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BALTIMORE COUNTY, MARYLAND

INTER-OFFICE CORRESPONDENCE

TO William L. Phillips Date April 12, 1973

FROM Technical Services Section

SUBJECT EPA HAZARDOUS AIR POLLUTANT STANDARDS: SUMMARY INTERPRETATION

A. GENERAL

Asbestos, beryllium and mercury have been declared hazardous air pollutants and national standards have been promulgated (Federal Register, V. 38, no. 66, pp 8820-8850, April 6, 1973). No one may construct or modify any stationary hazardous air pollutant source, and all existing sources must register with EPA. In Maryland, the address to contact is:

Director, Enforcement Division
Environmental Protection Agency
Region III
Curtis Building
Sixth and Walnut Streets
Philadelphia, Pa. 19106

B. ASBESTOS

(1) Mills, manufacturing plants - no visible emissions except [what would get through a well-designed baghouse]. The wording is that the fabric filter must operate at up to a pressure drop of 4 in. water gage and have air flow permeability no greater than 30 cfm/ft.^{2} of cloth. This corresponds to an operating air to cloth ratio of under 3.0 cfm/ft.^{2} (see AP-51, p. 105).

EPA officials say they put in the baghouse design specifications to effectively assure that these sources would be well controlled.

(2) Demolition - Any demolition operator wishing to raze any institutional, commercial, or industrial building (including apartment buildings with more than 4 dwelling units) must notify the EPA Administrator at least 20 days in advance, including the information listed under 61.22 (d)(1). The procedures to be followed to reduce asbestos emissions in demolition are basically (1) wet and remove fireproofing insulation from all boilers, pipes, and load-supporting structural members, and (2) do not drop these friable asbestos materials but lower carefully or transfer to ground via dust-tight containers or chutes.

(3) Sprayed asbestos - spray on materials used to insulate or fireproof buildings shall contain less than 1% asbestos on a dry weight basis.

However, any operator who wishes to spray asbestos materials must notify the EPA Administrator at least 20 days in advance, including information required under 61.22 (e)(2).

(4) Reporting - Sections 61.10 and 61.24 detail information which existing sources are required to send in by July 6, 1973 to EPA. Section 61.10 also deals with requests for waivers. Appendix A of the regulations includes the format for reporting information specified in part 61.10, reproduced here.

C. BERYLLIUM

Emissions to the atmosphere from stationary sources (including incinerators) shall not exceed 10 grams of beryllium in any day, with the possible exception where the company can show that ambient beryllium levels in the vicinity are under 0.01 ug/m^3. Stack sampling techniques are detailed in Appendix B to the regulations. Each operator must provide to EPA by July 6, 1973 stack emission tests unless a waiver is obtained under 61.13. All operators must register with EPA by July 6, 1973 as per 61.10 (form in Appendix A to Standards).

D. National Emission Standard for Beryllium Rocket Motor Firing will not be discussed here.

E. MERCURY

Emissions to the atmosphere from mercury ore processors, mercury reclaimers and chlor-alkali plants shall not exceed 2300 grams of mercury per 24 hour period.

Stack test data (method in Appendix B to regulations) must be submitted to EPA unless a waiver is granted under 61.13, by July 6, 1973.

All operators must register with EPA by July 6, 1973 as per 61.10 (form in Appendix A to regulations).

BC

Barry I. Castleman, PHE
Technical Services Section
Division of Air Pollution and
Industrial Hygiene

BIC/mav
attachment

(g) "Denuder" means a horizontal or vertical container which is part of a mercury chlor-alkali cell and in which water and alkali metal amalgam are converted to alkali metal hydroxide, mercury, and hydrogen gas in a short-circuited, electrolytic reaction.

(h) "Hydrogen gas stream" means a hydrogen stream formed in the chlor-alkali cell denuder.

(i) "End box" means a container(s) located on one or both ends of a mercury chlor-alkali electrolyzer which serves as a connection between the electrolyzer and denuder for rich and stripped amalgam.

(j) "End box ventilation system" means a ventilation system which collects mercury emissions from the end-boxes, the mercury pump sumps, and their water colection systems.

(k) "Cell room" means a structure(s) housing one or more mercury electrolytic chlor-alkali cells.

§ 61.52 Emission standard.

Emissions to the atmosphere from stationary sources subject to the provisions of this subpart shall not exceed 2,300 grams of mercury per 24-hour period.

§ 61.53 Stack sampling.

(a) Mercury ore processing facility.

(1) Unless a waiver of emission testing is obtained under § 61.13, each owner or operator processing mercury ore shall test emissions from his source,

(i) Within 90 days of the effective date in the case of an existing source or a new source which has an initial startup date preceding the effective date; or

(ii) Within 90 days of startup in the case of a new source which did not have an initial startup date preceding the effective date.

(2) The Administrator shall be notified at least 30 days prior to an emission test, so that he may at his option observe the test.

(3) Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in a 24-hour period. No changes in the operation shall be made, which would potentially increase emissions above that determined by the most recent source test, until the new emission level has been estimated by calculation and the results reported to the Administrator.

(4) All samples shall be analyzed, and mercury emissions shall be determined within 30 days after the source test. Each determination will be reported to the Administrator by a registered letter dispatched before the close of the next business day following such determination.

(5) Records of emission test results and other data needed to determine total emissions shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.

(b) Mercury chlor-alkali plant—hydrogen and end-box ventilation gas streams.

(1) Unless a waiver of emission testing is obtained under § 61.13, each owner or operator employing mercury chlor-alkali cell(s) shall test emissions from his source,

(i) Within 90 days of the effective date in the case of an existing source or a new source which has an initial startup date preceding the effective date; or

(ii) Within 90 days of startup in the case of a new source which did not have an initial startup date preceding the effective date.

(2) The Administrator shall be notified at least 30 days prior to an emission test, so that he may at his option observe the test.

(3) Samples shall be taken over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in a 24-hour period. No changes in the operation shall be made, which would potentially increase emissions above that determined by the most recent source test, until the new emission has been estimated by calculation and the results reported to the Administrator.

(4) All samples shall be analyzed and mercury emisions shall be determined within 30 days after the source test. All the determinations will be reported to the Administrator by a registered letter dispatched before the close of the next business day following such determination.

(5) Records of emission test results and other data needed to determine total emissions shall be retained at the source and made available, for inspection by the Administrator, for a minimum of 2 years.

(c) Mercury chlor-alkali plants—cell room ventilation system.

(1) Stationary sources using mercury chlor-alkali cells may test cell room emissions in accordance with paragraph (c)(2) of this section or demonstrate compliance with paragraph (c)(4) of this section and assume ventilation emissions of 1,300 gms/day of mercury.

(2) Unless a waiver of emission testing is obtained under § 61.13, each owner or operator shall pass all cell room air in forced gas streams through stacks suitable for testing,

(i) Within 90 days of the effective date in the case of an existing source or a new source which has an initial startup date preceding the effective date; or

(ii) Within 90 days of startup in the case of a new source which did not have an initial startup date preceding the effective date.

(3) The Administrator shall be notified at least 30 days prior to an emission test, so that he may at his option observe the test.

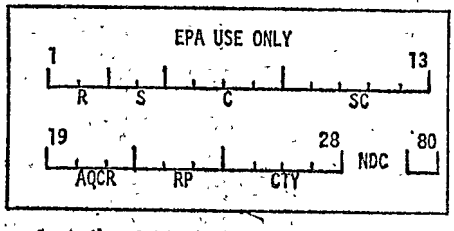
(4) An owner or operator may carry out approved design, maintenance, and housekeeping practices. A list of approved design, maintenance, and housekeeping practices may be obtained from the Administrator.

APPENDIX A

National Emission Standards for Hazardous Air Pollutants

Compliance Status Information

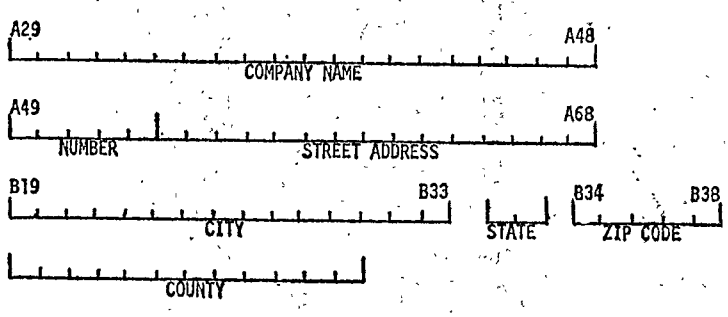
I. SOURCE REPORT



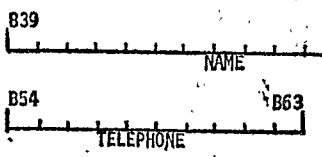
Instructions: Owners or operators of sources of hazardous pollutants subject to the National Emission Standards for Hazardous Air Pollutants are required to submit the information contained in Section I to the appropriate Environmental Protection Agency Regional Office before (date which is 90 days after the standards are promulgated). A listing of regional offices is provided in § 61.04.

A. SOURCE INFORMATION.

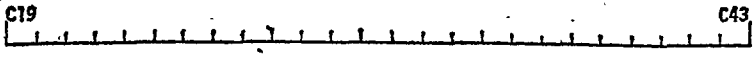
1. Identification/Location - Indicate the name and address of each source.



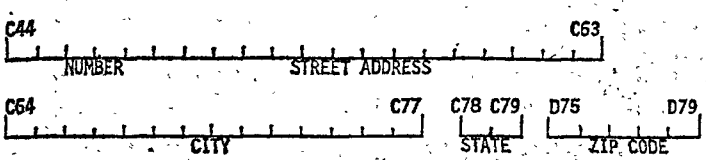
2. Contact - Indicate the name and telephone number of the owner or operator or other responsible official whom EPA may contact concerning this report.



3. Source Description - Briefly state the nature of the source (e.g., "Chlor-alkali Plant", or "Machine Shop").



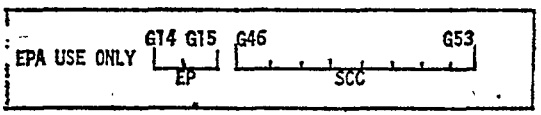
4. Alternative Mailing Address - Indicate an alternative mailing address if correspondence is to be directed to a location different than that specified above.



5. Compliance Status - The emissions from this source can cannot meet the emission limitations contained in the National Emission Standards on or before (date which is 90 days after the promulgation of the standards).

Signature of owner, operator or other responsible official

NOTE: If the emissions from the source will exceed those limits set by the National Emission Standards for Hazardous Air Pollutants, the source will be in violation and subject to Federal enforcement actions unless granted a waiver of compliance by the Administrator of the Environmental Protection Agency. The information needed for such waivers is listed in Section II of this form.



B. PROCESS INFORMATION. Part B should be completed separately for each point of emission for each hazardous pollutant.

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

G21 G45

2. Pollutant Emitted - Indicate the type of hazardous pollutant emitted by the process. Indicate "AB" for asbestos, "BE" for beryllium, or "HG" for mercury.

G19 G20

3. Amount of Pollutant - Indicate the average weight of the hazardous material named in item 2 which enters the process in pounds per month (based on the previous twelve months of operation).

G54 G60

4. Control Devices

a. Indicate the type of pollution control devices, if any, used to reduce the emissions from the process (e.g., venturi scrubber, baghouse, wet cyclone) and the estimated percent of the pollutant which the device removes from the process gas stream.

H19 H34 PRIMARY CONTROL DEVICE TYPE

H51 H53 PERCENT REMOVAL EFFICIENCY

H35 H50 SECONDARY CONTROL DEVICE TYPE

H54 H56 PERCENT REMOVAL EFFICIENCY

b. Asbestos Emission Control Devices Only

1. If a baghouse is specified in item 4a give the following information:

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

Air flow permeability = _____ cfm/ft^2

- 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 yarn, check whether this material is spun ☐ or not spun ☐.

  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/yd^2

11. If a wet collection device is specified in item 4a, give the designed unit contacting energy in inches water gauge,

    Unit contacting energy = _____ inches w.g.

EPA USE ONLY
H57
CC ☐

II. WAIVER REQUESTS

EPA USE ONLY
1 13
R S C SC

A. WAIVER OF COMPLIANCE. Owners or operators of sources unable to operate in compliance with the National Emission Standards for Hazardous Air Pollutants by (date which is 90 days after the standards are promulgated) may request a waiver of compliance from the Administrator of the Environmental Protection Agency for the time period necessary to install appropriate control devices or make modifications to achieve compliance. The Administrator may grant a waiver of compliance with the standard for a period not exceeding two years from the effective date of the hazardous pollutant standards if he finds that such period is necessary for the installation of controls and that steps will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment.

The reporting information provided in Section I must accompany this application. Applications should be sent to the appropriate EPA regional office.

1. Processes Involved - Indicate the process or processes emitting hazardous pollutants to which emission controls are to be applied.

_____

_____

2. Controls

   a. Describe the proposed type of control device to be added or modification to be made 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 waiver period to assure that the health of persons will be protected from imminent endangerment. Use additional sheets if necessary.

   _____

   _____

   _____

3. Increments of Progress - specify the dates by which the following increments of progress will be met.

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

   L54 MONTH | DAY | L59 YEAR 01

   Date of initiation of on-site construction or installation of emission control equipment or process change.

   L54 MONTH | DAY | L59 YEAR 02