PLAINTIFF'S
EXHIBIT
DUP-1998

OCCUPATIONAL HEALTH SURVEY NO. 1022-H
BEAUMONT WORKS

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Field Notes

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HYPALON® AREA

J-6 Respirator Fit-Test

With the increased emphasis by OSHA in the fourth quarter of 1980 for the fit-testing of disposable respirators, the plant has elected to discontinue use of these types of respirators, in favor of the Comfo II® with appropriate cartridges. This policy has affected mechanics site-wide and selected employees (a phosphate sensitive individual in the Methanol Area). This group of employees are now using respirators for which they have not been fit-tested, although testing is due this year. It is recommended that employees not be required to wear respirators that they have not been fit-tested and trained in the use of.

J-7 Self-Contained Breathing Apparatus

The pressure of the air supply cylinder of a 30-minute self-contained breathing apparatus was only 1600 psig. It is recommended that the cylinder be maintained in the full condition. A full cylinder will be one in which the pressure gauge is the full indication range or at least within 90% of the rated tank pressure. If monthly regulator checks are responsible for low tank pressures, it may be useful to use a spare cylinder for these inspections.

J-8 Employee Respirator Cleaning

The site uses a clearing solution of 30% isopropyl alcohol for daily clearing of individually assigned respirators. Some locations have encountered problems when using alcohol containing solutions, which can damage the facepiece by causing swelling or hardening of the rubber. It is recommended that use of alcohols should be avoided. A convenient alternative way to do intermediate cleaning is with an aqueous cleaner/sanitizer solution, e.g., Antiseptic Towelette, by Med-Pak Corporation, P. O. Box 548, Poca, W.V. 25159.

S-9 Gloves

PVC gloves are used as protection against carbon tetrachloride, chloroform and other solvents. PVC gloves have a low breakthrough time for these solvents. Plans to evaluate more protective gloves on basis of permeability data collected by Haskell are highly endorsed.

S-10 Spill Procedures

The area has developed some emergency procedures. Three different sheets address this item and different statements about personal protective equipment are indicated, e.g., rubber gloves, PVC gloves or only protective equipment for carbon tetrachloride. It is recommended that concise emergency spill procedures be developed. They should contain beside other information the exact types of protective equipment that should be used in a spill situation. Chemicals with similar properties can be ~~be ensured~~ together. Sample procedures can be provided. Other areas like Nordel®, TEL need to develop similar procedures.

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HYPALON® (Cont'd.)

S-11 Information on Chemical Hazards

a. Employees are informed about the hazards of the chemicals they handle annually. This training is documented with the names of the employees and the dates they received this information. It is recommended that the scope of the information on chemicals with carcinogenic or embryotoxic potential be included in the documentation.

b. The Chemical Data Sheets (used and prepared by Hypalon® Area) on carbon tetrachloride and chloroform which serves as information basis for employees do not contain information on the carcinogenic potential of these chemicals. This information should be added.

S-12 Respirators

a. Two face pieces of Scott Air Paks had some soil on them. O/K. It is recommended that dirty respirators be cleaned when found during the monthly inspection. A dirty face piece was also found in the Nordel® Area.

b. Breathing air stations for airline respirators are marked as such. It is recommended that the phrase 'blow out line before using mask' (Engineering Standard S1H) be added. This appears to have plantwide application.

NORDEL® AREA

J-13 Air-Line Respirators

The air-line respirators in the Nordel® Control Room are all similar in appearance and function. The approval designation on one of the units was by the Bureau of Mines BM-19B-36.

This style of respirator was no longer approved for use past March 31, 1980, unless modified by the manufacturer (no modification was apparent). A similar style of respirator was in use in the Methanol Control Room, but it carried a current approval number. Both styles of respirator use a quick disconnect unit which appears to have been fabricated on site.

An approved air supplied respirator must use components and parts, which have been submitted to the NIOSH/MSHA approval organization and approved as a unit, this includes vortex coolers. Interchange of parts and substitution of other parts will void the approval.

A similar quick disconnect unit is present on the 5, 7.5 and 10-minute escape respirators.

It is recommended that the air supplied respirators be inspected to assure that the entire unit is composed of approved components. In addition, the breathing air station in the Nordel® Control Room should be properly identified (see Engineering Standard S1H).

NORDEL (Cont'd.)

J-14 Ice Machines

a. A coffee cup was being used to remove ice from the ice maker. After use it was placed in the ice bin where the handle was in contact with the ice. It is recommended that the handle not be placed in contact with the ice, due to the potential contamination of the handle and subsequent ice contamination. OK

b. The ice bin is beginning to rust creating difficulties in cleaning and the potential of rust particles in the ice. It is recommended that the unit be cleaned and painted to eliminate the rusty condition. OK

S-15 Respirators

Two out of five Scott Ska Paks were filled below the full mark. It is recommended that the air pressure of emergency respirators be kept in the full range of the pressure gauge. The same deficiency was found at an escape pak in the Methanol Area. OK

S-16 Refrigerator

Refrigerators for cooling food do not contain thermometers. It is recommended that all refrigerators on the plant be equipped with a thermometer (not mercury bulb) to assure that the temperature be kept at or below 45°F to assure proper food storage.

S-17 Instrument Shop

Pans for catching mercury were installed under manometers. Various items were stored in the pans. It is recommended that nothing be stored in them to impair detection and cleanup of spills.

METHANOL AREA

J-18 Escape Respirators

a. Air purifying respirators (half-mask Comfo II with ammonia cartridges) have been placed in various areas of the Methanol Area. The Methanol Area is adjacent to the Ammonia Area. Two of the respirators were dirty and the storage bag was not sealed to provide clean, uncontaminated storage. Spare cartridges were also stored in the box. It is recommended that the respirators be cleaned, stored properly and spare cartridges stored in a central location (in an emergency, an employee should not be concerned with changing cartridges). OK

b. Since ammonia is an eye irritant, the area should evaluate the need for full face respirators in those locations that eye irritation could prevent successful escape in an emergency situation. It is recommended that the need for full-face respirators be evaluated.

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METHANOL (Cont'd.)

S-18 Hearing Protection

a. No hearing protection is required in the Water Treatment Laboratory but is required beyond both exits. It is recommended that signs be posted at both exits to remind employees that hearing protection is required when leavring the laboratory. OK.

b. An air powered portable grinder had no indication that hearing protection is required when it is operated. It is recommended that the noise level be evaluated and the tool be marked if the noise exceeds the applicable limit. OK.

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