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Interoffice Memorandum

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INSULATION
723
ASBESTIC
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APRIL 14, 1980

FROM: R. P. FRUTIGER
TO: G. C. ANDERSON
SUBJECT: REPAIR OF ASBESTOS INSULATION

PLAINTIFF'S EXHIBIT

SH-721

We have reviewed the subject DPMC-North project with Head Office - Operations Safety & Health to determine what criteria should be used in identifying asbestos insulation that needs maintaining from a health standpoint, and whether those areas identified as needing repair as part of our project were consistent with this criteria. The OSHA Standard 1910.1001 (h) (i) requires

"All external surfaces in any place of employment shall be maintained free of accumulations of loose asbestos fibers if, with their dispersion, there would be an excessive concentration."

In addition, because of the low level (0.1 fibers/ml. of air) at which OSHA requires medical exams, particular care must be taken in controlling work areas where there is a high level of foot traffic.

In reviewing our project, I believe the criteria we used was consistent with the above OSHA requirements. Although the three(3) years projected for completion of the job could be construed by regulatory officials as too long, I believe it's reasonable and something that we could defend.

Anacortes initiated a similar project about a year ago following Head Office approval. They have completed about 60% of the work to-date. They are using a contract maintenance crew of about ten(10) with a Shell foreman providing the supervision.

Please let me know if you need additional information.

LAM 016873


R. P. Frutiger

RPF:ikg

cc: North Management Team

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DPMC-10617

December 26, 1979

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72
Revised

D. P. ATWOOD
ONE SHELL PLAZA
ROOM 2156

Dave:

As requested in your note of 12/6/79 on asbestos, I have the following comments:

- 1.) Our monitoring data indicates if reasonable control is maintained over airborne particles of asbestos through wetting techniques, etc., exposure levels are less than the permissible.
- 2.) Unfortunately we do not have monitoring data for personal exposures before '72. This makes it extremely difficult to establish a criteria for selecting personnel for inclusion in the medical surveillance program. In fact, any criteria established would have to be viewed as somewhat arbitrary unless everyone was included from those crafts that potentially could have been exposed to asbestos. This would then raise the question concerning those individuals who entered these crafts since '72 - "why are they not included in the medical surveillance program."
- 3.) The practicality of implementing the proposed policy will be extremely difficult. I would like to see us establish '72 as the starting point of the program or include everyone in crafts that might have contacted asbestos prior to '72. The latter would necessitate educating those that joined the identified crafts since '72.
- 4.) Assuming inclusion of everyone who had the potential for coming into contact with asbestos prior to '72 and who are still in Shell's employment, the number of participants in the medical surveillance program would be increased by 140-150. As noted above, to try and adhere to the proposed policy would be impractical.

Please let me know if you wish to discuss.


R. P. Frutiger

LAM 016874

DPMC-10618

Construction

NIOSH DEVELOPS SIMPLE PROCEDURE FOR DETECTION OF ASBESTOS IN BUILDINGS

An inexpensive screening procedure for the detection of asbestos in the atmosphere of buildings is in the final stages of development, according to Bruce A. Hollett, an industrial hygienist for the National Institute for Occupational Safety and Health.

The test, which is a simple colorimetric spot test based upon the formation of color complexes with magnesium and iron released from asbestos, is not specific for asbestos, but does indicate the possibility of its presence, according to Hollett. A sample containing more than 1 percent asbestos gives a positive color reaction, according to test procedures developed by NIOSH researchers Walter S. Kim, James W. Carter II, and Richard E. Kupel.

Hollett explained the screening procedure October 24 at a meeting of the health subgroup of the Advisory Committee on Construction Safety and Health.

A total of 198 field samples indicated 126 positive and 72 negative results. Later laboratory analysis confirmed the presence of asbestos in 78 of the positive samples, but found no asbestos in 48 of the positive samples. The laboratory also confirmed the absence of asbestos in the 72 negative samples.

Hollett stated that since the laboratory detected no false negative sample results, the screening procedure theoretically could have saved 70 needless laboratory analyses.

Researching Health Problems

Subgroup members also discussed various occupational health problems of particular interest to the construction industry, including medical surveillance, exposure monitoring, respiratory protection, signs and labels, recordkeeping, employee training, waste disposal, and protective clothing and equipment.

Assistant Labor Secretary Eula Bingham recently requested that the subgroup submit rough drafts of their recommendations for health standards revisions periodical throughout the next six months. For this reason, most subgroup members volunteered to research specific topics and be responsible for presenting the subgroup with their findings at the next meeting.

The subgroup is scheduled to hold its next meeting November 26 and 27.

Health Hazards

STRESS IN WORKPLACE EXAMINED DURING SAN FRANCISCO SYMPOSIUM

SAN FRANCISCO — (By an OSHR staff correspondent) — Stress, from an almost infinite number of sources, is a common ailment among workers that can lead to physical illness and compensation cases, according to speakers at a workers' compensation symposium held October 25-27 in San Francisco.

The symposium was sponsored by the Industrial Claims Association and was addressed by four psychiatrists who examined some common causes of stress, signs of it in workers, and ailments that can result from it.

Stress can arise from any number of work related and non-work related causes because individuals react differently to causes of stress, speakers observed. Often people are not aware they are under stress or of its effects, according to Arnold Brodsky, a San Francisco psychiatrist. He characterized the effect of stress as a general feeling of un-

pleasantness which may range all the way from a simple malaise to coronary heart disease.

Individual vulnerability varies with personality types, Brodsky said. Paranoid personalities may live in constant fear of losing their jobs and that anxiety can affect job performance. Compulsive persons may spend so much time on detail work that they neglect more important aspects of their jobs.

Some common examples of stress in the workplace, according to Brodsky, include the following:

- ▶ Excessive demands by employers or superiors.
- ▶ Unpredictable work environment, such as fear of being fired.
- ▶ Fear of injury from unsafe conditions.
- ▶ Changes in work patterns, especially changes perceived by employees as being for the worse.
- ▶ Employee fears that aging may disqualify him from work.

Effects of Stress

Because people react to stress differently, the effects of stress are almost infinite in their variety. Adaptation often can lead to physical illness because it stimulates various body functions, according to Eugene Shafon, a researcher on cardiovascular disease.

Among the more common body reactions to stress are elevated blood pressure, increased heart beat rate, and stimulation of hormones such as adrenalin, Shafon told the symposium. Usually these effects are transitory, but if the stress is serious enough they can linger on for weeks after the initial incident.

Perhaps the most serious ailment linked with stress is coronary heart disease which Shafon said is linked to chronic job stress. Examples of chronic stress include insecurity about the job or its future, feelings of inadequacy about ability to do the job, overwork, and environmental stimuli such as noise or heat. Heart disease is seen more often in workers with sedentary occupations than in those with more active jobs, he added.

A sometimes overlooked aspect of stress is that it is cumulative. Multiple stresses impair an individual's capacity to cope with added stress, Brodsky stated. Thus, in the workplace, stress experienced at home may affect an employee's performance on the job, he noted.

Verifying Claims

Workers' compensation claims involving stress and related reactions are difficult to prove as well as disprove, the conference was told. The sources of stress may be hidden deep in a claimant's past or a claimant consciously may be exaggerating the trauma associated with an injury or illness.

The over 300 attorneys and insurers who attended the symposium got some advice from physicians about how legitimate cases are distinguished from "malingerers." In the latter category, some claimants try to manipulate the workers' compensation system by prolonging an injury or faking one, according to Allen J. Enelow, director of training, Department of Psychological and Social Medicine, Pacific Medical Center, San Francisco.

A common finding in cases of malingering is something called Briquet's Syndrome, Enelow explained. It involves attributing a variety of disorders to a job injury or illness. Enelow stated he believes that only about one in four cases of Briquet's Syndrome are being recognized today, at considerable cost to the workers' compensation system.

In diagnosing Briquet's Syndrome, Enelow advised a careful look at the claimant's medical history in as much detail as possible. Usually neurosis in conjunction with an in-

OSHA PUBLISHES TARGET DATES FOR ACTION ON HEALTH STANDARDS

Final health standards on a generic cancer policy and employee access to medical records should appear by the end of the year, according to a status report on health standards distributed last week at a meeting of the National Advisory Council on Occupational Safety and Health. A similar timetable was predicted for OSHA's standard on beryllium, which the report said was "in management review."

The document said that a feasibility assessment for a cadmium rule should be completed by May, 1980, adding that an economic analysis will be finished next month on chemical hazard identification, which is being coordinated with the Environmental Protection Agency. OSHA must determine which industries would be regulated under a rule for chromium and must also evaluate health effects and dose response data before any progress can be made on a rule for MOCA. A technical feasibility update on that chemical is projected for May, 1980.

The status document continued that the agency must determine whether a nickel standard should apply to all compounds, organic and inorganic and must distinguish carcinogenic compounds from non-carcinogens. Sufficient exposure data on nickel is not available, OSHA reported. A rule for pesticides is awaiting regulatory analysis which OSHA anticipates may appear in June, 1980. Finally, OSHA's five-year old proposal for a workplace noise standard is "awaiting regulatory analysis," OSHA said, a move expected in June, 1980.

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OSHA PUBLISHES TARGET DATES FOR ACTION ON SAFETY STANDARDS

A safety standards update published by Occupational Safety and Health Administration recently predicts that a final rule on multi-piece rim wheels will appear in December. A target date of Spring 1980 was listed for standards governing perimeter guarding for low pitched roofs and conveyors. A standard for Subpart S on electrical rules may be out by February, 1980, the agenda said, if there are no public hearings.

OSHA said that an advance notice of proposed rulemaking may appear next month on a lockout/tagout rule. Safety proposals which may be announced at various times next year included rules for floor and wall openings, ladders and scaffolds, tunnels, marine terminals, confined spaces, educational and scientific diving, walking/working surfaces and hazardous materials.

The agenda also listed December 1979 dates for completion of final rules on fire protection (excluding fire brigades) and a separate rule on fire protection which does include fire brigades.

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LAM 016876

COMPANY SAYS IT HAS A PERFECT ASBESTOS SUBSTITUTE

Edwin Neckermann, president of American Fillers and Abrasives, Inc., Bangor, Maine, claims that his firm has developed a non-toxic substitute for asbestos. The product, called Kay-O-Cel, consists of aoline, clay and cellulose and according to Neckermann, exhibits the same qualities as asbestos without any of the dangers.

He claims that Kay-O-Cel can withstand temperatures of up to 1,200°F and that the product makes a good insulator. Although workers are warned not to inhale the new product because that precaution should apply to any finely divided material, Neckermann said there are no indications that the substance is dangerous.

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AN IMPROVED INSTRUMENT FOR MONITORING airborne concentrations of respirable dust in underground and surface mines is described in a report of the Interior Department's Bureau of Mines. The new device is capable of giving a rapid and reliable on-site measurement of dust over a wide range of density levels. Called an "Improved Light Scattering Dust Monitor," it was developed under contract by the GCA Corporation, Bedford, Mass. and is now commercially available. For more information on the monitor, contact the Technology Transfer Office at the Bureau of Mines, Pittsburgh Research Center, 4800 Forbes Ave., Pittsburgh, Pa. 15213, (412) 675-6595.