



MEMORANDUM

July 26, 1972

DAB -
May we discuss
at your convenience
JAS.
7-27

"PERMANENT" ASBESTOS STANDARD
OSHA (29 CFR 1910.93a)
File 110.1 Asbestos

Mr. J.A. Spence

The revised permanent standard for exposure to asbestos dust was published in the Federal Register on June 7, 1972. In brief, this standard:

1. Sets maximum permissible exposure limits.
2. Requires that engineering controls be used to achieve compliance.
3. Requires specific controls for certain operations.
4. Specifically limits the use of respirators for compliance.
5. Requires the provision of special work clothing.
6. Requires specific monitoring of airborne dust levels.
7. Requires the use of caution signs and labels.
8. Requires pre-employment, annual, and termination medical examinations.
9. Specifies retention time and access of records.
10. Requires disposal of wastes in sealed containers.

My detailed summary, a copy of the Federal Register announcement, and a suggested cover letter for safety engineer distribution are attached.

The second attachment summarizes alternative approaches that can be taken in order to comply with monitoring requirements, paragraph (f), of the new standard. These approaches were developed jointly with Mr. S.H. Judd.

The critical requirement now is the monitoring of exposures in all asbestos operations by December 7, 1972. The original six-month period has already dwindled to less than four and one-half. Please advise soon how you wish to proceed.

I recommend that we advise Medical Department of the medical examination provisions of the new standard.

Chevron-East has requested that we investigate asbestos-free insulating material that can be substituted for those commonly used which contain asbestos. I suggest that we approach this question on a Company-wide basis, enlisting the assistance of the Company's insulation experts.

S.L. Dryden

SUGGESTED COVER LETTER FOR SAFETY ENGINEER MAILING

OSHA ASBESTOS STANDARD

TO ALL SAFETY ENGINEERS

The "permanent" standard for exposure to asbestos fibers was published in the June 7, 1972 Federal Register. A copy of that publication and the Environmental Health and Toxicology Section's detailed summary is attached. To briefly highlight the standard:

1. The permissible time-weighted average concentration will remain at 5 fibers/cc until 7/1/76, when it will drop to 2 fibers/cc. The maximum permissible concentration for any period of time is 10 fibers/cc.
2. Engineering controls "shall be used to meet the exposure limits." The use of respirators is limited to the time necessary to install controls, where adequate control are not feasible, or in emergencies.
3. For any removal of asbestos-containing insulation from pipes, etc the workers must be provided with supplied-air respirators.
4. Schedule 21B respirators are only good up to 10 times the permissible fiber concentration.
5. Hand - and power-operated tools which may produce fiber concentrations in excess of the exposure limits must be provided with local exhaust ventilation system.
6. All asbestos operations must be monitored by December 7, 1972 to determine whether exposures are below the permissible limits. Periodic followup sampling is also required in some cases.
7. Preplacement, annual, and termination medical examinations are required for all employees who are exposed to airborne asbestos.
8. Other requirements involve caution signs, labels, protective clothing, recordkeeping, notification of employees with exposure in excess of the limits, and waste disposal.

We suggest that you acquaint yourselves with all of your operations which involve asbestos, and become thoroughly familiar with the new standards. If you will send us a summary of the nature of asbestos exposures in your plants, we will advise on how to comply with item 6 above.

D. H. Barber

ALTERNATIVE APPROACHES TO
COMPLYING WITH THE MONITORING REQUIREMENTS
OF THE NEW OSHA ASBESTOS STANDARD (29 CFR 1910.93a)

7/21/72 S. L. Dryden

Paragraph (f) of Section 1910.93a outlines the requirements for monitoring airborne concentrations of asbestos fibers in order to determine the levels of exposure of employees. Initial determinations must be made within 6 months (i.e. by December 7, 1972) in "every place of employment where asbestos fibers are released." Periodic followup samples shall be taken often enough to accurately assess exposures, at least every 6 months "for employees whose exposure to asbestos may reasonably be foreseen to exceed the limits." (Note the difference between the wording used to describe in which case sampling must be done).

The following outlines alternative approaches that the company may take to comply with these requirements, concentrating on the initial determinations which are necessary everywhere asbestos is handled. The necessity for followup sampling will be based in part on the results of the former. Using Dow for sample analysis should suffice for the former, but in-house capability may be necessary down-the-road.

Scope: Asbestos-containing insulation is probably in use (and must be handled in the course of plant maintenance and modifications) at all manufacturing plants of Western Operations, Chevron Oil, Chevron Asphalt, Chevron Chemical, et. al. It is handled to a lesser extent at marketing terminals, formulating facilities, bulk plants, producing islands, etc. In addition, asbestos is used in asphalt formulations by Chevron Asphalt and Western Operations.

Alternative Approach I: Conduct as many initial surveys as permitted by the current workload and available field personnel (estimated 2 facilities per month) and recommend outside consultants for the others. Our travel expenses and analysis cost would be charged back to the operating companies.

Advantage: No additional manpower needed

Disadvantages: Out-of-pocket expenses of hiring consultants.
Need for, but difficulty of, effective auditing program by EHT
EHT Section's ability to answer future questions from the field would be hampered by limited experience.

Alternative Approach II: Conduct the initial surveys with current field personnel with the half-time (at least) assistance of Mr. J.E. Ford or Mr. J.M. Anderson. Charges would be the same as in AA I. Could survey 5 or more facilities per month.

Advantage: Better control of surveys and data, thus greater ability to advise down-the-road.

Disadvantage: Reduced output of the toxicology information service.

Alternative Approach III: Use current field personnel with the part-time assistance of Mr. Riley Stock. Output would be about the same as in AA II. Mr. Stock's time would be charged back, as well as the other charges.

Advantage & disadvantage: Same as in AA II.

Alternative Approach IV: Use current field personnel with half-to-full time assistance of a safety engineer from the Division (e.g. Mr. R.W. Ader). Charges would be the same as in AA I. Could survey 5 to 10 facilities per month, depending on percentage of the safety engineer's time available.

Advantages: Specific training for safety engineer
Good control of surveys

Limitation: Availability of safety engineer

Alternative Approach V: Use current field personnel with the assistance of a person on 6-month loan from a major operating facility. Person could be used for followup surveys for asbestos, et. al., after his return to his normal workplace-Charge back time, travel, and analysis costs.

Advantage: Output higher than AA II or III as loaned person would be full-time.

Limitations: May be difficult to select the right person for the job.
Selection, acquisition, and training will delay getting started.

Alternative Approach VI: Add a full-time industrial hygienist to the staff to assist in the initial and followup asbestos surveys and the monitoring of other substances, which will be a growing OSHA requirement in the future.

Advantage: EHT section better equipped to deal with future demands.

Limitation: The time required to get a new men on the job.

Alternative Approach VII: Devote time available for asbestos to training of operating company personnel at field locations.

Advantage: EHT Section time expenditures minimized in
-- the long run.

Limitations: Manpower is not necessarily available at opco
plants.
Delay in getting initial survey started
See also AA I disadvantages.