

CEMENT ASBESTOS PRODUCTS COMPANY

Birmingham, Alabama

PLAINTIFF'S EXHIBIT

CAP-1658

TO: Mr. Horace Beasley
Mr. Charlie Cobb

Date December 27, 1971

FROM: Mr. S. D. Weaver

SUBJECT:

Please read and re-read the attached material. We must look at all of our dust collecting equipment and dust pick-ups and keep them in good working order; and areas where dust is being turned loose without dust pick up must be improved.

SDW/bh

CAPCO KIN 0001919

The proposal contained in this notice may be changed in the light of comments received.

An official docket will be available for examination by interested persons at the Federal Aviation Administration, Office of the General Counsel, Attention: Rules Docket, 800 Independence Avenue SW., Washington, DC 20591. An informal docket will also be available for examination at the office of the Regional Air Traffic Division Chief.

The FAA proposes to amend Part 75 of the Federal Aviation Regulations by designating an area high route as follows:

J990R PHOENIX, ARIZ., TO BRIDGEPORT, TEX.

Reference facility, Theta/Rho, north latitude/west longitude

Phoenix, Ariz.,	000.0/00.0,	33°25'53"/
111°53'17",		
St. Johns, Ariz.,	168.4/03.5,	33°21'56"/
109°11'40",		
Socorro, N. Mex.,	187.1/07.3,	33°16'57"/
107°16'43",		
Roswell, N. Mex.,	000.0/03.0,	33°20'18"/
104°37'15",		
Texico, N. Mex.,	169.1/08.7,	33°20'52"/
102°50'29",		
Abilene, Tex.,	351.7/40.5,	33°18'28"/
09°50'01",		
Ardmore, Okla.,	190.3/05.0,	33°14'16"/
07°45'58",		

This amendment is proposed under the authority of section 207(a) of the Federal Aviation Act of 1958 (48 U.S.C. 1348(a)) and section 6(c) of the Department of Transportation Act (49 U.S.C. 1055(c)).

Issued in Washington, D.C., on November 30, 1971.

H. B. Hylstrom,
Chief, Airspace and Air
Traffic Rules Division.

[FR Doc. 71-17797 Filed 12-6-71; 8:40 am]

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 61]

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

Proposed Standards for Asbestos, Beryllium, Mercury

Pursuant to section 112 of the Clean Air Act, as amended, the Administrator published in the Federal Register of March 31, 1971 [36 CFR Part 62] an initial list of three hazardous air pollutants which in his judgment may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness. Publication of the list constituted an announcement of the Administrator's intention of establishing, under section 112, national emission standards for certain source categories known to emit these hazardous pollutants. These standards are based on information derived from many sources, including health effects levels, meteorology, technical analysis of control capability, and consideration of economic impact. The overriding considerations are health effects. Considera-

tion also has been given to the need to minimize the emission of hazardous pollutants that can accumulate in the environment.

In many cases, information on possible sources of the hazardous pollutants is not available in sufficient detail to determine the need for emission standards. Investigations are underway to fill these gaps in knowledge, and the results of these investigations may require modification of these standards and inclusion of additional source categories for these pollutants.

Beryllium, mercury, and asbestos are very different in the number and type of sources and control options available; therefore, each standard has been written in a different manner to optimize effectiveness and facilitate compliance.

Asbestos—The proposed standards for asbestos are designed to minimize emissions to the atmosphere. Because there is no suitable technique for sampling and analyzing asbestos in the ambient air or in emission gases, the standards are expressed as requirements for the operation of specific control equipment (or other equipment of comparable effectiveness), or in situations where no control system is available as prohibitions on the use of asbestos. When acceptable source sampling and analytical methods are available and it is possible to delineate hazardous levels, these standards may be revised to require compliance with a measured allowable emission.

The sources covered in the asbestos standard are: Mining, milling, spraying, and manufacturing. Specific examples of emission sources which would be subject to the proposed standards applicable to manufacturers of asbestos-containing products include, but are not limited to, manufacturers of the following products when those products contain asbestos: Cement, textiles, paper and board, friction products, plastics, floor tiles, gaskets, packings, roofing felts, and insulation products.

Beryllium—A maximum allowable concentration of beryllium for ambient air has been in use by the Department of Defense and the Atomic Energy Commission for many years. This guideline has been used in the development of the beryllium standards. The proposed standards offer the owner or operator the option of measuring compliance by either emission testing or measurement of ambient concentration levels in the vicinity of the plant. However, it is anticipated that most sources will elect to comply with the given emission limitation. Buildings or other obstructions in the vicinity of the source, or location in highly urbanized areas, may make it impossible to design and locate a sampling network that provides sufficient assurance that areas of maximum concentration are measured.

The known major sources of beryllium are extraction plants, machine shops and foundries handling beryllium or beryllium-containing alloys, ceramic plants using beryllium, rocket propellants containing beryllium, and incinerators burning beryllium-containing waste. These are covered in the proposed standards.

Other possible sources of beryllium are being investigated, and those sources which can potentially cause ambient concentrations to exceed 0.01 $\mu\text{g}/\text{m}^3$ will be included in revisions to this standard.

Mercury—Information currently available suggests that an ambient concentration level in the air below one (1) microgram per cubic meter is sufficient to protect the public health from illness due to inhalation of mercury. However, mercury is mobile in the environment, and once released to the atmosphere may cycle between air, land, and water for long periods of time. Natural processes and living organisms can change mercury from one form to another, at times converting mercury into its most hazardous forms. Therefore, when sufficient information and understanding are available, it will be necessary to consider the broader environmental problems caused by mercury emissions to the atmosphere.

The only industries known to be emitting mercury in quantities and in a fashion such that these facilities, assuming a negligible background level, may cause the ambient concentration level to exceed 1 $\mu\text{g}/\text{m}^3$ are the facilities producing mercury from ore and the mercury cell chlor-alkali plants. These industries are covered in this standard. Other sources may emit mercury, but present information indicates that these sources alone will not cause the ambient concentration level to exceed 1 $\mu\text{g}/\text{m}^3$.

Investigations are underway to identify all mercury sources and to quantify their emissions into the air. As more information becomes available, this subpart will be revised, as necessary, to add additional source categories.

The proposed regulations require application to the Administrator for approval for construction or modification of any stationary source to which a standard prescribed in the regulations is applicable. The Administrator will notify the applicant of approval or disapproval of such application within 60 days of receipt. A fee will be charged to defray part or all the costs of the review. The fee structure will be revised from time to time as experience with the program is developed.

Omitted from the proposed regulations are provisions for delegations of authority to States under section 112(d)(1). Nevertheless, it is the Administrator's intention to encourage States to assume the principal responsibility for enforcement of national emission standards for hazardous air pollutants. Toward this end, procedures for delegating authority will be established early next year, after the States have submitted their plans for implementation of national ambient air quality standards.

In accordance with section 117(f) of the Act, publication of these proposed standards was preceded by consultation with appropriate advisory committees, independent experts, and Federal departments and agencies.

Interested persons may participate in this rule making by submitting written comments in triplicate to the Environmental Protection Agency, Office of Air

Programs, Division of Compliance, Research Triangle Park, N.C. 27711. The Administrator will welcome comments on all aspects of the proposed regulations, including economic and technological issues and on the proposed test methods. All relevant comments received not later than 90 days after the date of publication of this notice will be considered. Receipt of comments will be acknowledged, but the Office of Air Programs will not provide substantive responses to individual comments.

Public hearings will be held as required by section 112(b)(1)(B) of the Clean Air Act. A notice of time, date, and place for these public hearings will be published in the Federal Register within 30 days of the publication date of these standards. Not later than 180 days after publication of the emission standards set forth below, the Administrator is required to promulgate such emission standards, unless he finds, on the basis of information presented at public hearings, that the pollutants in question clearly are not hazardous. Accordingly, all persons having scientific information pertinent either to the question of whether asbestos, beryllium, and/or mercury are in fact, hazardous within the meaning of section 112 of the Clean Air Act or to the question of the level of the various substances that constitute a risk to public health are urged to present such information either by testifying at the hearings or by submitting the data for the hearings record. In addition, all interested persons are specifically asked to present information on the extent to which promulgation of these emission standards for asbestos, beryllium, and mercury will be of benefit to the public health. In any testimony or written comments on the specific points mentioned herein or on other matters relevant to this proposed rule making, all assertions and claims should be fully substantiated by factual information.

Summaries of the pertinent data used in developing these standards are available free of charge from the Environmental Protection Agency, Office of Air Programs, Research Triangle Park, N.C. 27711.

This notice of proposed rule making is issued under the authority of sections 112 and 114 of the Clean Air Act, Public Law 91-604, 84 Stat. 1713.

WILLIAM D. RUCKELSHAUS,
Administrator,

Environmental Protection Agency.

NOVEMBER 30, 1971.

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Subpart A—General Provisions

§ 61.01 Applicability.

The provisions of this part apply to the owner or operator of any source which is operated, or the construction or modification of which is commenced after the date of publication in the Federal Register of proposed emission standards for hazardous air pollutants which are applicable to such source.

§ 61.02 Definitions.

As used in this part, all terms not defined in these subparts shall have the meaning given them in the Act:

(a) "Act" means the Clean Air Act (42 U.S.C. 1857 et seq., as amended by Public Law 91-604, 84 Stat. 1676).

(b) "Administrator" means the Administrator of the Environmental Protection Agency or his authorized representative.

(c) "Commenced" means that an owner or operator and a contractor to, or affiliate of, such owner or operator have entered into a binding agreement or contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

(d) "Construction" means fabrication, erection, or installation of a stationary source.

(e) "Emission test" means measurement and analysis of emissions or other procedures used for the purpose of determining compliance with a standard for hazardous air pollutants.

(f) "Existing source" means any stationary source which is not a "new source".

(g) "Modification" means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any hazardous air pollutant emitted by such source or which results in the emission of any hazardous air pollutant not previously emitted, except that routine maintenance, repair, and replacement shall not be considered physical changes.

(h) "New source" means any stationary source, the construction or modification of which is commenced after the publication in the Federal Register of proposed national emission standards for hazardous air pollutants which will be applicable to such facility.

(i) "Owner or operator" means any person who owns, leases, operates, controls, or supervises a stationary source.

(j) "Start up of operation" means the beginning of routine operation of a stationary source.

(k) "Stationary source" means any building, structure, facility, or installation which emits or may emit any hazardous air pollutant.

§ 61.03 Abbreviations.

The abbreviations used in this part have the following meanings:

cfm—Cubic feet per minute.
ft²—Square feet.
ft³—Cubic feet.
°F—Degree Fahrenheit.
in.—Inch.
l—Liter.
mg—Milligram.
ml—Milliliter.
M—Molar.
nm—Nanometer.
v/v—Volume per volume.
w.g.—Water gauge.
w/v—Weight per volume.
μg/m³—Micrograms per cubic meter.
%—Percent.

§ 61.04 Address.

All applications, requests, submissions and inquiries under this part shall be addressed to the Environmental Protection Agency, Office of Air Programs, Division of Compliance, Research Triangle Park, N.C. 27711.

§ 61.05 Prohibited activities.

(a) After the effective date of any emission standard prescribed under this part, no person shall construct or modify any stationary source subject to such standards without first obtaining written approval of the Administrator in accordance with this subpart, except under an exemption granted by the President under section 112(c)(2) of the Act.

(b) Ninety days after the effective date of any emission standard prescribed by this part, no person shall operate any stationary source in violation of such standard except under a waiver granted by the Administrator in accordance with this subpart or under any exemption granted by the President under section 112(c)(2) of the Act.

§ 61.06 Determination of construction or modification.

Upon written application therefor by an owner or operator, the Administrator will make a determination of whether actions taken or intended to be taken by such owner or operator constitute construction or modification or the commencement thereof within the meaning of this part.

§ 61.07 Application for approval for construction or modification.

(a) The owner or operator of any stationary source to which a standard prescribed under this part will be or is applicable shall, not less than 60 days prior to the date on which construction or modification is planned to commence, submit to the Administrator an application for approval of such construction or modification.

(b) A separate application shall be submitted for each stationary source.

(c) Each application shall include the following:

(1) Name and address of the applicant.

(2) Location or proposed location of the source.

(3) Technical information describing the proposed nature, size, design, and method of operation of the source, including a description of any equipment to be used for measurement or control of emissions.

§ 61.08 Approval by Administrator.

(a) The Administrator will, within 60 days of receipt of application, notify the owner or operator of approval or disapproval of construction or modification.

(b) If the Administrator determines, based on information included in an application submitted under § 61.06 or other information that a stationary source for which an application pursuant to § 61.06 was submitted will, if properly operated not cause emissions in violation of an applicable standard, he will approve the construction or modification of such source.

(c) Prior to denying any request for approval of construction or modification pursuant to this section, the Administrator will notify the person making such request of the Administrator's intention to issue such, together with:

(1) Notice of the information and findings on which such intended denial is based, and

(2) Notice of opportunity for such person to present additional information or arguments, orally or in writing, to the Administrator prior to final action on such request.

(d) A final determination to deny any request for approval will be in writing and will set forth the specific grounds on which such denial is based.

(e) Neither the submission of an application for approval or the Administrator's granting of approval to construct or modify shall:

(1) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or of any applicable State or local requirement, or

(2) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

§ 61.09 Source reporting.

(a) The owner or operator of any existing stationary source to which a standard prescribed in this part is applicable shall, within 30 days after the effective date of such standard, provide the Administrator the following information:

(1) Name and address of the owner or operator.

(2) Identification and location of the source.

(3) Brief description of the nature, size, design, and method of operation including description of any equipment used for the measurement or control of emissions.

(b) Changes in the information provided under paragraphs (a) (1) and (3) of this section shall be provided to the Administrator within 90 days of such change.

§ 61.10 Request for waiver of compliance.

(a) The owner or operator of an existing stationary source unable to operate in compliance with a standard or standards prescribed in this part may request a waiver of compliance with any applicable emission standard under this part for a period not exceeding 2 years.

(b) Any such request shall be in writing and shall include:

(1) The owner's or operator's name and address.

(2) Identification and location of the source.

(3) Technical information describing the nature, size, design, and method of operation of the source, including a description of any equipment used for measurement or control of emissions.

(4) Description of the controls necessary for compliance with the applicable standard and plans for installation of such controls.

(5) A time schedule for obtaining, producing, or installing such controls. The schedule should include interim measures to achieve compliance.

(6) Description of the emission control steps or other measures which will be taken by the owner during the waiver

period to assure that the health of persons will be protected from imminent endangerment.

(c) As used in this subpart, "imminent endangerment" means an immediate risk of significant harm to the human body.

§ 61.11 Waiver.

(a) Based on the information provided in any request under § 61.09 and any other information, the Administrator may grant a waiver of compliance with the applicable emission standard for a period not exceeding 2 years.

(b) Any such waiver shall be in writing and shall:

(1) Identify the source covered.

(2) Specify the termination date of the waiver.

(3) Impose such reasonable conditions as the Administrator determines to be necessary to assure installation of the necessary controls within the waiver period and to assure protection of the health of persons from imminent endangerment during the waiver period.

(c) Prior to finally denying any request for a waiver pursuant to this section, the Administrator will notify the person making such request of the Administrator's intention to issue such denial, together with:

(1) Notice of the information and findings on which such intended denial is based, and

(2) Notice of opportunity for such person to present additional information or arguments, orally or in writing, to the Administrator prior to final action on such request.

(d) A final determination to deny any request for a waiver will be in writing and will set forth the specific grounds on which such denial is based.

§ 61.12 Emission tests and monitoring.

(a) Emission tests and monitoring shall be conducted and results reported in accordance with the test methods and reporting requirements set forth in this part.

(b) At the request of the Administrator, the owner or operator of a source subject to this part shall provide, or cause to be provided, emission testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such source.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

§ 61.13 Availability of information.

(a) Emission data provided to, or otherwise obtained by, the Administrator in accordance with the provisions of this part shall be available to the public.

(b) Any records, reports, or information provided to, or otherwise obtained by, the Administrator in accordance with the provisions of this part shall be available to the public, except that upon a showing satisfactory to the Administrator by any person that such records, reports, or information, or particular part thereof (other than emission data), if made public, would divulge methods or processes

entitled to protection as trade secrets of such person, the Administrator shall consider such records, reports, or information, or particular part thereof, confidential in accordance with the purposes of section 1905 of title 18 of the United States Code, except that such records, reports, or information, or particular part thereof, may be disclosed to other officers, employees, or authorized representatives of the United States concerned with carrying out the provisions of the Act or when relevant in any proceeding under the Act.

§ 61.14 State authority.

The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from:

(a) Adopting and enforcing any emission standard or limitation applicable to a stationary source provided that such emission standard or limitation is not less stringent than the national emission standard for hazardous air pollutants applicable to such source.

(b) Requiring the owner or operator of a stationary source to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such source.

Subpart B—National Emission Standards for Asbestos

§ 61.20 Applicability.

The provisions of this subpart are applicable to the following sources of atmospheric asbestos:

Asbestos mines;

Asbestos mills;

Buildings, structures, or facilities within which manufacturing or fabricating operations involving the use of commercial asbestos are carried on;

Buildings or structures which have been or will be constructed or modified using asbestos insulating products;

Roadway facilities which would be surfaced or resurfaced using asbestos tailings.

§ 61.21 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given in the Act and in Subpart A of this part.

(a) "Asbestos" means any of six naturally occurring, hydrated mineral silicates: Actinolite, amosite, anthophyllite, chrysotile, crocidolite, and tremolite.

(b) "Commercial asbestos" means any variety of asbestos which is produced by the concentration of asbestos ore.

(c) "Asbestos mine" means any facility engaged in the extraction of asbestos ore from the earth for the purpose of recovering commercial asbestos.

(d) "Air flow permeability" means the volumetric rate of air flow in cfm, produced by a pressure decrease of 0.5 in. w.g. across a new, clean filtering fabric, divided by the area of the fabric in ft². The test air stream is maintained at nominal atmospheric pressure and temperature.

(e) "Dry drilling" means the process of drilling holes in the earth in the absence of an applied liquid stream, mist-containing stream or air stream.

(f) "Air-swept drilling" means the process of drilling holes in the earth in the presence of a forced or induced air stream, but not a liquid stream or mist-containing stream.

(g) "Wet drilling" means the process of drilling holes in the earth in the presence of a forced liquid stream or mist-containing stream.

(h) "Particulate matter" means any material, other than uncombined water, which exists in a finely divided form as a liquid or solid.

* (i) "Asbestos tailings" means any solid waste product of asbestos mining or milling operations which contains asbestos.

(j) "Visible emission" means, for the purpose of this subpart, any emission which is visually detectable.

(k) "Asbestos mill" means any facility engaged in the conversion of asbestos ore into commercial asbestos.

* (l) "Manufacturing operation" means the processing of commercial asbestos or the production of any product containing commercial asbestos.

* (m) "Fabricating" means the cutting, shaping, assembly, mixing or other altering of any manufactured product containing commercial asbestos.

§ 61.22 Emission standards for asbestos.

(a) Emissions to the atmosphere from asbestos mines shall be limited as follows:

(1) Emissions of particulate matter from air-swept or dry drilling operations shall not exceed those which would be emitted from an air-swept or dry drill, respectively, equipped with a fabric filter device for collection of dust generated from drilling, as described in § 61.23(a).

(2) Emissions of particulate matter from wet drilling operations shall not exceed those which would be emitted from a wet drill equipped with a cyclone gas cleaning device for collection of dust or mist generated from drilling as described in § 61.23(b).

(3) Visible emissions of particulate matter from any mine road surfaced with asbestos tailings are prohibited.

(b) Emissions to the atmosphere from asbestos mills shall be limited as follows:

* (1) Visible emissions of particulate matter from asbestos ore dumps, open storage areas for asbestos-containing materials, external conveyors for asbestos-containing materials, or asbestos-containing tailings dumps are prohibited.

(2) Emissions of particulate matter from asbestos ore dryers shall not exceed those which would be emitted from asbestos ore dryers equipped with fabric filter installations as described in § 61.23(c).

(3) Emissions of particulate matter from air streams used to process asbestos ores or for exhausting particulate matter resulting from milling operations shall not exceed the amounts which would be emitted if such air streams were treated in fabric filter installations as described in § 61.23(d).

(4) Emissions of particulate matter from any milling operation which continuously generates visible emissions shall not exceed the amounts which would be emitted if such air streams

were treated in fabric filter installations as described in § 61.23(d).

(c) Emissions to the atmosphere from buildings, structures, or facilities within which any fabricating or manufacturing operation is carried on shall be limited as follows:

(1) Emissions, in direct forced gas streams, of particulate matter resulting from manufacturing or fabricating operations shall not exceed the amounts which would be emitted if such forced exhausts were treated in fabric filter installations as described in § 61.23(d) or, where approved by the Administrator because of special process conditions, in wet collectors as described in § 61.23(f).

* (2) Emissions of particulate matter from any manufacturing or fabricating operation which continuously generates visible emissions shall not exceed the amount which would be emitted if the air containing such emissions were treated in fabric filter installations as described in § 61.23(d) or, where approved by the Administrator because of special process conditions, in wet collectors as described in § 61.23(f).

* (3) Visible emissions of particulate matter from any manufacturing or fabricating operations in an area directly open to the atmosphere are prohibited.

(d) Visible emissions to the atmosphere of asbestos particulate matter resulting from the repair or demolition of any building or structure, other than a single-family dwelling are prohibited.

(e) The spraying of asbestos is limited as follows:

(1) The spraying of any product which contains asbestos on any portion of a building or structure is prohibited.

(2) The spraying of any product which contains asbestos in an area directly open to the atmosphere is prohibited.

(3) Emissions of particulate matter from spraying of any product which contains asbestos, if such spraying is not specifically prohibited in subparagraphs (1) or (2) of this paragraph, shall not exceed the amounts which would be emitted if the air containing such emissions were treated in fabric filter installations as described in § 61.23(d) or, where approved by the Administrator because of special process conditions, in wet collectors as described in § 61.23(f).

(f) The surfacing or resurfacing of any roadway with asbestos tailings is prohibited.

§ 61.23 Referenced equipment specifications.

(a) Fabric filters referred to in § 61.22(a) (1) are equipped with fabrics having airflow permeabilities not exceeding 40 cfm/ft².

(b) Cyclone collectors referred to in § 61.22(a) (2) are operated at not less than 7 in. w.g. pressure decrease as measured from the cyclone inlet to the outlet.

(c) Fabric filters referred to in § 61.22(b) (2) are equipped with fabrics having airflow permeabilities not exceeding 30 cfm/ft².

(d) Fabric filters referred to in § 61.22(b) (3) and (4), (c) (1) and (2), and (e) (3) are equipped with woven cotton fabrics having airflow permeabilities not

exceeding 20 cfm/ft². No bypass devices are utilized, and provisions are made for emptying the collection hoppers without creating visible emissions of particulate matter.

(c) Fabric filter devices do not meet the descriptions in paragraphs (a), (c), and (d) of this section if any of the following conditions exist:

(1) Leakage of gases, containing particulate matter, from the control system prior to filtration.

(2) Torn or ruptured bags.

(3) Improperly positioned bags.

(4) Badly worn or threadbare bags.

(f) Wet collectors referred to in § 61.22(c) (1) and (2) and (c) (3) are of the high-energy venturi type operated with a minimum gas pressure decrease across the venturi throat of 40 inches w.g.

(g) Wet collectors do not meet the description in paragraph (f) of this section if any of the following conditions exist:

(1) Leakage of gases containing particulate matter from the control system prior to filtration.

(2) Operation at less than 40 inches w.g. pressure decrease.

(3) Operation at a scrubbing medium flow rate less than specified by the manufacturer for optimum collection efficiency.

§ 61.21 Substitute devices for the attainment of equivalent emission control.

(a) Compliance with any applicable standard of this subpart which refers to a control equipment specification in § 61.23 shall be demonstrated in accordance with this section if the referenced control equipment is not used.

(b) The owner or operator of the emission source shall make available to the Administrator sufficient information as may be required to demonstrate that the substitute equipment will provide the degree of control which, in the judgment of the Administrator, is at least as stringent as that which would be achieved by using the equipment specified in the applicable standard. To the maximum extent practicable, the determination of equivalent degree of emission control will be based upon operation at the actual conditions at which the substitute device is or will be operated on the emission source. Factors which will be considered include, but are not limited to, collection efficiency, reliability, and maintenance practices associated with proper operation of the substitute device.

(c) The owner or operator of the emission source shall submit to the Administrator performance data including, but not limited to, total mass collection efficiency of the substitute control device under actual operating conditions or conditions which are representative of those of the existing or planned operating conditions.

(d) In cases for which it is not reasonable, in the judgment of the Administrator, to require an owner or operator to submit performance data which are based upon actual operating conditions or conditions which are representative of

these, the owner or operator shall make available to the Administrator performance data on comparative tests, using suitable standard test aerosols, on the substitute device and the device specified by the applicable standard. The performance data shall include, but not be limited to, the total mass efficiencies of the substitute device and the device specified by the applicable standard.

(e) The total mass efficiency of any substitute device for those specified by § 61.23 (a), (c), or (d) shall not be less than 99.9 percent.

(f) The total mass efficiency of any substitute device for that specified by § 61.23(b) shall not be less than 85 percent.

(g) The total mass efficiency of any substitute device for that specified by § 61.23(f) shall not be less than 99.5 percent.

Subpart C—National Emission Standards for Beryllium

§ 61.30 Applicability.

The provisions of this subpart are applicable to the following sources:

Machine shops;
Ceramic plants;
Propellant plants;
Foundries;
Extraction plants;
Incinerators designed or modified for disposal of toxic substances.

§ 61.31 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them by the Act and in Subpart A of this part.

(a) "Beryllium" means the element beryllium excluding any associated elements.

(b) "Extraction plant" means a facility chemically processing beryllium ore to beryllium metal, alloy or oxide, or performing any of the intermediate steps in these processes.

(c) "Beryllium ore" means any material mined, hand cobbled, or gathered in any way specifically for its beryllium content.

(d) "Machine shop" means a facility performing cutting, grinding, turning, honing, milling, deburring, lapping, electrochemical machining, hot rolling, etching or other similar operations on beryllium metal, alloys or oxide.

(e) "Ceramic plant" means a manufacturing plant producing commercial ceramic stock forms, ware, or other items from beryllium oxide.

(f) "Foundry" means a facility engaged in the melting and/or casting of beryllium metal or alloy.

(g) "Propellant" means a fuel and oxidizer physically or chemically combined which undergoes combustion to provide rocket propulsion.

(h) "Beryllium alloy" means any metal to which beryllium is deliberately added and contains more than 0.1 percent beryllium by weight.

(i) "Propellant plant" means any facility engaged in the mixing, casting, or machining of propellant that contains beryllium.

(j) "Total emissions" means the emissions of beryllium in any form or any compound, from all points within a stationary source including emissions from the disposal of beryllium contaminated waste.

§ 61.32 Emission standards for beryllium.

A stationary source subject to this subpart shall, in accordance with the provisions of § 61.38, elect to comply with either paragraph (a) or (b) of this section.

(a) Total emissions to the atmosphere from sources subject to this subpart shall not exceed 10 grams of beryllium in a 24-hour day as measured in accordance with Method 3 in the appendix.

(b) Total emissions to the atmosphere from sources subject to this subpart shall not exceed amounts which result in an output concentration of 0.01 micrograms of beryllium per cubic meter of air averaged over a 30-day period, measured in accordance with a sampling network approved by the Administrator.

§ 61.33 Test methods and procedure—stack sampling.

Owners or operators electing to comply with § 61.32(a) shall comply with the requirements of this section and § 61.34.

(a) All beryllium emissions shall be transported through stacks or ducts which permit testing by the methods set forth in Method 3 in the appendix to this part.

(b) All tests shall be conducted to indicate the weight emitted per 24-hour day.

(c) Method 3 set forth in the appendix to this part shall be used as follows:

(1) The minimum sampling time shall be 2 hours, and the minimum sampling volume shall be 75 ft³ as measured by the gas meter. The total gas volume sampled at stack conditions shall be calculated.

(2) The velocity of the effluents shall be determined at stack conditions.

(3) For each repetition, beryllium emission expressed in grams per day shall be determined in accordance with Method 3.

§ 61.34 Periodic stack sampling and reports.

(a) All existing sources shall be tested within 3 months of the effective date of these regulations and at least once every 3 months thereafter.

(b) All sources constructed after the effective date of these regulations shall be tested immediately upon start-up of operations and at least once every 3 months thereafter.

(c) Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which would occur in a 24-hour period. In the case of cyclic operations, sufficient tests shall be made so as to allow accurate determination or calculation of the emissions which will occur over the duration of the cycle.

(d) All samples shall be analyzed, and beryllium emissions shall be calculated within 5 working days after collection of samples. A total emission exceeding the