



## Current Report

### Metalworking Fluids

#### MACHINE TOOL GROUP NEARS COMPLETION OF VOLUNTARY RULE TO CONTROL CONTAMINANTS

A voluntary U.S. standard for controlling emissions from metalworking fluids—a document that proponents say could prove helpful to federal job safety regulators—is nearing completion, according to officials working on the project.

A draft standard for the design, implementation, and use of machine tools using metalworking fluids could be submitted to the American National Standards Institute for approval as early as February, Gregory J. Mac, chairman of the group writing the document, told BNA Jan. 9.

ANSI, the private organization that coordinates the U.S. voluntary standards system for equipment, job hazards, and consumer products, then would circulate the document for a 60-day comment period before deciding whether to adopt it as a final standard, according to Mac.

Mac chairs a subcommittee of ANSI's Machine Tool Safety Committee that has been drafting the emissions control standard for about two years.

Although the ANSI standard will not carry the legal authority of a regulation, Mac and other officials say they believe the document could provide a basis for the Occupational Safety and Health Administration to draft its own standard for occupational exposure to metalworking fluids.

OSHA announced in December 1995 its intention to regulate metalworking fluids and expects either to conduct a negotiated rulemaking or to establish a special rulemaking advisory committee as provided under the Occupational Safety and Health Act (25 OSHR 987, 1020).

Generally, OSHA standards for hazardous substances establish a permissible exposure limit and companion provisions such as exposure monitoring and medical surveillance for workers exposed to the substance.

#### Guidance Provided

The draft ANSI document does not recommend an exposure level for metalworking fluids but provides guidance for manufacturers who design and build machines that use those fluids as lubricants and coolants. The performance-oriented standard also has recommendations for proper use of the machines in order to control emissions from metalworking fluids or other contaminants.

"This is more a practical guide that provides ways to limit exposures, limit contaminants in the air," Mac told BNA.

Henry B. Lick, manager of industrial hygiene for Ford Motor Co., told BNA that OSHA might be able to incorporate the ANSI document into its standard as an appendix. Lick is a member of the subcommittee drafting the voluntary standard and also serves on an OSHA advisory committee.

The auto industry has an interest in metalworking fluids because of the widespread use of machine tools, either by the auto manufacturers themselves or by their parts suppliers, according to officials.

Metalworking fluids are complex mixtures of oils, detergents, bacteria-killing biocides, and other materials. They are used in metal grinding, boring, and drilling operations, according to OSHA.

The job safety agency contends that workers are at risk of developing various cancers and non-malignant respiratory disease based on evidence of past workplace exposures to metalworking fluids. However, the Independent Lubricant Manufacturers Association, which represents producers of the fluids, disputes OSHA's characterization of the link between exposure and cancer (25 OSHR 1059).

A draft of the voluntary standard, a copy of which was provided to BNA, is undergoing review by members of the 40-person subcommittee, Mac said. The panel is scheduled to meet Feb. 1 to incorporate comments into what proponents hope is a final draft for submission to ANSI, according to Mac. ANSI then will circulate the document for a 60-day external review, Mac added.

According to the draft, the standard will provide guidelines for a uniform approach to the control of airborne contaminants generated by stationary machine tools used to cut and form metal. Control should be through proper design, installation, use, and maintenance of the machine tool and its support systems, such as air cleaning equipment and delivery systems for metalworking fluid, according to the draft.

### Ergonomics

#### INDUSTRY COALITION ASSERTS OSHA DISTORTED DATA FOR PLANNED STANDARD

The Occupational Safety and Health Administration distorted scientific data to justify its planned ergonomics standard, an industry coalition asserted in a report released Jan. 16.

The report by the National Coalition on Ergonomics contended that OSHA did not weigh all the evidence concerning work-related ergonomic disorders and selectively cited studies to support a cause-and-effect association between work conditions and repetitive strain disorders.

The coalition, organized by the National Association of Manufacturers, based its report on a review of scientific literature cited by OSHA as part of a draft ergonomics standard circulated in March 1995.

"OSHA has made a transparent and obvious effort to manipulate the available scientific data to justify a regulation," Laurie T. Baulig, co-chair of the ergonomics coalition, said at a Washington, D.C., news conference.

Since it was created in 1994, the coalition has been highly critical of OSHA's efforts to establish a standard for controlling repetitive strain disorders. The group has asserted frequently that insufficient data exist to link risk factors cited by the agency—such as the duration of a repetitive task—with job-related ergonomic disorders.

According to Baulig, the analysis by two occupational medicine specialists with experience in repetitive strain illness demonstrates that OSHA has not met its legal requirement to set standards based on the best available evidence.

"OSHA should do its homework, and this proposal needs to be taken off the table," she said, asserting that the analysis "shows far greater flaws exist" than the coalition suspected in the OSHA rulemaking.

The coalition report was prepared by Howard M. Sandler, president of Sandler Occupational Medicine Associates, and his associate, Richard S. Blume.

#### Provocative Statement

Barbara A. Silverstein, who headed the OSHA ergonomics team that drafted the March 1995 document but who has since left the agency, told BNA that OSHA did not manipulate the data. She further called Baulig's allegation "a provocative statement" that is not true. Silverstein is now research director for the Safety and Health Assessment and Research for Prevention program in the Washington state Department of Labor and Industries.

She acknowledged that better studies could be conducted, but questioned why the ergonomics coalition was making an assessment of a draft document that had not been fully peer reviewed.

"I think it's really weird that, first, they would cut off OSHA's ability to complete this and then they go through this early draft and present something as a definitive analysis," Silverstein said.

OSHA Administrator Joseph A. Dear said in a statement that the NAM group "should stop its backdoor campaign to prevent OSHA from taking steps to protect workers from musculoskeletal disorders.

"If NAM wants to debate the science behind ergonomics, then the appropriate place is the regulatory process, where all interested parties—not just the well-funded special interests—can participate fully and openly. I look forward to discussing how OSHA and employers can best protect workers from debilitating problems like carpal tunnel syndrome in an objective and productive forum."

The ergonomics rulemaking had been one of OSHA's regulatory priorities after the Clinton administration took office in 1993. However, since Republicans took control of Congress in the 1994 mid-term elections, GOP lawmakers have prohibited publication of a rule through restrictive language in legislation to fund the job safety agency.

OSHA circulated a draft rule in 1995 to elicit feedback, and industry lobbyists—including those affiliated with the coalition—have been critical of that draft.

Essentially, the March 1995 draft would cover approximately 2.6 million work establishments and 21.1 million workers who are exposed to one of five signal risk factors (24 OSHA 2100). Employers would have to conduct work site analyses to identify problem jobs and take steps to fix those jobs to eliminate the risk factors.

#### Positive Studies Emphasized

According to the coalition's report, OSHA did not attempt to perform a weight-of-the-evidence analysis of the scientific literature concerning musculoskeletal disorders. Nor did the agency make a critical assessment of individual studies in support of a causal association between risk factors and the presence of those disorders, the report said.

Instead, OSHA presented positive findings from selected studies, based on its apparent presumption that the weight of evidence supports a causal association, according to the document. However, 99 percent of the studies cited by OSHA contain one or more findings that do not support a cause-and-effect relationship for working conditions and musculoskeletal disorders, according to Blume.

The report also found flaws in OSHA's interpretations of the studies it did cite as part of its 1995 draft rule. Those studies contain "significant methodologic deficiencies, conflicting results and conclusions which appear to differ from OSHA's interpretations," the report said.

As an example, the report said a 1992 article cited by OSHA to support a causal association actually concluded that there are deficiencies in the majority of studies of musculoskeletal disorders in the areas of exposure assessment, diagnostic assessment, and pre-existing conditions.

Moreover, OSHA did not discuss how the majority of studies cited by the agency were designed, the report said, noting that the majority were cross-sectional studies. That type of study examines a population at a given point in time and is best used to generate hypotheses, not to prove cause and effect, according to the report.

#### Not To Be Discarded

Silverstein said it was difficult to respond to the report because she was not certain what specific studies the coalition was citing. "There are always deficiencies in a study, but that doesn't mean studies should be discarded unless there are fatal flaws in them," she said.

Concerning the use of cross-sectional studies, the Washington state official indicated that, in fact, many of those studies included data that showed exposure to risk factors prior to the onset of symptoms. OSHA also addressed in its draft the documented role of psychosocial factors and non-occupational factors in musculoskeletal disorders, Silverstein said.

Silverstein added that she is convinced enough conclusive evidence exists for OSHA to move forward with an ergonomics rule. "I have little doubt about it, and it is also what OSHA should be doing," she said.

The AFL-CIO, which has supported OSHA's efforts to issue an ergonomics standard, also criticized the employer coalition.

AFL-CIO President John J. Sweeney said in a statement that the industry analysis "is the latest effort in its ongoing campaign to use power, money, and distortions to keep the government from protecting workers from crippling repetitive strain injuries and illnesses."

The report, Sweeney added, "is not about science. It's about the industry trying to rid itself of all regulations and gut job safety protections."

#### Workplace Violence

##### OSHA WRAPS UP WORK ON GUIDELINES FOR HEALTH CARE INDUSTRY, STAFFER SAYS

All major work on the Occupational Safety and Health Administration's workplace violence guidelines for the health care industry has been completed, Patricia Biles, coordinator of OSHA's workplace violence effort, said Jan. 16.

However, Biles could not say when the agency's publications office will have printed copies available for public distribution. The publication schedule has been delayed because of government closings due to the furlough of federal workers and weather conditions, according to Biles.

Since the agency distributed a draft of the health care guidelines for comment in July 1995, the agency has attempted to shorten them and make formatting changes to the document, Biles said.

The agency is still working on putting out a draft of workplace violence guidelines aimed at the late-night retail sector, Biles said. The agency is still defining the scope of these guidelines, Biles said.

In addition, a National Institute for Occupational Safety and Health official said the agency has completed work on its educational document on workplace violence. Like the