

the medical removal protection requirement of the lead standard, the Occupational Safety and Health Administration announced June 22 (49 FR 25699).

Most of the terms in the temporary variance were found in the interim order granted by former Assistant Labor Secretary Thorne Auchter in a May 17, 1983, letter to ASARCO (Current Report, May 26, 1983, p. 1100).

Under the terms of the temporary variance, ASARCO will not have to remove employees from their jobs until their blood-lead levels are at or above 60 micrograms per 100 grams of blood, rather than the more stringent 50 $\mu\text{g}/100\text{ g}$ trigger level set by the lead standard. In addition, when an employee is removed, ASARCO will be allowed to place them in areas with air lead levels less than 50 $\mu\text{g}/\text{m}^3$, rather than the 30 $\mu\text{g}/\text{m}^3$ action level in the standard.

However, in the case of those employees who are transferred to areas with air lead levels of less than 50 $\mu\text{g}/\text{m}^3$, ASARCO must remove the workers to areas of lead concentration below 30 $\mu\text{g}/\text{m}^3$ if their blood-lead levels do not decline to or below 50 $\mu\text{g}/100\text{ g}$ of whole blood within six months from the date of removal.

As the agency had done in the interim order, OSHA denied ASARCO's request to raise the blood-lead level at which employees can be returned to the work area to 50 $\mu\text{g}/100\text{ g}$. The lead standard forbids employers from returning employees until their blood-lead level is 40 $\mu\text{g}/100\text{ g}$. The *Federal Register* notice said that the data submitted by ASARCO "was insufficient to justify relief" from the return trigger level. The agency added that "it is unlikely that an unreasonable burden is being imposed on the applicant."

Under some of the new provisions of the temporary variance that were not included in the interim order, ASARCO must:

- Conduct an immediate inspection and evaluation of existing engineering controls to determine whether they are maintained properly and to ensure that such controls do not have an adverse effect on employees.

- Submit to OSHA's Office of Variance Determination, within 45 days from the date of the temporary variance, a written report outlining the evaluation of employees whose blood-lead levels were between the 50 $\mu\text{g}/100\text{ g}$ required under the standard and the 60 $\mu\text{g}/100\text{ g}$ required for ASARCO and any corrective actions that were necessary.

- Submit to OSHA every two months blood-lead and air lead data from the facilities.

The text of the OSHA notice granting the temporary variance appears in the Full Text section of this issue.

Asbestos

NIOSH URGES POSITIVE PRESSURE RESPIRATORS, REITERATES SUPPORT FOR 0.1 FIBER LIMIT

The National Institute for Occupational Safety and Health voiced opposition June 21 to the use of air-purifying respirators, other than negative pressure, high-efficiency respirators, in protecting workers against exposure to asbestos in testimony presented at rulemaking hearings held by the Occupational Safety and Health Administration.

The NIOSH testimony followed testimony June 20 by witnesses appearing on behalf of OSHA (see related article that follows). The OSHA proposal, issued in April, would permit employers to use a combination of engineering controls, respiratory protection, and work practices to reach a lower asbestos exposure limit (Current Report, April 12, p. 1195).

NIOSH supported the use of both positive pressure supplied air respirators and positive pressure self-contained breathing apparatus as providing better protection to workers than air-purifying respirators. A higher form of respiratory protection is needed because asbestos is a carcinogen and no safe level of exposure has been determined for the substance, according to Nancy Bollinger of NIOSH's Division of Safety Research.

Richard Lemen, director of the NIOSH Division of Standards Development and Technology Transfer, stated that the position under consideration by OSHA "of permitting only the use of high efficiency air-purifying respirators, although an improvement over the old standard, may not adequately protect exposed workers." He reiterated the institute's recommendation regarding a quantitative respirator fit testing program. While NIOSH favors positive pressure respirators, it is not opposed to the use of negative pressure high-efficiency respirators as recommended by OSHA, Bollinger said.

Lemen stated that NIOSH still supports a permissible exposure limit of 0.1 fiber per cubic centimeter as recommended in its revised recommended asbestos standard submitted to OSHA in December 1976. He also stood behind several recommendations made by a joint NIOSH/OSHA working group on asbestos in 1980, including these:

- Respirators should not be considered a suitable substitute for engineering controls and work practices.

- Particular emphasis should be placed on the synergistic carcinogenic effects of cigarette smoking and asbestos exposure in any educational program developed under a new standard.

- The definition of asbestos for regulatory purposes should include chrysotile, crocidolite, and fibrous cummingtonite-grunerite including amosite, fibrous tremolite, fibrous actinolite, and fibrous anthophyllite.

- Manufacturers of asbestos-containing products such as construction materials should perform detailed monitoring of exposures which could result from all foreseeable uses of their products, including misuse.

No Safe Exposure Level

"It is our contention that there is no safe concentration of exposure to asbestos," he stated. "Any standard, no matter how low the concentration, will not ensure absolute protection for all workers from developing cancer as a result of their occupational exposure; however, lower concentrations of exposure carry lower risks." As for a dose-response relationship, data available to date provide no evidence of the existence of a threshold level, he asserted. "Virtually all levels of asbestos exposure studied to date demonstrated an excess of asbestos-related disease."

Although currently available screening tests may detect asbestos-related abnormalities among asymptomatic asbestos-exposed workers years before pulmonary impairment, disability, or death occur, Lemen questioned whether medical removal of these workers from exposure to asbestos would be effective in preventing development of cancer or other diseases. He acknowledged, however, that cessation of cigarette smoking among asbestos-exposed workers with or without detectable evidence of asbestos-related pulmonary abnormalities "appears to effectively lower the overall risk of premature disability and death in these individuals."

Lemen further stated that, if in the final rule OSHA maintains its requirement for employers to obtain routine periodic chest X-rays and pulmonary function tests for asbestos-exposed workers, it seems appropriate that the following should also be required:

- Both screening tests should be conducted, at initiation of employment and thereafter every five years for the first 15 years, and thereafter every two years, using the standardized guidelines for instrumentation, training, and interpretation of recognized expert authorities.

- Cigarette smoking should not be permitted at worksites.

- The results of required screening tests should be reported to OSHA without personal identification within two months of the performance of the tests in order to enable OSHA to evaluate over time the effectiveness of the medical surveillance provisions of the standard.

- Some consideration must be given to mandatory follow-up of all workers with any asbestos exposure. This is necessary because of the prolonged latency period of most asbestos-related diseases and the uncertainty surrounding the cumulative dose needed to initiate the disease process.

Asbestos

MEASUREMENT AT 0.2 FIBER CONCENTRATION NEARLY AS GOOD AS AT TWO FIBERS, OGDEN SAYS

Using an asbestos fiber measurement method recently developed by the National Institute for Occupational Safety and Health, precision in measuring at a concentration of 0.2 fibers per cubic centimeter is nearly as good as at a concentration of one or two f/cc, Trevor L. Ogden, of the British Health and Safety Executive, stated June 20 at rulemaking hearings on revisions to the Occupational Safety and Health Administration asbestos standard.

OSHA proposed in April to reduce the current asbestos exposure limit of two f/cc, suggesting two alternative exposure limits, 0.5 f/cc and 0.2 f/cc (Current Report, April 12, p. 1195). Hearings on the proposal began June 19 (Current Report, June 21, p. 35).

Ogden testified that the precision of fiber measurement depends on the number of fibers counted, but that if at least 50 fibers are counted little further improvement can be achieved by counting more. Employing the method currently used in Britain, or the new NIOSH method 7400, more than 50 fibers could easily be counted at 0.2 f/cc, he stated, adding that precision at that concentration is then almost as good as at one or two f/cc.

"The 50 fiber limit (and preferably 80 fibers) has implications for ceiling limits," Ogden said. A sample at two f/cc collected and evaluated by the new NIOSH method at one liter per minute for 15 minutes would give a count of about 60 fibers. "Clearly this is feasible from a precision point of view, but close to the limit," he noted.

Although other sources of error decrease the precision, they do not significantly change the concentration dependence, he said. The relatively large interlaboratory errors for asbestos measurement mean that proficiency testing and achievement of a certain standard should be required, Ogden cautioned. "The language of regulations must take into account the substantial measurement errors at all concentrations, but would be much simplified if a certain level of interlaboratory precision were required through a mandatory proficiency testing scheme," he concluded.

Yehia Y. Hammad, an associate professor at the Tulane University School of Medicine, testified that asbestos fibers in the concentration range of 0.2 to 0.5 f/cc can be measured by the membrane filter method "with a precision that is not significantly different" from the precision possible when testing concentrations of two fibers, the current OSHA per-

missible exposure limit. The precision of the method can be further improved by using the new NIOSH method 7400 and including in the instructions of the method a complete detailed drawing of the fibers that may or may not be included in the count to prevent ambiguity, he said.

Amphiboles May Penetrate More Easily

Experiments conducted by Los Alamos National Laboratory suggest that the size and straight fiber morphology of amphibole fibers, such as crocidolite and amosite, may penetrate respirator filters more easily than chrysotile, researcher Sidney C. Soderholm testified. He described a series of experiments designed to obtain preliminary information on the ability of a small number of commercial respirator filters of various types to effectively filter airborne chrysotile fibers.

Four of the five respirator filter media showed chrysotile fiber penetrations smaller than 0.1 percent when tested fresh from the package. "This penetration can be considered small compared to assumed leakage at the facial seal," Soderholm stated. Pre-loading respirators with 30 to 60 milligrams of a di(2-ethylhexyl) sebacate (DEHS) oil aerosol increased to some degree the asbestos penetration of all filters tested except the high efficiency model, he reported.

In addition, only the high efficiency respirator filter exhibited chrysotile asbestos penetrations smaller than 0.1 percent in all experimental series, according to Soderholm. He suggested that other types of respirator filters may require the user to give special attention to their storage and use in environments containing high humidity or liquid mists and to the frequency of filter replacement.

Richard Boggs, vice president of Organization Resources Counselors, Inc., reiterated the organization's recommendation of a permissible airborne concentration of 0.5 f/cc and a permissible exposure limit of 0.2 f/cc. Boggs stated that if circumstances require that an employee work in ambient airborne concentrations of asbestos fibers above 0.5 f/cc, and it has been documented that engineering controls cannot bring this down to 0.5 f/cc or below, the employee should be equipped with air-line or positive pressure, self-contained breathing apparatus.

The 0.5 f/cc level would require that the workforce be protected by the use of respirators with a minimum protection factor of five, according to the organization. The use of negative pressure respirators would be acceptable from 0.5 f/cc down if they were capable of being fit-tested, either qualitatively or quantitatively, and used high efficiency particulate (HEPA) filters.

The permissible exposure limit of 0.2 f/cc is the airborne concentration of asbestos fibers at or below which employees need not wear respirators, and above which all employees must be equipped with appropriate respiratory protective equipment, Boggs stated.

ORC recommended that employers be required to institute engineering controls to the extent feasible to control employee exposures to airborne asbestos fibers to or below permissible airborne concentrations. If engineering, work practice, or administrative controls are not effective in reducing exposures to or below the PEL, however, then respiratory protective equipment must be used to meet the PEL, Boggs said.

A well-planned integrated program for controlling hazards in all operations within a company is the most basic requirement to effectively control employee exposure to asbestos, according to Boggs. In addition, he stressed the need for a medical surveillance program for all employees who are exposed to airborne concentrations of asbestos

fibers in excess of the action level for more than a total of 30 days per year. A medical surveillance program should include preplacement examinations, periodic evaluations, termination of employment evaluations, employee and employer notification programs, and medical recordkeeping, he stated.

Appropriations

FUNDS FOR STATISTICAL QUALITY ASSURANCE, NEW YORK PLAN ADDED BY SENATE SUBCOMMITTEE

The Senate Appropriations Subcommittee on Labor, Health and Human Services, and Education June 20 approved fiscal 1985 funding for the Occupational Safety and Health Administration that would add another \$2.4 million to the \$217.7 million requested for the agency by the Reagan Administration.

Of the additional \$2.4 million, \$1.9 million would be used to fund New York's state plan for public employees, and \$500,000 would be earmarked for a quality assurance program to check the accuracy of injury and illness data reported by employers.

The provision for the New York state plan funding was similar to one added by the Senate last year to the fiscal 1984 appropriations bill. The Administration attempted earlier this year to rescind the amount appropriated for fiscal 1984, questioning the use of that money to fund a program covering only public employees in view of limited resources available to support other state plans covering both public and private sector employees. However, the rescission was not approved by Congress (Current Report, May 17, p. 1328).

Implementation of a quality assurance program for occupational safety and health recordkeeping and reporting was urged by organized labor earlier this year after the Bureau of Labor Statistics failed to act in time to include funding for such a program in the Reagan Administration's fiscal 1985 appropriations request. The \$500,000 added by the Senate is identical to the sum that BLS estimated as being necessary for such a program (Current Report, April 26, p. 1269).

Other figures for OSHA were identical to those included in the request submitted to Congress by the Administration in February (Current Report, Feb. 2, p. 947).

A total of \$66.7 million was approved by the subcommittee for the National Institute for Occupational Safety and Health. The panel restored \$8.7 million for training that was included in the fiscal 1984 appropriation but deleted from the Administration's fiscal 1985 request. The subcommittee also recommended \$55.5 million for NIOSH research activities, an increase from the \$53.9 million sought by the Administration, and \$2.5 million for scientific and technical services, the same amount asked by the Administration.

Committee mark-up for the bill was scheduled for June 26.

Litigation

LATE-FILING DOES NOT BAR CONSIDERATION OF DISCRIMINATION COMPLAINT, COURT RULES

A worker's claim that he was improperly discharged for exercising his rights under the Occupational Safety and Health Act is not barred by his noncompliance with the statutory deadline set for notifying the labor secretary

regarding discrimination by his employer, the U.S. Court of Appeals for the Tenth Circuit ruled June 15.

This decision in *Donovan v. Hahner, Foreman & Harness, Inc.* (No. 83-1349) affirmed a federal district court ruling which refused to dismiss a discrimination complaint filed on behalf of a former employee of the company being sued, on the basis that the employee's initial complaint to the Labor Department was filed beyond the 30-day time limit prescribed by the OSH Act (11 OSHC 1081).

The case arose after an employee of Hahner, Foreman & Harness, Inc. was discharged because of his refusal to obey a work order. While employed with the company, the worker, Wayne Kidd, acted as a foreman at the company's "Shadyway" project and in this capacity, both supervised and performed cement finishing operations from scaffolding equipment. On the day of his discharge, Kidd was working four stories above ground on a scaffold composed of two gondolas when he discovered that the motor for one of the gondolas failed to move the device up or down. After the equipment was lowered to the ground, the employee informed the project supervisor of the condition and the supervisor was able to get the machinery working again. Kidd was then ordered to go back up on the scaffolding, and after refusing this instruction on the basis that the equipment had not been properly examined for safety defects, he was fired. Soon after this incident, however, he was informed that he was being laid off, not fired, because of a lack of work until scaffolding was repaired. When he applied for unemployment compensation two months later, however, he was told that the basis for his discharge was bad conduct.

Kidd then complained to the Labor Department that he had been improperly discharged for refusing to perform his work since he had reason to believe that use of the scaffold, given the condition of the gondola, could have resulted in possible injuries or death. The former employee of Hahner, Foreman and Harness indicated, in addition, that he had experienced problems with the scaffolding, which also involved malfunctioning gondolas, only two weeks prior to the date of his discharge. On the basis of this information, the secretary of labor filed a complaint in federal court alleging that actions of Kidd's employer constituted a violation of Section 11(c) of the OSH Act.

In defending against the discrimination claim, Hahner, Foreman asserted that dismissal of the action was warranted since the former employee had not complained to the labor secretary within 30 days from the date of his discharge as required by time limits set in Section 11(c). The federal district court ruled, however, that noncompliance with the filing deadline did not constitute a bar to consideration of the claim because Kidd had been misled initially regarding the reasons for his termination. The court then found that the circumstances surrounding the company's discharge of its former worker constituted unlawful discrimination under the Act.

Filing Deadline as Jurisdictional Prerequisite

On appeal before the Tenth Circuit, the company renewed its argument that the discrimination claim could not be reviewed on the merits in view of Kidd's failure to timely apprise the government of his complaints. The company alleged specifically that the time limitation as set out in Section 11(c) constituted a jurisdictional prerequisite to consideration of the claim and was not subject to being tolled for any reason.

After reviewing the congressional policy underlying the OSH Act, the federal appeals court indicated that it agreed