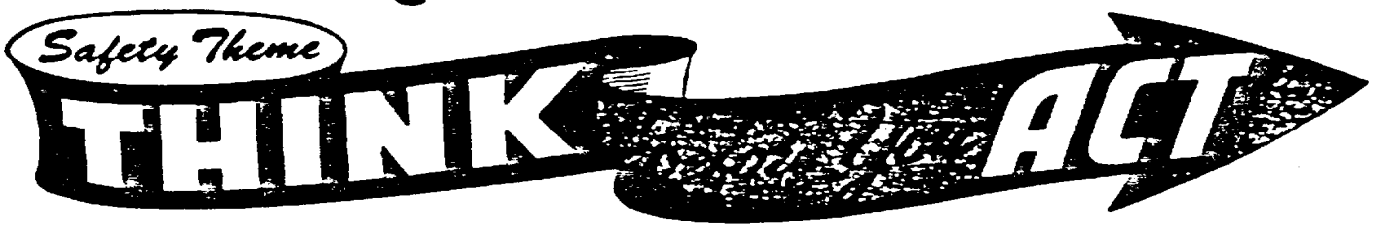
FILE NAME: Quigley (QUIG)

DATE: 1972 Mar 30

DOC#: QUIG017

DOCUMENT DESCRIPTION: Journal Article with Cover Letter



March 30, 1972

TO: Mr. J. J. Marino

RE: Asbestos

Referring to your memo of March 20, 1972 to Mr. A. Osti on asbestos products, we can report that the attached reference No. 1 (see below) summarizes the spraying situation. Restrictions on other uses are probably best summarized on reference No. 2 attached. At the moment we know of no further local restrictions.

Reference No. 3 contains much useful additional information on work practices (mixing asbestos with other materials, scrap collection, vacuum cleaning), relation of OSHA criteria to EPA emissions standards, and recommendations on clothing and laundering thereof. Useful background information on derivation of the standard is also given.

The asbestos situation is currently highly fluid; however, talk has been heard of separating embedded uses from applications of free fibers. We shall keep you posted as definitive rules evolve.

E. K. Hamilton

EKH:sm
Enclosures

cc: Mr. A. P. Osti/File: RIP, Asbestos

References:
1. BNA -OSHR No. 45 page 950
2. BNA -OSHR No. 45 pages 959-961
3. Occupational Exposure to Asbestos - Criteria for a recommended standard
   U. S. Department of Health, Education and Welfare
   Public Health Service
   Health Services and Mental Health Administration
   National Institute for Occupational Safety and Health

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The disaster could have been prevented, Hechler told the House. The slag pile was not a dam, it was just a garbage heap created for the waste products of coal. "It is high time that we start putting the value of human life above coal company profits," he said. "It is high time that every federal and state agency place a higher priority on protection than production."

Violation Investigation

Hechler told Osborn that Bureau regulations published May 22, 1971, in Section 77.216(a) state "if failure of a water or silt retaining dam will create a hazard, it should be of substantial construction and shall be inspected at least once each week" by the operator. He called on Osborn to initiate an investigation under Section 103 of the Act (Reference File 71:8503), including a public hearing to determine whether the dam was of "substantial construction," whether it was inspected on a weekly basis, and whether the operator was in violation of the law.

Hechler urged Osborn to seek the assistance of the geological survey and the Corps of Engineers. "Please provide me a list of all other coal mines in W. Va. which have a dam of this type and indicate to me whether the operator of such mines is in compliance with this section of the regulation," he added.

Alabama

NEW JOB SAFETY-HEALTH BILL WILL BE INTRODUCED TO CONSOLIDATE ACTIVITIES

Legislation to consolidate job safety and health responsibilities of various state agencies will be introduced to the Alabama state legislature in late February or early March of 1973, Howard Hendrix, director of the Department of Labor, told OSHR.

The department plans to have a minimum of two industrial hygienists by December, he said. The department will work closely with the Department of Health, which will supply laboratory services.

Under a federal grant of about $72,000 the department will study work conditions in agriculture, the docks system, and public employment, Hendrix said. He said he wanted the state to "take a strong look" at public employees. Their injury and severity rates are greater than those for industrial plants.

The Federal Government scared small employers, Hendrix said. The department preaches voluntary compliance with training and education. The key element in the department's safety and health program is training. Courses in industrial safety will be developed in trade schools and junior colleges and in high schools, on a limited basis. A Bachelor of Science degree program in safety engineering has been initiated at Auburn University.

Numerous meetings, conferences, and seminars will be sponsored statewide, Hendrix said. Last summer, at the beginning of the program, 500 representatives from industry, agriculture, health, and labor attended a safety and health seminar. "Shirt-sleeve" seminars were held in cooperation with the Alabama Trucking Association.

Current laws provide for no advance notice of inspection, employee walk around, and right of entry, but these provisions have not been used to the fullest advantage in the past, Hendrix said.

Alabama's state plan will be equal to or better than the Occupational Safety and Health Act. Hendrix said he hoped provision for state, federal, and local public employees would be included in the state plan. Auburn University is helping to prepare the plan. In addition, a statistical program is being set up.

New York

NEW YORK EPA OUTLAWS ASBESTOS SPRAYING IN CONSTRUCTION PROJECTS

The spraying of asbestos fireproofing compounds in New York City is illegal as of February 25 because of the city's new air pollution control code passed August 25, 1971, which allowed the construction industry six months to change over to acceptable substitutes.

Beginning February 28, the Department of Air Resources will issue Notices of Violation at any construction site where such spraying is being done. Following the notices, orders to cease and desist will be issued to continued violators.

Spraying asbestos has been the common means of fireproofing the steel members of high-rise buildings. However, studies show increased rates of lung cancer and other cancers among the workers who apply this material, and concern has been expressed also for exposure to the general public, the city Environmental Protection Administration said.

Regulations to control spraying operations were promulgated by the Department of Air Resources and the state EPA in April 1970. However, even with these controls it was still common for asbestos to escape and an outright ban was sought.

When the new code was passed, however, there were no acceptable substitute materials. Now three products have been approved by the City's Department of Buildings. In January 1971, 27 of 36 construction sites in the city were using asbestos spray. By December the number was seven.

Contractors still must observe the spraying regulations even when using the substitute materials. Other major cities including Chicago, Philadelphia, Boston, and San Francisco have banned asbestos spray also.

Enforcement

Assistant Commissioner of Air Resources, Harold Romer, and Deputy Director of the Bureau of Industrial Air Pollution Control, Morris A. Stoltz, have worked with various manufacturers to develop substitute materials. A four-man inspection force issued nearly 300 summonses and Notices of Violation on spraying operations since the regulations went into effect. This force will continue to monitor spraying of substitute materials, and also is deeply involved in enforcing the new air pollution code's regulations on the demolition of buildings.

09 0976

RECOMMENDATIONS OF THE ADVISORY COMMITTEE ON ASBESTOS DUST REGARDING THE PROPOSED STANDARD FOR ASBESTOS DUST EXPOSURE

FOREWORD

The Advisory Committee on Asbestos Dust was established January 24, 1972 to review the Department of Labor – OSHA proposed "Standard for Exposure to Asbestos Dust" published in the Federal Register Jan. 12, 1972 and prepare written recommendations regarding the proposed standard. The first committee meeting on February 3, 1972 was for orientation by the OSHA staff and presentation of the NIOSH "Criteria Document: Recommendations For an Occupational Exposure Standard for Asbestos" by Dr. Marcus M. Key, Director. Four additional public meetings were held on February 14, 15, 22 and 23, 1972. The Official Report of Proceedings in five volumes (722 pages) is known to contain many typographical errors which the Advisory Committee could not correct before the February 26, 1972 deadline for the recommendations included in this report. The Committee suggests that the OSHA staff correct the file copy, since the proceedings are available for public copying. The Committee will assist if requested.

The recommendations which follow represent a majority opinion of the Advisory Committee and are offered in the hope of developing an understandable standard which provides for the protection of the health of the employees. As required, a summary of the dissenting views is included. While not charged with making recommendations of feasibility, the majority of the Committee is concerned, as noted in the proceedings, and wish to emphasize that Dr. Key and his staff noted the need for variances for several of their recommendations when they presented their Criteria Document.

The Advisory Committee acknowledges the need for guidance for good work practices, but did not have adequate background information or time to prepare a detailed list. The Committee requested that the following suggestion be included in our comments. "Recognizing the extent of the asbestos inhalations hazard in industry and further recognizing the many areas in which work practices may either add to or reduce the hazard, it is suggested to the Secretary that a work practices manual to developed which would cover all the various operations and work situations in all industries using asbestos. It is felt that such a manual would be of great benefit both to those engaged in the operations and to their employers."

We wish to emphasize the need to provide training in monitoring techniques and call attention to the need to certify employer industrial hygienists and consultants. The majority of the committee believes a variance should be granted pending proper training and availability of monitoring equipment.

/s/ Edwin C. Hyatt
Chairman

CONTENTS

A. Guide to compare specific paragraphs in Proposed Standard (Sec. 1910.93(a)) with Advisory Committee Recommendations

Proposed Standard

(a) 8-hour time-weighted average
(b) Methods of compliance
(c) Allowable respirators
(d) Particular operations and products
(e) Warning signs
(f) Monitoring
(g) Medical examinations
(h) Records

Adv. Committee Recommendations

(a) Allowable Concentrations
(b) Methods of compliance
(c) Respiratory protective devices
(d) Protective clothing
(e) Work practices
(f) Warning label and signs
(g) Monitoring and records
(h) Medical
  (i) Surveillance
  (ii) Records
See (g) and (h) above

B. Advisory Committee Approval Vote Dissenting Views on Each Recommendation

(a) *Allowable concentrations* – Majority (3 of 5). No: Mr. Baliff and Mr. Weaver believe that studies and available data are inconclusive and does not warrant reducing proposed standard of 5 fibers/cc to 2 fibers/cc. (See February 15, 1972 Official Report of Proceedings.) Mr. Weaver requested permission to submit detailed dissenting view after February 26, 1972. See Feb. 22 Proceedings page 22, line 22 through line 1, page 25 for his initial dissenting view.

(b) *Methods of compliance* – Unanimous

(c) *Respiratory protective devices* – Unanimous

(d) *Protective clothing* – Majority (3 of 5). No: Mr. Baliff and Mr. Weaver believe it is too restrictive to require protective clothing when the concentration is greater than 10 times the limit. They prefer a higher limit, for example, 100 to 200 times the limit.

(e) *Work practices* – Unanimous

(f) *Warning label and signs* – Majority (4 of 5). No: Mr. Weaver believes the word Danger should be changed to Caution.

(g) *Monitoring and records* – Majority (3 of 5). No: Mr. Haas believes monitoring should be more frequent. Mr. Baliff does not believe employers should be required

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to monitor, only OSHA inspectors for compliance. Also, frequency is not feasible. (See February 22 and 23, 1972 Official Report of Proceedings.)

(h) *Medical* – Majority, Mr. Weaver abstained

(1) *Surveillance* – Majority (4 of 5)

(2) *Records* – Majority (3 of 5) No: Mr. Haas was concerned about medical record confidentiality and wants records stored for a longer period of time, such as at least 20 years as specified in proposed standard.

Sec. 1910.93 *Asbestos dust.*

(a) *Airborne concentration.* Exposure to airborne asbestos for any employee shall not exceed 2.0 asbestos fibers, greater than five microns in length, per cubic centimeter of air calculated as a time-weighted average exposure over the entire working day, and during the workday no concentration of asbestos to which workers are exposed shall exceed 10.0 fibers per cubic centimeter. The above standard shall become effective 2 years after its promulgation. Until that date a time-weighted average exposure of 5.0 fibers per cubic centimeter and a peak concentration of 10.0 fivers per cubic centimeter shall be in effect.

(b) *Methods of compliance.* (1) *Engineering methods.* One or more of the following engineering methods, either singly or in combination shall be used to achieve and maintain airborne concentrations of asbestos fibers at or below the exposure limits prescribed in paragraph (a) of this section.

(i) Substitution of a material, mixture, process or method of operation which will prevent or reduce the dissemination of airborne asbestos fibers.

(ii) Local exhaust ventilation designed, constructed, installed and operated in accordance with the latest revision of American National Standard Institute Fundamentals Governing the Design and Operation of Local Exhaust Systems; ANSI Z9.2.

(iii) Application of water or other wetting agent.

(iv) Enclosure or isolation of the operation.

(2) *Housekeeping.* (i) Housekeeping methods shall be in conformance with good engineering practices and procedures. No dry sweeping of floors shall be performed. Where feasible, all cleanup of asbestos dust shall be performed by vacuum cleaners or wet methods.

(ii) Asbestos containing waste, scrap, bags and containers shall be collected and disposed of in sealed impermeable paper or plastic bags or in other closed containers and shall be labeled in accordance with subsequent paragraph (f).

(3) *Personal protection.* When the limits of exposure to asbestos fibers prescribed in paragraph (a) of this section are exceeded and engineering control methods required by subparagraph (1) of this paragraph are not feasible or do not reduce the concentration of asbestos fibers to or below the limits prescribed in paragraph (a) of this section, the employer shall supply, and the employee shall use a personal respiratory protective device and protective clothing selected in accordance with paragraph (c) and (d) of this section.

(c) *Respiratory protective devices.* (1) Where engineering methods are not feasible, or do not reduce the concentrations to or below the limits prescribed in paragraph (a) of this section, respiratory protective devices (respirators) shall be selected and used in accordance with the following conditions. Except for emergencies, respirators shall be used only when a variance is required and pending or granted. Selection of respirators shall be decided on the basis of peak concentration limits. Only approved (30 CFR Part 11) respirators shall be selected. The selection of allowable respirators shall be based on the following concentration limits for each type of device. However, a respirator approved for higher concentrations may be used.

(2) For protection up to 5 times the limit, a single use valveless filter respirator shall be used.

(3) For protection up to 10 times the limit, a reusable or single use type with valve filter respirator shall be used.

(4) For protection up to 100 times the limit, a full facepiece "high efficiency" filter respirator shall be used.

(5) For protection up to 500 times the limit, a powered "high efficiency" filter respirator shall be used.

(6) For protection exceeding 500 times the limit, a Type C continuous flow supplied-air respirator shall be used.

(7) The employer shall establish a respirator program in accordance with the requirements of the latest revision of the American National Standard Practice for Respiratory Protection Z88.2, with the exception that no employee should be assigned to tasks requiring use of respirators if his most recent medical examination indicates:

(i) Forced vital capacity less than 70% of predicted value for age, height and sex *or*

(ii) Forced vital capacity less than 80% of predicted value for age, height or sex in addition to at least two of the following criteria

(a) X-ray evidence of asbestosis

(b) Dyspnea (shortness of breath)

(c) Rales

(d) Clubbing of fingers

(8) The employee shall use the respirator provided in accordance with the requirements of ANSI Z88.2.

(9) The respirators provided each employee shall be properly fitted, inspected, cleaned, repaired, and stored.

(d) *Protective clothing.* (1) The employer shall provide each employee with protective clothing when they are required to work in a variance area and it is projected that the asbestos dust concentration will be greater than 10 times the limit. Such clothing may be coveralls or similar full body protective clothing and headgear.

(e) *Work practices.* (1) Asbestos cement, mortar, coatings, grout, and plaster shall be mixed in closed bags or in other closed containers or in mixers equipped with local exhaust ventilation that conforms to the latest ANSI standard Z9.2 covering design and operation of local exhaust systems.

(2) Use of compressed air jets for cleaning purposes shall be prohibited unless the following conditions are met:

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(i) All persons not engaged in the cleaning operations are vacated from the area.

(ii) All entrances to the area are posted with warning signs or signals.

(iii) The workers performing the cleaning work use personal protective equipment as in accordance with paragraph (b)(3) of this section.

(3) Employees exposed to the spraying of asbestos, to the demolition of pipes, structures, or equipment covered or insulated with asbestos, or to the demolition of insulating strippings, shall be provided with personal protection in accordance with paragraph (c)(6) of this section.

(f) *Warning label and signs.* (1) Proposed warning label for raw products, mixtures, and finished products containing 5 or more percent by weight of asbestos.

DANGER
Contains ASBESTOS fibers.
Do not make unnecessary dust.
DO NOT BREATHE DUST — MAY CAUSE
ASBESTOSIS AND CANCER

(2) Proposed warning sign to be used when material or products require an asbestos warning label *or* where known hazards exist.

DANGER
Asbestos Dust Area
Unauthorized persons and other trades
KEEP OUT

When asbestos work is being done
Breathing Dust May Cause
Asbestosis and Cancer

(g) *Monitoring and Records.* Employee exposure monitoring shall be undertaken by the employer on the basis of the membrane filter method at 400-450X magnification (4 millimeter objective) phase contrast illumination as specified by NIOSH in Criteria for a recommended standard ... Occupational Exposure to Asbestos (HSM72-10267). Employers will be required to maintain records of employees' exposure to asbestos in the work area based on the following monitoring schedule and procedures:

(1) Personal exposure (Breathing Zone) samples will be collected and recorded at least every six months for projected high risk work operations. Samples will be collected from a number but not necessarily all employees whose exposure may be considered representative of the specific work area.

(2) Personal exposure samples will be collected and evaluated as both time-weighted average and peak values.

(3) Personal exposure samples will be collected and recorded at least once a month from those work areas found to be in excess of the standard.

(4) Monitoring will be required on a monthly basis until the workplace air levels are in compliance with the standard.

(5) The first sampling period will be completed within a time frame specified by the Secretary.

(6) Records of the evaluation of the workplace air will be maintained by the employer for a period of time determined by the Secretary of Labor. Employees shall have access to these records.

(7) Exposed employees shall be informed of the workplace air levels.

(h) *Medical.* (1) *Surveillance.* A comprehensive history and physical examination shall be performed on all workers and applicants. This shall include a chest roentgenogram (posterior-anterior 14 X 17 inches) and baseline pulmonary function including forced vital capacity (FVC) and forced expiratory volume at one second (FEV 1.0). Health education should emphasize the hazards of asbestos and the importance of good occupational health practices.

Periodic medical evaluation is required annually on all workers with 10 or more years exposure to asbestos and every two years on workers with less than 10 years exposure. Periodic medical evaluation also is required annually on those individuals:

(i) who show roentgenographic findings (such as small opacities, pleural plaques, pleural thickening, and pleural calcification) which suggest or indicate pneumoconiosis or other reaction to asbestos, or

(ii) who have changes in pulmonary function which indicate restrictive or obstructive lung disease. Periodic medical evaluation shall include a chest roentgenogram (posterior-anterior 14 x 17 inches), spirometry including FVC and FEV 1.0, and a questionnaire for the presence and degree of respiratory symptoms including breathlessness, cough, sputum production, and wheezing. Current smoking habits shall be recorded, and smoking shall be discouraged. Examination for rales and finger clubbing shall be performed.

Sputum cytology is recommended annually on those workers with 10 or more years exposure to asbestos, and if atypia or greater classification is manifest, subsequent sputum examinations should be conducted on a six-month basis.

A comprehensive termination medical examination shall include physical examination, chest roentgenogram, FVC and FEV 1.0, and questionnaire for respiratory symptoms.

The initial and termination medical evaluations shall not be required, if a similar comprehensive medical evaluation has been performed within a 12 month period.

(2) *Records.* The physician(s) charged with the implementation of the medical program shall maintain the appropriate medical records. Only HEW and DOL physicians and medical consultants and physicians designated and authorized by the employees shall have access to the medical record.

Medical records shall be maintained for a period of time to be determined by the Secretary of Labor in consultation with the Secretary of Health, Education, and Welfare.

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