solution is used in some units. In principle, the use of alkaline solution could result in increases of HCl removal efficiency by reducing the vapor pressure of HCl in equilibrium with the scrubbing solution. In practice, however, increased efficiencies were not observed for pickling process scrubbing systems that could be attributed solely to the use of alkaline medium. Also, the equilibrium vapor pressure of HCl for weak hydrochloric acid solutions is inherently very low. The EPA concludes that use of an alkaline collection medium does not constitute a more effective level of control than the use of water for this application.

The characteristics of the scrubbers constituting the existing source and new source levels of control were determined by evaluating the results of emission tests conducted on units currently employed in the industry. Ten valid sets of emission test data on scrubbers applied to representative continuous strip and push-pull strip pickling lines were collected. All tests were conducted on sieve tray and vertical packed bed scrubbers. Fundamental design measures of performance for units of these types include the number of trays in sieve tray scrubbers and the depth of the packing in packed bed scrubbers.

The data from these tests are presented and discussed in detail in the background information document. The data are from four source tests conducted by the EPA and six tests conducted by industry. All data sets consist of results from sampling runs conducted under conditions representing normal scrubber and pickling line operations, and all data sets include simultaneous inlet and outlet measurements.

Six tests include a minimum of three sampling runs each, three tests include two runs each, and one test consists of one run. Of the six tests that include three or more sampling runs each, two were conducted on sieve tray scrubbers with six and three plates, respectively, and four were conducted on vertical packed bed scrubbers that contained packing ranging from 5 to 10 feet in depth. One sieve tray unit was equipped with a mesh pad DE, the other with a chevron DE. Two packed bed units were equipped with mesh pad DEs, two with chevron or vane DEs. Thus, all four combinations of scrubber and DE type are represented in these six tests. Of the three tests that included two sampling runs each, all were conducted on vertical packed bed scrubbers with mesh pad DEs. The test with one sampling run was conducted on a five-plate sieve tray scrubber equipped with a chevron DE.

Of the remaining lines using the same types of devices, at least 10 employ sieve tray scrubbers with a number of trays in the range of those tested (3 to 6) and 15 employ vertical packed bed units with packing depth in the same range as those tested (5 to 10 feet). Thus, on these design criteria, the control devices tested represent those employed by at least 35 lines. No scrubber designs employed in this source category have been demonstrated to be more effective than these. The EPA therefore assumes that the best controlled 12 percent (18 lines) are found in this group of 35.

All tests were conducted using either EPA Method 26A in appendix A to 40 CFR part 60 or a method equally valid for this application. Field evaluations indicate that Method 26A is an acceptable procedure for measuring HCl from municipal waste combustors at levels as low as 3 ppmv.[6] The EPA considers the method to be equally valid for measuring emissions from pickling and acid regeneration sources. Emission reduction efficiency values on the above tests were adjusted on the premise that measured outlet HCl concentrations below 3 ppmv may not be accurate enough to determine numerical emission standards. Reported outlet concentrations of less than 3 ppmv were assumed to be 3 ppmv for purposes of calculating reduction efficiencies and determining the numerical emission limits.

Reduction efficiencies for HCl for the ten scrubbers range from 99.9 to 92.7 percent; HCl outlet concentrations range from 3.0 to 92 ppmv.

The best controlled lines are two lines that achieve both 99 percent or greater HCl collection efficiencies and 3 ppmv or lower HCl outlet concentrations. One line is served by a six-plate sieve tray scrubber and one by a packed bed scrubber. These control devices are the most effective devices demonstrated in this application and therefore constitute the new source MACT floor for continuous pickling operations.

For the remaining eight scrubbers, neither sieve tray nor vertical packed bed units as groups were superior to the other type of device. The existing source MACT floor therefore is sieve tray scrubbers with 3 to 5 trays and vertical packed bed scrubbers with 5 to 10 feet of packing.

[6] Laboratory and Field Evaluation of a Methodology of Determination of Hydrogen Chloride Emissions from Municipal and Hazardous Waste Incinerators. U.S. Environmental Protection Agency. Office of Research and Development. Atmospheric Research and Exposure Assessment Laboratory. EPA–600/3–89–064. 1989.

The EPA is required to consider levels of control more stringent than the floor level if such levels exist. No higher level of control exists for new sources than the level proposed. For existing sources, the new source level of control is more stringent and therefore was considered. As discussed below in section VII.E of this document, ''Selection of Emission Limits'', the proposed emission limits for existing source MACT are 97.5 percent minimum HCl reduction efficiency or 10 ppmv maximum HCl outlet concentration. According to a cost analysis, the additional cost of controls to reduce emission levels from either an outlet concentration of 10 to 3 ppmv HCl or increase reduction efficiencies from 97.5 to 99 percent is estimated to be $20.7 million for capital costs and $3.0 million for annual costs. The associated emission reduction is estimated to be 450 Mg/yr. The cost effectiveness is therefore $46,000 per Mg of HCl reduction for capital cost, $6,700 per Mg for annual cost. The EPA considers this burden to be excessive and therefore is not proposing the higher level of control for existing sources. By comparison, the cost effectiveness of the proposed rule is $2,400 per Mg of HCl reduction for capital cost and $850 per Mg of reduction for annual cost for pickling lines and acid regeneration units combined.

Batch pickling lines. According to data from the ICR responses, only 14 of the 59 batch pickling lines are controlled, although 36 lines are equipped with local ventilation. As with continuous picklers, wet scrubbers are the only type of control device identified. MACT for batch pickling lines is therefore wet scrubbing. Nine lines employ vertical packed bed scrubbers, two employ horizontal packed bed units, and two employ wet scrubbers of unknown types.

No valid test data are available for batch operations. The MACT floor must therefore be determined by an assessment of scrubbers of these types in similar applications, e. g., continuous pickling lines. Of the vertical packed bed systems employed, at least five scrubbers have packing depths equal to or greater than those found in continuous pickling line scrubbers (5 to 10 feet) and would be expected to perform as well as those units. The use of DEs will be inferred by the fact that they are standard equipment in similar types of applications. The existing source MACT floor technology therefore includes packed bed scrubbers of the same capability as the packed bed scrubbers in the existing source MACT floor technology for continuous pickling lines. The expected level of performance is assumed to be the same as that for existing continuous lines. The EPA therefore believes that selection of the same existing source MACT floor for batch pickling lines as for continuous lines is justified.

Unlike continuous pickling, data are not available on batch pickling to allow differentiation in terms of scrubber performance. No distinction could be made among the scrubbers constituting the existing source MACT floor. Consequently, the new source MACT floor is the same as the existing source MACT floor for this subcategory of sources.

The EPA considered one higher level of control than the MACT floor, namely the level of control for new continuous pickling sources, for application to both existing and new batch pickling sources. According to a cost analysis, the additional cost of controls for existing batch pickling lines to reduce emission levels of existing sources from either an outlet concentration of 10 to 3 ppmv HCl or increase reduction efficiencies from 97.5 to 99 percent was estimated to be $610,000 for capital costs and $140,000 for annual costs. The associated emission reduction is estimated to be 61 Mg/yr. The cost effectiveness is therefore $10,000 per Mg of HCl reduction for capital cost, $2,300 per Mg for annual cost. This burden is considerably lower than the additional burden required for existing continuous lines to reduce emissions to new source levels instead of existing source levels. The emissions reduction that would be achieved, however, is very low; 61 Mg/yr is less than one percent of the total of 8,360 Mg/yr that would be achieved by implementation of the proposed rule. In view of the minimal gain to be achieved, the EPA proposes that the more stringent level of control not be required for existing batch pickling sources.

The EPA proposes that the new source level of control for continuous pickling lines be required for new source batch pickling lines because the control technologies are virtually identical for both subcategories of sources.

Acid regeneration plants. Ten acid regeneration facilities, eight of which are collocated at pickling facilities, operate 13 regeneration plants. Based on information submitted in ICR responses from all 10 facilities, the following control devices are employed to reduce emissions. Nine plants use single-stage vertical packed bed scrubbers with water as the collection medium. Each scrubber is equipped with a DE and packing that ranges from 6 to 25 feet in depth. Two plants use two-stage vertical packed towers, with water as the collection medium in the first stage and alkaline solution in the second stage. One plant uses two-stage packed tower absorption, which is similar to single stage absorption followed by a stage of scrubbing; the second absorber is followed by a venturi scrubber that uses alkaline solution. The thirteenth plant is uncontrolled.

Similarly to EPA's technical judgement on the effectiveness of scrubbing with alkaline media versus unneutralized water for HCl control on pickling lines, the EPA does not believe that the use of alkaline media in scrubbers necessarily enhances control over the use of unneutralized water for HCl control on acid regeneration plants, even though the use of alkaline media does enhance Cl_2 control. Consequently, any improvement in HCl control by the control systems that employ dual stages of absorption or scrubbing plus use of an alkaline medium is due in EPA's opinion to the existence of multiple stages rather than the use of alkaline media.

Because the source category includes fewer than 30 acid regeneration plants, the MACT floor for existing sources is determined by the average emission limitation achieved by the best controlled five plants.

HCl collection efficiency data were available for only one plant. Collection efficiency could therefore not be used as a basis for determining MACT. By comparison, scrubber outlet concentration data were available for five plants; this information was used to determine the MACT floors for new and existing sources.

Measured scrubber outlet concentration values are 0.9, 1.0, 3.1, 16, and 137 ppmv HCl. The 137 ppmv value is far out of line with the other values and is considered to be the result of a malfunction in the acid regeneration plant, specifically inefficient absorber operation. This value is therefore not included in any determinations.

Referring to the limitation of the test method employed discussed previously in this section, concentration values below 3 ppmv cannot be measured with assurance. Measured values of less than 3 ppmv are assumed to be 3 ppmv for the purpose of determining MACT and the numerical emission limit. The outlet concentration values used were therefore 3, 3, 3.1, and 16 ppmv HCl.

New source MACT for HCl control is based on the lowest exhaust gas concentration achieved in practice by the best similar source or sources. Three plants currently achieve measured HCl

concentrations of 3.1 ppmv or lower and constitute MACT. These plants employ two-stage scrubbing with vertical packed bed scrubbers or two-stage absorption followed by a venturi scrubber. Consequently, the floor and MACT for new sources is the level of control demonstrated by two-stage scrubbing or two-stage absorption.

If the MACT floor for existing sources is to be determined by the median of the concentrations achieved by the best 5 controlled plants, the value will be 3 ppmv (3.1 ppmv rounded off). If the floor is to be determined by the average of the concentrations achieved by the best 5 controlled plants, a fifth value will have to be assumed. The assumed value would be 16 ppmv because it cannot be determined that any of the other 8 plants employing single-stage scrubbing performs at either a higher or lower level than the plant for which information is available. The average of 3, 3, 3.1, 16, and 16 ppmv is 8 ppmv.

In choosing between using the average or the median concentration to determine the MACT floor, the EPA considered the capabilities of the control technology currently in use and also the relative costs and benefits of the two options. As described above, three plants have been shown to achieve the 3 ppmv HCl median value. These include two plants that employ two-stage scrubbing with vertical packed bed scrubbers and a third plant that employs two-stage absorption and single-stage scrubbing with a venturi scrubber. Nine of the twelve plants that are controlled, however, employ single-stage scrubbing, which has not been demonstrated to be capable of achieving the 3 ppmv level of control. Also, according to a cost analysis that is presented later in this section, the incremental annual cost of increasing control from 8 ppmv to 3 ppmv is $7,600 per Mg of HCl reduction, which EPA considers to be excessive. Based on these considerations, the EPA is proposing to use the average level of control, 8 ppmv HCl outlet concentration, to determine the existing source MACT floor. Although no single-stage scrubber employed in an acid regeneration plant has been demonstrated to meet this level of control, it would be more achievable than 3 ppmv. Also, the existing source level of control proposed for pickling lines is a similar value, 10 ppmv, and the scrubbers used to control pickling lines are mainly single-stage units.

MACT for chlorine emission control was determined from the best five controlled plants for Cl_2. Collection efficiency data were too limited to be used. Data were available from three plants; two were the plants that use two-stage scrubbing with alkaline media in the second stages, and the third was a plant that uses single-stage water scrubbing. Chlorine reduction was virtually nil from the latter plant because water does not absorb Cl_2 effectively. The secondary scrubbers using alkaline solution reduce Cl_2 emissions from 5.1 to 2.1 ppmv and from 7.8 to 0.27 ppmv. Respective Cl_2 collection efficiencies are 53 and 94 percent, a wide variation for two identical units operated with the same goal. The EPA consequently believes that neither MACT nor a numerical emission limit for Cl_2 can be determined from collection efficiency data.

Outlet Cl_2 concentration data were available from four plants. Measured values are 0.3, 2.1, 3.3, and 60 ppmv. As discussed previously in this section, EPA Method 26A in appendix A to 40 CFR part 60 is considered acceptable for HCl concentrations as low as 3 ppmv. Although no lower limit is given for Cl_2, the EPA believes that the limit would be similar to that for HCl considering the details of the test method. Consequently, the actual Cl_2 outlet concentrations are taken to be 3, 3, 3.3, and 60 ppmv.

The 60 ppmv value appears to be high enough compared with the other values to be considered a result of inefficient operation and therefore was not included in the data used to determine MACT or the numerical limit.

The existing source MACT floor for Cl_2 control was determined from the median level of achievement of the best five performing sources, i. e., the third best controlled source. Because the best performing three plants have virtually identical performance, all three technologies constitute MACT. Two of these plants are those that employ two-stage scrubbing with caustic media in the second stages. The third plant uses only single-stage scrubbing with water. The latter facility, however, controls Cl_2 emissions through control of process operating conditions. The existing source MACT floor for Cl_2 control therefore is scrubbing with an alkaline medium or control of plant operating conditions.

Wet scrubbing systems that do not use alkaline solution as the collection medium do not effectively control Cl_2 emissions. Scrubbing with alkaline solution, however, has a significant disadvantage in that the scrubber blowdown cannot be recycled to either an acid plant or a pickling process but must be disposed of; thus, alkaline scrubbing creates an additional waste product.

By comparison, control of process conditions does not create a waste product nor require a control device. Formation of Cl_2 in acid regeneration can be reduced by increasing the operating temperature and decreasing the amount of the excess oxygen in the roaster.[7] These processes are normally operated with sufficient excess air to insure that conversion of ferrous iron to ferric iron is complete. At least one facility, however, operates under conditions that are chosen to reduce Cl_2 formation. The EPA therefore believes that regeneration plants can be operated to minimize Cl_2 formation while maintaining product quality. The facility that operates with a specific goal of reducing Cl_2 formation has measured a Cl_2 concentration of 3.3 ppmv in the process offgas. As discussed above, the facility operating two regeneration plants has measured Cl_2 concentrations in the process offgases prior to alkaline scrubbing of 5.1 and 7.8 ppmv, which are of the same order as 3.3 ppmv. The EPA believes that controlling process operating conditions can result in reducing Cl_2 formation to a demonstrated concentration level and therefore proposes that control of process operating conditions be included in the MACT floor for reducing Cl_2 emissions from acid regeneration plants. Because of the limited data available to support this conclusion, the EPA solicits comment on this selection of MACT.

New source MACT for Cl_2 control is determined by the single best performing plant. The outlet concentration values of 3, 3, and 3.3 ppmv are virtually identical, and therefore the best performing plant could be any one of the best three. The new source MACT floor for Cl_2 control is therefore the technology used by all three plants, i.e., the same as the existing source MACT floor.

As in the case of the standard for pickling lines, the EPA considered levels of control more stringent than the MACT floor. For HCl control, no higher level of control exists for new sources than the level proposed. For existing sources, the new source level of control is more stringent and therefore was considered. The additional cost of controls to reduce outlet concentrations from 8 to 3 ppmv HCl is estimated to be $2.9 million for capital costs and $1.0 for annual costs. The associated

[7] Chlorine Control of Pickling Acid Regeneration Plants. E. Th. Herpers, B. Schweinsberg, N. Ozer, and J. Bozcar. International Chemical Engineering Symposium Series No. 57. pp. BB1–BB14. Available from University of California, Los Angeles, PSTL/ Interlibrary Loans, 8251 Boelter Hall, Los Angeles, CA 90024–1598.

emission reduction is estimated to be 133 tpy. The cost effectiveness is therefore $22,000 per Mg of HCl reduction for capital cost, $7,600 per Mg for annual cost. The EPA considers this burden to be excessive and therefore is not proposing the higher level of control for existing sources.

For Cl_2 control, no higher level of control is known than that proposed, and therefore no higher level could be considered.

Acid storage tanks. Storage tanks typically provide complete enclosure of the acid. Based on data from ICR responses, 40 pickling facilities and four regeneration plants employ emission control systems on tanks used for storage of virgin and regenerated acid. A total of 24 of the 40 pickling facilities and all four regeneration plants vent tank fumes to the scrubbers that service the associated pickling process or acid plant. The control systems at the remaining 16 facilities were not determined to be more or less effective than the pickling process and acid plant control systems at the 24 facilities. The MACT floor for existing acid storage tanks therefore includes covering and sealing all openings on the tank, except during loading and unloading of acid, and routing emissions from the atmospheric vent to a control device. The EPA is not requiring that fumes be vented to the same control device used to service the associated pickling line or acid plant because the tank may be in a remote location; in this case, a separate device may be used.

At least 15 facilities control acid fumes during acid transfer to and from the tanks by either conducting the transfer through sealed lines and connections or providing local ventilation through a control device at the point of transfer. The existing source MACT floor therefore also includes acid transfer fume control through either a sealed connection or use of local ventilation at the transfer point through a control device.

The effectiveness in HCl control of these systems could not be differentiated, and thus no one system that was more effective than the others could be identified. The new source MACT floor is therefore the same as the existing source floor.

D. Selection of Format

Section 112 of the Act requires the Administrator to prescribe emission standards for HAP control unless, in the Administrator's judgement, it is not feasible to prescribe or enforce emission standards. Section 112(h) defines two conditions under which it is not feasible to prescribe or enforce emission standards: (1) If the HAP cannot be emitted through a conveyance device designed and constructed to emit or capture the HAP; and (2) if the application of measurement methodology to a particular class of sources is not practicable because of technological or economic limitations. If it is not feasible to prescribe or enforce emission standards, then the Administrator may instead promulgate equipment, work practice, design, or operational standards, or a combination thereof.

Format options for numerical emission standards or limits include mass concentration (mass per unit volume), volume concentration (volume per unit volume), mass emission rate (mass per unit time), process emission rate (mass per unit of production or other process parameter), and degree or percentage of reduction.

1. Pickling Lines and Acid Regeneration Plants

A mass emission rate for HCl is not proposed for pickling lines because of the large variation in the size of the operations. The EPA did not propose a process emission rate because no correlation between HCl emissions and the amount of steel processed or the amount of acid used has been established. For acid regeneration plants, mass and process emission rates are not proposed for HCl or Cl_2 because too little information is available to establish any applicable relationship.

Wet scrubbers constitute MACT for HCl for pickling lines and acid regeneration plants. Control systems of this type are normally designed for a target emission reduction efficiency for these applications. For these reasons, EPA proposes that a minimum HCl reduction efficiency be established for subcategories where sufficient data are available to establish a numerical limit.

Concentration of a soluble pollutant in the scrubber outlet gas cannot be reduced below the value that corresponds to the equilibrium vapor pressure of the pollutant in contact with the inlet scrubbing medium. Furthermore, depending on temperature and humidity, some HCl may be present as an aerosol or in water droplets as well as a gas. The effect on control efficiency of the presence of aerosol or droplets is not known. High reduction efficiencies for process gases that contain low concentrations of HCl or HCl in aerosol or droplet form may therefore not be achievable. The EPA therefore proposes that a maximum exhaust gas concentration be established as an alternative to reduction efficiency in recognition of these limitations of MACT.

As discussed previously in section VII.C of this document, ''Selection of Basis and Level for the Proposed Standards for Existing and New Sources'', technical information on acid regeneration processes plus measured Cl_2 exhaust gas concentration values for three plants suggest that these processes can be operated under conditions that achieve a target outlet gas concentration of Cl_2.

Based on the above considerations, the EPA is proposing: (1) The options of meeting either an HCl reduction efficiency limit for APCD performance or an HCl exhaust gas concentration limit for pickling lines; and (2) meeting an HCl exhaust gas concentration limit for acid regeneration plants. The EPA is also proposing a Cl_2 exhaust gas concentration limit for acid regeneration plants.

2. Acid Storage Tanks

An equipment standard is proposed for acid storage tanks because emission measurements may be neither practicable nor cost-effective. Also, if the air pollution control system that services the associated pickling process or acid regeneration unit is used to control tank emissions, the need for making a separate measurement is precluded.

E. Selection of Emission Limits

1. Continuous Pickling Lines

Several types of information were available to determine the proposed emission limits for HCl:

(1) Emission tests conducted by a method valid for this source; (2) emissions data derived by other means; (3) emissions data reported by the facility with no basis given; and (4) information from vendors and designers that would indicate an expected level of performance. For purposes of this discussion, the term ''valid'' means data from tests conducted by EPA Method 26A, ''Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method'' in appendix A to 40 CFR part 60, or an applicable equivalent method. The EPA decided to use only data from tests conducted by valid methods.

In selecting the emission limits for pickling line sources, the EPA decided to select limits that could demonstrably be met by a compliance test, i. e., a test conducted using EPA Method 26A (40 CFR part 60, appendix A) with a minimum of three sampling runs. Referring to the discussion in section VII.C above, the two scrubbers

constituting new source MACT are a six-tray scrubber and a packed bed scrubber. The six-tray scrubber was tested with three sampling runs. The average measured HCl outlet concentration was 2.0 ppmv, and the average measured HCl collection efficiency was 99.96 percent. The average scrubber inlet HCl loading for the three runs was 5,150 ppmv, which is the highest of all scrubbers tested. The packed bed scrubber was tested with 11 sampling runs. The average measured HCl outlet concentration was 1.6 ppmv, and the average measured HCl collection efficiency was 99.5 percent. The average scrubber inlet HCl loading was 260 ppmv, which is near the low end of the range for all scrubbers tested (the lowest being 98 ppmv). For the three worst consecutive runs of the eleven, the average measured HCl outlet concentration was 2.6 ppmv, and the average measured HCl collection efficiency was 98.9 percent. Except for one run, all collection efficiencies were above 99 percent, and all measured outlet concentrations were below 2.0 ppmv.

In view of this information, the EPA believes that the proposed numerical limit options of 99 percent HCl collection efficiency and 3 ppmv HCl outlet concentration are reasonable and can be met in compliance tests. Although the measured collection efficiency achieved by the best scrubber is considerably better than 99 percent (i.e., 99.96 percent), the EPA believes that this level of efficiency is achieved primarily because of the exceptionally high inlet scrubber loading. This level of efficiency may not be demonstrable for scrubbers with lower inlet loading, even at the middle of the expected range, because the required outlet concentration would be too low to measure with accuracy.

Four lines currently achieve a 3 ppmv or lower exhaust gas concentration limit and/or a 99 percent or greater reduction efficiency based on actual test results. Twenty-one additional lines would meet the standard based on reported outlet concentrations or reduction efficiencies.

Existing source MACT consists of the level of control that is achieved by the remainder of the scrubbers for which test data are available. Data from three or more runs are available for four of the scrubbers constituting existing source MACT. The averages of the runs were as follows:

HCl collection efficiency (percent)	HCl outlet concentration (ppmv)
98.1	62
97.5	42
97.0	12.7
94.7	8.0

In section VII.D of this document, ''Selection of Format'', EPA presented its rationale for proposing options of collection efficiency or outlet concentration. Because each owner or operator of a pickling facility has two options for meeting the proposed standard, the EPA decided to derive each numerical limits from the best performing scrubbers for that option. For collection efficiency, three scrubbers are clearly the best. The average performance for these three is 97.5 percent efficiency. For outlet concentration, two scrubbers are superior. The average performance for these two is 10 ppmv concentration. The numerical standards proposed for existing sources are therefore 97.5 percent minimum HCl reduction efficiency and 10 ppmv maximum outlet HCl concentration.

Seven continuous pickling lines meet the maximum 10 ppmv exhaust gas concentration standard and/or the minimum 97.5 percent reduction efficiency standard based on actual test results. Fifty additional lines would meet the standard based on reported outlet concentrations of 10 ppmv or lower or reduction efficiencies of 97.5 percent or higher.

2. Batch Pickling Lines

Referring to the discussion above in section VII.C of this document, given that MACT for existing batch lines is the same as MACT for existing continuous lines, the EPA believes that selection of the same emission limits for existing batch pickling lines as for existing continuous lines is justified. The numerical standards proposed for existing sources are 97.5 percent minimum HCl reduction efficiency and 10 ppmv maximum outlet HCl concentration. New source MACT for batch pickling lines is the same as existing source MACT for batch lines. However, as discussed in section VII.C of this document, the EPA is proposing the same level of control for new batch lines as for new continuous lines because the control technologies for the two subcategories of sources are indistinguishable from each other. The numerical standards proposed for new sources are therefore 99 percent minimum HCl reduction efficiency and 3 ppmv maximum outlet concentration.

3. Acid Regeneration Plants

Referring again to the discussion in section VII.C of this document, the proposed HCl outlet concentrations derived in determining the existing source and new source MACT floors were 8 ppmv and 3 ppmv, respectively.

Two plants currently meet the HCl exhaust gas concentration limit of 3 ppmv based on test results. A third plant achieves an outlet concentration of 3.1 ppmv HCl. No additional plants meet the 8 ppmv limit based on actual test results available; one additional plant meets the 8 ppmv limit based on reported outlet concentration.

As discussed in section VII.C of this document, the levels of control achieved by the new and existing MACT floors for Cl_2 control are virtually the same. The proposed maximum outlet concentrations for new and existing sources are therefore the same.

Because only one of the three plants for which Cl_2 emission data are available was tested with three sampling runs, the EPA considered results of individual runs in establishing the Cl_2 numerical limit. Measured values for Cl_2 outlet concentrations from one plant were 1.1, 1.9, and 3.4 ppmv; values measured for the second plant were 0.16 and 0.38 ppmv; and values measured for the third plant were 3.0 and 3.6 ppmv. Because of the limited number of data points, the EPA decided to propose an emission limit of 4 ppmv Cl_2 to accommodate the uncertainty of meeting a lower limit in a compliance test.

Three plants are known to meet the 4 ppmv Cl_2 maximum outlet gas concentration limit based on test results. The EPA notes that one plant that achieves this limit employs single stage scrubbing without the use of alkaline solution; the limit is achieved through process control. No additional plants meet this limit based on reported information.

The EPA is not aware that all existing acid regeneration plants are designed to operate at conditions under which this limitation can be achieved and therefore proposes that a plant can be operated at a higher concentration provided that it can demonstrate that a concentration of 4 ppmv cannot be achieved within the design operating conditions of the unit. Each facility will be allowed to conduct a demonstration test at maximum design operating temperature and minimum excess air consistent with iron oxide production of acceptable quality while measuring Cl_2 concentration in the exhaust gas. The measured concentration will become the standard for that regeneration plant.

As in the case of existing sources, a new source would have the opportunity to conduct a demonstration test at maximum design temperature and minimum excess air to establish a higher concentration limitation. However, a new source would also have to provide a reason why the process could not be designed to operate under conditions that would allow it to meet the 4 ppmv Cl_2 limitation.

F. Selection of Monitoring Requirements

The EPA evaluated the hierarchy of monitoring options available for the HCl pickling process and proposed control equipment. This hierarchy includes measurement of HCl and $C1_2$ by a CEMS, installation of measurement devices for continuous monitoring of process and control device operating parameters, and periodic performance tests. Each option was evaluated relative to its technical feasibility, cost, ease of implementation, and relevance to the process or control device.

CEMSs provide a direct measurement of emissions. Monitors for HCl and $C1_2$ emissions are commercially available. Although these systems have not yet been demonstrated for pickling and acid regeneration operations, the EPA believes that HCl monitors can be used for these applications; the technical feasibility of monitoring $C1_2$, however, is in question. The nationwide capital cost of this option (CEMSs for all scrubbers) is estimated at $18 million, with annual costs of $9.2 million for operation and maintenance, quality assurance and quality control performance evaluation, and reporting/recordkeeping requirements. Because of the high cost of using CEMSs compared with the cost of monitoring control device and process parameters, the EPA is not considering requiring the use of CEMSs to demonstrate compliance.

Another option is monitoring process and/or control device operating parameters plus conducting annual emission tests. Process parameters were not selected as indicators for HCl emissions because a good correlation does not exist between production and emission rates. Control device operating parameters were selected instead because measurements outside a range of values established during an initial performance test would indicate the control device was not operating properly. The estimated nationwide capital costs of this option are $450 thousand; annual costs are $1.5 million.

Annual emission tests by Method 26A in appendix A to 40 CFR part 60 would not require a capital investment. The estimated cost assumes the use of a test contractor and includes time for participation by plant personnel.

The EPA believes that reasonable assurance of compliance is achieved through monitoring control device operating parameters and annual emission tests.

1. Pickling Lines

The proposed NESHAP offers the owner or operator a choice of two monitoring options for HCl. The owner or operator would either install, operate, and calibrate devices for the continuous measurement and recording of scrubber pressure drop and scrubbing medium acidity and conduct annual performance tests by Method 26A in appendix A to 40 CFR part 60 or install and operate a CEMS and comply with all the requirements in the general provisions in subpart A of 40 CFR part 63 that apply to a CMS.

A number of facilities may be able to meet the proposed HCl emission limits if the existing control systems were maintained in improved working order. To ensure continued proper operation of the wet scrubber control devices, the proposed NESHAP includes a requirement for the development and implementation of a written maintenance program. The elements required to be included in the maintenance plan are:

- Perform the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, and exhaust system and scrubber fans and those motors associated with pumps and fans;
- Clean the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling that degrades performance below emission limits or standards;
- Conduct a periodic inspection of each scrubber and (1) clean or replace any plugged spray nozzles or other liquid delivery devices, (2) repair or replace missing, damaged, or misaligned baffles, trays, and other internal components, (3) repair or replace droplet eliminator elements as needed, (4) repair or replace heat exchanger elements used for temperature control of fluids entering or leaving the scrubber, and (5) check damper settings for consistency with the air flow level used to maintain compliance and adjust as required;
- Initiate appropriate repair, replacement, or other corrective action within one working day of detection; and
- Maintain a daily record (i. e., checklist), signed by a responsible plant official, showing the date of each inspection for each requirement, the problem, a description of the repair, replacement, or other action taken, and the date of repair or replacement.

In addition to correcting defects detected during inspections, the owner or operator would be required to ensure that the equipment is being operated at an appropriate level of reliability, i.e. without the need for continual or unusually frequent repairs or alterations that require down time. Excursions of control device operating parameters that occur with unacceptable frequency would indicate that some aspect of the maintenance program or procedures is flawed. Occurrences more frequent than an average of once per month over any reporting period would be unacceptable, and the owner or operator would be required to install a CEMS and comply with all requirements that apply to a CMS, in order to provide assurance of compliance. A frequency of once per month would correspond to operation out of compliance approximately five percent of the operating time, assuming one day of such operation for each occurrence and also assuming that the process will experience some down time each month for routine maintenance.

2. Acid Regeneration Plants

Monitoring requirements for HCl for acid regeneration plants are the same as those for pickling lines.

For Cl_2 monitoring, process parameters were selected to determine compliance with the Cl_2 emission limit for acid regeneration plants because process control is the means by which Cl_2 emissions are reduced. The cost of would be insignificant because these parameters are currently monitored routinely as part of normal operation.

For Cl_2 control, the owner or operator would install (if necessary), operate, and calibrate devices for the continuous measurement and recording of roaster temperature, rate of addition of iron in the spent liquor process feed, combustion gas feed rate, and air or oxygen feed rate.

To ensure proper operation of the acid regeneration plant, development and implementation of a written maintenance program is required. Elements required to be included in the plan are:

- Perform the manufacturer's recommended maintenance at the recommended intervals on all required systems and components;
- Initiate appropriate repair, replacement, or other corrective action within one working day of detection; and

• Maintain a daily record (i.e., checklist), signed by a responsible plant official, showing the date of each inspection for each requirement, the problem, a description of the repair, replacement, or other action taken, and the date of repair or replacement.

In addition to continuously monitoring process operating parameters, the owner or operator would conduct annual performance tests by Method 26A in appendix A to 40 CFR part 60.

G. Selection of Test Methods

The proposed NESHAP would require an initial performance test to determine compliance. The initial test would consist of emission testing of the exhaust gases from the scrubbers used to control HCl emissions from pickling lines and acid regeneration plants.

Test Method 26A in appendix A to 40 CFR part 60 has been developed and validated for the measurement of HCl and Cl_2 emissions. The following methods, also from 40 CFR part 60, appendix A, would be used for sampling and analysis. EPA Method 1 would be used to determine the number and location of sampling points. Method 2 would be used to determine gas velocity and volumetric flow rate. Method 3 would be used for gas analysis, and Method 4 would be used to determine the volumetric moisture content of the gas. The EPA selected these methods for use in the proposed rule because these methods and equivalent procedures are those used by EPA and other parties to collect the data upon which the proposed emission limits are based. Consistent with the methods and standard practice, the initial compliance test would consist of three runs by Method 26A conducted under conditions representative of normal operation. Compliance would be determined based on the average of the three runs. Simultaneous measurements and sampling must be done at the APCD inlet and outlet if compliance with the collection efficiency limitation is being demonstrated.

H. Selection of Notification, Recordkeeping, and Reporting Requirements

The proposed rule requires the owner or operator to comply with the notification, recordkeeping, and reporting requirements in the general provisions in subpart A of 40 CFR part 63.

Recordkeeping requirements for all MACT standards are established in § 63.10(b) of the general provisions in subpart A of 40 CFR part 63. In addition to these requirements, for wet scrubber operations the proposed NESHAP would require the owner or operator to maintain a copy of the scrubber maintenance program with records of inspections and repairs, records of pH or acidity levels taken manually (if applicable), and records of certification for accuracy of monitoring devices (if applicable). For acid regeneration operations, the owner or operator would maintain records of certification for accuracy of monitoring devices. All requirements that apply to a CMS would apply if a CEMS is used.

I. Solicitation of Comments

The EPA seeks full public participation in arriving at its final decisions, and strongly encourages comments on all aspects of this proposal from all interested parties. Full supporting data and detailed analyses should be submitted with comments to allow the EPA to make maximum use of the comments. All comments should be directed to the Air and Radiation Docket and Information Center, Docket No. A–95–43 (see **ADDRESSES**). Comments on this notice must be submitted on or before the date specified in **DATES**.

Commenters wishing to submit proprietary information for consideration should clearly distinguish such information from other comments, and clearly label it ''Confidential Business Information'' (CBI). Submissions containing such proprietary information should be sent directly to the following address, and not to the public docket, to ensure that proprietary information is not inadvertently placed in the docket: Attention: Jim Maysilles, c/o Ms. Melva Toomer, U.S. EPA Confidential Business Information Manager, OAQPS (MD–13); Research Triangle Park, NC 27711. Information covered by such a claim of confidentiality will be disclosed by the EPA only to the extent allowed and by the procedures set forth in 40 CFR part 2. If no claim of confidentiality accompanies the submission when it is received by the EPA, the submission may be made available to the public without further notice to the commenter.

VIII. Administrative Requirements

A. Docket

The docket is an organized and complete file of all the information considered by the EPA in the development of this rulemaking. The docket is a dynamic file because material is added throughout the rulemaking development. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket will serve as the record in the case of judicial review. (See section 307(d)(7)(A) of the Act.)

B. Public Hearing

If a request to speak at a public hearing is received, a public hearing on the proposed standards will be held in accordance with section 307(d)(5) of the Act. Persons wishing to present oral testimony or to inquire as to whether a hearing is to be held should contact EPA (see **ADDRESSES**). To provide an opportunity for all who may wish to speak, oral presentations will be limited to 15 minutes each.

Any member of the public may file a written statement on or before November 17, 1997. Written statements should be addressed to the Air and Radiation Docket and Information Center (see **ADDRESSES**) and refer to Docket No. A–95–43. A verbatim transcript of the hearing and written statements will be placed in the docket and be available for public inspection and copying, or mailed upon request, at the Air and Radiation Docket and Information Center.

C. Executive Order 12866

Under Executive Order 12866 (58 FR 51735, October 4, 1993), the EPA must determine whether the regulatory action is ''significant'' and therefore subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Executive Order defines ''significant regulatory action'' as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is not a ''significant regulatory action'' because none of the

listed criteria apply to this action. Consequently, this action was not submitted to OMB for review under Executive Order 12866.

D. Enhancing the Intergovernmental Partnership Under Executive Order 12875

In compliance with Executive Order 12875, we have involved State regulatory experts in the development of this proposed rule. No tribal governments are believed to be affected by this proposed rule. Although not directly impacted by the rule, State governments will be required to implement the rule by incorporating the rule into permits and enforcing the rule upon delegation. They will collect permit fees that will be used to offset the resources burden of implementing the rule. Comments have been solicited from state partners and have been carefully considered in the rule development process. In addition, all states are encouraged to comment on this proposed rule during the public comment period, and the EPA intends to fully consider these comments in the development of the final rule.

E. Unfunded Mandates Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with ''Federal mandates'' that may result in expenditures by State, local, and tribal governments, in aggregate, or by the private sector, of $100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that this rule does not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. Thus, today's rule is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, the EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's rule is not subject to the requirements of section 203 of the UMRA.

F. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small government jurisdictions.

Only four companies in the steel pickling industry are considered small entities. Of these four, one company is expected to meet the standard. Two companies are projected to be nonmajor sources based on calculations using an emissions estimating model along with information supplied by these firms. It is not anticipated that these three firms will be adversely impacted by the regulation. The remaining small firm employs a scrubber that may meet the emission limitation. If this firm incurs emission control costs, the costs would likely relate to upgrading existing equipment or improved maintenance practices. Any regulatory impacts for this firm are not expected to be significant. Based on this information, the EPA has concluded that this proposed rule would not have a significant economic impact on a substantial number of small entities. Therefore, I certify that this action will not have a significant economic impact on a substantial number of small entities.

G. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to the OMB under the requirements of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* An information collection request (ICR) document has been prepared by EPA (ICR No.1821.01), and a copy may be obtained from Sandy Farmer, OPPE Regulatory Information Division, U.S. Environmental Protection Agency (2137), 401 M Street SW., Washington, DC 20460, or by calling (202) 260–2740.

The proposed information requirements are based on notification, recordkeeping, and reporting requirements in the NESHAP general provisions (40 CFR part 63, subpart A), which are mandatory for all owners or operators subject to national emission standards. These recordkeeping and reporting requirements are specifically authorized by section 114 of the Act (42 U.S.C. 7414). All information submitted to the EPA for which a claim of confidentiality is made is safeguarded according to Agency policies in 40 CFR part 2, subpart B.

The proposed rule would require maintenance inspections of the control devices but would not require any notifications or reports beyond those required by the general provisions. The proposed recordkeeping requirements require only the specific information needed to determine compliance.

The annual monitoring, reporting, and recordkeeping burden for this collection, per respondent (averaged over the first 3 years after the effective date of the rule) is estimated to be 410 labor hours per year at a total annual cost of $14,800.

This estimate includes a one-time performance test and report (with repeat tests where needed); one-time submission of a startup, shutdown, and malfunction plan with semiannual reports for any event when the procedures in the plan were not followed; semiannual excess emission reports; maintenance inspections; notifications; and recordkeeping. There are no capital/startup costs associated with these reporting and recordkeeping requirements. Operational and maintenance (O and M) cost burden is estimated at $13,800/yr. per respondent. These O and M costs are for performance testing, which is anticipated to be conducted by outside contractors.

Burden means the total time, effort, or financial resources expended by persons

to generate, maintain, retain, or disclose, or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purpose of collecting, validating, and verifying information; processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to respond to a collection of information; search existing data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9 and 48 CFR chapter 15.

Comments are requested on the EPA's need for this information, the accuracy of the provided burden estimates, any suggested methods for minimizing respondent burden, including through the use of automated collection techniques. Send comments on the ICR to the Director, OPPE Regulatory Information Division; U.S. Environmental Protection Agency (2137), 401 M Street SW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street NW., Washington, DC 20503, marked ''Attention: Desk Office for EPA.'' Include the ICR number in any correspondence. Because OMB is required to make a decision concerning the ICR between 30 and 60 days after September 18, 1997, comment to OMB is best assured of having its full effect if OMB receives it by October 20, 1997. The final rule will respond to any OMB or public comments on the information collection requirements contained in this proposal.

H. Clean Air Act

In accordance with section 117 of the Act, publication of this proposal was preceded by consultation with appropriate advisory committees, independent experts, and Federal departments and agencies. This regulation will be reviewed 8 years from the date of promulgation. This review will include an assessment of such factors as evaluation of the residual health risks, any overlap with other programs, the existence of alternative methods, enforceability, improvements in emission control technology and health data, and the recordkeeping and reporting requirements.

List of Subjects in 40 CFR Part 63

Environmental protection, Air Pollution Control, Hazardous substances, Reporting and recordkeeping requirements, Steel pickling.

Dated: August 28, 1997.

Carol M. Browner,

Administrator.

For the reasons set out in the preamble, part 63 of title 40, chapter I, of the Code of Federal Regulations is proposed to be amended as follows:

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

2. Part 63 is amended by adding subpart CCC to read as follows:

Subpart CCC—National Emission Standards for Hazardous Air Pollutants From Steel Pickling Facilities—HCl Process

Sec.

Subpart CCC—National Emission Standards for Hazardous Air Pollutants From Steel Pickling Facilities—HCl Process

§ 63.1155 Applicability.

(a) The provisions of this subpart apply to all new and existing steel pickling facilities that pickle steel using an acid solution in which 50 percent or more by weight of the acid in solution is hydrochloric acid (HCl) and/or regenerate spent HCl from steel pickling operations that are major sources or are parts of facilities that are major sources. The provisions of this subpart do not apply to facilities that pickle using other acids or mixtures of acids in which the acid in solution is less than 50 percent HCl by weight or to facilities that regenerate other acids.

(b) For the purposes of implementing this subpart, the affected sources at a steel pickling facility subject to this subpart are as follows: batch and continuous pickling lines, acid regeneration plants, and virgin or regenerated acid storage tanks.

(c) Appendix A to this subpart specifies the provisions of subpart A that apply and those that do not apply to owners and operators of HCl steel pickling facilities and acid regeneration plants. The following sections of part 63 apply to this subpart as stated in subpart A and appendix A to this subpart: § 63.1 (Applicability), § 63.2 (Definitions), § 63.3 (Units and abbreviations), § 63.4 (Prohibited activities and circumvention), § 63.5 (Construction and reconstruction), § 63.7 (Performance testing requirements), § 63.12 (State authority and delegations), § 63.13 (Addresses of State air pollution control agencies and EPA Regional Offices), § 63.14 (Incorporations by reference), and § 63.15 (Availability of information and confidentiality). The following sections of part 63 apply to the extent specified in this subpart and appendix A to this subpart: § 63.6 (Compliance with standards and maintenance requirements), § 63.8 (Monitoring requirements), § 63.9 (Notification requirements), and § 63.10 (Recordkeeping and reporting requirements). Section 63.11 (Control device requirements) does not apply to this subpart.

§ 63.1156 Definitions.

Terms used in this subpart are defined in the Clean Air Act, in subpart A of this part, or in this section as follows:

Acid regeneration plant means the collection of equipment and processes configured to reconstitute fresh hydrochloric acid pickling solution from spent pickle liquor using a thermal treatment process.

Acid storage tank means a vessel used for the bulk containment of virgin or regenerated hydrochloric acid.

Batch pickling line means the collection of equipment and vessels configured for pickling metal in any form but usually in discrete shapes where the material is lowered in batches into a bath of hydrochloric acid solution, allowed to remain until the scale is dissolved, then removed from the solution, drained, and rinsed by spraying or immersion in one or more rinse tanks to remove residual acid.

Closed-vent system means a system that is not open to the atmosphere and that is composed of piping, ductwork,

connections, and flow-inducing devices that transport emissions from a process unit or piece of equipment (e. g., pumps, pressure relief devices, sampling connections, open-ended valves or lines, connectors, and instrumentation systems) to a control device or back into a closed system.

Continuous pickling line means the collection of equipment and vessels configured for pickling metal strip, rod, wire, tube, or pipe that is passed through an acid solution in a continuous or nearly continuous manner and rinsed in another vessel or series of vessels to remove residual acid. This definition includes continuous spray towers.

Spray tower means an enclosed vertical tower in which hydrochloric acid pickling solution is sprayed onto moving steel strip in multiple vertical passes.

Steel pickling means the chemical removal of iron oxides and scale that is formed on steel surfaces during hot rolling or forming of semi-finished steel products through contact with an aqueous solution of hydrochloric acid. This definition does not include operations for the removal of light rust or for activation of the metal surface prior to plating.

Steel pickling facility means any facility that operates one or more batch or continuous steel pickling lines or one or more acid regeneration plants.

§ 63.1157 Emission standards for existing sources.

(a) *Pickling lines.* (1) No owner or operator of an existing affected pickling line at a steel pickling facility shall cause or allow to be discharged into the atmosphere from the affected pickling line a hydrochloric acid (HCl) emission rate corresponding to a collection efficiency of less than 97.5 percent.

(2) As an alternative to the requirement of paragraph (a)(1) of this section, no owner or operator of an existing affected pickling line at a steel pickling facility shall cause or allow to be discharged into the atmosphere from the affected pickling line any gases that contain HCl in excess of 10 parts per million by volume (ppmv).

(b) *Acid regeneration plant.* (1) No owner or operator of an existing affected acid regeneration plant shall cause or allow to be discharged into the atmosphere from the affected acid regeneration plant any gases that contain HCl in excess of 8 ppmv.

(2) In addition to the requirement of paragraph (b)(1) of this section, no owner or operator shall cause or allow to be discharged into the atmosphere from the affected acid regeneration plant any gases that contain chlorine (Cl_2) in excess of either 4 ppmv or an optional maximum concentration limitation to be established for each source. The maximum concentration limitation shall be established according to § 63.1160(c)(2) of this subpart.

(c) *Acid storage tank.* The owner or operator of an existing affected acid storage tank shall provide and operate, except during loading and unloading of acid, a closed-vent system for each tank. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.

§ 63.1158 Emission standards for new or reconstructed sources.

(a) *Pickling line.* (1) No owner or operator of a new or reconstructed affected pickling line at a steel pickling facility shall cause or allow to be discharged into the atmosphere from the affected pickling line an HCl emission rate corresponding to a collection efficiency of less than 99 percent.

(2) As an alternative to the requirement of paragraph (a)(1) of this section, no owner or operator of a new or reconstructed affected pickling line at a steel pickling facility shall cause or allow to be discharged into the atmosphere from the affected pickling line any gases that contain HCl in excess of 3 ppmv.

(b) *Acid regeneration plant.* (1) No owner or operator of a new or reconstructed affected acid regeneration plant shall cause or allow to be discharged into the atmosphere from the affected acid regeneration plant any gases that contain HCl in excess of 3 ppmv.

(2) In addition to the requirement of paragraph (b)(1) of this section, no owner or operator shall cause or allow to be discharged into the atmosphere from the affected acid regeneration plant any gases that contain Cl_2 in excess of either 4 ppmv or an optional maximum concentration limitation to be established for each source. The maximum concentration limitation shall be established according to § 63.1160(c)(2) of this subpart. Also, the owner or operator shall explain in writing to the Administrator's satisfaction why the process could not be designed to operate under conditions that would allow it to meet the 4 ppmv Cl_2 limitation. The explanation shall be submitted to the Administrator within 30 days after completion of the emission test made according to § 63.1160(c) of this subpart.

(c) *Acid storage tank.* The owner or operator of a new or reconstructed affected acid storage tank shall provide and operate, except during loading and unloading of acid, a closed-vent system for each tank. Loading and unloading shall be conducted either through enclosed lines or each point where the acid is exposed to the atmosphere shall be equipped with a local fume capture system, ventilated through an air pollution control device.

§ 63.1159 Compliance dates and maintenance requirements.

(a) *Compliance dates.* (1) The owner or operator of an affected existing steel pickling facility and/or acid regeneration plant subject to this subpart shall achieve initial compliance with the requirements of this subpart no later than _____ [Insert date 2 years from publication of final rule in the **Federal Register**].

(2) The owner or operator of a new or reconstructed steel pickling facility and/or acid regeneration plant subject to this subpart that commences construction or reconstruction after September 18, 1997 shall achieve compliance with the requirements of this subpart immediately upon startup of operations or by _____ [Insert date of publication of final rule in the **Federal Register**], whichever is later.

(b) *Operation and maintenance requirements.* (1) The owner or operator of an affected source shall comply with the requirements of § 63.6(e) of subpart A of this part.

(2) In addition to the requirements specified in paragraph (b)(1) of this section, the owner or operator shall develop and implement a written maintenance plan for each emission control device. The owner or operator shall submit the plan no later than the date of compliance to the applicable permitting authority. For a scrubber emission control device, the written program must include the minimum elements contained in the operating manual provided by the manufacturer and:

(i) Require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, recirculating pumps, discharge pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans;

(ii) Require cleaning of the scrubber internals and mist eliminators at intervals sufficient to prevent buildup of solids or other fouling;

(iii) Require an inspection of each scrubber at intervals of no less than 3 months with:

(A) Cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;

(B) Repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;

(C) Repair or replacement of droplet eliminator elements as needed;

(D) Repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and

(E) Adjustment of damper settings for consistency with the required air flow.

(iv) If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Administrator may be used.

(v) The owner or operator shall initiate corrective action within one working day of detection of an operating problem and provide appropriate repair, replacement, or other corrective action. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement.

(vi) The owner or operator shall maintain a record of each inspection, including each item identified in paragraph (b)(2)(iii) of this section, that is signed by the responsible plant official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

(3) In addition to the requirements specified in paragraphs (b)(1) and (b)(2) of this section, the owner or operator of each acid regeneration plant shall develop and implement a written maintenance program. The program shall require:

(i) Performance of the manufacturer's recommended maintenance at the recommended intervals on all required systems and components;

(ii) Initiation of appropriate repair, replacement, or other corrective action within one working day of detection; and

(iii) Maintenance of a daily record, signed by a responsible plant official, showing the date of each inspection for each requirement, the problems found, a description of the repair, replacement, or other action taken, and the date of repair or replacement.

§ 63.1160 Performance testing and test methods.

(a) The owner or operator shall conduct an initial performance test for each process or emission control device to determine and demonstrate compliance with the applicable emission limit or performance standard according to the requirements in § 63.7 of this part and in this section.

(1) Following approval of the site-specific test plan, the owner or operator shall conduct an emission test for each process or control device to measure either the mass flows of HCl at the inlet and the outlet of the control device (to determine compliance with the applicable collection efficiency standard) or the concentration of HCl (and Cl_2 for acid regeneration plants) in gases exiting the process or the emission control device (to determine compliance with the applicable emission concentration standard).

(2) Compliance with the applicable emission concentration or collection efficiency standard shall be determined by the average of three runs. Each run shall be conducted under conditions representative of normal process operations.

(3) Compliance is achieved if either the average collection efficiency as determined by the HCl mass flows at the control device inlet and outlet is greater than or equal to the applicable collection efficiency requirement or the average measured concentration of HCl or Cl_2 exiting the process or the emission control device is less than or equal to the applicable emission concentration requirement.

(b) During the emission test for each emission control device, the owner or operator using a wet scrubber to achieve compliance and electing to monitor emission control device operating parameters as described in § 63.1161(a)(2) of this subpart shall establish as site-specific operating parameters the pressure drop across the scrubber and the maximum acidity of the scrubber effluent.

(1) The owner or operator shall determine the operating parameter monitoring values as the average of the values recorded during each of the three runs constituting the test. An owner or operator may conduct multiple performance tests to establish a range of compliant operating parameter values.

(2) As an alternative to the requirement specified in paragraph (a)(1) of this section, the owner or operator may set as the compliant value for pressure drop the average value measured over the three test runs of one compliance test and accept ±1 inch of water column from the pressure drop value as the compliant range.

(c)(1) During the emission test for Cl_2 at an acid regeneration plant, the owner or operator shall establish as site-specific operating parameters the minimum process offgas temperature and the maximum proportion of excess air fed to the process as described in § 63.1161(d)(2) of this subpart. The owner or operator shall determine the operating parameter monitoring values as the average of the values recorded during each of the three runs constituting the test. An owner or operator may conduct multiple performance tests to establish a range of compliant operating parameter values.

(2) During this emission test, the owner or operator may establish an optional maximum concentration limitation for Cl_2. If the owner or operator can demonstrate to the Administrator's satisfaction that the plant cannot meet the 4 ppmv maximum concentration limitation by operating the plant within its design parameters, the plant shall be operated at maximum design temperature and with the minimum excess air that allows production of iron oxide of acceptable quality while measuring Cl_2 concentration in the process exhaust gas. The measured concentration shall be the maximum concentration allowed for that plant.

(d) The following test methods in appendix A to part 60 of this chapter shall be used to determine compliance under §§ 63.1157(a), 63.1157(b), 63.1158(a), and 63.1158(b) of this subpart:

(1) Method 1, to determine the number and location of sampling points;

(2) Method 2, to determine gas velocity and volumetric flow rate;

(3) Method 3, to determine the molecular weight of the stack gas;

(4) Method 4, to determine the moisture content of the stack gas; and

(5) Method 26A, ''Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method'', to determine the HCl mass flows at the inlet and outlet of a control device or the concentration of HCl discharged to the atmosphere and also to determine the concentration of Cl_2 discharged to the atmosphere from acid regeneration plants. If compliance with a collection efficiency standard is being demonstrated, inlet and outlet measurements shall be performed simultaneously. The minimum sampling time for each run shall be 60 minutes and the minimum sample volume 0.85 dry standard cubic meters (dscm) [30 dry standard cubic feet (dscf)]. The concentration of HCl and Cl_2 shall be calculated as follows:

C_{HCl} (ppmv)=0.659 C_{HCl} (mg/dscm),

C_{Cl2} (ppmv)=0.339 C_{Cl2} (mg/dscm),

where:

C (ppmv) is concentration in ppmv and C(mg/dscm) is concentration in milligrams per dry standard cubic meter

as calculated by the procedure given in Method 26A in appendix A to part 60 of this chapter.

(e) The owner or operator may use equivalent alternative measurement methods approved by the Administrator.

§ 63.1161 Monitoring requirements.

(a) The owner or operator of a new, reconstructed, or existing steel pickling facility or acid regeneration plant subject to this subpart shall:

(1) Conduct annual performance tests to measure the HCl mass flows at the control device inlet and outlet or the concentration of HCl exiting the control device according to the procedures described in § 63.1160 of this subpart. If an annual performance test shows that the HCl emission limit is being exceeded, then the owner or operator is in violation of the HCl emission limit.

(2) In addition to conducting annual performance tests, if a wet scrubber is used as the emission control device, install, operate, and maintain systems for the measurement and recording of the:

(i) Pressure drop across the scrubber, which shall be measured and recorded at least once every 24-hour period, and

(ii) Acidity of the scrubber effluent, which shall be measured and recorded at least once every 8-hour period.

(3) If an emission control device other than a wet scrubber is used, install, operate, and maintain systems for the appropriate measurement and recording of the operating parameters.

(4) Each monitoring device shall be certified by the manufacturer to be accurate to within 5-percent and shall be calibrated semiannually in accordance with the manufacturer's instructions.

(5)(i) Operation of the control device with excursions of operating parameters listed in paragraph (a)(2) of this section outside the ranges established during the initial performance test will require initiation of corrective action as specified by the maintenance requirement in § 63.1159(b)(2) of this subpart. Failure to initiate the required action is a violation of the maintenance requirements.

(6) Failure to record each of the operating parameters listed in paragraph (a)(2) of this section is a violation of the monitoring requirements.

(b) As an option to the requirements of paragraphs (a)(1) through (a)(6) of this section, the owner or operator of a new, reconstructed, or existing steel pickling facility or acid regeneration plant subject to this subpart may do the following:

(1) Install, calibrate, certify, operate, and maintain according to the manufacturer's specifications a continuous emission monitoring system (CEMS) capable of measuring HCl concentrations in the ranges required to demonstrate compliance with this standard. Any owner or operator employing a CEMS shall be subject to all the requirements applicable to a continuous monitoring system (CMS) specified in § 63.8 of subpart A of this part and in this section.

(i) If the compliance option chosen is collection efficiency (§§ 63.1157(a)(1) or 63.1158(a)(1) of this subpart, whichever applies), then the air pollution control device inlet and outlet gases shall both be monitored. The owner or operator may employ a single analyzer to monitor both streams, with each stream being monitored 50-percent of the time during each 24-hour period.

(ii) If the compliance option chosen is concentration (§§ 63.1157(a)(2), 63.1157(b)(1), 63.1158(a)(2), or 63.1158(b)(1) of this subpart, whichever applies), then the air pollution control device or process offgas shall be monitored continuously.

(c) If excursions of the control device operating parameters listed in paragraph (a)(2) of this section outside the ranges established during the initial performance test occur more often than six times during any 6-month reporting period, the owner or operator shall install a CEMS and comply with the requirements specified in paragraph (b)(1) of this section.

(d) The owner or operator of a new or existing acid regeneration facility subject to this subpart shall also:

(1) Conduct annual performance tests to measure the concentration of Cl_2 exiting the process or the control device according to the procedures described in § 63.1160 of this subpart. If an annual performance test shows that the Cl_2 emission limit is being exceeded, then the owner or operator is in violation of the Cl_2 emission limit.

(2) In addition to conducting annual performance tests, install, operate, and maintain systems for the measurement and recording of the:

(i) Process offgas temperature, which shall be monitored and recorded continuously, and

(ii) Excess air feed rate, which shall be measured and recorded at least once every 8-hour period. Proportion of excess air shall be determined by a combination of total air flow rate, fuel flow rate, spent pickle liquor addition rate, and amount of iron in the spent pickle liquor or by any other combination of parameters approved by the Administrator.

(3) Each monitoring device must be certified by the manufacturer to be accurate to within 5-percent and must be calibrated semiannually in accordance with the manufacturer's instructions.

(4) Operation of the process with operating parameters listed in paragraph (a)(2) of this section in exceedance of the ranges established during the initial performance test is a violation of the emission limit specified in §§ 63.1157(b)(2) or 63.1158(b)(2) of this subpart, whichever applies. Failure to record each of these parameters is a violation of the monitoring requirements.

(e) The owner or operator of an affected acid storage tank shall inspect each tank monthly to determine that the closed-vent system and either the air pollution control device or the enclosed loading and unloading line, whichever is applicable, are installed and operating when required.

§ 63.1162 Notification requirements.

(a) *Initial notifications.* As required by § 63.9(b) of subpart A of this part, the owner or operator shall submit the following written notifications to the Administrator:

(1) The owner or operator of an area source that subsequently becomes subject to the requirements of the standard shall provide notification to the applicable permitting authority as required by § 63.9(b)(1) of subpart A of this part.

(2) As required by § 63.9(b)(2) of subpart A of this part, the owner or operator of an affected source that has an initial startup before the effective date of the standard shall notify the Administrator that the source is subject to the requirements of the standard. The notification shall be submitted not later than 120 calendar days after the effective date of this standard (or within 120 calendar days after the source becomes subject to this standard) and shall contain the information specified in §§ 63.9(b)(2)(i) through 63.9(b)(2)(v) of subpart A of this part.

(3) As required by § 63.9(b)(3) of subpart A of this part, the owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date and for which an application for approval of construction or reconstruction is not required under § 63.5(d) of subpart A of this part, shall notify the Administrator in writing that the source is subject to the standards no later than 120 days after initial startup. The notification shall contain the information specified

in §§ 63.9(b)(2)(i) through 63.9(b)(2)(v) of subpart A of this part, delivered or postmarked with the notification required in § 63.9(b)(5) of subpart A of this part.

(4) As required by § 63.9(b)(4) of subpart A of this part, the owner or operator of a new or reconstructed major affected source that has an initial startup after the effective date of this standard and for which an application for approval of construction or reconstruction is required under § 63.5(d) of subpart A of this part shall provide the information specified in §§ 63.9(b)(4)(i) through 63.9(b)(4)(v) of subpart A of this part.

(5) As required by § 63.9(b)(5) of subpart A of this part, the owner or operator who, after the effective date of this standard, intends to construct a new affected source or reconstruct an affected source subject to this standard, or reconstruct a source such that it becomes an affected source subject to this standard, shall notify the Administrator, in writing, of the intended construction or reconstruction.

(b) *Request for extension of compliance.* As required by § 63.9(c) of subpart A of this part, if the owner or operator of an affected source cannot comply with this standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with § 63.6(i)(5) of subpart A of this part, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in §§ 63.6(i)(4) through 63.6(i)(6) of subpart A of this part.

(c) *Notification that source is subject to special compliance requirements.* As required by § 63.9(d) of subpart A of this part, an owner or operator of a new source that is subject to special compliance requirements as specified in §§ 63.6(b)(3) and 63.6(b)(4) of subpart A of this part shall notify the Administrator of his/her compliance obligations not later than the notification dates established in § 63.9(b) of subpart A of this part for new sources that are not subject to the special provisions.

(d) *Notification of performance test.* As required by § 63.9(e) of subpart A of this part, the owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under § 63.7(c) of subpart A of this part, if requested by the Administrator, and to have an observer present during the test.

(e) *Additional notification requirements for sources with continuous emission monitoring systems.* The owner or operator of an affected source using a CEMS shall furnish the Administrator written notification that applies to a CMS as specified in §§ 63.9(g)(1) through 63.9(g)(3) of subpart A of this part.

(f) *Notification of compliance status.* The owner or operator of an affected source shall submit a notification of compliance status as required by § 63.9(h) of subpart A of this part when the source becomes subject to this standard.

§ 63.1163 Reporting requirements.

(a) *Reporting results of performance tests.* As required by § 63.10(d)(2) of this part, the owner or operator of an affected source shall report the results of the initial performance test as part of the notification of compliance status required in § 63.1162 of this subpart.

(b) *Progress reports.* The owner or operator of an affected source who is required to submit progress reports under § 63.6(i) of subpart A shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

(c) *Periodic startup, shutdown, and malfunction reports.* Section 63.6(e) of subpart A of this part requires the owner or operator of an affected source to operate and maintain each affected emission source and associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions (at least to the level required by the standard) at all times, including during any period of startup, shutdown, or malfunction. Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.

(1) *Plan.* As required by § 63.6(e)(3) of subpart A of this part, the owner or operator shall develop and implement a written startup, shutdown, and malfunction plan that provides a detailed description of the procedures for operating the emission source or control system during a period of startup, shutdown, or malfunction and a program of corrective action for malfunctioning process and air pollution control equipment. If applicable, § 63.8(c)(1)(i) of subpart A also requires that the plan shall identify all routine or otherwise predictable malfunctions for a CEMS used to comply with the standard.

(2) *Reports.* As required by § 63.10(d)(5)(i) of subpart A of this part, if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the owner or operator shall state such information in a semiannual report. The report, to be certified by the owner or operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 30th day following the end of each calendar half; and

(3) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall comply with all requirements of § 63.10(d)(5)(ii) of subpart A of this part.

(d) *CEMS performance evaluations.* If a CEMS is used, the owner or operator is required to conduct an annual performance evaluation of the CEMS and submit a written report of the results as described for a CMS under § 63.10(e)(2) of subpart A of this part. The owner or operator shall submit the report simultaneously with the results of the initial performance test.

(e) *Excess emissions and CEMS performance report and summary report.* The owner or operator of an affected source required to install a CEMS shall comply with all requirements of § 63.10(e)(3) of subpart A of this part.

§ 63.1164 Recordkeeping requirements.

(a) *General recordkeeping requirements.* As required by § 63.10(b)(2) of subpart A of this part, the owner or operator shall maintain records for 5 years from the date of each record of:

(1) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment and control devices);

(2) The occurrence and duration of each malfunction of the source or air pollution control equipment;

(3) All maintenance performed on the air pollution control equipment;

(4) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the startup, shutdown, and malfunction plan;

(5) All information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions) are consistent with the procedures specified in such plan. This information can be recorded in a checklist or similar form. (See § 63.10(b)(2)(v) of subpart A. of this part.);

(6) All required measurements needed to demonstrate compliance with the standard and to support data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;

(7) All results of initial or subsequent performance tests;

(8) If the owner or operator has been granted a waiver from recordkeeping or reporting requirements under § 63.10(f) of subpart A of this part, any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements;

(9) If the owner or operator has been granted a waiver from the initial performance test under § 63.7(h) of subpart A of this part, a copy of the full request and the Administrator's approval or disapproval;

(10) All documentation supporting initial notifications and notifications of compliance status required by § 63.9 of subpart A of this part; and

(11) Records of any applicability determination, including supporting analyses.

(b) *Subpart CCC records.* (1) In addition to the general records required by paragraph (a) of this section, the owner or operator shall maintain records for 5 years from the date of each record of:

(i) Records of pressure drop across the scrubber and of pH levels or other measures of acidity of the scrubber effluent if a wet scrubber is used and readings are taken manually;

(ii) Records of manufacturer certification that monitoring devices are accurate to within 5-percent and of semiannual calibration;

(iii) Copy of the written maintenance plan for each emission control device; and

(iv) Records of each maintenance inspection and repair, replacement, or other corrective action.

(2) The owner or operator of an acid regeneration plant shall also maintain records for 5 years from the date of each record of process offgas temperature and excess air feed rate.

(c) General records and subpart CCC records for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

(d) *CEMS recordkeeping requirements.* The owner or operator using a CEMS shall also comply with the recordkeeping requirements in §§ 63.10(b)(2)(vi) through 63.10(b)(2)(xiv) and § 63.10(c) of subpart A of this part that apply to a CMS, including:

(1) Each period when a CEMS is malfunctioning or inoperative (including out of control periods);

(2) All required measurements needed to indicate compliance with the standard that support data that the source is required to report including, but not limited to, 15-minute averages of continuous emission monitoring data and raw performance evaluations;

(3) All results of CEMS performance evaluations;

(4) All measurements necessary to determine the conditions of performance evaluations;

(5) All calibration checks on the continuous emission monitor;

(6) All adjustments and maintenance performed on a CEMS;

(7) All emission levels relative to obtaining permission to use an alternative to the relative accuracy test, if the owner or operator has been granted permission under § 63.8(f)(6) of subpart A of this part;

(8) All required CEMS measurements (including monitoring data recorded during unavoidable breakdowns and out of control periods);

(9) The date and time identifying each period during which the CEMS was inoperative (except for span checks) or out of control periods. (See § 63.8(c)(7) of subpart A of this part):

(10) The specific identification (i.e., the date and time of commencement and termination) of each time period of excess emissions and parameter exceedances and excursions that occurs during startups, shutdowns, and malfunctions of the emission source;

(11) The specific identification of each time period of excess emissions and parameter exceedances and excursions that occurs during periods other than startups, shutdowns, and malfunctions of the emission source;

(12) The nature and cause of any malfunction (if known);

(13) The corrective action taken or preventative measures adopted;

(14) The nature of the repairs or adjustments to the CEMS that was inoperative or out of control;

(15) The total process operating time during the reporting period; and

(16) All procedures that are a part of a quality control program developed and implemented for the CEMS under § 63.8(d) of subpart A of this part.

§ 63.1165 Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b)(1) Section 63.1160(e) of this subpart for approval of an alternative measurement method; and

(2) Section 63.6(g) of subpart A of this part for approval of an alternative nonopacity emission standard.

§§ 63.1166 through 63.1174 [Reserved]

APPENDIX A TO SUBPART CCC OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART CCC

Reference	Applies to subpart CCC	Comment
63.1–63.5	Yes	
63.6(a)–63.6(f)	Yes	
63.6(g)	Yes	EPA reserves approval of alternative nonopacity emission standard.
63.6(h)	No	Subpart does not contain an opacity or visible emission standard.
63.6(i)–63.6(j)	Yes	
63.7	Yes	
63.8	Yes	Sections that apply to a CMS apply to a CEMS when used.

APPENDIX A TO SUBPART CCC OF PART 63—APPLICABILITY OF GENERAL PROVISIONS (40 CFR PART 63, SUBPART A) TO SUBPART CCC—Continued

Reference	Applies to subpart CCC	Comment
63.9(a)–63.9(f); 63.9(h)–63.9(j)	Yes	
63.9(g)	Yes	Applies only when a CEMS is used.
63.10(a)	Yes	
63.10(b)(1)	Yes	
63.10(b)(2)(i)–63.10(b)(2)(v); 63.10(b)(2)(vii)–63.10(b)(2)(ix); 63.10(b)(2)(xii)–63.10(b)(2)(xiv).	Yes	
63.10(b)(2)(vi); 63.10(b)(2)(x)–63.10(b)(2)(xi)	Yes	Applies only when a CEMS is used.
63.10(b)(3)	Yes	
63.10(c)	Yes	Applies only when a CEMS is used.
63.10(d)(1)–63.10(d)(2)	Yes	
63.10(d)(3)	No	Subpart does not contain an opacity or visible emission standard.
63.10(d)(4)–63.10(d)(5)	Yes	
63.10(e)	Yes	Applies only when a CEMS is used.
63.10(f)	Yes	
63.11	No	The use of flares is not required.
63.12–63.15	Yes.	

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