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PVC PLANT SAFETY & HEALTH MANUAL
ABERDEEN, MS

SUBJECT: WORK ENVIRONMENT HAZARD CONTROL PROGRAM

EFFECTIVE DATE: March 16, 1984

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TITLE: MANAGER

I. INTRODUCTION

Operation of the Aberdeen PVC Plant involves the presence of the work environment hazards described below. Each hazard may be damaging to the human body if controls are inadequate. This program establishes the minimum controls required for that purpose.

A. Chemicals

A wide range of chemicals are required for plant operation. Many of them are toxic or otherwise hazardous. In those cases, harm to people may occur via inhalation, ingestion, or direct skin/eye contact, depending upon the specific chemical and conditions present.

B. Noise

Inherently noisy equipment exists throughout the plant. Excessive exposure to the resulting noise may produce temporary or permanent hearing loss.

C. Low Light Levels

Safe plant operation requires adequate work area lighting. Loss of this light, regardless of cause, greatly increases the risk of personal injury and other accidents.

D. Biological Hazards

Plant breakrooms, restrooms, and trash containers represent locations where biological hazards may develop. The presence of vermin attracted to these areas increases the risk of incurring illnesses.

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Section 1.510
Page 1

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III. HAZARD EVALUATION (Continued)

B. Routine Dosimetry

The Safety Department will conduct effective, on-going dosimetry programs for the following hazards. Each program will comply with the requirements of regulation pertinent to each hazard:

1. VCM

Worker TWA VCM exposures will be routinely determined, using REAL "Minimonitors". Sample analysis will be done by the laboratory, using a Perkin-Elmer "F42" head-space analyzer, or other equivalent analytical instrument.

As soon as analysis is complete, the Plant Nurse or the Safety Supervisor will notify each department of any overexposures. On weekends, the Laboratory will perform the notification. Following notification, the department supervision will then:

1. Investigate and determine the causes and circumstances of each overexposure.
2. Discuss 1. with the overexposed employee.
3. Report their findings to the Safety Supervisor.

2. Lead

Worker TWA lead exposures will be routinely determined, using Bendix Mod. BDX-44 pumps, operated at 1.5 liters per minute, and either Gelman #4337 filters or Millipore MAWP037AM filters. Analysis will be done by Research Services, using atomic absorption analysis. When analysis is complete, the Safety Supervisor will calculate the exposure results and advise each department of any overexposures. The department will conduct follow-up investigations as with VCM.

3. Total Dust

Worker TWA total dust exposures will be routinely determined, using Bendix Mod. BDX-44 pumps, operated at 1.5 liters per minute, and Millipore MAWP037AM matched-weight, dual filters. Analysis will be done by using a 5-place analytical balance.

When analysis is complete, the Safety Supervisor will calculate the exposure results and advise each department of any overexposures. The department will conduct follow-up investigations, as with VCM.

4. Noise

Worker noise exposure will be routinely determined, using audio dosimeters which comply with the requirements of OSHA noise regulation.

E. Reports

1. General

The timely reporting of work environment hazards is essential to their effective control. Any employee who discovers a hazard suspected of representing a serious danger must report it immediately to his supervisor. Additionally, interim measures must be taken to control the hazard until further action can be taken. This is a responsibility borne by each employee. The reporting of hazards to non-plant personnel will be confined to that established by local manager policy.

2. Routine Reports

The following reports will be routinely made:

a. Weekly Results of Chemical Dosimetry

The Plant Nurse will issue weekly reports of the results of routine chemical dosimetry. This includes VCM, lead, and total dust.

b. Weekly Results Of Noise Dosimetry

The Plant Nurse will issue weekly reports of the results of noise dosimetry during the times when noise dosimetry is being done.

c. Overexposure Notices

The Plant Nurse will issue reports to employees found to have been overexposed during routine chemical and noise dosimetry, notifying them of their overexposures. In the absence of the Plant Nurse, the reporting will be done by the Safety Supervisor.

d. Monthly Industrial Hygiene Report

The Plant Nurse will issue monthly reports which summarize the results of all:

- (1) Routine chemical dosimetry, including the details pertinent to overexposures.
- (2) Work area ventilation checks.
- (3) Special chemical exposure studies, including VCM.
- (4) Noise measurement, including dosimetry.
- (5) Dosimetry equipment evaluation, maintenance and calibration.
- (6) Industrial hygiene program changes, including plans.

IV. EMPLOYEE COMMUNICATIONS AND TRAINING (Continued)

E. Respirator Training

1. New Employees

The Safety Department will conduct basic respirator training for each new employee as a part of the orientation in C.1, above. The instruction will include explanation of the functioning of each respirator, a demonstration of its correct use, and employee practice.

2. Refresher Training

The Safety Department, in conjunction with Operating and Maintenance Departments, will conduct annual respirator refresher training for all employees whose job duties require the use of respirators. The training will be done by using 1st line supervisors as assistant instructors and will include negative face piece fit seal checks, using a test environment.

V. ENGINEERING CONTROLS

Whenever possible or practical, engineering controls will be used to control environmental hazards. When hazards are present and adequate engineering controls have not been implemented, interim measures of other types must be used to protect employees from the hazard.

VI. VENTILATION

A. General

Ventilation systems in use must be maintained and used as designed and intended. Should system failure occur, employees normally protected by ventilation must be removed from the area(s) of the hazard unless other equally effective protective measures are provided.

B. Building Ventilation System

The Compound Department is responsible for daily monitoring of the compound ventilation system and the issuance of work orders or other measures needed to correct system deficiencies.

The Safety Department will conduct quarterly measurements of ventilation system airflow and immediately alert the Compound Department of any serious deficiencies found.