

TO	W. E. Horton	FIELD POINT OR DEPT & BLDG NO Avon Lake G.C.	DATE YOUR LETTER
FROM	T. S. Bialke	FIELD POINT OR DEPT & BLDG NO Akron - D/0020, 5-H	DATE THIS LETTER 6-13-84

SUBJECT

1984 Industrial Hygiene Survey

This is to confirm the Avon Lake General Chemical plant industrial hygiene survey scheduled for the week of June 18-22, 1984.

During my survey I will be interested in the following:

1. Avon Lake G.C. compliance with Chemical Group Standard IH-101,
2. Respirator use for VCM task exposures,
3. Avon Lake G.C. monitoring program - post OVA,
4. Physical examinations for occupational exposures,
5. Industrial hygiene training requirements,
6. Hearing conservation program,
7. Review of completion of actions to address previous recommendations.

T. S. Bialke

T. S. Bialke

v

cc ~~E. B. Katzenmeyer, Jr. / H. W. Dietz, MD~~ / *file*
H. Waltemate / G. Lefebvre
R. Lockemer

26133001

TO	W. E. Horton	FIELD POINT OR DEPT. & BLDG. NO.	DATE YOUR LETTER
FROM	T. S. Bialke	Avon Lake G.C.	DATE THIS LETTER
SUBJECT		Akron - D/0020, 5-H	8-10-84

~~Industrial Hygiene Survey - ALCO~~

During the period June 18-21, 1984, an industrial hygiene survey of the Avon Lake General Chemical plant was conducted. All recommendations except one from the previous survey have been completed.

Items during this survey that need attention include completion of the hazard inventory (recommendation carried over from previous survey), training of employees with noise exposure, and evaluating employee exposures to VCM from "C" process and to organo tin in the compound department.

I would like to thank R. Lockemer, J. Gressler and the Avon Lake G.C. plant for their assistance during the survey.

Please respond to my recommendations within 120 days.

T. S. Bialke
T. S. Bialke

v

cc: J. Gressler
H. Waltemate/G. Lefebvre
~~E.B. Katzenmayer, Jr./H.W. Dietz, MD~~
R.A. Guyton, MD/R.A. Kelley

file

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Compliance with 1982 Survey Recommendations

1. Geon East bagging area has been posted as noise hazardous and audiograms are being offered to affected employees; action complete.
2. Yearly results of each individual employee's monitoring record is being kept in the Avon Lake GC dispensary; action complete.
3. Procedure for calibration of plant breathing air carbon dioxide alarm has been established; action complete.
4. Procedure for chlorine cylinder charging has been changed to require the stand-by operator to wear a respirator.
5. Hazard inventory has been completed for the hydrophilics department. Hazard inventory needs to be completed for other ALGC departments; action incomplete.
6. Opening in E-F line cuber enclosure through which the strip passes has been enclosed with a door. Hearing protection is being worn. Noise level in mill area at time of survey was 88-89 dBA; action complete.
7. Efforts have been made by the VCM production areas to ensure employees utilize respiratory protection when required. These efforts include employee education, posting of signs and supervision. These efforts seem to be working, as personnel monitoring shows an increase in the frequency of respirator usage.

1984 IH Survey Recommendations

1. Prepare a quarterly industrial hygiene report listing personnel sampling results, explanation of overexposures, personnel protection devices worn, what is being done to prevent future occurrences of overexposures, and status of engineering controls/projects to address overexposure situations.
2. Include in the 4th quarter IH report a summary of the past year's accomplishments and unresolved problems in the ALGC industrial hygiene program. Also include goals/objectives of the plant for the coming year.
3. Complete a health hazard inventory for all ALGC job classifications (see Discussion).
4. Evaluate employee exposures to VCM from the "C" process by obtaining at least one sample per exposed employee.
5. Evaluate employee exposures to organo tins in compound. Contact T.S. Bialke, ext. 4224 in Akron to arrange for this sampling.
6. Conduct annual training for employees who have noise exposures above 50%, 8-hr. TWA. Training must include (1) the effects of noise on hearing, (2) the purpose of hearing protection (advantages/disadvantages of various types, instructions on selection, fitting, use and care), and (3) an explanation of the purpose of the audiometric exam.

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Discussion

Attachment I is the complete industrial hygiene checklist used for the ALGC survey. This checklist is a guide used by the hygienist to ensure that all areas of a facilities IH program are addressed. The checklist is based on the Chemical Groups IH program, Standard IH-101. The following section contains a discussion of survey items and recommendations that are not self-explanatory.

The plant's reporting of IH activities was dropped in early 1984. As a result, the ALGC plant has no mechanism for informing Chemical Group management and the Health & Environmental Services department in Akron of employee exposure problems or control successes. The quarterly report of IH activities/efforts is a valuable tool for getting the attention of upper management and keeping them attuned to the unique occupational health problems of a multiple product chemical plant.

The ALGC medical services department is run very efficiently. Physical exams being offered to employees meet BFG and OSHA requirements. Counseling of employees who demonstrate shifts in their hearing is excellent.

Essential to the BFG medical information system is an inventory of physical and chemical hazards an employee may be exposed to when working in an ALGC job classification. The health hazard inventory or job health analysis is similar to a job safety analysis in that both are attempts to discover and describe hazards associated with jobs at BFG plants. An inventory of the hydrophilics department has been completed.

As a result of ALGC environmental group personnel losses, some required monitoring and exposure evaluations have not been completed. The plant has taken steps to correct this situation by training the guards to assume this responsibility. To assist in this transfer of responsibility, I instructed the guards in proper procedures for collection of heavy metal sampling. To prioritize the plant's personnel monitoring efforts, I made the above recommendations.

The "C" process employee exposures to VCM must be evaluated as soon as it gets lined out. This monitoring must be done, as the OSHA VCM standard requires all new processes to be evaluated.

Previous monitoring for organo tins in compound west indicated that no exposure problems existed. That sampling method has subsequently been shown to be suspect. An interview with a compound employee revealed there may be an organo tin exposure problem. For these reasons the evaluation of compound employee exposures to organo tin needs a high priority.

I am available to assist the plant in setting up sampling programs to address the above recommendations.

The ALGC Q.C. laboratory has installed local exhaust ventilation to control fumes from bench top extruders. All laboratory hood flow rates are being periodically measured and all hoods are rated.

TSB

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CHEMICAL GROUP INDUSTRIAL HYGIENE
AUDIT CHECKLISTLOCATION A. L. G. C. P.DATE 6/19/84S = Satisfactory
NA = Needs Attention
DNA = Does Not Apply

A. INDUSTRIAL HYGIENE PROGRAM ADMINISTRATION

1. Industrial Hygiene Coordinator

- a. Named
- b. Knowledgeable
- c. Walk-throughs

S
S
S

2. Periodic Industrial Hygiene Program Reports

- a. Timely
- b. Content
- c. Year-end Summary
- d. Goals for Next Year

NA
S
NA
NA

3. Medical Services

- a. Physical Examination
- b. Medical Equipment Certification/
Calibration
- c. Training
- d. Illness and Complaint Investigation

S
S
S
S

4. Hazard Inventory

- a. Complete
- b. Annual Review and Update

NA
DNA

5. Chemical Hazard Review and Use

- a. Committee Established
- b. MSDS

S

- 1. Available
- 2. Employees Trained in Use

S
S

6. Reply to Corporate Surveys

- a. Initial
- b. Final Report

S
S

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S = Satisfactory
 NA = Needs Attention
 DNA = Does Not Apply

B. INDUSTRIAL HYGIENE PROCEDURES

1. Respiratory Procedure

- a. Written
- b. Selected per Hazard
- c. Training
- d. Fit Testing
- e. Medical Examination
- f. Cleaning
- g. Storage
- h. Inspection
- i. Approvals
- j. Usage

S
 S
 S
 S
 S
 S
 S
 S
 S
 S

2. Asbestos Handling and Disposal

- a. Sources Identified
- b. Monitoring
- c. Medical Examination
- d. Demolition and Removal
- e. Protective Clothing
- g. Written

S
 S
 DNA
 S
 S
 S

3. Industrial Hygiene Sampling

a. Strategies

- 1. OSHA compliance
- 2. Hazard Evaluation
- 3. Special Requests

N.A.
 N.A.
 S

- b. Sample Procedures
- c. Analytical Procedures/Cross Check Program
- d. Employee Interview

S
 S
 S

4. Hearing Conservation and Noise Control

(Use Hearing Conservation Audit Checklist)

Total Satisfactory
 Total Needs Attention

23
 1

5. Radiation

- a. Hazards Identified and Labeled
- b. License Requirements
- c. Records
- d. Dosimetry Program
- e. Periodic Leak Checks
- f. Radiation Protection Officer

S
 S
 S
 DNA
 DNA
 S

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S = Satisfactory
 NA = Needs Attention
 DNA = Does Not Apply

6. Ventilation for Health Hazard Control

- a. Periodic Flow or Maintenance Checks S
 b. Laboratory Hoods S

1. Yearly Flow Checked S
 2. Rating or Flow-Rate Posted S

- c. Modifications Reviewed S
 d. New Systems Reviewed S

7. Leak Detection

- a. Written S
 b. Area Monitoring Response S
 c. Leak Repair Control S

8. I.H. Equipment Calibration

- a. Audiocimeters

1. Daily Field Calibration S
 2. Laboratory Calibration S

- b. Sound Level Meters

1. Daily Field Calibration S
 2. Laboratory Calibration/Three Years S

- c. Acoustic Field Calibrators Every Three Years S
 d. Radiation Detection Device - Annually DNA
 e. Area Monitoring Devices S
 f. Personnel Monitoring Pumps S

9. Laboratory Safety

- a. Lab Hoods Adequate for Hazard S
 b. Lab Procedures Reviewed S
 c. Personnel Protective Clothing and Equipment S

10. Totals

Satisfactory 77
 Needs Attention 6

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INDUSTRIAL HYGIENE LABORATORY REQUEST

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