

OSHA's new asbestos standard remains in a holding pattern

In a news conference held last April, NIOSH Director Dr. Anthony Robbins and then-Assistant Secretary of Labor — OSHA Eula Bingham announced the findings of a joint NIOSH/OSHA asbestos work group which had concluded that the OSHA asbestos standard should be revised substantially. The group recommended that OSHA lower the asbestos permissible exposure level (PEL) from 2 million fibers per cubic meter of air to 100,000 fibers, and eliminate from the workplace all exposure from new non-essential uses of asbestos.

Bingham said the work group's report "demands corrective action" and pledged that OSHA would "move with all deliberate speed" to amend the 2-million-fiber standard. Bingham did not say what PEL OSHA would propose but, given her statement that the proposal would be developed "pursuant to the OSHA cancer policy," most OSHA observers concluded that the agency would endorse the 100,000-fiber limit.

The asbestos work group was formed in 1979 to review asbestos health research conducted since 1976, when NIOSH recommended lowering the standard to 100,000 fibers. The group found that all commercial and several non-commercial forms of asbestos cause disease. It reconfirmed NIOSH's position that there is no safe exposure limit for asbestos and that the PEL should be set at the lowest reliably detectable level — 100,000 fibers.

In recommending a more stringent standard, the group admitted that "no adequate epidemiological information is available on the disease experience of workers exposed below the current standard and followed for a sufficient period to identify long-latent effects." Neverthe-



Industry officials warn a revised asbestos standard would require expensive new engineering controls and put some operations out of business.

less, the group found the 2-million-fiber standard inadequate for these reasons:

- The 2-million-fiber standard was set in 1969 by the British Occupational Hygiene Society to minimize asbestosis, but follow-up studies showed the standard would not prevent "a large incidence of asbestosis."

- All levels of asbestos exposure studied to date had shown asbestos-related disease, leading the group to conclude that asbestos exhibited a linear dose-response curve, that is, no level below which clinical effects did not occur.

- Members of asbestos worker households and persons living near asbestos-contaminated areas, often subject only to low-level or intermittent exposure to asbestos, had contracted asbestos-related diseases. "Studies of duration of exposure suggest that even at very short exposure periods (1 day to 3 months) significant disease can oc-

cur," the group found.

Response to the NIOSH/OSHA report from the asbestos industry was swift and critical. "We fully concur with the goal of protecting workers in the asbestos industry from health-related risks," Asbestos Information Association/North America (AIA/NA) President Thomas A. Dougherty said, "but we cannot find in the NIOSH report any justification for the proposed decrease to a .1 fiber [per cubic centimeter] standard." He charged: "The NIOSH recommendation . . . is based almost entirely on epidemiologic evidence from worker populations exposed to asbestos at levels many times greater than those experienced in industry today."

Johns-Manville Corp. disputed the idea that no safe exposure level for asbestos exists: "In those asbestos-using plants where our knowledge of the need to control asbestos was such that comprehen-

sive environmental controls were installed from the very beginning of their operations, no cases of asbestos-related disease have been diagnosed in employees working with asbestos in those operations alone. Because of this we can say with confidence that we are not creating a future disease problem and that it is possible to work with asbestos without hazard." (J-M officials told *Occupational Hazards* that no asbestosis has been contracted by employees working exclusively at plants built since 1957.)

J-M stated that both studies of people exposed to naturally occurring asbestos and certain occupational studies showed that asbestos can be used "without hazard" and verified that "the important element in asbestos-related disease is dose." The company charged that workers evidencing asbestos-related disease recently were reflecting "the high levels of exposure of past decades. . . ." J-M faulted the NIOSH/OSHA report for failing to "emphasize the role of smoking in disease occurrence and fail[ing] to distinguish between past conditions and the present situation in the workplace."

AIA/NA President Dougherty warned that a 100,000-fiber standard would not be feasible in many workplaces. In practical terms, said Dougherty, the proposed PEL would amount "to a ban on the use of asbestos" in such situations and would be "detrimental" to the U.S. economy.

Update

A year has passed since the OSHA/NIOSH report was issued, but there has been little news about revising the OSHA asbestos standard, despite the air of urgency surrounding the report's release. Steve Simon, OSHA project officer for the asbestos standard, said former OSHA-boss Eula Bingham had intended to publish an advanced notice of proposed rulemaking in early 1981, but the changeover in administrations has stalled that action. Simon said he did not know what action the Reagan Administration's OSHA team would take on asbestos.

Simon said the agency was work-

ing on an asbestos risk assessment using three different modeling techniques to generate dose-response curves for asbestos PELs of 2 million, 500,000, and 100,000 fibers. Simon reported all three PELs showed some risk of asbestos-related disease. NIOSH is conducting a separate risk assessment.

Members of the asbestos work group remain convinced that a strong case can be made for a new asbestos standard. "I think if we don't have data on asbestos, then we don't have data to control any hazardous substance. Probably, the data on asbestos is the strongest we have," claimed John Dement, assistant director of NIOSH's Division of Respiratory Disease Studies.

Dement reported that he and researchers from the University of North Carolina School of Public Health had recently completed a retrospective cohort study of 768 asbestos textile workers employed in a plant between 1940 and 1965, and followed them through 1975. Of the 191 deaths observed, 26 were due to lung cancer, while only 7.47 had been expected. There were 18 deaths from non-malignant respiratory disease, compared to the 6.85 expected. The study concluded: "The current OSHA exposure standard of 2.0 fibers/cc is based on an allowable lifetime exposure of 100 fiber/cc $\times$ years (i.e., 2.0 fibers/cc for 50 years). Based on data from this study, elevated risks are predicted for lung cancer and for non-malignant respiratory diseases at this exposure level." The study's authors acknowledged that this was based on a cumulative dose concept and that historic exposures at the plant "have been considerably above 2.0 fibers/cc."

"I think we're in a period where, if we're going to wait and count bodies, we're going to have to wait years until we really demonstrate a risk below the 2-fiber level," said Richard A. Lemen, special assistant to the director for standards development, NIOSH, and chairman of the OSHA/NIOSH asbestos work group. "But the evidence that is available to date indicates there is a problem below the 2-fiber level." Lemen said there was evidence of lung tissue changes and decrease in pulmonary function among workers



Asbestos manufacturers believe engineering controls and other measures used to reach OSHA's 2 fiber/cc standard are adequate to protect workers' health.

reportedly exposed to the 2-fiber level only and that people with very limited exposure had developed mesothelioma.

Amid some reports in Washington that OSHA would not proceed with a new asbestos standard, we asked Lemen what he had heard. "I talked to Bailus Walker [OSHA director of health standards] last week, and he told me that they were going to go ahead and promulgate an asbestos standard," Lemen replied. "I would hope that they do, even if the revisions are confined only to our recommendations on medical surveillance and monitoring and things of that nature."

Walker could not be reached for comment.

Johns-Manville officials told *Occupational Hazards* they do not expect OSHA to promulgate a 100,000-fiber standard, especially in light of the Supreme Court's benzene decision, but they do forecast "some tightening" of the asbestos standard in the next 4 years. How much tightening occurs in the midst of the present sensitivity to the cost of government may well depend as much on economics as on medical science. ■