



ASBESTOS INFORMATION ASSOCIATION

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7 November 1975

Memorandum For: Holders of AIA/NA Handbook, "Asbestos-Federal Regulations"

Subject: Change No. 1 to "Asbestos - Federal Regulations"

EPA published amendments to National Emission Standards for Hazardous Air Pollutants (Asbestos) in the Federal Register, Vol. 40, No. 199, on October 14, 1975. Reproductions from the Federal Register were forwarded to members of the Association. Enclosed are page insertions to be incorporated in the AIA/NA handbook, "Asbestos - Federal Regulations."

The following changes should be made:

a. Under EPA tab (Introduction)

Remove present pages B-1 through B-7 and insert enclosed pages B-1 through B-8.

b. Under EPA tab (Rules and Regulations)

- (1) - Insert enclosed pages 48292 through 48309/48310 immediately following page 15398.
- (2) - Remove present pages 7529 through 7535 and insert enclosed pages 7528 through 7535.


R. H. Mereness
Executive Director

Enclosures

ASBESTOS REGULATION
ENVIRONMENTAL PROTECTION AGENCY

BACKGROUND

Section 112 of the Clean Air Act gives authority to the Environmental Protection Agency (EPA) Administrator to set emissions standards for hazardous air pollutants. On March 31, 1971, EPA published its first list of hazardous air pollutants (asbestos, beryllium, and mercury). On December 7, 1971, EPA proposed a standard for control of asbestos fiber emissions. After the rulemaking process, the standard was issued on April 6, 1973, as part of the National Emissions Standards for Hazardous Air Pollutants (NESHAPS). The standard:

1. Prohibits any visible emissions of asbestos from milling, manufacturing, and demolition activities; and
2. Provides for the use of specified air cleaning procedures which may be used in lieu of meeting the no visible emissions requirement.

Clarification of the terminology in the April 6, 1973 standard was published on May 3, 1974. EPA issued amendments to the standard on October 14, 1975.

Under the authority of the Federal Water Pollution Control Act Amendments of 1972, EPA, on October 30, 1973, proposed regulations on wastewater effluents. The proposal included effluent limitation guidelines for existing point source discharges of wastewater, standards of performance for new sources, and new source pretreatment standards for seven subcategories within the asbestos manufacturing point source category. These guidelines and standards, issued February 26, 1974, establish limits on the amount of total suspended solids (TSS), chemical oxygen demand (COD), and the level of pH in the wastewater that may be discharged to waterways.

On January 9, 1975, effluent limitation guidelines were issued for four additional subcategories in the asbestos manufacturing point source

B-1

CH-1
11-7-75

category, along with new source performance standards and pretreatment standards for new sources. On February 11, 1975, pretreatment standards for existing sources within the initial seven subcategories (A through G) were issued. Minor editorial corrections to the January 9, 1975 document were published on April 25, 1975.

EPA/ASBESTOS REGULATIONS--AIR: Federal Register, Vol. 38, p 8820, Apr. 6, 1973
Vol. 39, p 15396, May 3, 1974
Vol. 40, p 48292, Oct. 14, 1975

National Emissions Standards for Hazardous Air Pollutants were promulgated on April 6, 1973, and amended October 14, 1975. The regulations state:

1. There must be no visible emissions to the outside air from asbestos mills or from buildings in which the following types of products are manufactured:
 - (a) textile materials,
 - (b) cement products,
 - (c) fireproofing and insulating materials,
 - (d) friction products,
 - (e) paper, millboard, and felt,
 - (f) floor tile,
 - (g) paints, coatings, caulks, adhesives, and sealants,
 - (h) plastics and rubber materials,
 - (i) chlorine,
 - (j) shotgun shells, and
 - (k) asphalt concrete;
2. Visible emissions are emissions which contain asbestos and which are visually detectable without the aid of instruments. Asbestos is defined as actinolite, amosite, anthophyllite, chrysotile, crocidolite and tremolite. Asbestos wastes are defined as wastes containing commercial asbestos.
3. Specified air cleaning procedures may be used rather than meet the no visible emission requirement. These procedures require the use of fabric filters that meet EPA specifications, unless a fire or explosion hazard exists. In that case, wet collectors may be used. Other collection devices may be used if they are deemed equivalent by EPA. Bypass devices may be used only during emergency conditions

- and then only for as long as it takes to shut down the process generating the asbestos emission;
4. Operators employing air cleaning procedures must report to EPA a description of the emission control equipment used in each process. The report must include, as appropriate, the pressure drop across a fabric filter, airflow permeability, fabric density and minimum thickness;
 5. Fabricators of cement building products, most friction products, and cement or silicate board must meet the no visible emission standard;
 6. There must be no visible emissions to the outside air from any spray-on application of fireproofing or insulation material containing more than one percent asbestos. Twenty days before such operation may begin, notice of the work must be given to EPA;
 7. It is the responsibility of the generator of asbestos wastes resulting from manufacturing, fabrication, demolition, renovation and spraying operations to ensure that the waste is disposed of in a properly operated disposal site. No visible emissions may result from any disposal operation. Alternatively, the wastes may be mixed with water and sealed in a labeled, leak-tight container and deposited at a disposal site or they may be formed into nonfriable forms and deposited at a disposal site. Wastes from asbestos mills are subject to the no visible emissions standard. That standard may be satisfied by wetting the wastes during transfer and deposition at the disposal site;
 8. Active waste disposal sites that are acceptable for the deposit of asbestos wastes must not have visible emissions and must have warning signs and fences erected around the property. The standard may also be met by covering the wastes daily with nonasbestos cover material or by applying a resinous dust suppression agent. Warning signs and fences are not required if natural barriers deter public access to the site or if the site is covered daily with nonasbestos material;
 9. Present owners of inactive disposal sites that once received wastes from sources covered by these regulations must meet the no visible emissions standard and must erect warning signs and fences around the site. Rather than comply with the above requirement, the owner may cover the site with nonasbestos material or, in the case of inactive tailings piles, may apply resinous dust suppression agents. Where the covering material is applied or where natural barriers deter public access to the site, fences and warning signs are not required;

10. Notification of intention to demolish a building containing friable asbestos must be made to EPA at least 10 days prior to the start of work. Notification must include dates of the work, location, type, and method of demolition. Reports on demolition operations involving less than 80 meters (of pipe insulation) or 15 square meters (of other asbestos insulation) need include only the location and dates of the demolition and must be submitted to EPA 20 days prior to commencement of work. Renovation work involving more than 80 meters or 15 square meters of asbestos must also be reported to EPA;
11. Planned renovations that involve a series of individually nonscheduled operations must be reported to EPA if the total amount of asbestos estimated to be removed during the work is greater than 80 meters or 15 square meters. The estimate must be made for the maximum period (between 30 days and one year) for which the amount of asbestos to be removed can be predicted. When the total amount of asbestos involved is greater than the cutoff specified, all work may be reported on a single form;
12. All demolition and renovation work involving more than 80 meters or 15 square meters of friable asbestos must use emissions control procedures which require the careful removal of items and waste containing asbestos and the wetting of asbestos wastes. If wetting would result in unavoidable damage, local exhaust and ventilation systems may be used provided the emissions from the system meet the no visible emission standard; and
13. Roadways may not be surfaced with asbestos except in the case of temporary roadways on asbestos ore deposits.

EPA/ASBESTOS REGULATIONS--WATER: Federal Register, Vol. 39, p 7526, Feb. 26, 1974
Vol. 40, p 1874, Jan. 9, 1975
Vol. 40, p 6444, Feb. 11, 1975
Vol. 40, p 18172, Apr. 25, 1975

Effluent limitations guidelines for the first seven subcategories (A through G) of the asbestos manufacturing point source category were promulgated on February 26, 1974. In addition to the guidelines, these regulations include standards of performance for all new point sources within the subcategories as well as pretreatment standards for new plants which discharge to municipal sewer systems. On January 9, 1975, regulations were promulgated setting forth the effluent limitation guidelines, new source performance standards, and new source pretreatment requirements for subcategories H through K. Also, on February 11, 1975, pretreatment standards for existing sources in subcategories A through G were promulgated. (Pretreatment standards for existing sources in subcategories H through

K will be forwarded for inclusion in this publication when promulgated.)

The Federal Water Pollution Control Act Amendments of 1972 require that all industrial sources treat their effluent by applying the best practicable control technology currently available (BPT) by December 31, 1977. That law also requires the same sources to use the best available control technology economically achievable (BAT) by December 31, 1983. The effluent limitation guidelines establish the degree of effluent quality that is necessary to meet the BPT and BAT requirements. Effluent quality is expressed in terms of total suspended solids (TSS) and pH for all subcategories. Two subcategories also have a chemical oxygen demand (COD) standard.

According to the regulations, the effluent limitations, standards of performance for new sources, and pretreatment standards are as follows.

Subcategory A--Asbestos-Cement Pipe

	<u>one day maximum</u>	<u>30 day average</u>
BPT requirements	TSS 1.14 pH within the range of 6.0 to 9.0	0.38 (lb/ton of product)
BAT requirement	No discharge of process wastewater to navigable waters	
New source performance standard	Same as BPT requirements	
Pretreatment standards		
(new sources)	No discharge of incompatible pollutants	
(existing sources)	Same as new sources, no limit on discharge of TSS or pH	

Subcategory B--Asbestos-Cement Sheet

	<u>one day maximum</u>	<u>30 day average</u>
BPT requirements	TSS 1.35 pH within the range of 6.0 to 9.0	0.45 (lb/ton of product)
BAT requirement	No discharge of process wastewater to navigable waters	
New source performance standard	Same as BAT requirement	
Pretreatment standards		
(new sources)	No discharge of incompatible pollutants	
(existing sources)	Same as new sources, no limit on discharge of TSS or pH	

Subcategory C--Asbestos Paper (Starch Binder)

	<u>one day maximum</u>	<u>30 day average</u>
BPT requirements	TSS 1.10 pH within the range of 6.0 to 9.0	0.70 (lb/ton of product)
BAT requirement	No discharge of process wastewater to navigable waters	
New source performance standard	Same as BAT requirement	
Pretreatment standards		
(new sources)	No discharge of incompatible pollutants	
(existing sources)	Same as new sources, no limit on discharge of TSS or pH	

Subcategory D--Asbestos Paper (Elastomeric Binder)

	<u>one day maximum</u>	<u>30 day average</u>
BPT requirements	TSS 1.10 pH within the range of 6.0 to 9.0	0.70 (lb/ton of product)
BAT requirement	No discharge of process wastewater to navigable waters	
New source performance standard	Same as BPT requirements	
Pretreatment standards		
(new sources)	No discharge of incompatible pollutants	
(existing sources)	Same as new sources, no limit on discharge of TSS or pH	

Subcategory E--Asbestos Millboard

BPT requirement	No discharge of process wastewater to navigable waters	
BAT requirement	Same as BPT requirement	
New source performance standard	Same as BPT requirement	
Pretreatment standards		
(new sources)	No discharge of incompatible pollutants	
(existing sources)	Same as new sources, no limit on discharge of TSS or pH	

Subcategory F--Asbestos Roofing

	<u>one day maximum</u>	<u>30 day average</u>
BPT requirements	COD 0.029 TSS 0.020 pH within the range of 6.0 to 9.0	0.016 (lb/ton of product) 0.012 (lb/ton of product)
BAT requirement	No discharge of process wastewater to navigable waters	

CH-1
11-7-75

B-6

New source performance standard Same as BAT requirement

Pretreatment standards
(new sources) No discharge of incompatible pollutants
(existing sources) Same as new sources, no limit as discharge of TSS, COD or pH

Subcategory G--Asbestos Floor Tile

	<u>one day maximum</u>	<u>30 day average</u>
BPT requirements	COD 0.30 TSS 0.13 pH within the range of 6.0 to 9.0	0.18 (lb/ton of product) 0.08 (lb/ton of product)
BAT requirement	No discharge of process wastewater to navigable waters	
New source performance standard	Same as BAT requirement	
Pretreatment standards (new sources)	No discharge of incompatible pollutants	
(existing sources)	Same as new sources, no limit on discharge of TSS, COD or pH	

Subcategory H--Coating or Finishing of Asbestos Textiles

BPT requirement No discharge of process wastewater to navigable waters
BAT requirement Same as BPT requirement
New source performance standard Same as BPT requirement
Pretreatment standard
(new sources) No discharge of incompatible pollutants, no limit on discharge of TSS, COD or pH

Subcategory I--Solvent Recovery

	<u>one day maximum</u>	<u>30 day average</u>
BPT requirements	COD 0.30 TSS 0.18 pH within the range of 6.0 to 9.0	0.15 (lb/1,000 lb of finished asbestos product) 0.09 (lb/1,000 lb of finished asbestos product)
BAT requirement	Same as BPT requirement	
New source performance standard	Same as BPT requirement	
Pretreatment standard (new sources)	No discharge of incompatible pollutants, no limitation on discharge of TSS, COD or pH	

Subcategory J--Vapor Absorption

BPT requirement	No discharge of wastewater pollutants to navigable waters
BAT requirement	Same as BPT requirement
New source performance standard	Same as BPT requirement
Pretreatment standard (new sources)	No discharge of incompatible pollutants, no limitation on discharge of TSS, COD or pH

Subcategory K--Wet Dust Collection

	<u>one day maximum</u>	<u>30 day average</u>
BPT requirement	TSS 5.0	2.50 (lb/million' std cu ft of air scrubbed)
	pH within the range of 6.0 to 9.0	
BAT requirement	No discharge of wastewater pollutants to navigable waters	
New source performance standard	Same as BAT requirement	
Pretreatment standard (new sources)	No discharge of incompatible pollutants, no limitation on discharge of TSS, COD or pH	

Title 40—Protection of Environment
CHAPTER II—ENVIRONMENTAL
PROTECTION AGENCY

[FR 43-2]

PART 61—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

Amendments to Standards for Asbestos and Mercury

On October 25, 1974, (39 FR 38064) pursuant to section 112 of the Clean Air Act, as amended, the Administrator proposed amendments to national emission standards for the hazardous air pollutants asbestos and mercury. The Administrator also proposed amendments to Appendix B, Test Methods, of this part. Interested persons representing industry, trade associations, environmental groups, and Federal, State and local governments participated in the rulemaking by sending comments to the Agency. Commentators submitted 40 letters, many with multiple comments. The comments have been considered, and the proposed amendments have been reevaluated. Each comment, some of which were submitted by more than one party, has been separately addressed in writing by the Agency. The Freedom of Information Center, Room 202 West Tower, 401 M Street, S.W., Washington, D.C., has copies of the comment letters received and a summary of the issues and Agency responses available for public inspection. In addition, copies of the issue summary and Agency responses may be obtained upon written request from the EPA Public Information Center, (PM-215), 401 M Street, S.W., Washington, D.C. 20460 (specify Public Comment Summary—Proposed Amendments to National Emission Standards for Hazardous Air Pollutants—Asbestos and Mercury). Where determined by the Administrator to be appropriate, changes have been made to the proposed amendments, and the revised version of the amendments to the national emission standards for asbestos and mercury is promulgated herein. The principal changes to the proposed amendments and the Agency's responses to the major comments received are summarized below.

Copies of *Background Information on National Emission Standards for Hazardous Air Pollutants—Proposed Amendments to Standards for Asbestos and Mercury* (EPA-450/2-74-009a), which explains the basis for the proposed amendments, are available on request from the Emission Standards and Engineering Division, Research Triangle Park, North Carolina 27711. Attention: Mr. Don R. Goodwin.

ASBESTOS

CHANGES TO PROPOSED AMENDMENTS

Manufacturing. The Agency received numerous comments stating that the proposed amendments should apply only to asphalt concrete manufacturing plants that use asbestos. This was the Agency's intent. Section 61.22(c) has been revised by the addition of the wording "that use commercial asbestos."

Demolition and Renovation. A comment was received during review of the amendments within the Agency that ducts can be insulated with amounts of friable asbestos material similar to those on boilers, tanks, reactors, turbines, furnaces, and structural members, and should be covered by the demolition and renovation regulations. Since demolition and renovation operations can involve ducts insulated with appreciable quantities of friable asbestos material, ducts has been added to the list of apparatus that are covered by the amendments.

The comment was made that the quantity of friable asbestos material proposed as the minimum amount for establishing renovation operations as a major source of asbestos subject to the proposed amendments was arbitrary, but should also apply to demolition operations. The Agency explained in the preamble of the proposed amendments that this amount of asbestos is typically contained in a four-unit apartment building, which is the maximum size for apartment buildings excluded from the demolition provisions. Therefore, the minimum quantity of friable asbestos material covered by the demolition and renovation provisions is essentially equivalent. The Agency considered applying regulations only to demolition operations in which more than a specified amount of friable asbestos material was involved, prior to promulgation of demolition provisions on April 6, 1973, (38 FR 3820). This approach was rejected primarily because it would complicate enforcement procedures. However, the Agency realizes that certain commercial buildings contain smaller amounts of friable asbestos material than the lower size cutoff limit proposed for renovating operations. On reevaluation, the Agency concluded that the available information justifies changing the proposed amendment to allow exemption of demolition operations involving less than 80 meters of friable asbestos pipe insulation and less than 15 square meters of friable asbestos material used to insulate or fireproof any duct, boiler, tank, reactor, turbine, furnace or structural member. The owner or operator of a demolition operation desiring this exemption must notify the Administrator at least 20 days prior to beginning demolition. Of the measured or estimated amount of friable asbestos material involved in the demolition, this will permit the exception to be implemented without requiring prior inspection of every site by Agency personnel, which would be an excessive enforcement burden. This differs from the reporting requirements of the renovation provisions of the amendments. The nature of renovation operations necessitates a greater familiarity on the part of the operator with the quantities of friable asbestos materials present than for demolition operations. For this reason, the Agency believes that it is not necessary to require reports from all renovation operations in order to ensure effective enforcement of the renovation provisions that apply to only larger renovation operations.

Several comments were received which stated that operating machinery could be damaged by wetting procedures during certain renovation operations. The wetting during renovation of a heated boiler near sensitive electric equipment, and over operating machinery in an industrial plant were mentioned as specific examples. One comment also stated that portable local exhaust ventilation systems are effective alternatives to wetting. The proposed amendments have been changed to allow the use of local exhaust ventilation systems when damage to equipment from wetting is unavoidable, provided that the system captures the asbestos particulate material produced during the removal of friable asbestos material and discharges no visible emissions from its exhaust. The Administrator will make determinations upon request of whether damage to equipment from wetting would be unavoidable.

Several comments were received which stated that the proposed frequency for submitting to the Agency written notices of intention to perform repetitive renovation work at a single facility was excessive. One commentator suggested that definitions for emergency renovation and routine maintenance renovation be included, and that a yearly filing of intention to renovate should be allowed for each industrial plant. It is evident from the comments received that some plants perform renovation operations very frequently, such as twice a week. The proposed reporting requirements for such plants would be excessive. The proposed amendment has been changed so that these requirements are reduced, and the applicability of the requirement is more clearly defined by adding more detailed language and definitions for planned renovation and emergency renovation operations. Additionally, the applicability of the amendment has been clarified by specifying how the quantities of asbestos involved in planned renovation and emergency renovation are to be determined. The basic characteristics that distinguish the two types of renovation operations is the degree of predictability of their occurrence. The amount of friable asbestos material that will be removed or stripped within a given period of time can be predicted for planned renovation operations, including both scheduled and non-scheduled operations, whereas no such prediction can be made for emergency renovation operations. The given period of time for predicting purposes has been specified to be between 30 days and one year for planned renovation operations involving individually non-scheduled operations. A reporting time shorter than 30 days would require the submission and review of a large number of reports, and predictions over periods longer than one year could give inaccurate predictions of friable asbestos material to be removed in emergency renovation operations. The amount of friable asbestos material that is subject to the amendment is the total amount of such mate-

rial that will be removed or stripped as a result of the individual emergency.

One commentator stated that the proposed amendment covering renovation could be circumvented by the carrying out of small portions which are individually not subject to the amendment, or a larger operation. Section 61.17 has been added to the General Provisions to explicitly prevent this potential circumvention and to apply in general to circumvention of all standards promulgated under this part.

One commentator stated that a requirement in § 61.22(d)(2)(vi) of the proposed amendments was inconsistent and should be revised. This section required that friable asbestos material be moved from buildings greater than 50 feet in height, be transported to the ground via dust-tight chutes or containers. The cited inconsistency arises because this requirement applied at all heights, including those less than 50 feet for a building 50 feet or greater in height, whereas it did not apply to buildings less than 50 feet in height. The requirement has been changed so that it applies only to materials that have been removed or stripped at more than 50 feet above ground level.

Several minor changes have been made in response to comments. Language has been added to allow delivery of notices of intention to renovate or demolish to the Administrator by means other than the U.S. mail. There is a minor clarifying language change between § 61.22(d)(2)(d) of the proposed demolition provisions and the corresponding provision § 61.22(d)(4)(d) of the regulations promulgated herein. A comment suggested the term "adequately wetted" should be defined and differentiated from "thoroughly wetted" since both terms appeared in the proposed amendments. The use of these terms has been reevaluated, and a definition of "adequately wetted" has been added. The term "thoroughly wetted" has been deleted and the term "adequately wetted" has been used throughout.

The Agency has made a revision in the proposed requirement [§ 61.22(d)(d)] for notification of intention to perform renovation or demolition operations. An additional reporting requirement for the name and location of the waste disposal site where demolition and renovation waste will be deposited has been added to assist in enforcing the waste disposal provisions of the amendments.

Spraying. During review of the amendments within the Agency, a question arose concerning whether the waste generated by operations that use spray-on materials which contain less than one percent of asbestos by weight to insulate or fireproof buildings, structures, pipes and conduits was covered by the asbestos waste disposal amendment [§ 61.22(j)]. The spraying provisions do not apply to such operations, though reports of the operations were required by the standard promulgated on April 6, 1973. Therefore, the waste disposal processes associated with these operations are not regulated by the waste disposal amendments.

Based on Agency enforcement experience since promulgation of the standard on April 6, 1973, the required reporting of spraying operations where less than 1 percent asbestos material is used is felt to be unnecessary. Accordingly, the Agency has revised the reporting requirements of paragraph 61.22(e) to apply only to spray-on insulation and fireproofing material that contains more than one percent asbestos by weight.

Waste Disposal. The proposed amendments would have applied directly to all waste disposal sites that accept asbestos waste from any emission source covered under the asbestos standard. The Agency estimated that approximately 2500 disposal sites would be covered by review of these proposed amendments within the Agency. It indicated that enforcement would have required a disproportionate commitment of Agency resources. Alternative means of controlling asbestos emissions from waste disposal sites were therefore examined.

The number of acceptable waste disposal sites that meet the criteria in § 61.22(i)(3) of the proposed amendments, which are similar to the criteria for sanitary landfills, has increased significantly within the past several years and the trend is continuing in that direction. This trend is noted in a recent publication (*Waste Age*, January 1975). This indicates that acceptable sites (i.e., private and municipal sanitary landfills) which follow practices that reduce asbestos emissions will be available for disposal of asbestos-containing waste. Therefore, it was determined that an effective means of reducing emissions from waste disposal sites without undue enforcement burdens would be to require already regulated asbestos waste generators to dispose of asbestos-containing wastes at properly operated disposal sites. This is provided for in the amendment herein promulgated.

The Agency's greatest concern is with disposal sites which accept large quantities of asbestos waste. In most cases, companies which generate large quantities of asbestos-containing waste also own and operate their own disposal sites because of convenience and economics. For example, all domestic asbestos mills operate their own tailings disposal sites. The Agency anticipates that these large waste generators will operate their disposal sites in the future in compliance with the proposed § 61.22(i) in order to meet the requirement that they dispose of their waste at acceptable sites. Inactive disposal sites may also be major emission sources if they contain large amounts of asbestos waste. It is likely that at inactive sites containing small amounts of asbestos waste the asbestos is covered by non-asbestos waste and the chance of significant asbestos emissions is small. It was decided to require that those inactive sites which are known to contain large quantities of asbestos comply with the standards specified in section 61.22(i) to reduce asbestos emissions. This category of asbestos waste disposal sites is usually operated by the sources that generate the asbestos con-

taining wastes, as noted above. Accordingly, the amendments promulgated herein apply to inactive disposal sites that have previously been operated by certain sources covered by the asbestos standard. The owner of such an inactive site must comply with the amendments regardless of whether or not the generated the waste or operated the disposal site when it was active. This category of sites includes asbestos mill tailings disposal sites, and the large disposal sites at asbestos manufacturing and fabricating plants which have caused concern in the past. The owners or operators of spraying, demolition and renovation operations have not operated disposal sites in the past and are not expected to do so in the future. Due to the nature of such operations, the wastes generated are deposited at waste disposal sites which accept mostly non-asbestos-containing waste. As a result, the asbestos waste is effectively covered thereby preventing emissions even in open dumps. For these reasons inactive waste disposal sites that have been used by spraying, renovation and demolition are not regulated.

The amendments promulgated herein will control inactive asbestos waste disposal sites that contain large quantities of asbestos waste. The Agency's enforcement resources will be more effectively utilized since approximately 2000 waste disposal sites will not be directly regulated by the promulgated amendments. This should facilitate enforcement and protection of the public health.

The comment was made that the proposed permanent posting of warning signs at inactive asbestos waste disposal sites would be overly restrictive. The warning signs were intended primarily to warn the general public of the potential hazards that could result from creating dust by such disturbances as walking on exposed asbestos waste in the disposal site is properly covered over as required by the alternative methods of complying with the proposed amendment for waste disposal sites. Such minor disturbances will not generate asbestos emissions. Accordingly, the proposed amendment has been changed, and warning signs are not required for an inactive disposal site. It applies and properly maintains a covering of compacted non-asbestos-containing material at least 60 centimeters (ca. 2 feet) in depth or at least 15 centimeters (ca. 6 inches) in depth with a cover of vegetation. The proposed amendment would have also required that active asbestos waste disposal sites post warning signs. The amendments promulgated herein do not apply directly to active disposal sites, and the specified operating practices for acceptable disposal sites do not require the posting of warning signs provided an appropriate cover of at least 15 centimeters (ca. 6 inches) of non-asbestos-containing material is applied to the active portion of the site at the end of each operating day. Comments were received that suggested the Agency should allow the use of existing natural barriers as substitutes for fences that are intended to deter access to some types of asbestos waste disposal sites. The Agen-

cy agrees that certain natural barriers such as deep ravines and steep cliffs can be as effective as fences in deterring access. The proposed amendment has been changed to suspend the requirements for fences, and also warning signs, when a natural barrier provides an adequate deterrent to public access. Upon request and supply of appropriate information, the Administrator will determine whether a specific type of fence or a natural barrier adequately deters access to the general public. In response to another comment, the proposed amendment for fencing of asbestos waste disposal sites has been revised to allow fences to be placed either along the property line of an affected source that contains a waste disposal site or along the perimeter of the disposal site itself. Either type of fence provides the necessary deterrent to public access to the disposal site.

Several comments were received on the proposed prohibition of incineration of containers that previously contained commercial asbestos. One commentator stated that the prohibition seemed undesirable because asbestos is thermally degraded at a temperature of 600°C. The Agency considered: (a) the uncertainty that the feed material to an incinerator will be uniformly heated to the combustion chamber temperature; (b) the uncertainty concerning the decomposition temperature of asbestos; and (c) the results of a stack gas test that detected emissions of asbestos from a sintering process in which the temperature attained was well above 600°C. In evaluating the comment, the Agency concluded that the available data do not justify changing the proposed regulation on grounds that the asbestos is thermally degraded in the combustion process. Another comment suggested that incineration should be permitted, provided there are no visible emissions of asbestos particulate matter from the incinerator. Information presented to the Agency after proposal indicated that some small incinerators, such as those operated by asbestos manufacturing plants, can be operated with no visible emissions. The proposed prohibition on incineration of containers that previously held commercial asbestos has been deleted. The provisions of the amendments for the disposal of asbestos-containing waste materials apply in particular to the disposal of containers that previously held commercial asbestos. Therefore, these containers can be incinerated under the amendments provided the incineration operation does not discharge visible emissions.

Two commentators suggested that the proposed amendments should not require that EPA warning labels be attached to containers of asbestos waste. In addition to the warning labels specified in regulations issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA). The Agency agrees that both labels adequately convey the desired information; therefore, the proposed amendment has been changed to allow the OSHA warning label to be used in place of the EPA warning label.

Several commentators requested that the proposed alternative method of compliance included in the asbestos waste disposal amendments, which specified that the waste be formed into non-triangular pellets, be changed to accommodate shapes other than pellets. The precise size and shape of the processed non-triangular waste is not important, and the amendment has been reworded to explicitly permit their forming for asbestos wastes into pellets or any other shapes.

A comment was made during review within the Agency that asbestos-containing wastes subject to the proposed amendment are sometimes used to surface roadways, and that this practice should be prohibited. The Agency agrees that the use of asbestos-containing wastes on roadways can cause asbestos emissions similar to those caused by the use of asbestos tailings on roadways, which is prohibited by the asbestos standard. Vehicular traffic on roadways can pulverize asbestos waste and liberate fibers that can become airborne in the wake of moving vehicles and by the wind. The use of asbestos-containing wastes has therefore been prohibited from use on roadways.

The proposed amendment for a waste disposal at asbestos mills included a provision requiring no visible emissions to the outside air from the deposition of asbestos ore tailings onto a disposal pile. An alternative method of compliance required that the waste be adequately wetted with a dust suppressant agent prior to deposition. Two commentators stated that an exemption from the wetting requirement of the alternative method is needed when the temperature at the disposal site is below freezing, to prevent freezing of the tailings and permit continued operation of the asbestos mill at such low temperatures. The investigation carried out by the Agency prior to proposal of the amendment indicated that wetting of asbestos tailings is the only presently available method for effectively controlling particulate emissions from the deposition operation. In response to the comments received, the Agency further investigated the cold weather operational problems of disposal systems for wetted asbestos tailings. Discussions were held with operators of three Canadian asbestos mills that frequently operate under cold weather conditions and have installed tailings wetting systems with a firm that is experienced in designing systems to suppress dust generated by materials conveying operations and with several non-asbestos mineral mining facilities that operate wetting systems for crushing and conveying operations. The investigation revealed that several Canadian asbestos mills are presently experimenting with wet tailings disposal systems to extend operation to temperatures substantially below freezing. However, the Agency is aware of no such system that has operated in a continuous manner at temperatures below -9.5°C (15°F). Accordingly, the Agency has concluded that wet tailings disposal systems for asbestos mills are not available for disposal site temperatures below -9.5°C (15°F), and the proposed amend-

ment has been changed to provide an exemption for wetting of tailings below this temperature. Only one existing domestic asbestos mill is expected to use the exemption to a significant extent. An examination of hourly temperature representative of the location of that plant and extending over a period of one year showed that hourly temperatures are below 15°F for approximately 7 percent of the time.

Asbestos emissions at asbestos mill tailings disposal piles are contributed by their tailings conveying operation, the deposition operation, and wind entrainment of asbestos-containing particulate from the surface of the disposal pile. The first emission source is subject to previously promulgated regulations (38 FR 8820), and the latter two sources are subject to the amendments promulgated herein. The major sources of asbestos emissions from process gas streams at asbestos mills, namely, effluents from crushers, dryers, and milling equipment, are also covered by the previously promulgated regulations (38 FR 8820). The amendments promulgated herein, including an exemption from wetting of asbestos tailings at temperatures below -9.5°C (15°F), together with the standards promulgated on April 6, 1973 (38 FR 8820), represent use of the best available technology for control of emissions from asbestos mills. This is consistent with the determination of the Administrator that best available technology should be used to control major sources of asbestos emissions to protect the public health with an ample margin of safety.

The reporting format of Appendix A has been changed by the addition of paragraphs C and D to accommodate the addition of disposal of asbestos-containing wastes and certain inactive asbestos waste disposal sites to the amendments. The additional information required is essential for determining compliance with the regulations. Appendix A has also been revised into a new computer format which will promote more effective enforcement of the regulations. Section 61.24 has been revised to reflect the additional reporting information requested in Appendix A.

ADDITIONAL COMMENTS

Manufacturing and Fabrication. One comment questioned the need for including asphalt concrete manufacturing plants in the proposed amendments. The rationale for including asphalt concrete plants as a major source of asbestos is discussed in the background information document for the proposed amendments (EPA-450/2-74-009a). Two commentators suggested that the manufacture of asphalt concrete containing less than 3 to 5 percent asbestos in the total mixture should be exempt from the regulations. However, asbestos asphalt concrete typically contains 1 to 2 percent asbestos, and the Agency determined that asbestos asphalt concrete operations using even these low percentages of asbestos are major sources. No data or information were received that would indicate asphalt concrete plants are not

major sources, and the regulations promulgated herein apply to such sources. The Agency received two comments that the individual emission sources within an asbestos asphalt concrete plant which are subject to the proposed amendments should be specified. The Agency feels that revisions are not necessary. Only component operations that may emit asbestos are covered by the provisions. For example, if no asbestos is added to the aggregate dryer, the emissions from the dryer alone are not covered.

The possibility that the enforcement of the amendments promulgated herein for asphalt concrete plants may be in conflict with the enforcement of new source performance standards for asphalt concrete plants was raised by one commentator. It is possible that both the new source performance standards and the national emission standard for asbestos will apply simultaneously to emissions from some operations at some new and modified plants. Where this occurs, the visible emission standard promulgated herein applies to asbestos particulate matter, even though it is more restrictive than the opacity regulation of the new source performance standard. A more stringent standard is justified when asbestos is being processed because of the hazardous nature of asbestos.

Comments were received that the proposed definition of "fabricating" needed to be clarified. The Agency reviewed the definition and determined that changes in the definition are not necessary. Fabricating includes any type of processing, excluding field fabrication performed on manufactured products, that contain commercial asbestos. The Agency acknowledges that some component processes of asbestos fabricating operations could generate visible emissions in such a manner that the visible emissions do not contain asbestos generated by the process, though the commentators did not cite any specific examples. The Agency has observed this type of process in asbestos manufacturing operations. For example, visible emissions of organic materials are sometimes generated during the curing of asbestos friction products in operations where asbestos is bound into a matrix of non-asbestos material but the asbestos is not transferred into the emission stream. Such operations are in compliance with the standard of no visible emissions containing particulate asbestos material.

One commentator stated that some field fabrication operations release significant amounts of asbestos. The Agency's investigation prior to proposal of the amendments showed that there is only limited field fabrication of asbestos products other than insulating products. The fabrication of friable asbestos insulation was determined to be the only major asbestos field fabrication source, and this is regulated by prohibiting the use of such materials after the effective date of the amendments promulgated herein. In the judgment of the Administrator, the comment did not contain sufficient information to justify including other categories of asbestos field fabrication in the amendments. One commenta-

tor recommended that the Agency impose a standard of 0.03 grains per cubic foot for asbestos emissions in addition to the no-visible-emission standard. It is the judgment of the Agency that there are no sufficient reliable emission measurement techniques to provide a basis for such a numerical standard and the setting of numerical standards should be delayed until accurate asbestos measuring techniques are available.

Demolition and Renovation. Comments were received which suggested that the proposed renovation provisions should not apply to operations carried out within buildings or to operations regulated by the Occupational Safety and Health Administration (OSHA) for worker exposure to asbestos. The Agency recognizes that there may be less asbestos emissions from stripping of friable asbestos materials within a structure than from stripping in an unenclosed area. However, asbestos from the stripping operation carried out within a building or structure can be discharged into the outside air from building ventilation systems, windows and doors. Further, the disposal of friable asbestos waste materials generated by renovation operations, which includes the transport of waste materials to a disposal site, is an emission source that needs to be controlled regardless of whether the renovation is performed in the outside air or in buildings. In the judgment of the Administrator, the control of such asbestos emissions is necessary and is part of the best available control technology. The OSHA regulations (29 CFR 1910.93a) require that, "insofar as practicable," asbestos material be removed while wetted effectively to prevent emission of asbestos in excess of the specified OSHA exposure limit, but also specifically require that employees shall be provided with respiratory equipment for all spraying, demolition and removal of asbestos materials. The purpose of the OSHA standard to protect employees' health can be achieved by the use of respiratory equipment, even in those situations where wetting is not implemented and emissions may produce concentrations in excess of the OSHA exposure limit. The extent to which the resulting concentrations in the outside air are protective of public health is unknown. Accordingly, the proposed renovating provisions do not exempt operations that are controlled by OSHA regulations.

Two commentators stated that the alternative to the wetting requirement in the demolition provisions at sub-freezing temperatures should be allowed at all temperatures. In contrast, another commentator suggested that suspension of the wetting requirements at sub-freezing temperatures should be subject to a permit procedure that would discourage demolition at sub-freezing temperatures. The alternative was proposed because in the judgment of the Agency, worker safety would be unduly jeopardized by the unsafe footing caused by ice formation from water use under freezing conditions. The proposed alternative is less restrictive on demolition contractors than a second course of action that was

considered, namely, the prohibition of demolition under freezing conditions. The proposed alternative suspends only a portion of the wetting requirements under freezing conditions. Pipes, ducts, boilers, tanks, reactors, turbines, furnaces and structural members insulated or fireproofed with friable asbestos materials must be removed from the building in sections to the maximum extent practicable before wrecking of the building. The stripping of asbestos materials from the previously removed sections must be accompanied by wetting at all temperatures, and the resulting asbestos waste materials must be wetted at all temperatures. These procedures do not jeopardize worker safety. Therefore, the promulgated demolition provisions are based on the use of the best available emission control methods at all temperatures, and these methods are different for non-freezing and freezing conditions.

Another comment indicated that sprayed fireproofing was the only type of asbestos material that could cause asbestos emissions to the atmosphere during demolition operations, and that molded insulation is not readily released into the air. The Agency has inspected both types of materials and has found that some types of molded insulation and plaster that contain asbestos are friable. Therefore, buildings containing these materials are covered by the amendments promulgated herein.

Comments were received that the Agency has a responsibility to develop asbestos measurement methods and determine by use of measurement methods whether demolition is a major source of asbestos emissions. The Agency keeps abreast of newly developed measurement techniques in the asbestos industry, and the development of asbestos measurement techniques is currently being funded by the Agency. No new information on measurement techniques was received in the comments. The Agency previously made the determination that building demolition is a major source of asbestos emissions, and no new information has been submitted to demonstrate that it is not a major source. Demolition and renovation operations generate short-term exposures of urban populations to asbestos. Since promulgation of the demolition regulations on April 6, 1973, new biological evidence supporting the significance of single short-term exposures of asbestos has been obtained. One-day inhalation exposures in animal experiments have produced an increase in the incidence of mesothelioma (Wagner, J. C., Berry, G., and Timbrell, V., "The Effects of the Inhalation of Asbestos in Rats," *Br. J. Cancer*, 29, pp. 252-269, 1974). A copy of this article is available for inspection at the Public Information Reference Center, Room 2404, Waterside Mall, 401 M Street, S.W., Washington, D.C. 20460. It can be concluded that human asbestos exposure for periods typically required to perform demolition and renovation operations is hazardous. Therefore, the Agency has not changed its prior determination that building demolition is a major source of asbestos emissions. Another commentator was concerned that

the demolition sources now covered by the asbestos standard as major sources were not defined as major sources by the National Academy of Sciences (NAS) study, which was cited by the Agency as a basis for the demolition regulation. The NAS study did not define categories of asbestos materials other than sprayed fireproofing as major emission sources because data were available at that time on fireproofing only. The Agency had concluded prior to proposing asbestos standards on December 7, 1971 that any friable asbestos material used for insulation or fireproofing has a comparable potential to create asbestos emissions upon demolition or renovation as sprayed fireproofing, and therefore these materials are also covered by the regulations.

Several comments were received stating that the definitions of "friable asbestos material," "asbestos," and "asbestos material" are vague and subjective and remain constitutionally deficient for a regulation enforceable by criminal proceedings. The Agency reevaluated the definitions and concluded that they are sufficiently clear that the owners or operators subject to the amendments can reasonably be expected to understand these terms. Owners or operators should be able to identify covered material and comply with the regulations on the basis of the definitions supplied.

Comments were made suggesting the Agency describe more specifically a proper wetting operation. The purpose of the wetting requirements is to reduce the amount of asbestos dust generated during demolition operations. Many different procedures would accomplish this; therefore the Agency believes that specifying such procedures is neither necessary nor appropriate. A new definition of "adequately wetted" was added to the regulations promulgated herein. The Agency believes that owners or operators of demolition operations are familiar with proper wetting procedures.

Two comments were made stating that the proposed demolition and renovation amendments are not emission standards and that asbestos emissions must be proved in determining compliance with the regulations. Congress has specified that EPA should set emission standards for hazardous air pollutants. EPA is charged with implementing this requirement. EPA has determined that the term "emission standard" includes work practice requirements designed to limit emissions. The position taken by the Administrator on this issue in the promulgation of the original regulations on asbestos on April 6, 1973 (38 FR 8820) is unchanged here. The demolition and renovation regulations require certain work procedures to be followed. These methods of control are required because of the impossibility at this time of prescribing and enforcing allowable numerical concentrations or mass emission limitations. One difficulty in prescribing a numerical emission standard is the relative inaccuracy of asbestos analytical methods. Dr. Arnold Brown, testifying in a recent court case involving asbestos emissions (*United States et al. v. Reserve*

Mining Co. et al., 498 F.2d 1073, 1079 (8th Cir. 1974)) stated: "It is reasonable to assume an error in the count of fibers in both water and air of at least nine times on the high side to one ninth on the low side." Further testifying on the same subject, Dr. Brown stated: "I do not recall having been exposed to a procedure with an error this large, and which people have seriously proposed a number based on this very poor procedure." Moreover, there is no place to measure the total emissions from a demolition or renovation operation. The Agency has determined that violations of the work practices specified in the demolition section will result in emissions of asbestos. Considering these facts, the prescription of work practices is not only a legal permissible form of an emission standard but also the only practical and reasonable form.

Waste Disposal. A number of commentators questioned the relationship between the proposed no-visible-emissions requirements and the proposed asbestos waste disposal provisions and the alternative methods for complying with the requirements. The following points were included in the comments:

1. Can any of a variety of waste disposal methods be used to meet the no-visible-emissions limit?

2. Various other methods of disposal should be specified as alternatives.

3. The inclusion of a no-visible-emissions requirement in portions of the alternative methods of compliance is a paradox.

4. Various alternatives are either not feasible or are unnecessary for some specific waste disposal operations.

As stated in §§ 61.22 (c) and (d) of the proposed and promulgated amendments, a requirement for affected sources that dispose of asbestos waste is no visible emissions during waste disposal operations. This provides affected sources flexibility in developing and using those disposal techniques most suitable to individual needs. The Agency recognizes that the best available disposal methods for some of the sources may not be capable of preventing visible emissions during a minor portion of some of the disposal operations. Therefore alternative methods of compliance that represent the best available disposal methods have been included in the regulations. Sources are not required to use these methods; they may use other methods that achieve no visible emissions. However, sources may elect to use one of the specified alternatives. Some of these alternatives result in no visible emissions; others may not. For those alternative methods that may not be capable of preventing visible emissions during all portions of the waste disposal process, a requirement has nevertheless been included that there be no visible emissions from those portions of the process that can achieve this performance level. The listing of a particular method of waste disposal as an alternative method of compliance does not imply that the method is universally applicable or that the use of the method is necessary to achieve no visible emissions.

Some comments questioned whether the proposed amendments would apply to asbestos waste disposal sites that were inactivated prior to the publication of the proposed amendments. Regulations established under section 112 of the Act are applicable to both existing sources and new sources. The amendments cover previously inactivated sites as well as sites that become inactive in the future. However, the proposed amendments have been revised as discussed in "Changes to the Proposed Amendments" so that only owners of sites which have been operated by asbestos mills, manufacturing plants, and fabricating plants subject to the asbestos standard must comply with the asbestos amendments proposed herein for inactive asbestos waste disposal sites.

Several commentators suggested that certain types of asbestos waste disposal sites should be excluded from the proposed amendments, depending upon the rate at which asbestos waste is deposited at the site, the percentage of the total waste that is asbestos, the friability of the asbestos waste, and the extent to which the site is in active operation. These comments were considered, but no changes in the proposed amendments were made as a result of the Agency's reevaluation. It would be extremely difficult to enforce regulations that depend on the rate or asbestos content of waste deposition. Further, the provisions promulgated herein shift the focus of the waste disposal requirements away from the site operator to the generator of the waste. Because of this, the burden of the requirements on a waste disposal site operator who accepts only a very small quantity of asbestos waste and who the commentators desire to exclude from the regulations is largely removed.

A comment was made that the proposed amendments could cause considerable hardship to small users of asbestos because some waste disposal sites may no longer accept asbestos wastes. There are an estimated 5,000 waste disposal sites in the U.S. which meet the standards of a sanitary landfill. A properly operated sanitary landfill complies with the soil covering requirements of the amendments, and therefore will be affected only slightly by handling asbestos wastes. Accordingly, the Agency believes that small manufacturers and users of asbestos will not encounter severe problems in complying with the amendments for waste disposal sites.

Two commentators were concerned that the proposed waste disposal provisions would cause serious problems in contract hauling arrangements, and in the use of private landfills, municipal landfills, and waste disposal sites leased by generators of the asbestos waste. Since the generator of the waste has the direct responsibility for compliance during the transport of waste and for disposing of the waste at a properly operated disposal site, the Agency believes that problems in contract hauling arrangements can be avoided if the generator institutes proper waste handling practices. The Agency also believes that

the deletion in the promulgated amendments of some of the proposed requirements for posting of warning signs will remove many of the potential problems that were of concern. Further changes to the proposed amendments were judged unnecessary because they impose few additional requirements on disposal sites, such as municipal sanitary landfill sites that are properly operated.

A comment suggested that bags which previously held commercial asbestos should be exempt if the bags have been cleaned sufficiently so that shaking the bags will not generate visible emissions of asbestos particulate matter. Even if such wastes do not produce visible emissions during the subsequent processing, transporting and depositing operations at a waste disposal site, there is a need for ensuring proper ultimate waste disposal because such bags still are likely to contain residual asbestos. The Agency believes that regulations are needed for this purpose and also for the purpose of ensuring that emissions from the cited method of cleaning bags are properly controlled. Accordingly, the disposal of bags that have been cleaned in the manner described has not been exempted from the amendments promulgated herein.

Comments were received which stated that the proposed waste disposal provisions would probably preclude the disposal of waste asbestos cement pipe in commercial landfills. It is the Agency's judgment that commercial landfills which comply with the regulations will be available. Further, the pipe crushing operation that is conventionally carried out during compaction at the disposal site can alternatively be performed and controlled by gas cleaning equipment at a stationary crusher.

ENVIRONMENTAL AND ENERGY IMPACT

Environmental impact statements must accompany national emission standards for hazardous air pollutants approved for proposal after October 14, 1974. The amendments recommended for promulgation were approved for proposal prior to this date, and an environmental impact statement has not been prepared. The environmental impact of the standards has been assessed, however, and is discussed in the background information document (EPA-450/2-74-009a) for the proposed standards and in the preamble (39 FR 38064) to the proposed standards.

The energy impact resulting from the control of asbestos waste disposal operations at asbestos emission sources and at waste disposal sites is expected to be insignificant since this waste is already collected and deposited at waste disposal sites. Only a relatively small quantity of additional waste material is generated as a result of better control of particulate emissions from manufacturing and fabrication sources covered by the standard. The major energy impact of the amendments is that resulting from the operation of fabric filtration devices at manufacturing and fabrication plants. It is estimated that approximately 170 baghouses of 1000 acfm capacity will be required to comply with the amendments. The operation of these control devices will require the consumption of 2.5 million kilowatt-hours per year, which is equivalent to 3900 barrels per year of Number 6 fuel oil at the power generating station. The energy impact resulting from the NESHAPS amendment is small and is justified by the increased control of asbestos emissions.

There is no energy impact that results from the regulation of mercury emissions from sludge incinerators and dryers.

Effective upon promulgation.

(Sec. 112 and 114 of the Clean Air Act, as amended (42 U.S.C. 1857c-7 and 9))

Dated: October 3, 1975.

JOHN CHARLES
Acting Administrator

Part 61 of Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

1. The table of sections is amended as follows:

Subpart A—General Provisions

61.17 Circumvention

Subpart B—National Emission Standard for Asbestos

61.25 Waste disposal sites

2. The authority citation at the end of the table of sections for Part 61 is revised to read as follows:

AUTHORITY: Secs. 112 and 114 of the Clean Air Act, as amended by sec. 4(a) of Pub. L. 91-604, 84 Stat. 1678 (42 U.S.C. 1857c-7, 1857c-9).

Subpart A—General Provisions

3. Section 61.14 is amended by revising paragraph (c) and adding paragraph (d). The revised and added paragraphs read as follows:

§ 61.14 Source test and analytical methods.

(c) The Administrator may, after notice to the owner or operator, withdraw approval of an alternative method granted under paragraphs (a), (b), or (d) of this section if where the test results using an alternative method do not adequately indicate whether a source is in compliance with a standard, the Administrator may require the use of the reference method or its equivalent.

(d) Method 105 in Appendix B to this part is hereby approved by the Administrator as an alternative method for sources subject to § 61.52(b).

4. A new § 61.17 is added to subpart A as follows:

§ 61.17 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, process, or method the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.

Subpart B—National Emission Standard for Asbestos

5. Section 61.21 is amended by revising paragraph (j) and adding paragraphs (k), (l), (m), (n), (o), (p), (q), (r), (s), (t), (u), (v), and (w). The revised and added paragraphs read as follows:

§ 61.21 Definitions.

(j) Demolition means the wrecking or taking out of any load-supporting structural member and any related removing or stripping of friable asbestos materials.

(k) Friable asbestos material means any material that contains more than 1 percent asbestos by weight and that can be crumbled, pulverized, or reduced to powder when dry by hand pressure.

(l) Control device asbestos waste means any asbestos-containing waste material that is collected in a pollution control device.

(m) Renovation means the removing or stripping of friable asbestos material used to insulate or fireproof any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member. Opera-

tions in which load-supporting structural members are wrecked or taken out are excluded.

(n) Planned renovation means a renovation operation in which the amount of friable asbestos material that will be removed or stripped within a given period of time can be predicted. Operations that are individually non-scheduled are included, provided a number of such operations can be predicted to occur during a given period of time based on operating experience.

(o) Emergency renovation means a renovation operation that results from a sudden, unexpected event and is not a planned renovation. Operations necessitated by non-routine failures of equipment are included.

(p) Adequately wetted means sufficiently mixed or coated with water or an aqueous solution to prevent dust emissions.

(q) Removing means taking out friable asbestos materials used to insulate or fireproof any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member from any building, structure, facility, or installation.

(r) Stripping means taking out friable asbestos materials used for insulation or fireproofing from any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member.

(s) Fabricating means any processing of a manufactured product containing commercial asbestos with the exception of processing at temporary sites for the construction or restoration of buildings, structures, facilities, or installations.

(t) Inactive waste disposal site means any disposal site or portion thereof where additional asbestos-containing waste material will not be deposited and where the surface is not disturbed by vehicular traffic.

(u) Active waste disposal site means any disposal site other than an inactive site.

(v) Roadways means surfaces on which motor vehicles travel including, but not limited to, highways, roads, streets, parking areas, and driveways.

(w) Asbestos-containing waste material means any waste which contains commercial asbestos and is generated by a source subject to the provisions of this subpart including asbestos mill tailings, control device asbestos waste, friable asbestos waste material, and bags or containers that previously contained commercial asbestos.

6. Section 61.22 is amended by amending paragraphs (c) and (e), revising paragraphs (b), (d), (f), and (g), and adding paragraphs (h), (i), (j), (k), and (l). The revised and added paragraphs read as follows:

§ 61.22 Emission standard.

(b) Roadways. The surfacing of roadways with asbestos tailings or with asbestos-containing waste that is generated by any source subject to paragraphs (c), (d), (e), or (h) of this section is

prohibited, except for temporary roadways on an area of asbestos or asbestos-containing waste on roadways covered with snow or ice is considered surfacing.

(c) Manufacturing. There shall be no visible emissions to the outside air, except as provided in paragraph (f) of this section, from any of the following operations if they use commercial asbestos or from any building or structure in which such operations are conducted:

10. The manufacture of shotgun shells.

11. The manufacture of asphalt concrete.

(d) Demolition and renovation. The requirements of this paragraph shall apply to any owner or operator of a demolition or renovation operation who intends to demolish any institutional, commercial, or industrial building (including apartment buildings having more than four dwelling units), structure, facility, installation, or portion thereof which contains any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member that is insulated or fireproofed with friable asbestos material except as provided in paragraph (f) of this section. Any owner who intends to renovate any institutional, commercial, or industrial building, structure, facility, installation, or portion thereof where more than 80 meters (ca. 260 feet) of pipe insulated or fireproofed with friable asbestos material are stripped or removed or more than 15 square meters (ca. 160 square feet) of friable asbestos material used to insulate or fireproof any duct, boiler, tank, reactor, turbine, furnace, or structural member are stripped or removed.

(e) The owner or operator of a demolition operation is exempted from the requirements of this paragraph provided: (1) the amount of friable asbestos material in the building or portion thereof to be demolished is less than 80 meters (ca. 260 feet) of pipe insulated or fireproofed with friable asbestos material and less than 15 square meters (ca. 160 square feet) of friable asbestos material used to insulate or fireproof any duct, boiler, tank, reactor, turbine, furnace, or structural member; and (2) the notification requirements of paragraphs (d), (b), (f), and (g) are met.

(f) Written notification shall be postmarked or delivered to the Administrator at least 20 days prior to commencement of demolition and shall include the information required by paragraph (d) of this section, with the exception of the information required by paragraphs (d), (2), (iii), (vi), (vii), and (ix) and shall state the measured or estimated amount of friable asbestos material used for insulation and fireproofing which is present. Techniques of estimation shall be explained.

(g) Written notice of intention to demolish or renovate shall be provided to the Administrator by the owner or operator of the demolition or renovation operation. Such notice shall be postmarked or delivered to the Administrator at least 10 days prior to commencement of demo-

lition, or as early as possible prior to commencement of emergency demolition subject to paragraph (d) (6) of this section, and as early as possible prior to commencement of renovation. Such notice shall include the following information:

(i) Name of owner or operator.
(ii) Address of owner or operator.
(iii) Description of the building, structure, facility, or installation to be demolished or renovated, including the size, age, and prior use of the structure, and the approximate amount of friable asbestos material used for insulation and fireproofing.

(iv) Address or location of the building, structure, facility, or installation.

(v) Scheduled starting and completion dates of demolition or renovation.

(vi) Nature of planned demolition or renovation and method(s) to be employed.

(vii) Procedures to be employed to meet the requirements of this paragraph and paragraph (f) of this section.

(viii) The name and address or location of the waste disposal site where the friable asbestos waste will be deposited.

(ix) Name, title, and authority of the State or local governmental representative who has ordered a demolition which is subject to paragraph (d) (6) of this section.

(3) (i) For purposes of determining whether a planned renovating operation constitutes a renovation within the meaning of this paragraph, the amount of friable asbestos material to be removed or stripped shall be:

(A) For planned renovating operations involving individually non-scheduled operations, the additive amount of friable asbestos material that can be predicted will be removed or stripped at a source over the maximum period of time for which a prediction can be made. The period shall be not less than 30 days and not longer than one year.

(B) For each planned renovating operation not covered by paragraph (d) (3) (i) (A), the total amount of friable asbestos material that can be predicted will be removed or stripped at a source.

(ii) For purposes of determining whether an emergency renovating operation constitutes a renovation within the meaning of this paragraph, the amount of friable asbestos material to be removed or stripped shall be the total amount of friable asbestos material that will be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation.

(4) The following procedures shall be used to prevent emissions of particulate asbestos material to outside air:

(i) Friable asbestos materials, used to insulate or fireproof any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member, shall be removed from any building, structure, facility, or installation subject to this paragraph. Such removal shall occur before wrecking or dismantling of any portion of such building, structure, facility, or installation that would break up the friable asbestos materials, and before

wrecking or dismantling of any other portion of such building, structure, facility, or installation that would preclude access to such materials for subsequent removal. Removal of friable asbestos materials used for insulation or fireproofing of any pipe, duct, or structural member which are encased in concrete or other similar structural material is not required prior to demolition, but such material shall be adequately wetted whenever exposed during demolition.

(ii) Friable asbestos materials, used to insulate or fireproof pipes, ducts, boilers, tanks, reactors, turbines, furnaces, or structural members shall be adequately wetted during stripping, except as provided in paragraphs (d) (4) (iv), (d) (4) (vi), or (d) (4) (vii) of this section.

(iii) Pipes, ducts, boilers, tanks, reactors, turbines, furnaces, or structural members that are insulated or fireproofed with friable asbestos materials may be taken out of any building, structure, facility, or installation subject to this paragraph as units or in sections provided the friable asbestos materials exposed during cutting or disjoining are adequately wetted during the cutting or disjoining operation. Such units shall not be dropped or thrown to the ground, but shall be carefully lowered to ground level.

(iv) The stripping of friable asbestos materials used to insulate or fireproof any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member that has been removed as a unit or in sections as provided in paragraph (d) (4) (iii) of this section shall be performed in accordance with paragraph (d) (4) (ii) of this section. Rather than comply with the wetting requirement, a local exhaust ventilation and collection system may be used to prevent emissions to the outside air. Such local exhaust ventilation systems shall be designed and operated to capture the asbestos particulate matter produced by the stripping of friable asbestos material. There shall be no visible emissions to the outside air from such local exhaust ventilation and collection systems, except as provided in paragraph (f) of this section.

(v) All friable asbestos materials that have been removed or stripped shall be adequately wetted to ensure that such materials remain wet during all remaining stages of demolition or renovation and related handling operations. Such materials shall not be dropped or thrown to the ground or a lower floor. Such materials that have been removed or stripped more than 50 feet above ground level, except those materials removed as units or in sections, shall be transported to the ground via dust-tight chutes or containers.

(vi) Except as specified below, the wetting requirements of this paragraph are suspended when the temperature at the point of wetting is below 0°C (32°F). When friable asbestos materials are not wetted due to freezing temperatures, such materials on pipes, ducts, boilers, tanks, reactors, turbines, furnaces, or structural

members shall, to the maximum extent possible, be removed as units or in sections prior to wrecking. In no case shall the requirements of paragraphs (d) (4) (iv) or (d) (4) (v) be suspended due to freezing temperatures.

(vii) For renovation operations, local exhaust ventilation and collection systems may be used instead of wetting as specified in paragraph (d) (4) (ii) to prevent emissions of particulate asbestos material to outside air when damage to equipment resulting from the wetting would be unavoidable. Upon request and supply of adequate information, the Administrator will determine whether damage to equipment resulting from wetting to comply with the provisions of this paragraph would be unavoidable. Such local exhaust ventilation systems shall be designed and operated to capture the asbestos particulate matter produced by the stripping and removal of friable asbestos material. There shall be no visible emissions to the outside air from such local exhaust ventilation and collection systems, except as provided in paragraph (f) of this section.

(5) Sources subject to this paragraph are exempt from the requirements of §§ 61.05 (a), 61.07, and 61.09.

(6) The demolition of a building, structure, facility, or installation pursuant to an order of an authorized representative of a State or local governmental agency issued because the building is structurally unsound and in danger of imminent collapse is exempt from all but the following requirements of paragraph (d) of this section:

(i) The notification requirements specified by paragraph (d) (2) of this section.

(ii) The requirements on stripping of friable asbestos materials from previously removed units or sections as specified in paragraph (d) (4) (iv) of this section.

(iii) The wetting as specified by paragraphs (d) (4) (v) of this section of friable asbestos materials that have been removed or stripped.

(iv) The portion of the structure being demolished that contains friable asbestos materials shall be adequately wetted during the wrecking operation.

(e) (1) Any owner or operator who intends to spray asbestos materials which contain more than 1 percent asbestos on a dry weight basis to insulate or fireproof equipment and machinery shall report such intention to the Administrator at least 20 days prior to the commencement of the spraying operation. Such report shall include the following information:

(i) Rather than meet the no-visible emission requirements as specified by paragraphs (a), (c), (d), (e), (h), (j), and (k) of this section, an owner or operator may elect to use the methods specified by § 61.23 to clean emissions containing particulate asbestos material before such emissions escape to, or are vented to, the outside air.

(2) Where the presence of uncombined water is the sole reason for failure to meet the no-visible emission requirement of paragraphs (a), (c), (d), (e),

(h), (j), or (k) of this section, such failure shall not be a violation of such emission requirements.

(h) Fabricating. There shall be no visible emissions to the outside air, except as provided in paragraph (f) of this section, from any of the following operations if they use commercial asbestos or from any building or structure in which such operations are conducted:

(1) The fabrication of cement building products.

(2) The fabrication of friction products, except those operations that primarily install asbestos friction materials on motor vehicles.

(3) The fabrication of cement or silicate board for ventilation hoods, ovens, electrical panels, laboratory furniture, bulkheads, partitions, and ceilings for marine construction and flow control devices for the molten metal industry.

(i) Insulating. Molded insulating materials which are friable and wet-applied insulating materials which are friable after drying, installed after the effective date of these regulations, shall contain no commercial asbestos. The provisions of this paragraph do not apply to insulating materials which are spray applied; such materials are regulated under § 61.22(e).

(j) Waste disposal for manufacturing, fabricating, demolition, renovation and spraying operations. The owner or operator of any source covered under the provisions of paragraphs (c), (d), (e), or (h) of this section shall meet the following standards:

(1) There shall be no visible emissions to the outside air, except as provided in paragraph (f) (3) of this section, during the collection, processing, including incineration, packaging, transporting, or deposition of any asbestos-containing waste material which is generated by such source.

(2) All asbestos-containing waste material shall be deposited at waste disposal sites which are operated in accordance with the provisions of § 61.25.

(3) Rather than meet the requirement of paragraph (1) (i) of this section, an owner or operator may elect to use either of the disposal methods specified under (1) (3) (i) and (ii) of this section, or an alternative disposal method which has received prior approval by the Administrator.

(i) Treatment of asbestos-containing waste material with water.

(A) Control device asbestos waste shall be thoroughly mixed with water into a slurry and other asbestos-containing waste material shall be adequately wetted. There shall be no visible emissions to the outside air from the collection, mixing and wetting operations, except as provided in paragraph (f) of this section.

(B) After wetting, all asbestos-containing waste material shall be sealed into leak-tight containers while wet, and such containers shall be deposited at waste disposal sites which are operated in accordance with the provisions of § 61.25.

(C) The containers specified under paragraph (1) (3) (i) (B) of this section

shall be labeled with a warning label that states:

Caution
Contains Asbestos
Avoid Opening or Breaking Container
Breathing Asbestos is Hazardous
to Your Health

Alternatively, warning labels specified by Occupational Safety and Health Standards of the Department of Labor Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.93a(g) (2) (i) may be used.

(ii) Processing of asbestos-containing waste material into non-friable forms.

(A) All asbestos-containing waste material shall be formed into non-friable pellets or other shapes and deposited at waste disposal sites which are operated in accordance with the provisions of § 61.25.

(B) There shall be no visible emissions to the outside air from the collection and processing of asbestos-containing waste material, except as specified in paragraph (f) of this section.

(4) For the purposes of this paragraph (j), the term all asbestos-containing waste material as applied to demolition and renovation operations covered by paragraph (d) of this section includes only friable asbestos waste and control device asbestos waste.

(k) Waste disposal for asbestos mills. The owner or operator of any source covered under the provisions of paragraph (a) of this section shall meet the following standard:

(1) There shall be no visible emissions to the outside air except as provided in paragraph (k) (3) of this section during the collection, processing, packaging, transporting, or deposition of any asbestos-containing waste material which is generated by such source.

(2) All asbestos-containing waste material shall be deposited at waste disposal sites which are operated in accordance with the provisions of § 61.25.

(3) Rather than meet the requirement of paragraph (1) (i) of this section, an owner or operator may elect to meet the following requirements in paragraphs (k) (3) (i) and (ii) or use an alternative disposal method which has received prior approval by the Administrator.

(i) There shall be no visible emissions to the outside air from the transfer of control device asbestos waste to the tailings conveyor except as provided in paragraph (f) of this section. Such waste shall be subsequently processed either as specified in paragraph (k) (3) (ii) of this section or as specified in paragraph (1) (3) of this section.

(ii) All asbestos-containing waste material shall be adequately mixed with a wetting agent recommended by the manufacturer of the agent to effectively wet dust and tailings prior to deposition at a waste disposal site. Such agent shall be used as recommended for the particular dust by the manufacturer of the agent. There shall be no discharge of visible emissions to the outside air from the wetting operation except as specified in paragraph (f) of this section. Wetting may be suspended when the ambient

temperature at the waste disposal site is less than -9.5°C (ca 16°F). The ambient air temperature shall be determined by an appropriate measurement method with an accuracy of ±1°C (±2°F) and recorded at 15-min intervals during the period that the operation of the wetting system is suspended. Records of such temperature measurements shall be retained at the source for a minimum of two years and made available for inspection by the Administrator.

(1) The owner of any inactive waste disposal site which was operated by sources covered under § 61.22 (a), (c) or (h) and where asbestos-containing waste material produced by such sources was deposited shall meet the following standards:

(i) There shall be no visible emissions to the outside air from an inactive waste disposal site subject to this paragraph except as provided in paragraph (1) (5) of this section.

(2) Warning signs shall be displayed at all entrances and along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited at intervals of 100 m (ca 330 ft) or less except as specified in paragraph (1) (4) of this section. Signs shall be posted in such a manner and location that a person may easily read the legend. The warning signs required by this paragraph shall conform to the requirements of 29 CFR 1910.145 (d) (4) and this paragraph. The signs shall display the following legend in the lower panel with letter size and styles of visibility at least equal to those specified in this paragraph.

LEGEND
ASBESTOS WASTE DISPOSAL SITE
Do Not Create Dust
Breathing Asbestos is Hazardous
to Your Health
Notification
Sans Serif, Gothic or Block
Sans Serif, Gothic or Block
Point Gothic

Spacing between lines shall be at least equal to the height of the upper of the two lines.

(3) The perimeter of the site shall be fenced in a manner adequate to deter access by the general public except as specified in paragraph (1) (4) of this section.

(4) Warning signs and fencing are not required where the requirements of paragraphs (1) (5) (1) or (ii) of this section are met or where a natural barrier adequately deters access by the general public. Upon request and supply of appropriate information, the Administrator will determine whether a fence or a natural barrier adequately deters access to the general public.

(5) Rather than meet the requirement of paragraph (1) (i) of this section, an owner may elect to meet the requirements of this paragraph or may use an alternative control method for emissions from inactive waste disposal sites which

has received prior approval by the Administrator.

(1) The asbestos-containing waste material shall be covered with at least 15 centimeters (ca. 6 inches) of compacted non-asbestos-containing material and a cover of vegetation shall be grown and maintained on the area adequate to prevent exposure of the asbestos-containing waste material.

(ii) The asbestos-containing waste material shall be covered with at least 60 centimeters (ca. 2 feet) of compacted non-asbestos-containing material and maintained to prevent exposure of the asbestos-containing waste.

(iii) For inactive waste disposal sites for asbestos, fallings, petroleum-based dust suppression agent which effectively binds dust and controls wind erosion shall be applied. Such agent shall be used as recommended for the particular asbestos fallings by the dust suppression agent manufacturer. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, waste crankcase oil is not considered a dust suppression agent.

7. The first sentence in § 61.23 is revised as follows:

§ 61.23 Air Cleaning

If air cleaning is elected as permitted by §§ 61.22(f) and 61.22(d)(4)(iv), the requirements of this section must be met.

8. The first sentence in § 61.24 is revised and redesignated as paragraph (e) and new paragraphs (c) and (d) are added as follows:

§ 61.24 Reporting

(c) For sources subject to §§ 61.22(g) and 61.22(k).

(1) A brief description of each process that generates asbestos-containing waste material.

(2) The average weight of asbestos-containing waste material disposed of, measured in kg/day.

(3) The emission control methods used in all stages of waste disposal.

(4) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.

(d) For sources subject to § 61.22(l).

(1) A brief description of the site.

(2) The method or methods used to comply with the standard or alternative procedures to be used.

(e) Such information shall accompany the information required by § 61.10. The information described in this section shall be reported using the format of Appendix A of this part.

9. A new section 61.25 is added to subpart B as follows:

§ 61.25 Waste disposal sites

In order to be an acceptable site for disposal of asbestos-containing waste material under § 61.22(d) and (k), an active waste disposal site shall meet the requirements of this section.

(a) There shall be no visible emissions to the outside air from any active waste

disposal site where asbestos-containing waste material has been deposited except as provided in paragraph (e) of this section.

(b) Warning signs shall be displayed at all entrances and along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited at intervals of 100 m (ca. 330 ft) or less except as specified in paragraph (d) of this section. Signs shall be posted in such a manner and location that a person may easily read the legend. The warning signs required by this paragraph shall conform to the requirements of 20 CFR 19.109.45(d)(4) and this paragraph. The signs shall display the following legend in the lower panel, with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Asbestos Waste Disposal Site

Do Not Create Dust

Breathing Asbestos Is Hazardous to Your Health

Notation

1. Sans Serif Gothic or Block

2. Sans Serif Gothic or Block

14 Point Gothic

Spacing between lines shall be at least equal to the height of the upper of the two lines.

(c) The perimeter of the disposal site shall be fenced in order to adequately deter access to the general public except as specified in paragraph (d) of this section.

(d) Warning signs and fencing are not required where the requirements of paragraph (c)(ii) of this section are met, or where a natural barrier adequately deters access to the general public. Upon request and supply of appropriate information, the Administrator will determine whether a fence or a natural barrier adequately deters access to the general public.

(e) Rather than meet the requirement of paragraph (a) of this section, an owner or operator may elect to meet the requirements of paragraph (c)(i) or (c)(2) of this section, or may use an alternative control method for emissions from active waste disposal sites which has received prior approval by the Administrator.

(1) At the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material which was deposited at the site during the operating day or previous 24-hour period shall be covered with at least 15 centimeters (ca. 6 inches) of compacted non-asbestos-containing material.

(2) At the end of each operating day, or at least once every 24-hour period while the disposal site is in continuous operation, the asbestos-containing waste material which was deposited at the site during the operating day or previous 24-hour period shall be covered with a resinous or petroleum-based dust suppression agent which effectively binds dust

and controls wind erosion. Such agent shall be used as recommended for the particular dust by the dust suppression agent manufacturer. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, waste crankcase oil is not considered a dust suppression agent.

Subpart E—National Emission Standard for Mercury

10. Section 61.50 is revised to read as follows:

§ 61.50 Applicability

The provisions of this subpart are applicable to those stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge.

11. Section 61.51 is amended by adding paragraphs (l) and (m) as follows:

§ 61.51 Definitions

(l) Sludge means sludge produced by a treatment plant that processes municipal or industrial waste waters.

(m) Sludge dryer means a device used to reduce the moisture content of sludge by heating to temperatures above 65°C (ca. 150°F) directly with combustion gases.

12. Section 61.52 is revised to read as follows:

§ 61.52 Emission standard

(a) Emissions to the atmosphere from mercury ore processing facilities and mercury cell chlor-alkali plants shall not exceed 2300 grams of mercury per 24-hour period.

(b) Emissions to the atmosphere from sludge incineration plants, sludge drying plants, or a combination of these that process wastewater treatment plant sludges shall not exceed 3200 grams of mercury per 24-hour period.

13. Section 61.53 is amended by adding paragraph (d) as follows:

§ 61.53 Stack sampling

(d) Sludge incineration and drying plants.

(1) Unless a waiver of emission testing is obtained under § 61.13, each owner or operator of a source subject to the standard in § 61.52(b) shall test emissions from that source. Such tests shall be conducted in accordance with the procedures set forth either in paragraph (d) of this section or in § 61.54.

(2) Method 101 in Appendix B to this part shall be used to test emissions as follows:

(i) The test shall be performed within 90 days of the effective date of these regulations in the case of an existing source, or a new source which has an initial startup date preceding the effective date.

(ii) The test shall be performed within 90 days of startup in the case of a new source which did not have an initial startup date preceding the effective date.

48309

RULES AND REGULATIONS

48309

APPENDIX A

National Emission Standards for Hazardous Air Pollutants

Compliance Status Information

1. SOURCE REPORT

INSTRUCTIONS: Owners/operators of sources of hazardous pollutants subject to the National Emission Standards for Hazardous Air Pollutants are required to submit the information contained in this Section to the appropriate U.S. Environmental Protection Agency Regional Office for 150 days after the effective date of any standard or standard amendment which requires the submission of such information.

A list of Regional Offices is provided in 16104b.

A. SOURCE INFORMATION

1. Identification/Location - Indicate the name and address of each source.

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
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172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

172 344 1522-8 944-19 0100 0100 21
 Region State County Source Number 17-16 17-16 19
 20 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

48305

RULES AND REGULATIONS

48306

1b. Pollutant Emitted - Indicate the type of hazardous pollutant emitted by the process. Indicate "Asbestos" for asbestos, "HAP" for heavy metal, or "HAP for mercury".

23-133
Pollutant: 31-133 Regulation 70-119
70-119
70-119

2a. Process Description - Provide a brief description of each process (e.g., hydrogen end box, in a mercury, chlor-alkali plant, grinding machine, in a battery machine shop). Use additional sheets if necessary.

50-133
Process Description: 74-100
74-100

51-133
Pollutant: 19-20 21-20 22-20 23-20 24-20 25-20 26-20 27-20 28-20 29-20 30-20 31-20 32-20 33-20 34-20 35-20 36-20 37-20 38-20 39-20 40-20 41-20 42-20 43-20 44-20 45-20 46-20 47-20 48-20 49-20 50-20 51-20 52-20 53-20 54-20 55-20 56-20 57-20 58-20 59-20 60-20 61-20 62-20 63-20 64-20 65-20 66-20 67-20 68-20 69-20 70-20 71-20 72-20 73-20 74-20 75-20 76-20 77-20 78-20 79-20 80-20 81-20 82-20 83-20 84-20 85-20 86-20 87-20 88-20 89-20 90-20 91-20 92-20 93-20 94-20 95-20 96-20 97-20 98-20 99-20 100-20

3. Amount of Pollutant - Indicate the average weight of the hazardous material named in item 1 which enters the process in pounds per month (based on the previous twelve months of operation).

51-133
Amount of Pollutant: 19-20 21-20 22-20 23-20 24-20 25-20 26-20 27-20 28-20 29-20 30-20 31-20 32-20 33-20 34-20 35-20 36-20 37-20 38-20 39-20 40-20 41-20 42-20 43-20 44-20 45-20 46-20 47-20 48-20 49-20 50-20 51-20 52-20 53-20 54-20 55-20 56-20 57-20 58-20 59-20 60-20 61-20 62-20 63-20 64-20 65-20 66-20 67-20 68-20 69-20 70-20 71-20 72-20 73-20 74-20 75-20 76-20 77-20 78-20 79-20 80-20 81-20 82-20 83-20 84-20 85-20 86-20 87-20 88-20 89-20 90-20 91-20 92-20 93-20 94-20 95-20 96-20 97-20 98-20 99-20 100-20

4. Control Devices - Indicate the type of pollution control devices, if any, used to reduce the emissions from the process (e.g., venturi scrubber, electrostatic precipitator, baghouse, etc.) and the estimated percentage of the pollutant which the device removes from the process gas stream.

51-133
Control Devices: 19-20 21-20 22-20 23-20 24-20 25-20 26-20 27-20 28-20 29-20 30-20 31-20 32-20 33-20 34-20 35-20 36-20 37-20 38-20 39-20 40-20 41-20 42-20 43-20 44-20 45-20 46-20 47-20 48-20 49-20 50-20 51-20 52-20 53-20 54-20 55-20 56-20 57-20 58-20 59-20 60-20 61-20 62-20 63-20 64-20 65-20 66-20 67-20 68-20 69-20 70-20 71-20 72-20 73-20 74-20 75-20 76-20 77-20 78-20 79-20 80-20 81-20 82-20 83-20 84-20 85-20 86-20 87-20 88-20 89-20 90-20 91-20 92-20 93-20 94-20 95-20 96-20 97-20 98-20 99-20 100-20

51-133
Primary Device Name: 19-20 21-20 22-20 23-20 24-20 25-20 26-20 27-20 28-20 29-20 30-20 31-20 32-20 33-20 34-20 35-20 36-20 37-20 38-20 39-20 40-20 41-20 42-20 43-20 44-20 45-20 46-20 47-20 48-20 49-20 50-20 51-20 52-20 53-20 54-20 55-20 56-20 57-20 58-20 59-20 60-20 61-20 62-20 63-20 64-20 65-20 66-20 67-20 68-20 69-20 70-20 71-20 72-20 73-20 74-20 75-20 76-20 77-20 78-20 79-20 80-20 81-20 82-20 83-20 84-20 85-20 86-20 87-20 88-20 89-20 90-20 91-20 92-20 93-20 94-20 95-20 96-20 97-20 98-20 99-20 100-20

51-133
Secondary Device Name: 19-20 21-20 22-20 23-20 24-20 25-20 26-20 27-20 28-20 29-20 30-20 31-20 32-20 33-20 34-20 35-20 36-20 37-20 38-20 39-20 40-20 41-20 42-20 43-20 44-20 45-20 46-20 47-20 48-20 49-20 50-20 51-20 52-20 53-20 54-20 55-20 56-20 57-20 58-20 59-20 60-20 61-20 62-20 63-20 64-20 65-20 66-20 67-20 68-20 69-20 70-20 71-20 72-20 73-20 74-20 75-20 76-20 77-20 78-20 79-20 80-20 81-20 82-20 83-20 84-20 85-20 86-20 87-20 88-20 89-20 90-20 91-20 92-20 93-20 94-20 95-20 96-20 97-20 98-20 99-20 100-20

51-133
Efficiency: 19-20 21-20 22-20 23-20 24-20 25-20 26-20 27-20 28-20 29-20 30-20 31-20 32-20 33-20 34-20 35-20 36-20 37-20 38-20 39-20 40-20 41-20 42-20 43-20 44-20 45-20 46-20 47-20 48-20 49-20 50-20 51-20 52-20 53-20 54-20 55-20 56-20 57-20 58-20 59-20 60-20 61-20 62-20 63-20 64-20 65-20 66-20 67-20 68-20 69-20 70-20 71-20 72-20 73-20 74-20 75-20 76-20 77-20 78-20 79-20 80-20 81-20 82-20 83-20 84-20 85-20 86-20 87-20 88-20 89-20 90-20 91-20 92-20 93-20 94-20 95-20 96-20 97-20 98-20 99-20 100-20

b. Asbestos Emission Control Devices Only - Give the following information:

The air flow permeability in cubic feet per minute per square foot of fabric area.

Air flow permeability = cm³/ft²

The pressure drop in inches water gauge across the filter at which the baghouse is operated.

Operating pressure drop = inches w.g.

If the baghouse material contains synthetic fill, check whether this material is 1/2" or not 1/2"

If the baghouse utilizes a felted fabric, give the minimum thickness in inches and the density in ounces per square yard.

Thickness = inches Density = oz/yd²

If a wet collection device is specified in item 1a, give the designed unit contacting energy in inches water gauge.

Unit contacting energy = inches w.g.

c. DISPOSAL OF ASBESTOS-CONTAINING MASTERS - Part C should be completed separately for each asbestos-containing waste generation operation arising from sources subject to 161.22(a), (c), (e), and (h).

51-133
Disposal of Asbestos-Containing Masters: 19-20 21-20 22-20 23-20 24-20 25-20 26-20 27-20 28-20 29-20 30-20 31-20 32-20 33-20 34-20 35-20 36-20 37-20 38-20 39-20 40-20 41-20 42-20 43-20 44-20 45-20 46-20 47-20 48-20 49-20 50-20 51-20 52-20 53-20 54-20 55-20 56-20 57-20 58-20 59-20 60-20 61-20 62-20 63-20 64-20 65-20 66-20 67-20 68-20 69-20 70-20 71-20 72-20 73-20 74-20 75-20 76-20 77-20 78-20 79-20 80-20 81-20 82-20 83-20 84-20 85-20 86-20 87-20 88-20 89-20 90-20 91-20 92-20 93-20 94-20 95-20 96-20 97-20 98-20 99-20 100-20

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48308

RULES AND REGULATIONS

1. Waste Generation - Provide a brief description of the process that generates asbestos-containing waste (e.g. disposal of control device wastes).

2. Asbestos Concentration - Indicate the average percentage asbestos content of these material(s).

3. Amount of Wastes - Indicate the average weight of asbestos-containing wastes disposed of as measured in kg/day.

4. Control Methods - Indicate the emission control methods used in all stages of waste disposal, from collection, processing and packaging to transporting and deposition.

5. Primary Control Method

6. Waste Disposal - Indicate the type of disposal site (sanitary landfill, open covered, or incineration site) (municipal, private) where the waste is disposed of, and who operates the site (company, private, municipal).

7. State the name and location of the site (closest city or town, county, state).

8. SITE DESCRIPTION

9. RESIDENCE

10. ROAD

11. KMH

12. DISTANCE

13. ASBESTOS CONCENTRATION

14. kg/day

15. kg/day

16. kg/day

17. kg/day

18. kg/day

19. kg/day

20. kg/day

21. kg/day

22. kg/day

23. kg/day

24. kg/day

25. kg/day

26. kg/day

27. kg/day

28. kg/day

29. kg/day

30. kg/day

31. kg/day

32. kg/day

33. kg/day

34. kg/day

35. kg/day

36. kg/day

37. kg/day

38. kg/day

39. kg/day

40. kg/day

41. kg/day

42. kg/day

43. kg/day

44. kg/day

45. kg/day

46. kg/day

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DupA1-18 618 CONTACT METHOD/MCIVE SITE!

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MAINTAINING COMPETENCE. Owners or operators of sources unable to operate in compliance with the National Emissions Standards for Hazardous Air Pollutants prior to 90 days after the effective date for any standards for amendments will be required to submit for such information to request a waiver to comply. A request from the Administrator of the U.S. Environmental Protection Agency for a 120-day time period is necessary to install inappropriate control devices or undertake modifications to achieve compliance. The Administrator may grant a waiver of compliance with the standards for a period not exceeding two years, if the effective date for the hazardous air pollutant standards in question finds that such period is necessary for the installation of controls and that the standards will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment.

Processes Involved: Indicate the processes or processes emitting hazardous pollutants to which chemicals controls are to be applied.

Describe the proposed type of control device to be added or modified to the process to reduce the emissions of hazardous pollutants to an acceptable level. (Use additional sheets if necessary.)

b. Describe the measures that will be taken during the Navy period to assure that the health of persons will be protected from imminent dangerment.³ (Use additional sheets if necessary)

Increments of progress will be met.

Date by which contracts for emission control systems or process modifications will be awarded; on date by which orders will be issued for the purchase of the component parts to accomplish emission control or process modification.

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0267-9116

DATA: 01/01/2001

THE UNIVERSITY OF CHICAGO



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owners, or operators of:

the owners or operators

This application should

THE UNIVERSITY OF CHICAGO

the prescribed 1 mi

1. The first step is to identify the problem or question that needs to be addressed. This involves understanding the context and the specific requirements of the task.

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DAY: OCTOBER 14, 1975

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Sec. 427.15 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.

427.16 Standards of performance for new sources.

427.17 Pretreatment standards for new sources.

Subpart B—Asbestos-Cement Sheet Subcategory

427.20 Applicability, description of the asbestos-cement sheet subcategory.

427.21 Specialized definitions.

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

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

427.24 (Reserved)

427.25 Standards of performance for new sources.

427.26 Pretreatment standards for new sources.

Subpart C—Asbestos Paper (Starch Binder) Subcategory

427.30 Applicability, description of the asbestos paper (starch binder) subcategory.

427.31 Specialized definitions.

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

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

427.34 (Reserved)

427.35 Standards of performance for new sources.

427.36 Pretreatment standards for new sources.

Subpart D—Asbestos Paper (Elastomeric Binder) Subcategory

427.40 Applicability, description of the asbestos paper (elastomeric binder) subcategory.

427.41 Specialized definitions.

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

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

427.44 (Reserved)

427.45 Standards of performance for new sources.

427.46 Pretreatment standards for new sources.

Subpart E—Asbestos Millboard Subcategory

427.50 Applicability, description of the asbestos millboard subcategory.

427.51 Specialized definitions.

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

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

Sec. 427.54 (Reserved)

427.55 Standards of performance for new sources.

427.56 Pretreatment standards for new sources.

Subpart F—Asbestos Roofing Subcategory

427.60 Applicability, description of the asbestos roofing products subcategory.

427.61 Specialized definitions.

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

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

427.64 (Reserved)

427.65 Standards of performance for new sources.

427.66 Pretreatment standards for new sources.

Subpart G—Asbestos Floor Tile Subcategory

427.70 Applicability, description of the asbestos floor tile subcategory.

427.71 Specialized definitions.

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

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

427.74 (Reserved)

427.75 Standards of performance for new sources.

427.76 Pretreatment standards for new sources.

Subpart A—Asbestos-Cement Pipe Subcategory

427.10 Applicability, description of the asbestos-cement pipe subcategory.

The provisions of this subpart are applicable to discharges resulting from the process in which asbestos, Portland cement, silica and other ingredients are used in the manufacturing of asbestos-cement pipe.

427.11 Specialized definitions.

For the purpose of this subpart:

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

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

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these

limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different from the factors compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator (or the State) shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties controlled by this section which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available.

Effluent limitations		
Effluent characteristic	Maximum for any day	A range of daily values for 30 consecutive days shall not exceed
Metric units (g/l of product)		
TSS	200	100
pH	Within the range 6.0 to 9.0	
English units (lb/ton of product)		
TSS	154	79
pH	Within the range 6.0 to 9.0	

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

The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable: there shall be no discharge of process waste water pollutants to navigable waters.

427.14 (Reserved)

427.15 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of

pollutants or pollutant properties controlled by this section, which may be discharged by a new source subject to the provisions of this subpart.

Effluent limitations	
Effluent characteristic	Average of daily values for 30 consecutive days shall not exceed
TSS	0.57
pH	Within the range 6.0 to 9.0
Metric units (kg/kg of product)	
TSS	0.57
pH	Within the range 6.0 to 9.0
English units (lb/ton of product)	
TSS	1.14
pH	Within the range 6.0 to 9.0

§ 427.16 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the asbestos-cement pipe subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128.133 except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 427.15. *Provided*, That if the publicly owned treatment works which receives the pollutants is committed in its NPDES permit to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart B—Asbestos-Cement Sheet Subcategory

§ 427.20 Applicability, description of the asbestos-cement sheet subcategory.

The provisions of this subpart are applicable to discharges resulting from the process in which asbestos, Portland cement, silica, and other ingredients are used in the manufacturing of asbestos-cement sheets. Discharges resulting from manufacture of asbestos-cement sheet laboratory tops are specifically excluded from the provisions of this subpart.

§ 427.21 Specialized definitions.

For the purpose of this subpart,

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

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

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to col-

lect, develop, and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved in the process applied or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different from that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established therein to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent limitations	
Effluent characteristic	Average of daily values for 30 consecutive days shall not exceed
TSS	0.68
pH	Within the range 6.0 to 9.0
Metric units (kg/kg of product)	
TSS	0.68
pH	Within the range 6.0 to 9.0
English units (lb/ton of product)	
TSS	1.36
pH	Within the range 6.0 to 9.0

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

The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology, economically achievable; there shall be no

discharge of process waste water pollutants to navigable waters.

§ 427.24 [Reserved]

§ 427.25 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties which may be discharged by a new source subject to the provisions of this subpart; there shall be no discharge of process waste waters, pollutants to navigable waters.

§ 427.26 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the asbestos-cement sheet subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128.133 except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 427.25. *Provided*, That if the publicly owned treatment works which receives the pollutants is committed in its NPDES permit to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart C—Asbestos Paper (Starch Binder) Subcategory

§ 427.30 Applicability, description of the asbestos paper (starch binder) subcategory.

The provisions of this subpart are applicable to discharges resulting from the process in which asbestos, starch binders and other ingredients are used in the manufacture of asbestos paper (starch binder).

§ 427.31 Specialized definitions.

For the purpose of this subpart,

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

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

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop, and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established.

It is, however, possible that data which would affect these limitations have not been available and as a result, those limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved in the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties controlled by this section which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent limitations		
Effluent characteristic	Maximum daily load (lb/day)	Average of daily values for 30 consecutive days (lb/day)
Metric units (kg/kg of product)		
TSS	0.50	0.35
pH	Within the range 8.0 to 9.0	
English units (lb/ton of product)		
TSS	1.10	0.70
pH	Within the range 8.0 to 9.0	

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

The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by point source subject to the provisions of this subpart after application of the best available technology economically achievable; there shall be no discharge of process waste water pollutants to navigable waters.

§ 427.34. [Reserved]

§ 427.35. Standards of performance for new sources.

The following standards of performance establish the quantity or quality of

pollutants or pollutant properties which may be discharged by a new source subject to the provisions of this subpart; there shall be no discharge of process waste water pollutants to navigable waters.

§ 427.36. Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the asbestos paper (starch binder) subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR Part 128, except that for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standards for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 427.35. Provided that, if the publicly owned treatment works which receives the pollutants is committed in its NPDES permit to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart D—Asbestos Paper (Elastomeric Binder) Subcategory

§ 427.40. Applicability, description of the asbestos paper (elastomeric binder) subcategory.

The provisions of this subpart are applicable to discharges resulting from the process in which asbestos elastomeric binder and other ingredients are used in the manufacture of asbestos paper (elastomeric binder).

§ 427.41. Specialized definitions.

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

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

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established.

It is, however, possible that data which would affect these limitations have not been available and as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional

Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved in the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties controlled by this section which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent limitations		
Effluent characteristic	Maximum daily load (lb/day)	Average of daily values for 30 consecutive days (lb/day)
Metric units (kg/kg of product)		
TSS	0.50	0.35
pH	Within the range 8.0 to 9.0	
English units (lb/ton of product)		
TSS	1.10	0.70
pH	Within the range 8.0 to 9.0	

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

The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable; there shall be no discharge of process waste water pollutants to navigable waters.

§ 427.44. [Reserved]

§ 427.45. Standards of performance for new sources.

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

Effluent characteristics	Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
	Metric units (kg/kg of product)	
TSS	5.0	0.85
pH	Within the range 6.0 to 9.0	
	English units (lb/ton of product)	
TSS	11.0	1.9
pH	Within the range 6.0 to 9.0	

§ 427.46 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the asbestos paper (elastomeric binder) subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR Part 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 427.45. Provided, that, if the publicly owned treatment works which receives the pollutants is committed in its NPDES permit to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart F—Asbestos Millboard Subcategory

§ 427.50 Applicability: description of the asbestos millboard subcategory.

The provisions of this subpart are applicable to discharges resulting from the process in which asbestos in combination with various other materials such as cement, starch, clay, lime, and mineral wool are used in the manufacture of asbestos millboard.

§ 427.51 Specialized definitions.

For the purpose of this subpart:

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

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

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop, and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established

within the asbestos millboard subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act if it were to discharge pollutants to the navigable waters). shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 427.45. Provided, that, if the publicly owned treatment works which receives the pollutants is committed in its NPDES permit to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart F—Asbestos Roofing Subcategory

§ 427.60 Applicability: description of the asbestos roofing subcategory.

The provisions of this subpart are applicable to discharges resulting from the process in which asbestos paper is saturated with asphalt or coal tar with the subsequent application of various surface treatments to produce asbestos roofing products.

§ 427.61 Specialized definitions.

For the purpose of this subpart:

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

(b) COD shall mean COD added to the process waste water.

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

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop, and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator

It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES permit either more or less stringent than the limitations established herein to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

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

The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable; there shall be no discharge of process waste water pollutants to navigable waters.

§ 427.54 [Reserved]

§ 427.55 Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties which may be discharged by a new source subject to the provisions of this subpart; there shall be no discharge of process waste water pollutants to navigable waters.

§ 427.56 Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source

within the asbestos millboard subcategory, which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 427.45. Provided, that, if the publicly owned treatment works which receives the pollutants is committed in its NPDES permit to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart F—Asbestos Roofing Subcategory

§ 427.60 Applicability: description of the asbestos roofing subcategory.

The provisions of this subpart are applicable to discharges resulting from the process in which asbestos paper is saturated with asphalt or coal tar with the subsequent application of various surface treatments to produce asbestos roofing products.

§ 427.61 Specialized definitions.

For the purpose of this subpart:

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

(b) COD shall mean COD added to the process waste water.

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

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop, and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator

(or the State) will make a written finding that such factors are or are not fundamentally different from that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharge effluent limitations in the NPDES permit either more or less stringent than the limitations established herein to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent limitations		
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Metric units (kg/kg of product)		
COD	0.015	0.008
TSS	0.00	0.006
pH	Within the range 6.0 to 9.0	
English units (lb/ton of product)		
COD	0.023	0.016
TSS	0.002	0.012
pH	Within the range 6.0 to 9.0	

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

The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable; there shall be no discharge of process waste water pollutants to navigable waters.

§ 427.64. [Reserved]

§ 427.65. Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties which may be discharged by a new source subject to the provisions of this subpart; there shall be no discharge of process waste water pollutants to navigable waters.

§ 427.66. Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the asbestos millboard subcategory, which is a user of a publicly owned treatment works (and which would be a

new source subject to section 306 of the Act, if it were to discharge pollutants to the navigable waters), shall be the standard set forth in 40 CFR Part 128, except that, for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 427.65. Provided, That, if the publicly owned treatment works which receives the pollutants is committed, in its NPDES permit, to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

Subpart C—Asbestos Floor Tile

Subcategory

§ 427.70. Applicability: description of the asbestos floor tile subcategory.

The provisions of this subpart are applicable to discharges resulting from the process in which asbestos, polyvinyl chloride resin, chemical stabilizers, limestone, and other fillers are used in the manufacture of asbestos floor tile.

§ 427.71. Specialized definitions.

For the purpose of this subpart:

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

(b) The abbreviation "mpcl" shall mean 1000 pieces of floor tile.

(c) The term "pieces" shall mean floor tile measured in the standard size of 12 x 12 x 1/2.

(d) COD shall mean COD added to the process waste water.

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

(a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, raw materials, manufacturing processes, products produced, treatment technology available, energy requirements and costs) which can affect the industry subcategory and effluent levels established. It is, however, possible that data, which would affect these limitations, have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. Any individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved in the process applied, or other such factors related to such discharger, are fundamentally different from the factors considered in the establishment of the guidelines. On the basis

of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different from that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharge effluent limitations in the NPDES permit either more or less stringent than the limitations established herein to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations.

(b) The following limitations establish the quantity or quality of pollutants or pollutant properties controlled by this section, which may be discharged by a point source subject to the provisions of this subpart after application of the best practicable control technology currently available:

Effluent limitations		
Effluent characteristic	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Metric units (kg/mpc of product)		
COD	0.14	0.09
TSS	0.06	0.04
pH	Within the range 6.0 to 9.0	
English units (lb/mpc of product)		
COD	0.30	0.18
TSS	0.13	0.09
pH	Within the range 6.0 to 9.0	

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

The following limitations establish the quantity or quality of pollutants or pollutant properties which may be discharged by a point source subject to the provisions of this subpart after application of the best available technology economically achievable; there shall be no discharge of process waste water pollutants to navigable waters.

§ 427.74. [Reserved]

§ 427.75. Standards of performance for new sources.

The following standards of performance establish the quantity or quality of pollutants or pollutant properties which may be discharged by a new source subject to the provisions of this subpart; there shall be no discharge of process waste water pollutants to navigable waters.

§ 427.76. Pretreatment standards for new sources.

The pretreatment standards under section 307(c) of the Act for a source within the asbestos floor tile subcategory,

which is a user of a publicly owned treatment works (and which would be a new source subject to section 306 of the Act if it were to discharge pollutants to the navigable waters) shall be the standard set forth in 40 CFR Part 128, except that for the purpose of this section, 40 CFR 128.133 shall be amended to read as follows:

In addition to the prohibitions set forth in 40 CFR 128.131, the pretreatment standard for incompatible pollutants introduced

into a publicly owned treatment works shall be the standard of performance for new sources specified in 40 CFR 427.75. *Provided*, that if the publicly owned treatment works which receives the pollutant is committed in its NPDES permit to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall, except in the case of standards providing for no discharge of pollutants, be correspondingly reduced in stringency for that pollutant.

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ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 427]

ASBESTOS MANUFACTURING POINT SOURCE CATEGORY

Application of Effluent Limitations Guidelines for Existing Sources to Pretreatment Standards for Incompatible Pollutants

Notice is hereby given pursuant to sections 301, 304, and 307(b) of the Federal Water Pollution Control Act, as amended (the Act) (33 U.S.C. 1251, 1311, 1314, and 1317(b)), 86 Stat. 816, et seq., Pub. L. 92-500, that the proposed regulation set forth below concerns the application of effluent limitations guidelines for existing sources to pretreatment standards for incompatible pollutants. The proposal would amend 40 CFR Part 427, asbestos manufacturing point source category, by establishing for each subcategory therein the extent of application of effluent limitations guidelines to existing sources which discharge to publicly owned treatment works. The regulation is intended to be complementary to the general regulation for pretreatment standards set forth at 40 CFR 128. The general regulation was proposed July 19, 1973 (38 FR 19236), and published in final form on November 8, 1973 (38 FR 30982).

The proposed regulation is also intended to supplement a final regulation being simultaneously promulgated by the Environmental Protection Agency (EPA or Agency) which provides effluent limitations guidelines for existing sources and standards of performance and pretreatment standards for new sources within the asbestos-cement pipe, asbestos-cement sheet, asbestos paper (starch binder), asbestos paper (elastomeric binder), asbestos millboard, asbestos roofing products and asbestos floor tile subcategories of the asbestos manufacturing point source category. The latter regulation applies to the portion of a discharge which is directed to the navigable waters. The regulation proposed below applies to users of publicly owned treatment works which fall within the description of the point source category to which the guidelines and standards (40 CFR 427) promulgated simultaneously apply. However, the proposed regulation applies to the introduction of incompatible pollutants which are directed into a publicly owned treatment works rather than to discharges of pollutants to navigable waters.

The general pretreatment standard divides pollutants discharged by users of publicly owned treatment works into two broad categories: "compatible" and "incompatible." Compatible pollutants are generally not subject to pretreatment standards. (See 40 CFR 128.110 (State or local law) and 40 CFR 128.131 (Prohibited wastes) for requirements which may be applicable to compatible pollutants.) Incompatible pollutants are subject to pretreatment standards as pro-

vided in 40 CFR 128.133, which provides as follows:

In addition to the prohibitions set forth in 128.131, the pretreatment standard for incompatible pollutants introduced into a publicly owned treatment works by a major contributing industry not subject to section 307 (c) of the Act shall be for sources within the corresponding industrial or commercial category that established by a promulgated effluent limitations guidelines defining best practicable control technology currently available pursuant to sections 301 (b) and 304 (b) of the Act. Provided that, if the publicly owned treatment works which receives the pollutants is committed in its NPDES permit to remove a specified percentage of any incompatible pollutant, the pretreatment standard applicable to users of such treatment works shall be correspondingly reduced for that pollutant. And provided further that when the effluent limitations guidelines for each industry is promulgated, a separate provision will be proposed concerning the application of such guidelines to pretreatment.

The regulation proposed below is intended to implement that portion of 128.133, above, requiring that a separate provision be made stating the application of pretreatment standards or effluent limitations guidelines based upon best practicable control technology currently available.

Questions were raised during the public comment period on the proposed general pretreatment standard (40 CFR 128) about the propriety of applying a standard based upon best practicable control technology currently available to all plants subject to pretreatment standards. In general, EPA believes the analysis supporting the effluent limitations guidelines is adequate to make a determination regarding the application of those standards to users of publicly owned treatment works. However, to ensure that those standards are appropriate in all cases, EPA now seeks additional comments focusing upon the application of effluent limitations guidelines to users of publicly owned treatment works.

Sections 427.15, 427.25, 427.35, 427.45, 427.55, 427.65, and 427.75 of the proposed regulation for point sources within the asbestos-cement pipe, asbestos-cement sheet, asbestos paper (starch binder), asbestos paper (elastomeric binder), asbestos millboard, asbestos roofing products and asbestos floor tile subcategories (October 30, 1973, 38 FR 29944) contained the proposed pretreatment standard for new sources. The regulation promulgated simultaneously herewith contains §§ 427.16, 427.26, 427.36, 427.46, 427.56, 427.66, and 427.76 which state the applicability of standards of performance for purposes of pretreatment standard for new sources.

A preliminary Development Document was made available to the public at approximately the time of publication of the notice of proposed rulemaking and the final Development Document entitled "Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Building, Construction, and Paper Segment of the Asbestos Manufacturing Point Source Category" is now being published. The

economic analysis report entitled "Economic Analysis of Proposed Effluent Guidelines, The Asbestos Products Manufacturing Industry" (September 1973) was made available at the time of proposal. Copies of the final Development Document and economic analysis report will continue to be maintained for inspection and copying during the comment period at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street, SW, Washington, D.C. Copies will also be available for inspection at EPA regional offices and at State water pollution control agency offices. Copies of the Development Document may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Copies of the economic analysis report will be available for purchase through the National Technical Information Service, Springfield, Virginia 22151.

On June 14, 1973 (38 FR 15653), the Agency published procedures designed to insure that, when certain major standards, regulations, and guidelines are proposed, an explanation of their basis, purpose, and environmental effects is made available to the public. The procedures are applicable to major standards, regulations, and guidelines which are proposed on or after December 31, 1973, and which either prescribe national standards of environmental quality or require national emission, effluent, or performance standards or limitations.

The Agency determined to implement these procedures in order to insure that the public was provided with background information to assist it in commenting on the merits of a proposed action. In brief, the procedures call for the Agency to make public the information available to it delineating the major environmental effects of a proposed action, to discuss the pertinent nonenvironmental factors affecting the decision, and to explain the viable options available to it and the reasons for the option selected.

The procedures contemplate publication of this information in the Federal Register where this is practicable. They provide, however, that where such publication is impracticable because of the length of these materials, the material may be made available in an alternate format.

The Development Document referred to above contains information available to the Agency concerning the major environmental effects of the regulation proposed below. The information includes: (1) The identification of pollutants present in waste waters resulting from the manufacture of asbestos products, the characteristics of these pollutants, and the degree of pollutant reduction attainable through implementation of the proposed standard; and (2) the anticipated effects on other aspects of the environment (including air, subsurface waters, solid waste disposal and land use, and noise) of the treatment technologies available to meet the standard proposed.

The Development Document and the economic analysis report referred to above also contain information available

to the Agency regarding the estimated cost and energy consumption implications of those treatment technologies and the potential effects of those costs on the price and production of asbestos products. The two reports exceed in the aggregate 100 pages in length and contain a substantial number of charts, diagrams and tables. It is clearly impracticable to publish the material contained in these documents in the *FEDERAL REGISTER*. To the extent possible, significant aspects of the material have been presented in summary form in the preamble to the proposed regulation containing effluent limitations guidelines, new source performance standards and pretreatment standards for new sources within the asbestos manufacturing category (38 FR 29944, October 30, 1973). Additional discussion is contained in the analysis of public comments on the proposed regulation and the Agency's response to those comments. This discussion appears in the preamble to the promulgated regulation (40 CFR Part 427) which is being published simultaneously in the Rules and Regulations section of the *FEDERAL REGISTER*.

The options available to the Agency in establishing the level of pollutant reduction attainable through the best practicable control technology currently available and the reasons for the particular level of reduction selected are discussed in the documents described above. In applying the effluent limitations guidelines to pretreatment standards for the introduction of incompatible pollutants into municipal systems by existing sources in the asbestos-cement pipe, asbestos-cement sheet, asbestos paper (starch binder), asbestos paper (elastomeric binder), asbestos millboard, asbestos roofing products and asbestos floor tile subcategories, the Agency has essentially three options. The first is to declare that the guidelines do not apply. The second is to apply the guidelines unchanged. The third is to modify the guidelines to reflect (1) Differences between direct dischargers and plants utilizing municipal systems which affect the practicability of the latter employing the technology available to achieve the effluent limitations guidelines, or (2) characteristics of the relevant pollutants which require higher levels of reduction (or permit less stringent levels) in order to insure that the pollutants do not interfere with the treatment works or pass through them untreated.

The pollutants from this industry are deemed to be compatible with publicly owned treatment works. They do not interfere with nor pass through such works untreated. The main pollutant parameter from this industry is suspended solids, and municipal treatment systems are equipped to remove this pollutant parameter. The following regula-

tions, therefore, declare that the guidelines do not apply to existing sources discharging to publicly owned treatment works.

Interested persons may participate in this rulemaking by submitting written comments in triplicate to the EPA Information Center, Environmental Protection Agency, Washington, D.C. 20460, Attention: Mr. Phillip B. Wiseman. Comments on all aspects of the proposed regulations are solicited. In the event comments are in the nature of criticisms as to the adequacy of data which is available, or which may be relied upon by the Agency, comments should identify and, if possible, provide any additional data which may be available and should indicate why such data is essential to the development of the regulations. In the event comments address the approach taken by the Agency in establishing pretreatment standards for existing sources, EPA solicits suggestions as to what alternative better satisfies the detailed requirements of sections 301, 304, and 307 (b) of the Act.

A copy of all public comments will be available for inspection and copying at the EPA Information Center, Room 227, West Tower, Waterside Mall, 401 M Street, S.W., Washington, D.C. 20460. The EPA information regulation, 40 CFR 25 provides that a reasonable fee may be charged for copying.

In consideration of the foregoing, it is hereby proposed that 40 CFR 427 be amended to add §§ 427.14, 427.24, 427.34, 427.44, 427.54, 427.64, and 427.74. All comments received on or before March 28, 1974, will be considered.

Dated: February 15, 1974.

JOHN QUARLES,
Acting Administrator.

PART 427—ASBESTOS MANUFACTURING POINT SOURCE CATEGORY

40 CFR Part 427 is proposed to be amended as follows:

§ 427.14 Pretreatment standards for existing sources

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 427.12 shall not apply and subject to the provisions of Part 128 of this chapter concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

§ 427.24 Pretreatment standards for existing sources

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 427.22 shall not apply and

subject to the provisions of Part 128 of this chapter concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

§ 427.34 Pretreatment standards for existing sources

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 427.32 shall not apply and subject to the provisions of Part 128 of this chapter concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

§ 427.44 Pretreatment standards for existing sources

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 427.42 shall not apply and subject to the provisions of Part 128 of this chapter concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

§ 427.54 Pretreatment standards for existing sources

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 427.52 shall not apply and subject to the provisions of Part 128 of this chapter concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

§ 427.64 Pretreatment standards for existing sources

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 427.62 shall not apply and subject to the provisions of Part 128 of this chapter concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

§ 427.74 Pretreatment standards for existing sources

For the purpose of pretreatment standards for incompatible pollutants established under § 128.133 of this chapter, the effluent limitations guidelines set forth in § 427.72 shall not apply and subject to the provisions of Part 128 of this chapter concerning pretreatment, process waste water from this subcategory may be introduced into a publicly owned treatment works.

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