

KERR-McGEE CORPORATION

INTERNAL CORRESPONDENCE

TO Distribution
FROM E. R. Goltra, M.D.

DATE December 11, 1984
SUBJECT Asbestos Removal

The number of requests for assistance from Kerr-McGee facilities concerning asbestos removal has been increasing. This is a preliminary notification to alert you to the requirements associated with handling asbestos.

Both the Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) have published asbestos regulations. OSHA regulations for workplace practices may be found in 29 CFR 1910.1001, Asbestos. EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations may be found in 40 CFR Part 61 Subpart A (General Provisions) and Subpart M (National Emission Standards for Asbestos). Subpart M (§ 61.140-§61.156) revised and replaced Subpart B (§61.20-§61.25) on April 5, 1984. An abstract of this revision was distributed on June 22, 1984.

All work involving asbestos must be done in accordance with the OSHA and EPA regulations. Asbestos handling procedures summarizing these regulations are being prepared by the Medical Services Department. They will be distributed as an addition to the Corporate Safety and Health Manual.

The central questions to be considered when the presence of asbestos is suspected are:

- (1) Is asbestos actually present?
- (2) If it is, how significant are existing or potential exposure problems?, and
- (3) What control measures are needed?

The only sure method to determine if the material contains asbestos is to obtain a bulk sample and have it analyzed by a laboratory qualified for asbestos identification. The determination of potential hazards and control measures should only be done by qualified asbestos abatement personnel.

Given the health risks associated with asbestos exposure, it is imperative that asbestos be handled properly by qualified persons. Improper handling of asbestos materials may lead to serious contamination of the environment and exposure to persons working in the area.

Whenever a problem with asbestos is suspected, you are directed to contact the Corporate Medical Services Department (Bob Utesch 270-2534 or Dennis Johnson 270-2918) for assistance in determining if a hazard does exist and in obtaining qualified help to abate the problem.



CORPORATE

SUBPART Z - TOXIC AND HAZARDOUS SUBSTANCES

1910.1000 - AIR CONTAMINANTS

Are employees exposed to the materials listed in Table Z-1*, preceded by a "C" - as an example - C Boron Tri-fluoride - limited to the threshold limit values of the material in question? (a)(1)

Are employees exposed to materials other than those preceded by a "C" in Table Z-1*, limited to an exposure of the threshold limit values on an 8-hour time-weighted average? (a)(2)

Are employees' exposure to materials listed in Table Z-2*, limited to the threshold limit values in the 8-hour time weighted coverage column of the table for the material being used? (b)(1)

If an employee's exposure to a material listed in Table Z-2* exceeds the 8-hour time limit average, is he limited to an exposure of the material as listed in the acceptable ceiling concentration column of Table Z-2*? (b)(2)

If an employee's exposure exceeds the acceptable concentration values, is he limited to the concentration of material involved with the maximum duration of time as listed in the acceptable maximum peak above the acceptable ceiling concentrations for 8-hour shift columns of Table Z-2*? (b)(2)

Example: During an 8-hour work shift, an employee may be exposed to a concentration of above 25 p.p.m. (but never above 50 p.p.m.) only for a maximum period of ten minutes, such exposure must be compensated by exposures to concentrations less than the 10 p.p.m., so that the cumulative exposure for the entire 8-hour work shift does not exceed a weighted average of 10 p.p.m. (b)(3)

Are employee exposures to those materials listed in Table Z-3*, limited to the threshold limit values as established in that table? (c)

Have administrative or engineering controls for limiting the employee exposure to the materials listed in the tables been determined? (e)

If administrative and engineering controls have been determined, have they been implemented whenever feasible? (e)

When administrative and engineering controls are not feasible to achieve full compliance, is protective equipment or any other protective measure used to keep the exposure of employees within the limits prescribed in the tables? (e)

Has a competent industrial hygienist or other technically qualified person approved the use of any equipment and/or technical measures used to limit the employee exposure? (e)

If respirators are used to protect employees, do they comply with Sec. 1910. 134? (e)

1910.1001 - ASBESTOS

- Is the employee exposure to asbestos fibers limited to not more than 2 fibers, longer than 5 micrometers, per cubic centimeter of air for an 8-hour day? (b)(2)

* See Self-Inspection Appendix

1910.1001 - ASBESTOS

Are the necessary steps taken to ensure that no employee will be exposed at any time to airborne concentrations of asbestos fibers in excess of ten fibers, longer than 5 micrometers, per cubic centimeter of air? (b)(3)

Are the necessary engineering controls established so as to limit the asbestos exposure of employees to those listed in Sec. 1910.1001(b)(2) and (3) above? (c)(1)(i)

Are local exhaust ventilation and dust collection systems, where used, designed, constructed, installed, and maintained in accordance with the American National Standard Fundamentals Governing the Design and Operation of Local Exhaust Systems, ANSI Z9.2-1971? (c)(1)(ii)

Are all hand-operated and power-operated tools which may produce or release asbestos fibers equipped with local exhaust ventilation systems? (c)(2)(iii)

Is asbestos in the wet state when employees are handling, mixing, applying, removing, cutting, scoring, or otherwise worked? (c)(2)(i)

Is the release of airborne fibers of asbestos effectively controlled below the limits of Sec. 1910.1001(b) by wetting, enclosing, or ventilating when removing the material from bags, cartons, or shipping containers? (c)(2)(ii)

Are type "C" continuous flow or pressure-demand supplied-air respirators provided and worn when employees are performing any of the following operations:

spraying of asbestos, removal or demolition of pipes, structures, or equipment covered or insulated with asbestos, removal or demolition of asbestos insulation or coverings? (c)(2)(iii)

Are employees provided and are they required to use special clothing, such as coveralls or similar whole-body clothing, head coverings, gloves, and foot coverings whenever they are doing any of the above operations? (c)(2)(iii)

Is respiratory protection used to maintain an employee exposure to less than those established only during the time necessary to install engineering controls or the establishment of the required work practices, or (d)(1)(i)

In work situations in which the required methods are either technically not feasible, or feasible to an extent insufficient to reduce the airborne concentrations of asbestos fibers below the limits, or (d)(1)(ii)

In emergencies? (d)(1)(iii)

Is respiratory protection, or shift rotation of employees in order to ensure compliance with the exposure limits, only used during the following conditions: (d)(1)(iv)

Only during the time necessary to install engineering controls, or the establishment of the required work practices? (d)(1)(iv)

In work situations in which the required methods are either technically not feasible, or feasible to an extent insufficient to reduce the airborne concentrations of asbestos fibers below the limits? (d)(1)(iv)

In emergencies? (d)(1)(iv)

[illegible]

Notation

- **Revision**

[illegible]

Does the physician conducting the medical examination furnish to the employer of the examined employee all the information specifically required by this paragraph, and any other medical information related to occupational exposure to asbestos fibers? (i) (6) (ii)

Are you aware that coal tar pitch volatiles include the fused polycyclic hydrocarbons which volatilize from the distillation residues of coal, petroleum, wood, and other organic matter? See Table Z-1* for exposure limits.

*See Self-Inspection Appendix

REGULATORY ABSTRACT

Publication: Federal Register, April 5, 1984, pp. 13658-13665

Prepared by: Environment and Health Management Division

CFR: 40 CFR Part 61

Type of Notice: Final Rule

Agency: Environmental Protection Agency

Effective Date: April 5, 1984

Subject/Title: National Emission Standards for Hazardous Air Pollutants; Amendments to Asbestos Standard

Comments: NO

Abstract of Text:

Amendments to the national emission standard for asbestos were proposed in July 1983. This action promulgates the amendments under Section 112 of the Clean Air Act. The intended effect of the amendments is to reinstate work practice and equipment provisions of the standard that were held not to be emission standards by the U.S. Supreme Court in 1978. They also reword and rearrange the standard for clarity. Action here includes:

- reinstating a prohibition of surfacing roadways with asbestos-containing waste;
- reinstating a partial exemption for demolition operations for structurally unsound buildings;
- reinstating the requirements that asbestos removed during demolition or renovation be kept wet until it is collected for disposal, and that the asbestos not be dropped or thrown to the ground or a lower floor and that asbestos removed more than 50 feet above ground level be transported to the ground in dust-tight containers or chutes;
- reinstating alternative work practices that may be used for asbestos removal when there are freezing temperature conditions at the point where the asbestos is being wetted.
- reinstating the prohibition of installation of certain molded or wet-applied insulating materials containing asbestos;
- reinstating alternative work practices or equipment that may be used in lieu of complying with a no visible emission limit;
- reinstating the requirement for warning signs and fencing around asbestos waste disposal sites if the operator chooses to comply with a no visible emission limit rather than follow specified work practices and there is no natural barrier to deter access by the general public.

3. If work involving asbestos occurs when the temperature is below freezing (0°C, 32°F), care must be taken to assure friable asbestos remains wet until collected for disposal (sec. 61.147(f)).
4. If the quantity of friable asbestos involved in the demolition is less than 260 linear feet (80 meters) on pipes and 160 square feet (15 square meters) on the facility components, items a, b, c, d, and e of paragraph II.1 above must be provided to the EPA Administrator at least 20 days prior to start of demolition (sec. 61.146(b)(1)).

III. Renovation

1. If structures to be renovated contain at least 260 linear feet (80 linear meters) of friable asbestos on pipes or at least 160 square feet (15 square meters) of friable asbestos on other facility components, all the information in paragraph II. 1.a.-h. above must be provided to the EPA Administrator as early before start of renovation as possible (sec. 61.145(d), 61.146(a), (b)(4), (c)(1)-(8)).
2. Emission of particulate asbestos material may be controlled as stated in paragraph II 2 and 3 above (sec. 61.147). Note that if wetting would result in damage to equipment, the EPA Administrator may approve use of a local collection system to prevent emissions (sec. 61.147 (c)(1)(2)).

IV. Insulation Material

Asbestos insulation that is molded and friable or wet applied and friable after drying may not be installed (sec. 61.150).

V. Disposal of Asbestos Waste

1. Disposal of asbestos containing waste is permitted at acceptable waste sites that meet defined criteria and is not to result in visible emissions of asbestos to outside air during the waste collection, processing and disposition (sec. 61.152(a)(b)).
2. Provision is made for disposal by alternative methods if prior approval has been received from the EPA Administrator (sec. 61.152(b)(3)).

VI. Reporting

If existing sources of asbestos emissions were reported previously under the standard originally promulgated in 1973, which this standard replaces, renotification is not required. If existing sources were not reported previously, notification must be done by July 5, 1984.

National Emission Standards for
Hazardous Air Pollutants (NESHAP)

Asbestos Demolition Renovation Reporting Procedures

The Oklahoma Air Quality Service has set the following procedures as the method of compliance with the reporting requirements set forth in Regulation 3.8 of the Oklahoma Clean Air Act in accordance with 40 CFR Part 61, subpart M for demolition, renovation, and removal of any asbestos containing material. The attached information sheet should be completed and submitted to this office twenty (20) days prior to planned demolition renovation projects. Emergency removal projects will require verbal notification to the Enforcement Section prior to initial clean up with the submission of the written information as soon as possible. If any of the information provided on the attached form changes as to dates, times, amounts or procedures after submittal it will be necessary for the Air Quality Service to be notified of variations in the submitted information. Any questions or information concerning asbestos demolition and renovation procedures should be addressed to the attention of:

Oklahoma State Department of Health
Air Quality Service
Enforcement Section
1000 N.E. 10th Street
P.O. Box 53551
Oklahoma City, Oklahoma 73152
405/271-5220

Any information concerning demolition renovation activities conducted within Oklahoma and Tulsa counties should be addressed to the appropriate agency listed below.

Oklahoma City-County
Health Dept.
Air Quality Section
921 N.E. 23rd
Oklahoma City, OK 73105
(405) 427-8651

Tulsa City-County
Health Dept.
Air Quality Section
4616 East 15th Street
Tulsa, OK 74112
(918) 744-1000

Oklahoma State Department of Health
Air Quality Service
NESHAP Report (Demolition, Renovation, Spraying)

CONTRACTOR

Name _____

Address _____

City, State _____

Telephone _____

PROJECT LOCATION _____

Address _____

City, State _____

Dept. of Labor License No. _____

BUILDING OWNER

Name _____

Address _____

City, State _____

Telephone _____

SCHEDULED DATES OF PROJECT:

Begin _____

Complete _____

DESCRIPTION OF STRUCTURE: Dimensions _____ Age _____

Last use of building (office space, school, etc.) _____

List approximate amount of friable asbestos materials present (sq. ft., cu. ft.) _____

Describe method used in demolition or renovation project. _____

Describe, in detail, procedures to be used in collecting and disposal of asbestos. _____

Name and location of disposal facility where asbestos will be taken. _____

Signature: Firm's Authorized Representative _____

MAIL TO: Oklahoma State Department of Health; Air Quality Service; P.O. Box 53551;
Oklahoma City, Oklahoma 73152 - ATTN: Enforcement Section

**OSHA INSTRUCTION CPL 2-2.21A CH-1
JUNE 3, 1985**

Subject: 29 CFR 1910.1001(j)(2), (3) or (4), Minimum Airborne Fiber Concentration for Initiating and Continuing Asbestos Medical Examinations

A. Purpose. This instruction provides uniform inspection and compliance procedures for the medical examination requirement in the asbestos standard.

B. Scope. This instruction applies OSHA-wide.

C. Cancellation. OSHA Instruction CPL 2-2.21, October 11, 1978, is canceled.

D. Action. OSHA Regional Administrators and Area Directors shall assure that enforcement of 29 CFR 1910.1001(j)(2), (3) or (4) is consistent with the guidelines in G. of this instruction.

E. Federal Program Change. This instruction describes a Federal program change which affects State programs. Each Regional Administrator shall:

1. Ensure that this change is forwarded to each State designee.

2. Explain the technical content of the change to the State designee as requested.

3. Ensure that State designees are asked to acknowledge receipt of this Federal program change in writing, within 30 days of notification, to the Regional Administrator. This acknowledgment should include a description either of the State's plan to implement the change or the reasons why the change should not apply to that State.

4. Review policies, instructions and guidelines issued by the State to determine that this change has been communicated to State program personnel. Routine monitoring activities (accompanied inspections and case file reviews) shall also be used to determine if this change has been implemented in actual performance.

F. Background. OSHA has determined that generally citations should, as a matter of policy, be issued for violations of 29 CFR 1910.1001 (j)(2), (3) or (4), only when employees are exposed to a minimum of 0.1 asbestos fibers longer than 5 micrometers per cubic centimeter of air, as determined by the sampling method prescribed in section G.2. of this instruction. [The phrase "fibers longer than 5 micrometers per cubic centimeter of air" shall hereafter be abbreviated as "fibers/cc."] However, for situations in which sampling of exposure is infeasible, citations may be issued as provided in G.5. of this instruction.

G. Enforcement Guidelines.

1. Medical examinations as per 29 CFR 1910.1001 (j)(2), (3) or (4) will be required for any 7-to 8-hour time-weighted average concentration of 0.1 fibers/cc, or for a greater concentration.

2. Sampling procedures will follow Chapter X of the IHFOM with the additional guidelines of G.3 and 4. of this instruction.

3. Sampling for Exposures to Asbestos Dust with Low Levels of Contamination (e.g., Mixed with Other Minerals).

a. For exposure to dust that is mostly asbestos and is expected to be below the permissible exposure limit, the same filter should be used for the entire shift, but no longer than 8 hours.

b. For exposure expected to be at or above the permissible exposure limit, several samples may be required during the shift to avoid overloading the filters.

4. Sampling for Exposure to Asbestos Dust with High Levels of Contamination.

a. Several samples of exposure may be required during the shift to avoid overloading the filter.

b. Filters should be changed only after a minimum of 1 hour of sampling time for exposure expected to be close to 0.1 fibers/cc. Seven or eight 1-hour samples can be collected during the day.

5. Past Exposures. When employees have been exposed to asbestos but air samples cannot be taken on the day of the inspection or thereafter, citations for serious violation of 29 CFR 1910.1001 (j)(2), (3) or (4) should be issued according to the following procedures:

a. Determine that employees were exposed to airborne concentrations of asbestos, and that the use or handling of asbestos was performed on a regular basis; or that the use or handling of asbestos was performed on an irregular basis, but employees were exposed to significant amounts of dust containing asbestos.

NOTE: Compliance officers shall obtain monitoring results from the employer (contractor) or other source (e.g., insurance company; company or plant for whom contracting work is being done; building owner/building management; other Federal, State or Local agency), and shall indicate exposure levels above 0.1 fibers/cc of asbestos.

b. Document, by employee, employee representative, and union interviews, that this work was performed routinely, on a repeated basis; or that the use or handling of asbestos was performed on an irregular basis, but employees were exposed to significant amounts of dust containing asbestos. In addition, obtain documentation from written employer information on these routine operations, if it exists.

c. The violative conditions must have occurred at least within the previous 6 months to meet the requirements of Section 9(c) of the Occupational Safety and Health Act.