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INTERNAL CORRESPONDENCE

TECHNICAL CENTER

P.O. BOX 8361 SOUTH CHARLESTON, WEST VIRGINIA 25303

K. O. Hopkins
400-1
514

December 17, 1980

IH/EP

Construction Employees Dust Exposure Monitoring - Alloy Furnace Job

P. F. Bonham, 512
W. V. Filipek, 514
C. R. Johnson, 512
H. McHenry, 613
L. R. Noble, 512
D. R. Paugh, 512
J. W. Perry, Jr., 512
P. P. Price, 512
E. C. Shipley, 512
H. L. Robinson, 511

PLAINTIFF'S EXHIBIT
UC-3187

Dear Mr. Hopkins:

Dust samples were taken over a ten-week period at the Union Carbide Alloy Plant where Carbide Construction craftspeople were dismantling and rebuilding furnaces 3 and 7. Based on the OSHA standard for nuisance particulate, i.e., 15 and 5 mg/cu.m for total and respirable dust respectively, none of the thirty-four samples showed excessive dust for people working in the area.

However, there is a ladle lining operation at Alloy near these furnaces which involves the use of crystalline silica. Samples taken on October 16 near the #7 furnace east and west of the furnace showed an average crystalline silica dust content of nine percent. The OSHA allowed exposure for dust containing nine percent silica is 1.5 and 0.9 mg/m^3 for total and respirable dust respectively. At these lower levels some of the workers would have been overexposed.

Rather than depending on two values for crystalline silica, several more samples were taken on December 11. When these results are available the exposures will be re-examined with respect to crystalline silica content.

It should be remembered that, while some values were high for one day, the TWA allowed value is considered a safe level for day-after-day during a lifetime of work. So, even if these values found were above an OSHA value corrected for silica content, it does not mean that adverse health effects will accrue. Also, since

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many samples were taken on different days and at different places the dust collected in each of the thirty-four samples taken may not have contained the crystalline silica indicated.

George Hurley

G. F. Hurley
Industrial Hygienist

GFH/sc

Attachment

ACKNOWLEDGMENT

We appreciate the excellent cooperation of the craftspeople with respect to wearing the required samplers and pumps to take the measurements. Mr. McHenry of the Alloy Plant helped in monitoring for crystalline silica which was determined by the UCC Metals Division at Niagara Falls.

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DATE	SAMPLE	DESCRIPTION	SAMPLE			EXPOSURE	
			MINUTES	DUST mg/m^3	TOTAL (T) RESPIRABLE (R)	TWA	OSHA ALLOWED
9/29/80	Area	N. furnace 3 - mezz.	122	1.97	T	-	-
	Area	S. furnace 3 - mezz.	120	1.67	T	-	-
9/30/80	R.L. Ross	CF3 Bldg. west - #7 furnace - outside	387	1.89	T	1.52	2.73
	F.L. Davis	#7 West outside	398	0.40	R	0.33	0.9
	T.L. Vaughan	#7 West outside	394	.28	R	.23	.9
	R.F. Cooper	#7 West outside	393	.08	R	.07	.9
	B.A. Hambrick	#7 West outside	387	.12	R	.09	.9
10/6/80	C.E. McCoy	#3 First level	373	.54	R	.42	.9
	L.N. Walker	#3 First level	432	.58	R	.52	.9
	T.A. Casto	#3 Mezzanine	424	1.53	R	1.35	.9
	R.F. Cooper	#7 Roof	417	0.21	R	.18	.9
	K.J. Crites	#7 Roof	403	.37	R	.31	.9
10/8/80	I.D. Paul	#3 Furnace - cleanup	378	1.85	T	1.46	2.73
	Area	#3 Furnace - 1st level	368	0.82	T	-	-
	T.L. Vaughan	#7 Furnace - mezz.	362	8.2	T	6.19	2.73
	Area	#7 West - mezzanine	362	.83	T	-	-

(1) Based on 9% crystalline silica content of dust.

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DATE	SAMPLE	DESCRIPTION	SAMPLE			EXPOSURE	
			MINUTES	DUST mg/m^3	TOTAL(T) RESPIRABLE(R)	TWA	OSHA ALLOWED
10/8/80	Area	#7 East - mezzanine	362	1.17	T	-	-
	E.L. Mitchell	#3 Furnace - 1st level	378	0.71	R	0.56	0.9
	R.F. Cooper	#7 Furnace - mezzanine	365	.41	R	.31	.9
10/16/80	F.L. Davis	#7 Furnace - 3rd level	388	4.21	R	3.41	.9
	R.L. Ross	#7 Furnace - 3rd level	385	2.26	R	1.81	.9
	I.D. Paul	#7 Furnace - 3rd level	382	2.30	R	1.83	.9
	B.A. Hambrick	#7 Furnace - 3rd level	375	2.52	R	1.97	.9
	T.L. Vaughan	#7 Furnace - 3rd level	362	1.12	R	0.84	.9
10/24/80	F.L. Davis	#7 Furnace - 2nd level	395	1.22	R	1.00	.9
	R.L. Ross	#7 Furnace - 2nd level	395	.56	R	.46	.9
	T.L. Vaughan	#7 Furnace - 2nd level	385	.95	R	.76	.9
	B.A. Hambrick	#7 Furnace - 2nd level	383	.55	R	.44	.9
	I.D. Paul	#7 Furnace - 1st level	372	.79	R	.61	.9
11/13/80	A.S. Nunn	#7 Second level	406	.9	R	.7	.9
	I.D. Paul	#7 Second level	405	1.2	R	1.0	.9
	C.F. Meadows	#7 Second level	401	1.2	R	1.0	.9

(1)Based on 9% crystalline silica content of dust.

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DATE	SAMPLE	DESCRIPTION	SAMPLE			EXPOSURE	
			MINUTES	DUST mg/m3	TOTAL(T) RESPIRABLE(R)	TWA	OSHA ALLOWED
11/13/80	T.A. Casto	#7 Second level	399	0.6	R	0.5	.9
	W.P. Gilmore	#7 Second level	397	1.1	R	0.9	.9
12/11/80	H.L. Williams	#3 First level	402	1.06	R	0.79	.9
	C.F. Meadows	#3 First level	403	.79	R	.67	-
	E.L. Mitchell	#3 First level	402	.34	R	.28	-
	E.L. Walker	#7 First level	397	.08	R	.06	-
	W.P. Gilmore	#7 First level	394	.22	R	.18	-

UCC 016557

(1) Based on 9% crystalline silica content of dust.

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BNA

OCCUPATIONAL SAFETY & HEALTH REPORTER

A weekly review of occupational safety and health developments

Volume 13, Number 48 THE BUREAU OF NATIONAL AFFAIRS, INC. March 29, 1984

GEORGETOWN
APR 2 1984
SAFETY

HIGHLIGHTS OF CURRENT REPORT

TRADE SECRET PROVISIONS of the Occupational Safety and Health Administration's hazard communication standard should not be invoked to cover overly broad claims, panel members representing industry and labor tell a seminar sponsored by the U.S. Chamber of Commerce. An industry official says the standard presents a unique opportunity to create a better understanding of business, and urges manufacturers to make more information on chemical identities available to workers and their representatives (p. 1163).

E. ROSS BUCKLEY'S NOMINATION to the Occupational Safety and Health Review Commission is approved by the Senate Labor and Human Resources Committee. If the nomination is confirmed by the full Senate, Buckley will serve a six-year term ending in April 1989 (p. 1164).

THE BOARD OF SCIENTIFIC COUNSELORS of the National Institute for Occupational Safety and Health holds its first meeting in Atlanta, Ga., and is told by NIOSH Deputy Director Elliott S. Harris that its most important task will be to review the institute's research program on the "broadest levels" (p. 1164) ... Initiatives recommended by a NIOSH working group as ways to prevent future cases of work-related respiratory disease are outlined to the advisory board (p. 1166).

AN ASBESTOS CONTROL PROGRAM conducted by E.I. du Pont de Nemours & Company is described at a conference held by Organization Resources Counselors, Inc. As part of the program, Du Pont is conducting an epidemiological study of previous employees who had signs of potential asbestos-related illness, according to the company's medical director (p. 1165).

CONTROVERSY OVER A SET OF LOGS pertaining to meetings between OSHA Health Standards Director Leonard Vance and people outside the agency continues. Although Vance said that a House subcommittee could see the logs, he told House staff members that some of the logs were unavailable because his dog had vomited on them during a hunting trip, and they were thrown away, according to a House aide (p. 1167).

CARCINOGENIC EFFECTS from benzene at a range of exposures not greatly above the current legal standard are indicated in a study of rubber hydrochloride production workers, Philip Landrigan, director of the NIOSH Division of Surveillance, Hazard Evaluations, and Field Studies, tells a workshop on cancer studies (p. 1167) ... Silica sand and almost all substitute aggregates used in foundry mold production are co-carcinogenic, according to another study presented at the workshop (p. 1168).

FALLING HAZARDS IN ERECTION WORK are addressed in a draft OSHA program instruction intended to clarify an earlier directive that dealt more generally with fall protection (p. 1168).

EXTENSIVE PUBLIC HEARINGS on proposed standards for grain handling and oil and gas well drilling and servicing are planned, OSHA Safety Standards Director Barry White reports. Grain handling hearings are scheduled for Minneapolis, Kansas City, and Washington, and at least one of the oil and gas hearings will be held in Dallas, White says (p. 1169).

THE GRAIN HANDLING PROPOSAL should not be interpreted as being able to provide a totally safe working environment, several companies tell OSHA in response to the proposed standard. Companies also assert that it might be impossible to ensure that grain dust levels do not exceed one-eighth inch over a 200 square foot area. Union groups contend that a housekeeping provision in the proposal is vague and unenforceable (p. 1170).

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PLAINTIFF'S EXHIBIT
UC-3188

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Lung Disease Research

NIOSH officials briefed the board on current activities by the institute's seven divisions, including developments in grants, epidemiology, respiratory disease study, research on hazard control through material substitution and engineering controls, respirator certification, and information dissemination. The presentations reflected various facets of NIOSH's initiative against lung disease.

Robert Glenn, director of the NIOSH Division of Respiratory Disease Studies, reported on recommendations by an internal NIOSH work group on ways to control lung diseases related to coal dust, fibrous minerals, non-fibrous minerals, and organic dust. The intent of the recommendations is to prevent development of these diseases in new workers exposed after 1985, Glenn noted (see related article in this issue).

Barry Johnson, director of the NIOSH Division of Biomedical and Behavioral Sciences, reported on recent studies in his division on materials used as substitutes for silica sand in abrasive blasting operations. The idea in introducing substitutes for sand is to reduce worker exposure to silica. However, the substitutes first must be tested to ensure that they do not pose new hazards to exposed workers, Johnson noted.

NIOSH studied two types of materials that have been used as alternatives for silica sand: coal slags and mineral slags. In the tests, the institute looked at one coal slag product and "a couple" of mineral slags. In each instance, 20 micrograms of the material were introduced into the tracheas of laboratory animals, Johnson indicated.

The coal slag was found to be fibrogenic in the test animals, and the mineral slags "relatively free" of fibrogenicity, the NIOSH official reported. Other coal slags then were tested, and the results of these experiments are still being evaluated, he said.

NIOSH also decided to evaluate the possibility of a carcinogenic hazard from the mineral slags, which may contain quantities of nickel and beryllium, Johnson also stated. The tests, however, indicated no carcinogenicity from the slags in the laboratory animals, he remarked.

Asbestos

EMPLOYEE EDUCATION, EPIDEMIOLOGICAL STUDY PART OF DU PONT'S EMPLOYEE ASBESTOS PROGRAM

As part of an effort to combat and deal with potential employee exposure to asbestos fibers, E.I. du Pont de Nemours & Company routinely provides information on asbestos-related diseases, medical examinations, and X-rays to employees and is in the midst of conducting an epidemiological study on previous employees who had signs of potential asbestos-related illnesses.

This information was presented in a speech given by Burford W. Culpepper, medical director of Du Pont, at a March 27 session of Organization Resources Counselors, Inc.'s symposium, "Dealing with Asbestos in the Industrial Environment."

Culpepper said Du Pont's employee program began in 1980 after several cases of asbestos-related abnormalities were detected in Du Pont employees. The early part of the company's program involved testing of high-risk employees, including those greater than 40 years of age with 10 years experience at Du Pont in jobs which may have involved exposure to asbestos dust. The program later was broadened to include all of Du Pont's employees and its 30,000 pensioners, Culpepper said.

The results of Du Pont's study showed that of the 112,000 people evaluated, 29 had malignancies which the company conceded were related to asbestos exposure; 200 had asbestosis; and, about 1,300 had X-ray evidence of asbestos-related pleural thickening. The majority of cases were found in employees working in maintenance positions such as insulators, pipefitters, laggers, and mechanics, Culpepper said. He noted that the numbers were slightly higher than was anticipated, adding, however, that the "vast majority" of employees don't have asbestos-related problems.

The epidemiological study the company has instituted is primarily a "systematic follow-up" on those employees which showed signs of asbestos-related illnesses, Culpepper said.

Annual X-rays Provided

As part of the company's medical surveillance program, Culpepper said the company provides at a minimum annual X-rays for those employees having shown signs of asbestos-related illness. Culpepper noted that the company has hired a pulmonary specialist who provides regular medical and follow-up exams for employees to determine if a change in work assignment is needed.

Culpepper explained that the company provides compensation for medical expenses related to the illness if it is determined that it is asbestos related, adding that Du Pont has given compensation even in instances where it is unclear that asbestos is the reason for the illness. However, at a question and answer session after the meeting, Culpepper said that the company will not pay any medical costs where it is determined that an employee's exposure to asbestos occurred prior to joining Du Pont.

Other procedures used by the company include replacing all asbestos-containing insulation when necessary; using strict controls when there is no substitute; monitoring exposure levels on a routine basis; eliminating potential exposure; and, providing protective clothing.

As part of the employees' education program, Du Pont also has produced a 25-minute film, "Caring About: Asbestos," comprised mainly of Du Pont employees and medical specialists discussing the problems of dealing with the fear of asbestos.

Use of Respirators

A study on the use of face masks used to protect employees against asbestos exposure concluded that the majority of males tested could be satisfactorily fitted with medium-sized half-mask facepieces, while the small and large sized half-mask facepieces adequately protected all but a few of those tested.

The results of the study were reported in a paper prepared for the symposium by Norman A. Beddows, called "Working with Asbestos-Containing Materials, and the Use of Respirators to Protect Against Asbestos Fibers."

In a study of the use of half-mask facepieces on 1,066 males, the paper reported that 99.8 percent exceeded a fit factor (FF) of 10; 95 percent exceeded 20 FF; and 50 exceeded 200 FF. A fit factor, also called the protection factor, is a measure of facial seal quality.

The study also concluded that full facepieces provided more than a 50 FF in 56 tests; while 95 percent of those 56 tested experienced greater than a 100 FF; and, 50 percent exceeded 1,000 FF.

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Beddows' paper reported that "both types of facepieces generally (95 percent of the cases) performed better (by two times or more) in the tests than is implied by the nominal 10 and 50 'protection factors' which apply, respectively, to these two types of respirators," according to the Occupational Safety and Health Administration's standard.

However, the paper cautioned that workers must be given comprehensive training in the use of respirators. This should be done "by holding informal training sessions which are based on the asbestos and respirator standards' requirements, and the use of pipes and valves which are lagged with simulated asbestos material," the paper noted.

Research

REPORTING SYSTEM, STANDARDS ENFORCEMENT NEEDED TO PREVENT LUNG DISEASE, GROUP SAYS

ATLANTA — (By a BNA Staff Correspondent) — Development of a nationwide reporting system and enforcement of workplace standards are among the initiatives that can be taken to prevent future cases of work-related respiratory disease, according to recommendations by a National Institute for Occupational Safety and Health working group.

Inclusion of safety and health topics in various academic programs and dissemination of educational material to workers were two other approaches suggested by the group as ways of ensuring that no new cases of any disease related to coal dust, fibrous minerals, non-fibrous minerals, or organic dust occur in new workers exposed after 1985.

The recommendations were discussed March 20 by Robert Glenn, director of the NIOSH Division of Respiratory Disease Studies, at a meeting of the institute's new Board of Scientific Counselors (see related article in this issue).

A report by the working group is "still somewhat internal," and will be issued officially in December at a NIOSH conference on the 10 leading workplace illnesses and injuries in the U.S., Glenn told the board of counselors.

Occupational lung disorders were ranked by NIOSH in 1982 as the most serious of the 10 occupational disease and injury categories. Last year, a seven-member task force of NIOSH researchers was appointed to study ways of controlling four groups of lung diseases, with a view toward preventing future cases (Current Report, Feb. 24, 1983, p. 793). These goals are part of larger Public Health Service planning goals for 1990, Glenn noted.

Diseases addressed by the working group included these, Glenn stated:

- Coal workers' pneumoconiosis, industrial bronchitis, disorders from the interaction of coal dust and diesel exhaust, and other diseases associated with coal dust exposure.
- Diseases related to fibrous minerals such as asbestos and man-made materials.
- Silicosis and other diseases associated with non-fibrous minerals.
- Byssinosis, hypersensitivity pneumonitis, and other disorders related to organic dust.

Uniform Reporting System

The working group recommended that a uniform national reporting system be established to detect workplace respiratory hazards, Glenn stated. Areas of risk could be identified through worker exposure to hazardous substances, and through the actual incidence of disease, he said.

As envisioned by the working group, the reporting system would be operated in conjunction with activities by state health departments, and would be phased in on a pilot basis. The working group still is deliberating on whether such a system should be "active or passive," Glenn commented. If an active monitoring system is instituted, it can be used to look for trends in particular industries, bring action to bear on a problem, indicate where further research is needed, and set training priorities, he added.

In enforcing current standards for hazardous substances, the appropriate agencies might emphasize the substitution of less hazardous materials and the use of new ventilation techniques as ways of protecting employees, the working group indicated. Incentives to clean up the workplace, better work practices, and improved respiratory protection are other approaches that might be taken, according to Glenn's summary of the working group's recommendations.

Glenn said the group suggested that safety and health be made a part of the curriculum for medical, engineering, and vocational education students. Also, educational materials should be distributed in the workplace, emphasizing possible interactions between workplace exposures and workers' life styles in creating health risks.

Recommendations also were made for addressing risks posed by specific substances, the NIOSH official continued. Among its recommendations pertaining to asbestos, the working group urged that the Occupational Safety and Health Administration reduce its permissible exposure level to 0.1 fiber per cubic centimeter of air as recommended by NIOSH, and that other, less hazardous, materials be substituted for asbestos.

To reduce the risk of disease related to coal dust, the group recommended that a current coal miner surveillance program be re-examined for ways to enhance worker participation, and that dust control in long-wall mining operations be improved.

In the area of silica exposure, the working group recommended that education on the risks of silica be improved and expanded, and that silica be banned as an abrasive blasting agent, Glenn recounted.

Regarding cotton dust, the working group suggested, among other measures, that better research be conducted to determine the causative agent in byssinosis. Also, it asserted, a prospective study is needed to establish the relationship between acute and chronic effects.

Defining Scope of Problem

One member of the Board of Scientific Counselors, Steven Horvath, director of the Institute of Environmental Stress at the University of California, commented that the report by the working group represents a "big shopping list." He asked what NIOSH hopes to accomplish with the recommendations.

NIOSH Director J. Donald Millar replied that the objective of the study was to show "what needs doing" to address various areas of risk, even though the institute itself lacks the authority to undertake every action needed. Having determined what needs to be done, the institute then can say what it is able to accomplish itself, he told the board.

Elliott S. Harris, the institute's deputy director, added that to address a problem, one first has to "define the scope" of the problem. "That's what we are doing," he told the board. The next step will be to determine what NIOSH can do, and the third step is to indicate what other agencies can do, he said.

Determining what NIOSH is capable of doing, he also remarked to the board, is an area "where you can help us."

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tive fur dyes that also are used in commercial hair dyes, dressers had exposure to tanning chemicals and wood dust, and fur service workers had limited exposure to tanning chemicals, she said.

Mortality from cardiovascular disease was significantly elevated with an SMR of 126 only among service workers, Sweeney noted. SMRs and directly age-adjusted rate ratios indicated that Italian-born fur dyers experienced the most noticeable stomach cancer mortality while all foreign born fur dressers experienced more lung cancer deaths than expected, she said.

The excess mortality from stomach and lung cancer appeared to be related to occupational factors which included oxidative dyes, chromium, and arsenic, Sweeney concluded.

Excess in Lung Cancer

A statistically significant excess in lung cancer mortality was observed among fertilizer workers exposed to phosphate with greater than 10 years of employment and follow-up, according to a NIOSH study sponsored by the National Cancer Institute.

A retrospective cohort mortality study of phosphate fertilizer production workers was undertaken to determine whether this group is at increased risk of dying from any cause, and particularly from lung cancer, according to Leslie T. Stayner of NIOSH. Some 3,199 workers were followed for vital status ascertainment from their first date of employment up to Dec. 1, 1977, or the date of death, whichever occurred first.

Overall, no statistically significant elevations in cause specific mortality were observed for the entire study population, Stayner said. However, when the analysis was stratified by duration of employment, and length of followup, a statistically significant excess in lung cancer mortality was observed among workers with greater than 10 years of employment and follow-up, he noted. In addition, three subjects died of lung cancer, but were not cigarette smokers. They had been employed as maintenance men and were responsible for cleaning out a reactive vessel which had held phosphate.

Stayner cautioned that, because of the small number of deaths involved, and because NIOSH had prior knowledge of a lung cancer cluster at this plant, the findings should be viewed as "suggestive." Other investigations in plants with similar exposures are needed to clarify whether an occupationally-related lung cancer excess truly exists, he emphasized.

Carcinogens

NIOSH STUDY FINDS SILICA, SUBSTITUTES USED IN FOUNDRY MOLDS TO BE CO-CARCINOGENIC

Silica sand and almost all substitute aggregates used in foundry mold production are co-carcinogenic, according to a study presented March 23 at a workshop on joint environmental and occupational cancer studies in Bethesda, Md.

The two-day workshop was sponsored by the National Cancer Institute, the National Institute for Occupational Safety and Health, and the Environmental Protection Agency.

The silica study was designed to assess the co-carcinogenic potential of silica sand compared to Fe203, evaluate the cocarcinogenic potential of the substitutes, and determine the relative fibrogenicity of these materials compared to a reference quartz, Minusil, according to R.W. Niemeier of NIOSH.

Respirable size particulates prepared from industrial samples and extensively characterized by chemical and physical methods, were administered by intratracheal instillation in saline at dose levels based on surface area standardized to Minusil. Groups of 50 male Syrian golden hamsters received 15 weekly administrations of either particulate plus three milligrams benzo(a)pyrene (B(a)P) or particulate alone. Hamsters were killed when moribund or at 92 weeks after the first treatment and tissues were examined by histopathologic techniques, Niemeier said.

Survival was decreased in groups receiving Minusil without B(a)P and also significantly decreased in six of 12 particulate-B(a)P groups as compared to particulate controls, he noted. Pulmonary tumors were observed in every group receiving B(a)P. The most frequently observed tumor types were squamous cell and adenosquamous carcinomas and adenocarcinomas of the lungs and bronchi. No lung tumors were found in the saline control and very few groups receiving particulates alone developed lung tumors, Neimeier noted. No pulmonary fibrosis was observed in any animal; however, significant increases in granulomatous inflammation were observed in groups administered silica sand, Minusil, and the aluminum 48 silicate, he added.

Neimeier concluded that silica sand and almost all substitute aggregates used in foundry mold production are co-carcinogenic; that the hamster is a poor model for studying fibrotic potential; and that granulomatous inflammation does not influence tumor development.

Formaldehyde and Tumor Incidence

A proportionate mortality study of garment workers exposed to formaldehyde was conducted recently by NIOSH to evaluate the human carcinogenicity of formaldehyde, Leslie Stayner of NIOSH reported.

The study was based on 256 deaths that were identified from a death benefit insurance fund. Although 0.5 parts per million is the current average exposure for workers, exposures were much higher in the past, Stayner noted.

No nasal cancer deaths were observed and the mortality from respiratory cancer was slightly less than expected, he reported. There were four incidents of leukemia and hemotopoietic cancer observed while only 2.4 were expected.

Statistically significant elevations in proportionate mortality were observed for malignant neoplasms of the buccal cavity, biliary passages, and liver, and for other lymphatic and hematopoietic sites, according to Stayner. A proportionate cancer mortality analysis was also conducted and cancer of the buccal cavity and other lymphatic and hematopoietic sites were still significantly elevated.

Stayner cautioned that, due to the small number of deaths involved and the lack of consistency with other studies, these findings "should be viewed cautiously pending the outcome of more definitive studies."

Construction

EXCEPTIONS TO FALLING PROTECTION MEASURES OUTLINED IN DRAFT BULLETIN ON CONSTRUCTION

In response to considerable confusion over a July 1983 Occupational Safety and Health Administration instruction bulletin on protecting construction employees from falls, OSHA has developed a draft instruction which is specifically directed to employees in erection work and is intended to

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clarify application of the general industry standards covering fall protection.

The July 18, 1983, OSHA Instruction STD 3-3.1 (Reference File, 21:8309) was intended to apply to employees who did not do construction erection work. OSHA said that the construction workers who were exposed to falling hazards were required to ensure that workers wear personal protective equipment and were required to protect employees with safety nets from falls of more than 25 feet if other means were not practical (Current Report, July 28, 1983, p. 199).

In the new draft directive, OSHA Instruction STD 3-3.2, OSHA noted that the publication of the 1983 instruction bulletin "was met with considerable unanticipated confusion on the part of both the erection industry and OSHA compliance personnel." Specifically, OSHA said the confusion centered on the application of the bulletin to contractors and their employees engaged in the work of structural erection.

OSHA said that the construction industry "asserted that OSHA had illegally promulgated a new standard without benefit" of formal rulemaking procedures. While OSHA's compliance officers "mistakenly believed that the agency had changed its past compliance practices with regard to the erection industry and had embarked on a new and stricter enforcement enterprise." As a result of this, OSHA said that certain conditions were being cited "when they might not have been cited before."

OSHA stressed that it did not intend to force the erectors to create greater hazards by complying with the July 1983 directive, specifically as it pertained to standards at 1926.28(a) and 1926.105(a), than those to which workers were exposed by not complying with those standards. However, the agency said the directive was intended to inform compliance personnel that those two general industry standards should be used when ironworkers are exposed to falling hazards and there is no specific construction standard which can be cited. In fact, OSHA noted that those two standards are two of the "most frequently cited of the construction standards."

Exceptions Are Allowed

Under draft OSHA Instruction STD 3-3.2, compliance officers would be told to enforce 1926.28(a), which OSHA interprets to require employers to ensure that employees wear and use safety belts when exposed to falls from heights 25 feet or greater, in the erection industry "unless there are specific circumstances present on particular jobsites which justify an exception."

One such exception, OSHA said in the draft, would be when an ironworker is connecting structural steel and the nature of the work requires that the worker be free to move both to perform the work and to avoid being struck by moving structural materials. OSHA noted that "experienced judgment" must be used to determine when an exception is warranted.

OSHA noted that generally 1926.28(a) would be cited for distances greater than 25 feet, adding that "at the same time, such fall protection requirements must not be too restrictive in relation to the work to be performed."

In the area of safety belts, OSHA's draft instructional bulletin said they should not be used for heights of less than 10 feet under 1926.28(a) "due to the need for maneuverability and the common use of safety belts with a 6-foot lanyard."

Under 1926.105(a), which requires a safety net or other safety device which would protect exposed employees from falls, OSHA noted that the requirements of the standard are not met if the device used does not provide adequate fall protection to employees. For example, OSHA said employers using a catch platform do not satisfy the standards requirement if employees could possibly fall when doing work on or adjacent to the platform.

When in the steel erection phase of the construction of tiered buildings, employees working on the interior of the buildings exposed to falls greater than 25 feet must be protected by the "appropriate steel erection flooring" requirements, OSHA said.

The draft directive — along with a draft revision of Instruction STD 3-3.1 which would refer field staff to Instruction STD 3-3.2 for dealing with falling hazards during erection of structural members — was approved with minor wording changes on Feb. 29 by the Advisory Committee on Construction Safety and Health. The text of the final versions of both instructions will appear in a future Reference File supplement.

Safety Standards

RULES ON OIL AND GAS WELLS, GRAIN HANDLING, ELECTRICAL SAFETY TO BE SUBJECTS OF HEARINGS

Proposed rules affecting the grain handling and the oil and gas well drilling and servicing industries will be the subject of extensive hearings, Barry White, director of the Occupational Safety and Health Administration's safety standards office, reported March 26.

White said that OSHA plans on holding hearings on the grain elevator proposal in June in at least the following cities: Minneapolis, Minn.; Kansas City, Kan.; and Washington, D.C. (Current Report, March 1, p. 1038). The date for the Washington hearing is scheduled for June 12, while dates for the other hearings have not been confirmed. White said there is also a good chance that hearings on the proposed grain elevator rule will be held in a fourth city.

Hearings on the oil and gas proposal will be held in July, White said. At least one of the hearings will be held in Dallas, Texas, White said, adding that the agency had received an "incredible number of requests" for hearings for both the grain elevator and oil and gas standards.

Because of similar requests, OSHA has extended the comment period for grain elevators until June 8 and for oil and gas well drilling and servicing until June 4 (Current Report, March 1, p. 1037; March 22, p. 1153).

In another area, OSHA will be holding hearings on the proposed electrical construction standard on April 10, 11, and 12 in Washington, D.C. (Current Report, Feb. 16, p. 990).

Other OSHA Action

White said the information received in hearings on the agency's proposed underground construction safety standards was very helpful (Current Report, March 22, pp. 1147, 1150). He claimed the agency will probably be making "some substantial changes" to the proposal as a result of the three days of hearings.

He remarked that participants at the hearing offered a lot of specific recommendations on improving the proposed standard, including recommending technological changes to make the standard more workable, rather than just complaining that they did not want to be regulated.

Other proposed rules in the works in the safety standards area include a proposal on warning signs for hazardous work areas, called the general environmental control — tags standard. Under the present standard, OSHA allows only

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