LOUISIANA DIVISION

INDUSTRIAL HYGIENE PROGRAM

WRITTEN DESCRIPTION

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APRIL 1995

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GENERAL

In Louisiana Division, line management is ultimately responsible for providing a safe and healthful work environment. This is accomplished through the assistance of a small central Industrial Hygiene group and a network of approximately 40 Industrial Hygiene Contacts from the various plants and departments throughout the Division. The central Industrial Hygiene group consists of five full time professionals: four Industrial Hygienists, one Industrial Hygiene Technician and an Office Professional. The Industrial Hygienists have assigned to them specific plants/departments for which they provide industrial hygiene support. The Industrial Hygiene Manager, who reports to the Manager of Safety/Security/Environment/Health, is designated as the coordinator of the Division I.H. Program and severs as the liaison to related functions such as Safety and Medical. Professional Certification is encouraged and, at the present time, the Louisiana Division I.H. function has one Certified Industrial Hygienist In Training.

The primary responsibilities of the I.H. group are to keep management informed of I.H. requirements, serve as focal point and resource for managing I.H. programs in each operating plant and support group and provide technical training and guidance for the I.H. contacts. The contacts, in turn, are responsible for many of the day-to-day I.H. activities in their respective departments based on their individual knowledge and experience.

IDENTIFICATION AND PRIORITIZATION OF NEEDS

Industrial Hygiene priorities as identified through the use of the Chemical and Physical Agent Inventory (CPAI) forms. The CPAI is used to assign a degree of exposure and a priority rating by employee job class for chemical and physical agents of concern in a given plant. The resulting priority rating is then used to develop the exposure monitoring strategy and training requirements. The specific sampling plan is usually prepared by the I.H. contact with consultation with the appropriate Industrial Hygienist. The CPAI is updated on an annual basis and a copy is stored in the Health Surveillance Computer System.

Periodically (for example every two years), the site Occupational Health Audit Team reviews the overall I.H. program for each plant or department where the need for a formal ongoing program has been established. The review is a formal exercise addressing I.H. programs, involving a self evaluation questionnaire, inspection of the work area and identifying strengths and opportunities for improvement from both an I.H. and Medical standpoint. This Audit Team includes representatives for Industrial Hygiene, Medical, Operations, and Safety. The results and recommendations are documented and follow-up becomes a line responsibility.

EXPOSURE EVALUATION AND CONTROL

A written plan for evaluating exposures is developed on an annual basis. This I.H. annual report is written by the I.H. contact and by the Industrial Hygienist assigned to the particular plant. Topics covered include such things as a review of historical monitoring data, process description, job descriptions, sampling plans, sampling methodology, exposure results and criteria, accomplishments and goals. Approved and validated sampling and analytical methods are used whenever practical. Division laboratories participate in the Corporate I.H. analytical proficiency testing program. Spikes and blanks are routinely submitted with samples to both internal and external laboratories. Short term or excursion sampling is encouraged to identify specific tasks that are the source of potential or actual employee exposures. Monitoring is usually done on a worst-case basis to highlight potential problems. Time weighted averages, representative of full shift potential or actual employee exposures are also evaluated. The results of the monitoring are sued to ensure that the proper medical surveillance requirements are followed. These are also used to evaluate compliance with Dow exposure guidelines, government regulations and to ensure the proper selection of personal protective equipment. Evaluation of the need for exposure controls can be initiated by either an individual , such as an Industrial Hygienist, I.H. contact, or plant operator, or by a group such as the Occupational Health Audit Team. Recommendations for exposure reduction are made based on exposure or potential exposure monitoring data, observations and professional judgment. Such recommendations are made to the appropriate plant or department personnel and implementation the becomes a line responsibility. Documentation is usually done in the annual Industrial Hygiene summary report. Engineering controls are preferred and encouraged by administrative controls are used where appropriate. As much as possible, personal protective equipment is limited to situations where exposures are of relatively short duration, jobs that occur infrequently, or where other types of controls are not technically or economically feasible.

COMMUNICATION AND TRAINING

Industrial Hygiene training for new non-exempt employees and I.H. contacts is conducted by the central I.H. group personnel. New employees are given a comprehensive training session which includes respiratory fit testing before they begin their work assignment. Industrial Hygiene contact training is done in periodic group sessions and on an individual basis as required by a particular circumstance. Contacts are also encouraged, when appropriate, to attend other training courses and seminars such as those on the fundamentals of Industrial Hygiene as taught by Dow US Area I.H. personnel and the local section of the American Industrial Hygiene Association. The majority of routine in-plant training sessions are conducted by the plant I.H. contacts. A Louisiana Division Industrial Hygiene program checklist has been prepared to assist the contacts in making sure all required activities, including training, are completed. Many training programs, like most I.H. activities, are conducted on an annual basis, but may be spread out over the course of the year.

When contractors are brought on-site, they are given a general Division safety indoctrination which includes appropriate I.H. content. Upon arrival at the workplace, they are give plant/department specific indoctrination which includes hazard communication training before beginning their work assignment. In addition, further communication and training is conducted prior to specific jobs through the use of a safe work permit which covers hazards and protective equipment requirements that are job specific.

Contractors that are permanently assigned to a plant are essentially educated and trained the same as Dow employees.

Signs and labels are used extensively throughout the Division to communicate the presence of hazards and protective equipment requirements.

The Industrial Hygienist for a facility communicates directly with I.H. contacts and/or plant management as appropriate when new information becomes available on such topics as recent toxicity testing results, changes in regulatory requirements, etc.

I.H. personnel communicate directly with the Medical Department to ensure appropriate health surveillance requirements as being met.

DATA MANAGEMENT

Industrial Hygiene monitoring results for plants with ongoing I.H. programs are summarized (documented) in the facility's annual reports. For other areas, the monitoring data is reported by means of letter reports or formal technical reports. In advance of the report and in a timely manner, the monitoring results are discussed with the appropriate subject department personnel. In turn, the area's I.H. contact is normally responsible for communicating survey data to employees on an annual basis.

Industrial Hygiene maintains a computer data base which is part of the Dow U.S.A. Health Surveillance System. The LAD Industrial Hygiene Computer System provides a means of managing data and information. The system facilitates the handling of Chemical and Physical Agent Inventories, Employee Work History Data, and Employee Exposure Data. In addition, through linkups with available company information systems, Industrial Hygiene is able to retrieve background data (T.I.M.E. sheets, Dow MSD sheets) in order to meet site needs.

As extensive data management program, including appropriate QA/QC elements, is in place in the Environmental Services laboratory which analyzes the majority of the exposure monitoring samples taken in Louisiana Division. The lab also participates in the analytical Proficiency Testing Program conducted by Dow's Corporate I.H. personnel.

REGULATORY COMPLIANCE

Industrial Hygiene Group members review regulations that apply to worker health and environment related matters, consult with H&ES and Corporate regulatory compliance resources, attend seminars, conferences and meetings, and subscribe to appropriate publications to develop and maintain the site's regulatory compliance knowledge base. Mechanisms used to communicate minimum compliance requirements include establishing Division guidelines (e.g., Asbestos Awareness Handling Requirements, Hearing Conservation), Safety and Loss Prevention Standards (e.g., Respiratory Protection), communication meetings, and written communiqués.

Compliance with regulatory requirements is approached through establishment of appropriate minimum requirements, training and communication vehicles, and periodic assessment and auditing practices.