

A Current Digest Of Occupational Safety And Health Information

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MESA IN THE NEWS

ISA AND MESA TEAM UP

MESA inspectors are now being trained in investigative procedures developed by the Mining Enforcement and Safety Administration under contract with the *INTERNATIONAL SAFETY ACADEMY* in Houston, Texas. The new "mine profiling system" is a system of rating individual coal mines according to their disabling injury frequency rates and compliance records during the previous year, as well as their health and safety management capabilities and programs. The system is currently being used to rate the larger coal mine complexes (about 300 mines employing 150 or more workers) and mines with fewer employees will be added as the system is refined to accommodate them.

Underground and surface coal mines with 150 employees or more are being "scored" on a scale of 1,000 points in three critical areas: 200 points are possible in the area of the disabling injury rate, 300 for rate of compliance with Federal regulations and 500 for health and safety management. Mines with good safety and health records and programs receive a higher percentage of the total possible points.

Though the *ISA-developed profile system* has not received 100 percent approval from the mine officials, some of those whose mines were audited during the field testing phase have given the program their unqualified support. One official who took part in profile audits in Illinois and Kentucky remarked that "the rating system brings to every coal mine the best safety and health ideas available in a form that both mine managements and miners can shoot at. We felt we had a pretty good program at our mines but after taking part in the test ratings, we're doing something about seven or eight areas in which shortcomings were pointed out to us."

MINE FATALITIES LOWER

The total of 121 fatal accidents during 1975 in the metal-nonmetal mining industry was the lowest on record for the industry, according to the annual report of the Secretary of the Interior on the administration of the Federal Metal and Nonmetallic Mine Safety Act. Half of the fatal accidents in the metal and non-metal mining industry in 1975 involved operators of haulage equipment or machinery. Haulage accidents replaced falls of ground as the most common cause of fatal accidents in underground mines, the report stated, noting that 10 men suffocated when they were overcome by noxious gases, which is the most since 1971. The Act is administered by the Mining Enforcement and Safety Administration, which issued 88,000 notices for violations of standards during the course of 31,000 inspections in 1975. The report also noted that 3,217 closure orders were issued in 1975, which represents a 66 percent increase over the number in 1974.

LABOR DEPT MOVES IN ON MESA

The house passed H.R. 13555, the Mine Safety and Health Act of 1976, transferring certain functions relating to coal mine safety from the Interior Department to the U.S. Department of Labor. The act was amended to give Congress the right of review and veto of executive regulations implemented by the secretary within 60 days of their promulgation and to give a 45 day comment period for opinions on advisory statements. The bill requires a separate office from OSHA, under an assistant secretary, to administer mine safety, and also strengthen standards and enforcement procedures to make them correspond more closely with the features of the coal mine safety law.

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OSHA STANDARDS

CHANGES IN LEAD STANDARD

The Occupational Safety and Health Administration is setting an ambient air and blood-lead exposure standard for protection of the worker. The proposed lead standard retains an ambient air TLV lowered by half from the current time-weighted average TLV of 200 $\mu\text{g}/\text{m}^3$. It also spells out the maximum permissible concentration of the metal in blood setting a biological limit.

OSHA published this proposed standard in the Federal Register in October 1975. An inflationary impact statement is to be published this month. After this is released, public hearings can be held. OSHA, affected industries, trade associations and unions are all preparing for what appears will be a series of closely debated hearings to be held two months after publication of the impact statement.

OSHA FIRST

A new Occupational Safety and Health Administration health standard effective January 20, 1977 states that worker exposure to coke oven emissions must be limited to 150 micrograms of benzene-soluble fraction of total particulate matter per cubic meter of air averaged over an eight hour period. This is the first OSHA standard to mandate specific engineering controls, but it does so only for existing coke oven batteries and not for new batteries (see Current Report, October 7, 1976, p. 531). Specific engineering controls and work practices are to be in use as soon as possible after the standard becomes effective and no later than January 20, 1980.

OSHA based its standard on the conclusion that coke oven emissions "play a causal role in the induction of cancer of the lung and genitourinary tract" among exposed workers. OSHA said in the preamble to the new standard that about 22,000 workers in 65 plants are exposed to coke oven emissions in the United States. Estimates in the steel price increase as a result of the standard ranged from a low of \$1.50 to \$13.29 per ton based on steel priced at \$291 per ton. Estimated total costs to the industry ranged from \$130 million to \$1.28 billion. OSHA also stated that estimates of change resulting from costs to the steel industry for compliance would range from 0.01 to 0.07 percent increase in the Consumer Price Index.

ASBESTOS STANDARD CHANGE

OSHA has given industry until March 1977 to comply with OSHA Standard 1910.184 which states that every employer shall cause every place of employment where asbestos fibers are released to be monitored in such a way as to determine whether every employee's exposure to asbestos fibers is below the prescribed limits. If the limits are exceeded, the employer shall immediately undertake a compliance program in accordance with the OSHA regulations pertaining to such. OSHA further states that all determinations of airborne concentrations of asbestos fibers shall be made by the membrane filter method at 400-450X (magnification) (4 millimeter objective) with phase contrast illumination. All employers are charged to maintain records of any personal or environmental monitoring so required and these records shall be maintained for a period of no less than 20 years.

NOISE STANDARD CHALLENGED

Standards under consideration by the Occupational Safety and Health Administration would be inflationary because alternative approaches allowing ear protection use would accomplish the same objectives at significantly lower costs, according to the Council on Wage and Price Stability.

In written testimony the council emphasized the cost-effectiveness of both ear protection and industry-by-industry standards. Acting CWPS Director William Lilley said: "The costs of achieving minor improvements in noise exposure by the methods favored by OSHA would vary greatly from industry to industry, while the benefits to the workers would not vary accordingly; regulations which do not make allowances for such variations are, simply put, arbitrary and needlessly punitive."

JAN.-MARCH JOB SAFETY DATA

The Department of Labor's Occupational Safety and Health Administration (OSHA) has announced that a total of 38,482 workplace inspections were conducted by 21 approved plan states and one territory during the fourth quarter of fiscal year 1976 (April-June 1976). These inspections found 101,083 alleged violations resulting in proposed penalties of \$1,594,176 with 11,942 establishments found to be in compliance, the inspections covered establishments with 1,180,255 employees in a wide range of occupations and activities.

FIRE SAFETY

FIREWORK HAZARDS

This year, 768 fireworks-related incidents caused 5 deaths, 72 serious injuries, and 691 minor injuries during America's Bicentennial Fourth of July celebration. In addition, 846 fire were attributed to the indiscriminate use of fireworks. These fires resulted in property damage loss of \$3.1 million, \$1 million of which occurred in one building in New Jersey. This year's statistics do not present a scenario very different from the surveys in previous reporting years and until the enforcement of existing laws covering illegal fireworks is strengthened, this trend will probably continue.

FIRE FIGHTER MORTALITY

A report has been issued by the National Technical Information Service (NTIS) which describes the causes of mortality among fire fighters. The 15-month study involved the investigation of 101 fire fighters killed in the line of duty. The causes of death were listed as: 45 heart attacks, 13 building collapses, 12 burns, nine smoke inhalations, six apparatus accidents, five electrocutions, and one equipment failure. There was a higher incidence of fatalities occurring in the Mid-Atlantic, East, and New England areas. The mean age of fire fighter's fatality was 43.5 and the mean years of service was 15.8. Sixty percent of the fatalities occurred to men holding the rank of fire fighter.

FIRE SOURCE SURVEY

Factory Mutual System of Norwood, Mass. has recently revealed the results of its two year study on the cause of most industrial fires:

	PERCENT		PERCENT
ELECTRICAL	26.3	INCENDIARISM	6.4
HOT SURFACES	11.0	CHEMICAL ACTION	6.3
FRICTION	9.0	OPEN FLAMES	5.8
OVERHEATING	8.7	MISC. MATERIALS	5.4
CUTTING/WELDING	7.5	MOLTEN MATERIALS	4.1
SMOKING	7.3	EXPOSURE .FIRES	2.2

The human factor accounts for 73 cents of every fire-loss dollar according to a recent analysis. Thus any fire prevention and fire protection equipment is only as effective as the workers responsible for its use.

NEW DIRECTIONS

WOMANPOWER IN 1990

The Bureau of Labor Statistics estimates that the Nation's civilian labor force will pass the 100.0 million mark before 1980. By 1990, it is projected that nearly 114 million persons will be in the labor force, up from 92.6 million in 1975.

The primary reason for the upward revision in the Bureau's labor force projections is that more women are projected to enter the labor force than previously anticipated. Rates of labor force participation for women have risen very rapidly in the past few years and, although the pace of this increase is projected to taper off very gradually, nearly 12 million more women are estimated to be added to the work force between 1975 and 1990. By 1990, somewhat more than 1 out of every 2 women, 16 years of age and over, are projected to be in the labor force. Most of the growth in the female labor force will be among women age 25 to 54. Participation rates for women in this group, which averaged about 55 percent in 1975, are projected to rise to the 60 to 65 percent range by 1990. Conversely, the labor force growth for men is estimated to be slower than for women. Growth projections predict an increase in the work force from 55.6 million to 65.2 million over the 15-year period with the bulk of this 9.6 million increase occurring among men age 25 to 54. By 1990, the overall participation rate for males is projected to be about 77 percent compared with 79 percent in 1975.

GRADE CROSSING HAZARD

The Federal Railroad Administration should develop a formula for use in determining when to close a hazardous grade crossing, according to a report released by the National Transportation Safety Board. In the United States, there are more than 158,000 unprotected grade crossings on public roads that are not a part of the federal-aid highway system. Ideally, there should be either a grade separation or an active signal system--gates, flashing lights at each crossing. Unfortunately funds are not available for an all encompassing upgrading of the existing crossings. An alternative plan would allow for the closing or consolidation of grade crossings in an effort to reduce the number of potentially hazardous crossings. Such a plan would also reduce the amount of funds needed to equip the remaining crossings.

OSHA CASE HIGHLIGHTS

LANDMARK CASE FOR OSHA

In a landmark District Court decision, a former employee of the Delaware-based Trumbull Asphalt company was awarded more than two years back pay. Jerold Lee Miller, general foreman of the plant, was fired in October of 1974 along with several other employees, for filing a job safety complaint with the Occupational Safety and Health Administration. The Occupational Safety and Health Act of 1970 prohibits firing or otherwise discriminating against employees who complain to OSHA about job safety and health conditions. Hearings before the National Labor Relations Board resulted in the reinstatement of all but Miller who, because of his supervisory status, was not covered under the board's regulations. The U.S. Labor Department filed suit in behalf of Miller last year and litigation was concluded in November with the order signed by U.S. District Judge Wangelin. Back pay for Miller, in an amount not yet determined, is to cover the period from October 16, 1974, through November 2, 1976. The judge found that reinstatement was not an appropriate judgment in this case, however, because of the plaintiff's failure to act "in good faith in his dealings with his employer" following his discharge.

WARRENTLESS INSPECTIONS

As a result of a decision in the U.S. District Court for the Eastern District of Texas ruling against warrentless OSHA inspections, the Government has filed a legal brief in the U.S. Court of Appeals for the Fifth Circuit. An order was sought to permit Labor Department compliance officers to conduct an inspection following the employer's refusal to permit entry to nonpublic areas of its retail discount store. The request was denied by the court which ruled that the objected-to OSHA inspection requires a search warrant based on a showing of probable cause.

If an employer may refuse to permit inspection and require the secretary to seek a warrant, the effectiveness of inspection is nullified by the resulting advance notice due to the intervening period required to obtain the warrant, the Government contended in its brief. In addition, requiring an inspector to obtain a warrant before each inspection would place an intolerable burden on his limited enforcement resources and create severe delays in implementing inspections.

CITATION BRIEFS

....The accidental electrocution of a lineman engaged in transferring overhead, high energy wires from an old to a new utility pole resulted in OSHA charges against the employer for violation of equipment grounding or barricading. The Commission ruled that the firm must comply with the cited standard, that the violation was not due to unpreventable employee error, and that the firm knew of the hazardous conditions. The citation was affirmed and a \$600 penalty proposed by OSHA was assessed.

....An employer contested two job safety citations for serious violations involving nine instances of failing to provide guards on power transmission equipment (Standard 1910.265 and 1910.219) and two instances of failing to provide guards on power saws (1910.213). The firm also contested a nonserious violation for not providing handrails on stairways. The firm argued that the standards did not specify what guarding was necessary and that the OSHA standards were illegal because OSHA rearranged, reworded, and deleted provisions rather than adopting the precise terms of the ANSI standard. The Judge ruled that the standards were promulgated properly and were valid, and enforceable. In all, the Judge assessed \$280 in penalties for one serious (failing to guard power transmission equipment, saw blades, and stairways) and two nonserious violation.

....OSHRC rules that no industry exemption for railroads exists and that where the Transportation Department has not exercised its authority over specific working conditions the railroads are subject to OSHA job safety regulation (see Seaboard Coast Line Railroad Co., OSHRC Docket No. 11904 (1975) and Belt Railway Co. of Chicago, 20 OSHRC 568 (1975)).

.... The Commission affirmed a \$550 job safety penalty assessment against an employer for a serious violation of OSHA standard 1929.20 (b) (4) in that the firm permitted an employee, who was not qualified by either training or experience, to operate a loader tractor with a front end bucket and a backhoe. The record showed that the employee did not know how to park the loader properly with the buckets lowered, the brakes locked, the transmission in neutral, and the stabilizers lowered and the citation was consequently affirmed.

INDUSTRIAL HYGIENE

ACRYLAMIDE EXPOSURE LIMIT SET

Adherence to the present standard for acrylamide of 0.3 milligrams per cubic meter of air as a time-weighted average concentration for up to a 10-hour workday, 40-hour workweek was recommended by the National Institute for Occupational Safety and Health. Among the recommendations which NIOSH submitted was the suggested use of engineering controls to maintain concentrations below the prescribed limit, the availability of medical surveillance to all employees working in an area where acrylamide is stored, processed, produced, or otherwise used, except as an unintentional contaminant at a concentration of less than one percent by weight, and the use of personal protective clothing by all workers exposed to acrylamide. Polyacrylamides are used for soil stabilization, gel chromatography, papermaking strengtheners, clarification and treatment of potable water and foods. Localized effects of exposure include redness and peeling of the skin of the hands and sometimes the feet, numbness of the lower limbs, and excessive sweating of the hands and feet. Systemic effects from acrylamide intoxication involve central and peripheral nervous system damage manifested as ataxia (inability to coordinate voluntary muscle movements), weak or absent reflexes, positive Romberg's sign, and loss of vibration and position senses.

OSHA ON SILICA

OSHA is issuing voluntary employer guidelines to protect workers exposed to crystalline silica, lead, and mercury. The guidelines are not enforceable as law but are suggested as possible guidelines for these substances during the interim period before OSHA issues its complete standards. The guidelines outline programs of good housekeeping, personal hygiene, medical surveillance, and monitoring and measuring of exposure levels.

OSHA has proposed a lead standard and will propose standards on mercury and silica. The present exposure limit for lead is 200 $\mu\text{g}/\text{m}^3$, 8-time weighted average, but the proposed standard would set a 100- $\mu\text{g}/\text{m}^3$ TLV. The TLV for airborne mercury is 1 $\text{mg}/10\text{M}^3$; NIOSH recommends that it be lowered to .05 mg/M^3 . NIOSH hopes to lower the TLV for airborne crystalline silica to .05 mg/M^3 , time-weighted average for a 10-hour workday.

NEWS BRIEFS

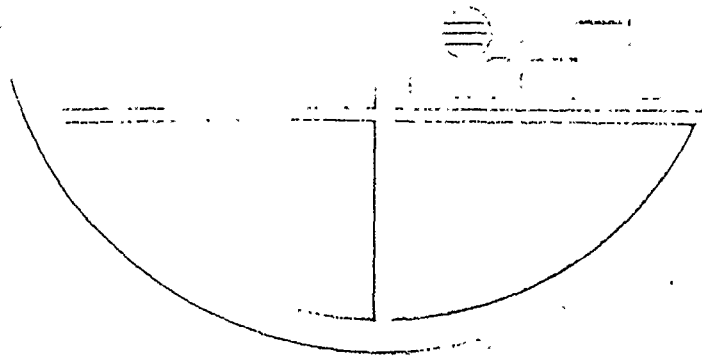
LIABILITY DEFENSES OUTLINED

The Occupational Hazards magazine has provided 16 ways to minimize a company's vulnerability to product liability suits:

1. Be sure the product's design and manufacture comply with technical or trade association standards and national or local codes.
2. Pretest components. Evaluate life expectancy and performance.
3. Code all important components. Include date and place of manufacture.
4. Affix a statement of limitations on machines.
5. Don't misrepresent your salesmen.
6. Hire competent engineers.
7. Have adequate liability insurance.
8. Keep pertinent records and correspondence concerning product for its lifespan plus.
9. Don't accept contracts containing hold-harmless or indemnification clauses, if you are the seller to a manufacturer.
10. Warn users of the inherent dangers in the product's use.
11. Keep case history of failed products.
12. Don't make safety devices optional.
13. Don't exaggerate advertising.
14. Provide instructions for operation and maintenance.
15. Use disclaimers or warranties.
16. Have legal staff review all contracts and sales agreements for potential liability elements.

CANCER INSTITUTE PANNED

Congressman David R. Obey (D-Wis.) reported that deaths due to cancer are increasing at more than three times the predicted rate, and an essential cancer prevention program is "in shambles." The congressman blamed the National Cancer Institute for failing to devote adequate efforts to testing chemicals in order to determine their cancer-causing potential. Obey further charged that during 1975 the National Cancer Institute projected that the number of cancer deaths in the U.S. would increase by 4,500, but the latest figures have shown an additional three times the NCI prediction. The congressman quoted NCI estimates that 80 to 90 percent of all cancer is due to chemical and environmental factors. He urged expanded and improved testing of chemicals on animals to determine their potential for producing cancer.



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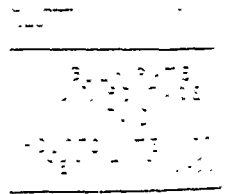
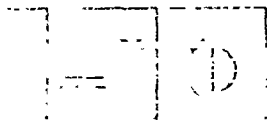
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