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REGULATORY REPORT

Occupational Health & Safety

Highlights

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R. E. PEELE

OSHA is currently expending most of its efforts moderating or repealing certain existing standards, especially the so-called "midnight regulations" issued during the last days of the previous administration. Most of the health items recently listed by OSHA to be worked on in the next few years are old issues. The top ten priority items are arsenic, asbestos, noise, cancer, lead, cotton dust, respiratory protection, labeling, access to records and personal protection equipment and engineering controls. A second and lower priority group includes ethylene oxide (see below), cadmium, anesthetic gases, chromium, nickel, MBOCA and radio frequency radiation.

OSHA says it is going to issue an Advance Notice of Proposed Rulemaking procedures for ethylene oxide. Recently a public interest group together with a government employees union petitioned OSHA for an Emergency Temporary Standard (ETS) to lower the permissible exposure level to one ppm TWA from the present 50 ppm TWA standard. OSHA denied the petition on the basis that most exposures are well below the standard, and thus the requirements for an ETS do not exist in manufacturing facilities and on the basis that jurisdiction over ethylene oxide for sterilant uses resides in EPA. Following the denial of the petition, the group filed suit against OSHA to require it to issue an ETS. Initiation of the rulemaking process was announced at the same time the denial was made.

An amended noise standard was reissued on 8/21/81 after several postponements. The amendment requires that all employees exposed to 85 dB TWA or higher must be in a hearing conservation program. The original amendment issued on 1/16/81 was a detailed specification standard. The 8/21/81 reissue is a more acceptable performance standard which describes what is required but generally leaves the details of how to do it up to the discretion of the employer. The principal features of the amendment are described along with a discussion of the temporarily stayed portions of 1/16/81 issue of the amendment.

Disability payments to a textile worker suffering from byssinosis was decreased to 55% because the worker smoked. This decision of the North Carolina Supreme Court has potentially far-reaching implications because it in effect rules that worker compensation benefits can be reduced because of the affected employee's non-occupational injuries or illnesses.

The recent changes in the lead standard are reviewed herein. These are reduction in permissible exposure levels of 50 $\mu\text{g}/\text{m}^3$ TWA, a debate on qualitative versus quantitative fit testing of respirators, and the lowering of trigger levels of lead in blood for medical removal of employees from exposure.

H. E. Fritz

H. E. Fritz
September & October 1981

OSHA

OSHA is far less as active in establishing or revising standards than the preceding administration. Most of its efforts have concentrated on moderating existing standards, especially the "midnight regulations" issued in the last few weeks of the previous administration. Although progress seems to be slow, from our point of view the standards are gradually becoming more realistic and represent a better approach to solving the problems. For example, the noise standard amendment, discussed more fully below, is now a good performance standard because the detailed (and undesirable) specification portions are stayed. Other existing or proposed standards are also under review and are expected to become more performance oriented.

Recently OSHA released a timetable of priority items to be developed by its health groups in the next few years. The first ten priority items are:

- Arsenic: A risk assessment of the standard will require one year, and a cooperative evaluation of control strategies is estimated to take one to two years.
- Asbestos: Consideration of a more stringent standard will take at least two years.
- Noise: Reconsideration of the entire noise standard is expected to take at least three years.
- Generic Carcinogen: Evaluation of new scientific and technological developments and of cost-effectiveness questions is expected to take from two to three years. The candidates list is not expected to be published soon.
- Lead: Court-ordered findings of feasibility, a joint economic analysis with the Environmental Protection Agency, and evaluation of the issues of intermittent exposure, solubility of compounds, and feasibility problems of medical removal protection will require one to three years.
- Cotton Dust: Review of medical removal protections, technical enforcement problems, and coverage of five non-textile industries is expected to take two years.
- Respiratory Protection: A scheduled advance notice of proposed rulemaking and a present rulemaking on fit testing are part of a project that is expected to take two to three years.
- Labeling: Following a proposal said to be issued shortly, the rulemaking process will cover one and a half to two years.
- Access to Medical Records: Review of the rule is expected to take one and a half years.
- Personal Protective Equipment and Engineering Controls: OSHA is considering a rulemaking on whether to set performance standards allowing employers to choose between the two modes of protection. The time required to develop a policy will be approximately two years.

A second priority group of standards also will receive attention during the next two years, OSHA said, including ethylene oxide, cadmium, anesthetic gases, chromium, nickel, MBOCA, and radiofrequency radiation.

These 17 items are expected to occupy the full time of the OSHA staff for the next two years. It is interesting to note that most of the items are old issues which were introduced by the previous OSHA administration.

The OSHA safety standards priorities are shown below.

- Commercial diving, ANPR Nov. 81
- Multi-piece and single-piece rim wheel, NPRM Feb. 82
- Marine Terminals, FR Mr. 83
- Revocation of advisory terms "should vs. Shall" NPRM Mar. 82
- Shipyard consolidation, FR Dec. 81
- Concrete, concrete forms and shoring, ANPR Dec. 81
- Electrical safety for the construction industry, NPRM Aug. 82
- Ladders and scaffolds in the construction industry, NPRM June 82
- Walking and working surfaces, NPRM, June 82
- Tunnels and shafts, NPRM Sept 82
- Electrical safety, Part II, ANPR 82

This schedule is ambitious based on OSHA's performance to date.

OSHA TARGETING OF SAFETY INSPECTIONS

OSHA area offices will select which locations will be programmed for safety inspections by using a high hazard industry list supplied by the national OSHA office. The industries will be ranked by their lost workday injury rates. Firms with less than ten employees are not required to keep injury and illness data so are not included in the list.

At the opening conference of a programmed inspection, the OSHA representative will explain the new system and ask to see the injury and illness data for that location. He will then calculate the lost workday rate for the past three years. If the rate is below the BLS national workday rate, the inspector will not conduct a safety inspection. An inspector can conduct a limited inspection of specific processes or areas of the plant if the data indicates that a serious hazard or imminent danger might exist.

NIOSH

NIOSH will not move from Rockville, MD, to Atlanta as previously announced because Congress ruled against it and allowed no funds for the transfer. NIOSH director, Dr. J. Donald Millar, is expected to remain in Atlanta along with those already located there. Assistant Director Ron Coene will be located in Rockville.

ETHYLENE OXIDE

The OSHA standard for ethylene oxide (1910.1000) is 50 ppm TWA for the permissible exposure limit (PEL). Recently OSHA was petitioned to issue an emergency temporary standard (ETS) of one ppm by the Public Citizen Health Research Group (HRG) and a Federal employees union, in a letter signed by Dr. Sidney Wolf, a Ralph Nader associate. On September 28, OSHA denied this petition on the basis that the vast majority of exposures are well below the standard, and thus the requirements for an ETS did not exist. Most employers involved in the manufacture of ethylene oxide have already lowered their exposures to 10 ppm or lower. The UCC internal standard is 5 ppm. Ethylene oxide is also used as a sterilant in the medical products industry and in hospitals, but OSHA stated in its rejection letter that regulatory jurisdiction for this use area is covered by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) under the direction of EPA. OSHA intends to enter into a regular rulemaking procedure which begins with an Advance Notice of Proposed Rulemaking (ANPR) to ask for comment with the intent to review all applicable scientific data on Ethylene Oxide. This process normally requires one to two years to develop a change in a standard.

An inter-industry group, the Ethylene Oxide Industry Council (EOIC), has been formed under the CMA to guide development of necessary health effects data on ethylene oxide, and to interact with regulatory agencies to obtain an appropriate regulatory standard. A. G. Voress is chairman of the EOIC, and UCC is actively participating in the group's efforts.

Following denial of the retention, the HRG filed suit against OSHA to require it to issue an ETS, and has asked OSHA to disclose the documents on which it based its decision. OSHA has until November 26, 1981 to respond to the suit, it will furnish the documents requested by the end of October. The newly formed EOIC will watch this matter closely.

ACCESS TO MEDICAL RECORDS

OSHA lifted the administrative stay of the Access to Employee Exposure and Medical Records standard which has been in effect for the contract construction industry since 5/28/81 (46 FR 45758). OSHA has decided to review the entire standard in general, and not just for the construction industry. "OSHA intends to scrutinize all aspects of the standard, including current enforcement experience; the issues raised by the litigation, pending petitions for modification from several trade associations, and other comments on the standard that have been received from numerous interested persons."

ACCESS TO MEDICAL RECORDS, (Cont'd)

OSHA has also proposed a broader trade secret protection for employers by interpreting the regulation to allow employers to seek monetary penalties for violation of confidentiality agreements. In return, OSHA expects a delay in the court actions contesting the rule.

Meanwhile, the Fifth Circuit ruled that the rule was a regulation not a standard, on the ground that it did not protect against an existing hazard but provided procedures to look into potential problems. As such, the regulation must be reviewed in the lower judicial district courts, not the circuit court.

SMOKING AND DISABILITY

In an unusual decision, the North Carolina Supreme Court ruled to reduce a worker's compensation disability payment to a female textile worker because she was a regular smoker. The worker's attorneys argued that she had byssinosis as a result of long employment in a textile mill and should receive 100% disability. The Court allowed only 55% of total disability because it found 40 to 50% of her disability resulted from "other factors", meaning smoking. This decision has potentially far-reaching implications because it in effect rules that worker compensation benefits can be reduced by, and some of the financial burden allocated to an affected employee when part of his injury or illness can be attributed to non-occupational causes.

NOISE AMENDMENT

After several postponements, the noise standard amendment was reissued on 8/21/81. The main requirement is a hearing conservation program for all employees whose noise exposures equal or exceed an 8-hour time-weighted average sound level (TWA) of 85 decibels (dB). The original amendment issued on 1/16/81 was a detailed specification standard, but was stayed along with many other "midnight" regulations. The 8/21/81 issue is a performance standard which describes what is required but leaves most of details of how to get it done to the discretion of the employer.

The highlights of the noise standard now in effect are described below.

The letters in parenthesis refer to the paragraphs in the standard.

- (a) Protect employees from noise exposure at or above 90 dB TWA.
- (b) Use feasible administrative and engineering controls and have a hearing conservation program.
- (c) Hearing conservation program required where noise exposures equal or exceed 85 dB TWA.
- (e) Monitoring in areas over 85 dB TWA is required.

(g) All continuous, intermittent and impulsive sound levels from 80 to 130 dB are to be included in sound monitoring.

(i) Employees or their representatives can observe measurements.

(j) Audiometric testing program at 85 dB TWA at no cost to employees. Approved annual audiograms required for all employees exposed.

Baseline audiogram preceded by 14 hours without exposure.

Evaluation of audiograms by an audiologist, otolaryngologist or qualified physician.

An employee with a significant threshold shift (STS) must be informed in writing within 21 days; notified to see his physician, if appropriate; and provided with better hearing protection.

(k) Audiometric test requirements include:

1) puretone, air conduction threshold examinations at 500, 1000, 2000, 3000, 4000 and 6000 Hz.,

2) equipment meets ANSI S3.6-1969.

3) pulsed-tone and self-recording audiometers and test rooms must meet criteria in appendices, and

4) biological and functional tests on the audiometer each day, acoustic check annually, and an exhaustive calibration every two years.

(l) Hearing protectors shall be available to all employees exposed to 85 dB TWA and must be worn by all employees exposed at 90 dB TWA or higher and at 85 dB TWA if they have a significant threshold shift. The employer must ensure that the employees are given a selection, fitted, trained and made to wear them.

(m) Hearing protectors must attenuate to at least 90 dB TWA or 85 dB TWA for those with a significant threshold shift. Appendix G discusses the mandatory Noise Reduction Rating method of attenuation determination.

(n) Annual training program for all employees exposed to 85 dB TWA or above. Inform each employee about hearing protectors, audiometric testing, and effect of noise on hearing.

(o) Employer shall post a copy of the standard and other information from OSHA.

(q) Recordkeeping will include exposure measurement for two years, audiometric tests for duration of employment, and audiometric test room background level data. All records available to employees, former employees, designated representatives and OSHA.

(y) Appendices A, C, D, E, G and I are mandatory.

- (s) Paragraphs (c)-(s) effective 8/21/81, monitoring pursuant to paragraph (e) by 2/22/82 and baseline audiograms by 8/22/82.

Many of the specification requirements of the 1/16/81 amendment have been temporarily stayed and OSHA has invited public comment on these and other portions of that amendment. UCC and many other companies plan to comment on these provisions. The standard is good as it stands from our point of view. Therefore, our input will be to provide information and comments to substantiate our position. Some of the most important issues from our point of view are:

1. Monitoring

- (a) Is personal monitoring necessary where area monitoring is as effective?
- (b) Does remonitoring have to be done at prescribed intervals?
- (c) Must notification of exposure levels be done individually or are there other effective ways?
- (d) Must personal monitoring be done in the 80-130 dB range regardless of accuracy, cost and availability of instruments?
- (e) Must an employer explain to and educate all employees the details of the monitoring process?

2. Audiometric Testing Program

- (a) Must baseline audiograms be taken with 14 hours free from workplace noise without the use of hearing protectors?
- (b) Should baseline audiograms be revised with changes in hearing?
- (c) Should companies be allowed to "grandfather" existing baseline audiograms?
- (d) Should the definition of Significant Threshold Shift be simplified from the complicated four part definition proposed by OSHA on 1/16/81?

3. Audiometers

- (a) Must the detailed procedures for calibration of equipment be mandated by OSHA or should procedures by others, such as ANSI, be allowed?

Oral communication from an OSHA industrial hygiene supervisor indicates that strict enforcement of the standard is not anticipated by OSHA until sometime in 1982.

LEAD

OSHA published on 1/21/81 [46 FR 6134] a lengthy supplemental statement of reasons assessing the technological and economic feasibility of meeting the permissible exposure level (PEL) for lead ($50 \mu\text{g}/\text{m}^3$ TWA) contained in the lead standard for the 46 industry categories. The statement was made in response to an order of the U.S. Court of Appeals for the D.C. Circuit which required OSHA to reconsider the question of feasibility for these industries.

LEAD, (Cont'd)

The effective date was originally 2/20/81 but has been postponed numerous times. The latest published effective date is 12/10/81. The latest delay is to allow additional time to consider the voluminous information contained in the numerous petitions submitted to OSHA. Each industry group has specific problems in achieving the PEL for lead via engineering controls which generate many different requests for variances, most of which seek the use of protective equipment as an alternative.

Another controversial lead issue is the OSHA proposal to allow qualitative fit testing (QLFT) in place of quantitative fit testing (QNFT) to meet the test provisions for respirators in the lead standard. QNFT requires specialized, expensive equipment and takes a considerable amount of time. DuPont and 3M companies have developed protocols for QLFT which protects workers and is cost-effective, time efficient and feasible. The four-step QLFT protocol published [46 FR 27359] is:

1. Provide a selection of respirator styles so that respirator which fits most comfortably is selected.
2. Pre-screen for odor or taste sensitivity (RE: iso-amyl acetate or saccharin).
3. Use a procedure which generates a constant concentration of test atmosphere.
4. Conduct test exercises - physical movement - while using test atmosphere.

Most industries are pushing the QLFT method while labor is pushing the QNFT method.

The trigger levels of lead in blood for medical removal protection under the lead standard is another active issue. There are serious compliance problems in certain industries, i.e., smelting and battery manufacturing plants, to achieve the new trigger levels. These industries have obtained interim relief from the 60/40 trigger levels but must meet the 70/50 level. The 60/40 level requires that workers be removed from exposure when their blood lead levels are at or above 60 ug of lead/100g of blood and cannot return until the blood level drops to 40 ug/100g.

Herman



"It says here a laboratory rat got himself a lawyer and is suing the government for \$10 million."