

TO: W. HORTON

FROM: H. WALTEMATE

DATE: 8/28/86

AVON LAKE GENERAL CHEMICAL SAFETY, INDUSTRIAL
HYGIENIST AND ENVIRONMENTAL AUDIT

Attached are the individual reports from the audit which was conducted July 28 through August 1. The ALGC plant has a very sound program in all areas which were audited. This is brought out in these reports with the recommendations which are being made.

If you have any questions, you should contact the individual of the discipline involved or myself.

A status report should be sent in response 120 days after you have received this report. It should include how each item was corrected or the plans for making the correction.

I am also requesting that you improve in keeping me informed of the accident prevention activities in your plant.


H. Waltemate

HW/kp
8627q

Attachments

cc: J. Gressler
W. C. Holbrook/G. F. Lefebvre/J. D. Fannin
T. S. Bialke
W. Niederst
F. Krause
M. Fletcher/G. Krcmar/A. Sitabkhan

TO: W. E. HORTON
FROM: J. L. MILLER

DATE: 8/28/86

1986 AVON LAKE GENERAL CHEMICAL

SAFETY AUDIT - JULY 28, 1986

Attached please find the 1986 Avon Lake General Chemical Safety Audit report. It was a pleasure and indeed beneficial for me to conduct this year's audit. Employees throughout ALGC were extremely courteous and cooperative. Their attitude toward safety was very positive; this was indicated in the one on one discussions held throughout the week.

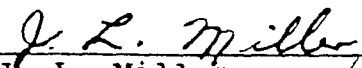
In reviewing your 1984 Safety Audit report and having the opportunity to conduct this year's audit, it was very apparent the positive strides you are making. Please continue to emphasize responsibility and accountability for your safety program downward in your organization.

Within 120 days after receiving this report, please prepare a reply which includes actions taken, actions to be taken and a timetable of expected completion dates for each of the audit recommendations.

The ALGC plant attained a rating of 43 satisfactory and 4 categories which need attention. The recommendations for Community Emergency Planning and compliance with SA-132 Hazardous Chemical Storage are listed in R. Hardesty's Environmental Audit report.

This report includes the following:

- I. 1986 Safety Audit Recommendations
- II. Plant Feedback
- III. General Comments
- IV. Plant Rating


J. L. Miller *J.L.*

JLM/kp
8629q

Attachment

NGC00026545

1986 AVON LAKE GENERAL CHEMICAL

SAFETY AUDIT - JULY 28, 1986

I. 1986 Safety Audit Recommendations

Hum 86-A. Per BFG Engineering Standard ST-522 (3.05/3.07), steam lines are to be vertically projected downward and equipped with a bleed off valve. In surveying your utility stations, the majority were found to be deficient in one or both of these requirements.

86-B. In reviewing your OSHA 200 log, the following areas were found to be deficient:

1. 1986 lost time injury did not have the 49 days lost and 50 days restricted posted. Seven restricted days were posted incorrectly with another injury.
2. Job titles were not posted in the log as required.
3. Information on the hospital and medial doctor are required to be included on the OSHA 101 (BFG 6074) reports.
4. Eleven second degree burn cases, one infection case and one light duty case listed on your first aid daily report need to be reviewed. The basis for not listing these cases as recordable needs to be forwarded to H. Waltemate.

*Meet with
Area* 86-C. During my plant walk-through, I witnessed several areas where insulation was apparently either left off or had not been required. I recommend that you survey your plant for areas in need of insulation. Also, reemphasize the importance of placing insulation back in its proper place.

*Simon
Done* 86-D. Three derails were observed thrown without utilizing the warning flag. Utilizing the warning flag in conjunction with the derail may prevent you from derailling a railcar.

86-E. You have recently modified your approach in maintaining your self contained breathing apparatuses. I believe you have made some significant progress in this area; however, there were a few cylinders that had not been hydrostatically tested in accordance with the OSHA requirements.

86-F. It is a requirement of OSHA that rescue equipment be inspected on a monthly basis with associated documentation. This can be accomplished by either (1) utilizing your check sheets presently used or (2) attaching an inspection tag and signing off on each box.

86-G. You presently have halon systems in your vulnerable areas with water extinguishers located just outside. I recommend you replace these water extinguishers with either halon or CO₂.

Review 86-H. Review your elevator doors for "spacers" to prevent smashing of fingers.

Review 86-I. The rotex screens in the Dryer Building are presently lifted off by manual means. Due to the position a person has to place themselves in could result in a back injury. I recommend you provide a mechanical means of lifting these screens.

86-J. The recently revised Chemical Group Safety Standard SA-102, Powered Hand Truck and Lift Truck, states that "steering wheel knobs will not be utilized except for stand-up type lift trucks (these will be the recessed steering knobs). This standard is effective September 29, 1986. You need to revise your stand-up lift trucks.

86-K. To ensure that control rooms and breaker rooms in hazards are pressurized as required, I recommend that the manometers be included on a daily checklist. Any problems observed should be corrected on an emergency basis.

86-L. The safety roles for employees need to be defined.

II. Plant Feedback

- More information on off-the-job accident prevention for motorcycles is desirable.
- There needs to be more sharing between the plants in new creative awareness programs.
- There is an emphasis void after "Take Two." Suggest we do more with safety information from suppliers. It was also suggested that maintenance employees be included in selected customer trips.
- A method for recognizing individual departments for an outstanding safety performance is needed.
- The joint Safety, Industrial Hygiene, Environmental Audits are good. It is very awkward with four to five people involved.
- The audit team was very positive with their approach.
- How is the replacement for L. Clark being handled?

III. General Comments

Your housekeeping program plant-wide was in excellent shape. I did not inquire as to whether there is a formal program regarding housekeeping at ALGC; however, the awareness for housekeeping as picked up significantly at the Deer Park plant following formalization of the program.

Prior to my visit, I expected to see some work in the area of safety training necessary. Following my discussion with plant personnel, I was convinced that training was not the problem I had anticipated. A few training areas in particular that impressed me were mill drills, fire brigade, fork truck and hazard communications.

I cannot emphasize enough the importance of your task group completing their mission in evaluating the Pedricktown incident as it compares to ALGC.

In closing, I was very impressed with the relationship displayed between direct and indirect employees. There was an attitude displayed that convinced this auditor that responsibility for their safety was in their hands. Keep up the good work!

8629q/kp
8/28/86

IV. BFGOODRICH CHEMICAL GROUP SAFETY PROGRAM RATING

LOCATION: Avon Lake General Chemical DATE OF AUDIT: 7/28-8/1, 1986

RATING ORGANIZATION AND ADMINISTRATION

S	Management and Supervision Involvement
S	First Line Supervision Involvement
S	Compliance with Previous Audits
S	Preparation and Completion of Safety and Housekeeping Goals
S	Preparation and Compliance with Safety Procedures
S	Preparation and Compliance with Job Procedures
S	Procurement and Introduction of New Chemicals and Equipment
NA	Definition of Safety Roles

EDUCATION, TRAINING AND MOTIVATION

S	Safety Counseling Services
S	Accident Prevention Achievement Recognition
S	Fire Preparedness
S	Supervisor Training
S	Employee Safety Training
S	Hot Work Training
S	Lockout Training
S	Vessel Entry Training
S	Forklift Trailer Entry Training
S	New Employee Indoctrination
S	Safety Meetings
S	Employee/Supervisor Safety Contact
S	First Aid
S	Off-The-Job Safety
S	Job Safety Analysis

GENERAL HAZARD CONTROL

S	Quality of Housekeeping Program
S	Housekeeping Conditions
S	Internal Safety Audit
S	Equipment Guarding
S	Safety Equipment
S	Hoisting Equipment
S	Electrical Equipment
S	Drum Handling System
S	Bag/Box Handling System
S	Forklift Trailer Entry

PROCESS HAZARD CONTROL

S	Relief Valve and Rupture Disc Inspection
S	Flame Arrestor and Vent Line Inspection
S	Mill Drills and System
NA	Community Awareness Emergency Response
S	Vessel Rescue Drills
S	Hot Work System
S	Lockout System
S	Vessel Entry System
S	Maintenance Work Order System
NA	SA-132

ACCIDENT INVESTIGATION AND ANALYSIS

S	Accident Investigation by Supervisor
S	Management Systems Investigation
S	Accident Analysis
NA	OSHA Recordkeeping

The Status of the Individual Components Will be Indicated by:

S - The Program Element is
Satisfactory

NA - The Program Element
Needs Attention

TOTAL SATISFACTORY: 43

TOTAL NEEDS ATTENTION: 4

8629g/kp
8/28/86

NGC00026549

TO: W. HORTON
FROM: T. S. BIALKE

DATE: 8/28/86

1986 ALGC INDUSTRIAL HYGIENE AUDIT

During the period July 28 through August 1, an Industrial Hygiene Audit of the ALGC plant was conducted. The attached report details the findings of the audit. Section A describes the actions taken by the plant to address previous Industrial Hygiene Audit recommendations. Section B contains the findings of the recent audit and requirements or recommendations addressing those findings. Section C is a brief discussion of the audit checklist.

In 1986, the ALGC plant's Industrial Hygiene program was found to be in excellent shape; only five needs attention items were found out of eighty-six checklist items.

The plant has made progress in removing asbestos and establishing a program for the preventive maintenance of ventilation systems. The plant's new chemical review process is working and all employees have been exposed to Hazard Communication training.

The one area that needs improvement is the keeping of records documenting the completion of OSHA required noise training and respirator fit testing results.

I want to thank B. Accarino, G. Krupp, B. Holmes and Nilda Colon for their help and courtesy shown me during the audit. Keep up the good work.

T. S. Bialke /kp
Tom S. Bialke

TSB/kp
8595q

Attachment

NGC00026550

AVON LAKE GENERAL CHEMICAL PLANT

1986 INDUSTRIAL HYGIENE AUDIT

FINDINGS AND REQUIREMENTS/RECOMMENDATIONS

A. 1984 Survey Recommendations

1. Prepare a quarterly Industrial Hygiene exception report listing monitoring overexposures, personal protective equipment worn, causes of exceedance and planned corrective action.

Not complete. Expected to be initiated third quarter 1986.

2. Develop goals/objectives for Industrial Hygiene at the ALGC plant for each year.

Complete.

3. Evaluate employee exposure for organotin exposure in Geon West Compound.

Not completed.

4. Conduct annual noise training of all employees exposed to noise in excess of 85 dBA.

Completed for Compound East and West. Needs to be expanded to other plant areas.

B. 1986 Findings/Recommendations/Requirements

86-1. The joint Safety, Health and Environment plant audits scheduled for initiation in 1986 will depend upon the plants to keep the Cleveland Environmental Department informed of all Industrial Hygiene activities. A periodic plant report describing Industrial Hygiene activities would facilitate the successful completion of a combined audit.

Recommendations

- Prepare and issue a quarterly Industrial Hygiene exception report of personnel monitoring results, causes of exceedances, personal protective equipment worn and corrective action taken or planned.

86-2. Increased usage of lead is expected in Compound West in 1986 or 1987. Such increase usage may result in increased employee exposure and implementation of provisions of the OSHA lead standard.

Requirements

- Review lead exposures as new lead compounds are added and provide employees with information and training on lead to comply with the requirements of the OSHA lead standard.

86-3. Numerous respirators of various types are used within the plant. Fit testing and training of employees is an essential part of a respirator program because employees need to be assured that a respirator will perform adequately. Documentation of respirator training and the results of fit testing are required by regulatory agencies to document compliance. Geon East and West have been doing fit testing, but the records are incomplete.

Requirements

- Annually fit test all plant employees who are required to wear a respirator as part of their job with each type of respirator they may wear doing their job.
- Maintain a record of each employee's respirator training and fit test results.

86-4. All plant areas above 85 dBA are posted as noise hazardous and employees are required to wear hearing protection while working in the area. Hearing protection wearing was observed to be good. Noise training has been completed in Compound East and West, but records of training were not available.

Requirements

- Conduct annual noise training for all employees with eight hour TWA noise exposure greater than 50% dose or 85 dBA per OSHA Hearing Conservation amendment. Maintain a record of each employee's noise training.

86-5. Compound East and West. *High potential exposure - Inhalation*

- a. Cuber room doors were found open or missing in both Compound areas.

Recommendations

- Determine if open or missing doors contribute to excess employee noise exposure and take corrective action.
- b. Organotin stabilizers are frequently used as a stabilizer in PVC Compound. Organotins are volatile and can be released during the milling of PVC Compound.

Recommendations

- Conduct personnel monitoring for organotin in Compound during mixing and milling of PVC Compounds. Obtain three samples per exposed employee for an initial evaluation.

86-6. Respirators in the Hydrophilics Building were found lying uncovered on operators' desks and on shelves.

Recommendations

- Improve respirator storage by providing each employee with a canvas storage bag such as used by ALGC maintenance or some other means of protecting respirators from contamination during storage.

86-7. Gasoline powered forklift trucks were observed to be operating in the Latex, Estane and Geon East warehouse areas. The use of gasoline powered forklift trucks inside of building can produce a dangerously high level of CO if the building ventilation is not sufficient.

Requirements

- Conduct personnel monitoring for CO in these areas during the winter months to evaluate employee exposure. Obtain three samples per exposed employee.

86-8. OSHA has just recently issued a new asbestos standard lowering the eight hour PEL from 2 f/cc to 0.2 f/cc. ALGC has a program to remove asbestos by contractor. ALGC employees will still be required to remove small amounts of asbestos, prior to a maintenance job, for example.

Recommendations

- Update plant asbestos policy to include new asbestos standard requirements and plant's policy on contract or removal.

86-9. The production increases in Latex and Hydrophilics Departments have resulted in the introduction of new chemicals and the increase usage of others. Proper handling procedures have been implemented, however, employee exposures have not been evaluated to assure employees are not overexposed.

Recommendations

- Conduct personnel monitoring for acrylamide, NMA and acrylates in both the Latex and Hydrophilics Departments. Obtain three samples per exposed employee for an initial evaluation.

- Remonitor for acrylonitrile in Latex Department as current exposure measurements are not available.

C. Discussion

Attached is a copy of the completed Industrial Hygiene Checklist. Out of 86 items reviewed, the plant only had five that needed attention. Recommendations have been made in Section B of this report to address these needs attention items. Below is a brief discussion on some of the aspects of the ALGC Industrial Hygiene program that were found to be satisfactory.

The plant medical services were again found to be in excellent shape. All OSHA and BFG required medical exams are being offered as required. The introduction of MEK into the Hydrophilics Department is a good example of how the plant's New Chemical Review Committee works. Discussion with some Hydrophilics employees revealed that they had been worried about MEK, but the review process addressed their concerns. Another positive aspect of the plant Industrial Hygiene program is that a ventilation system check/preventive maintenance program has been set up for all systems used for control of health hazards. Also, the laboratory has done an excellent job of providing local exhaust drops to all possible sources of fumes or volatiles being emitted as a result of a test.

Employee feedback about the plant's Industrial Hygiene efforts was positive. All employees we talked to indicated that they felt that management was committed and cooperative. All employees knew the location of the MSDS's and were knowledgeable of the Hazard Communication Standard requirements.

CHEMICAL GROUP INDUSTRIAL HYGIENE
AUDIT CHECKLIST

LOCATION Avon Lake General Chemical

DATE July 28-August 1, 1986

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

A. INDUSTRIAL HYGIENE PROGRAM ADMINISTRATION

1. Industrial Hygiene Coordinator

a. Named	<u>S</u>
b. Knowledgeable	<u>S</u>
c. Walk-throughs	<u>S</u>

2. Periodic Industrial Hygiene Program Reports

a. Timely	<u>NA</u>
b. Content	<u>DNA</u>
c. Year-end Summary	<u>S</u>
d. Goals for Next Year	<u>S</u>

3. Medical Services

a. Physical Examination	<u>S</u>
b. Medical Equipment Certification/ Calibration	<u>S</u>
c. Training	<u>S</u>
d. Illness and Complaint Investigation	<u>S</u>

4. Hazard Inventory

a. Complete	<u>DNA</u>
b. Annual Review and Update	<u>DNA</u>

5. Chemical Hazard Review and Use

a. Committee Established	<u>S</u>
b. MSDS	
1. Available	<u>S</u>
2. Employees Trained in Use	<u>S</u>

6. Reply to Industrial Hygiene Audits

a. Initial	<u>S</u>
b. Final Report	<u>S</u>

7. Training

a. Hazard Communication	<u>S</u>
b. Vinyl Chloride	<u>S</u>
c. Lead	<u>NA</u>
d. Acrylonitrile	<u>S</u>

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

B. INDUSTRIAL HYGIENE PROCEDURES

1. Respiratory Procedure

a. Written	<u>S</u>
b. Selected per Hazard	<u>S</u>
c. Training	<u>S</u>
d. Fit Testing	<u>NA</u>
e. Medical Examination	<u>NA</u>
f. Cleaning	<u>S</u>
g. Storage	<u>S</u>
h. Inspection	<u>S</u>
i. Approvals	<u>S</u>
j. Usage	<u>S</u>

2. Asbestos Handling and Disposal

a. Sources Identified	<u>S</u>
b. Monitoring	<u>S</u>
c. Medical Examination	<u>S</u>
d. Demolition and Removal	<u>S</u>
e. Protective Clothing	<u>S</u>
g. Written	<u>S</u>

3. Industrial Hygiene Sampling

a. Strategies	
1. OSHA compliance	<u>S</u>
2. Hazard Evaluation	<u>S</u>
3. Special Requests	<u>S</u>
b. Sample Procedures	<u>S</u>
c. Analytical Procedures/Cross Check Program	<u>DNA</u>
d. Employee Interview	<u>S</u>

4. Hearing Conservation and Noise Control

(Use Hearing Conservation Audit Checklist)

Total Satisfactory	<u>21</u>
Total Needs Attention	<u>1</u>

5. Radiation

a. Hazards Identified and Labeled	<u>S</u>
b. License Requirements	<u>S</u>
c. Records	<u>S</u>
d. Dosimetry Program	<u>S</u>
e. Periodic Leak Checks	<u>S</u>
f. Radiation Protection Officer	<u>S</u>

IH-101A

Revised: 04/15/85

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

6.	Ventilation for Health Hazard Control	
a.	Periodic Flow or Maintenance Checks	<u>S</u>
b.	Laboratory Hoods	
1.	Yearly Flow Checked	<u>S</u>
2.	Rating or Flow-Rate Posted	<u>S</u>
c.	Modifications Reviewed	<u>S</u>
d.	New Systems Reviewed	<u>S</u>
7.	Leak Detection	
a.	Written	<u>S</u>
b.	Area Monitoring Response	<u>S</u>
c.	Leak Repair Control	<u>S</u>
8.	I.H. Equipment Calibration	
a.	Audiocimeters	
1.	Daily Field Calibration	<u>S</u>
2.	Laboratory Calibration	<u>S</u>
b.	Sound Level Meters	
1.	Daily Field Calibration	<u>S</u>
2.	Laboratory Calibration/Three Years	<u>S</u>
c.	Acoustic Field Calibrators Every Three Years	<u>S</u>
d.	Radiation Detection Device - Annually	<u>DNA</u>
e.	Area Monitoring Devices	<u>S</u>
f.	Personnel Monitoring Pumps	<u>S</u>
9.	Laboratory Safety	
a.	Lab Hoods Adequate for Hazard	<u>S</u>
b.	Lab Procedures Reviewed	<u>S</u>
c.	Personnel Protective Clothing and Equipment	<u>S</u>
10.	Totals	
	Satisfactory	<u>86</u>
	Needs Attention	<u>5</u>

HEARING CONSERVATION AUDIT CHECKLIST

LOCATION _____

PLANT Avon Lake General Chem.

	<u>O.K.</u>	<u>Needs Attn.</u>	<u>Need Help</u>
1. All jobs with an eight hour TWA exposure of 85 dBA (50% does), have been identified.	<u>X</u>	_____	_____
2. Noise hazardous areas have been posted.	<u>X</u>	_____	_____
3. A formal list is available at the plant specifically designating hazardous and non-hazardous noise exposure jobs.	<u>X</u>	_____	_____
4. Records are available showing monitoring results for those jobs that were monitored. <u>NOTE:</u> A copy of monitoring results should be sent to D/0020 in Akron. The plant must retain its records for at least two years (OSHA).	<u>X</u>	_____	_____
5. When employees working on noise hazardous jobs are monitored, they are informed of the monitoring results (OSHA).	<u>X</u>	_____	_____
6. Engineering and/or maintenance efforts have been directed to reducing noise in those areas/jobs with an eight hour TWA exposure of 90 dBA or greater (100% dose) (OSHA). <u>NOTE:</u> Details of this effort must be documented.	<u>X</u>	_____	_____
7. Hearing protection is worn in all noise hazardous areas.	<u>X</u>	_____	_____
8. Hearing protectors in use are capable of reducing employee noise exposures to below 85 dBA (<u>NOTE:</u> "NRR" or attenuation factor on hearing protector package. Consult with D/0020 in Akron if more information is needed).	<u>X</u>	_____	_____
9. Employees are provided a choice of two or three different types/varieties of hearing protection (OSHA).	<u>X</u>	_____	_____

- | | | | | |
|-----|--|--------------|--------------|-------|
| 10. | Personnel working at noise hazardous jobs receive annual training which includes at least the following information (OSHA). | _____ | <u> X </u> | _____ |
| a. | The effect of noise on hearing | | | |
| b. | The purpose of hearing protectors, the advantage/disadvantage and attenuation of various types, and instructions on selection, fitting, use, and care | | | |
| c. | The purpose of audiometric testing and an explanation of the test procedures | | | |
| 11. | Care is exercised to insure a proper initial fit and correct use of all hearing protectors (OSHA). <u>NOTE</u> : With inset-type hearing protectors (ear plugs), it is important that the ear canal be clear and free of impacted wax. The ears should be examined for impacted wax before plugs are fitted. If impacted wax is found, it should be removed by a nurse or physician. Any employee complaining of an ear problem should be referred to medical personnel for examination. | <u> X </u> | _____ | _____ |
| 12. | Audiometric examinations are provided for: | | | |
| a. | All new hires (pre-employment) | <u> X </u> | _____ | _____ |
| b. | Transfers to noise hazardous jobs | <u> X </u> | _____ | _____ |
| c. | Employees working on noise hazardous jobs (annually) | <u> X </u> | _____ | _____ |
| | <u>NOTE</u> : Details for conducting proper audiometric exams are provided in BFG's OHP Manual, Section 5.05. | | | |
| 13. | Audiograms are permanently retained for each employee. | <u> X </u> | _____ | _____ |
| 14. | Employees with audiograms showing a standard threshold shift (STS) are notified of this fact in writing within 21 days (OSHA). <u>NOTE</u> : Employees showing a STS can be retested within 30 days. | <u> X </u> | _____ | _____ |
| 15. | Employees exhibiting a STS are refitted with hearing protection and retrained in its use (OSHA). <u>NOTE</u> : Hearing protectors with greater attenuation may be needed. | <u> X </u> | _____ | _____ |

16. Employees showing shifts in their hearing are provided follow-up counseling based on the BFG quarterly Audio Action Report and Section 5.0-5 of the OHP manual. X _____
- 17.* The audiometer in use satisfies requirements of the ANSI standard S3.6-1969. X _____
- 18.* A biological calibration is performed daily on the audiometer before use. NOTE: Results of these tests must be kept on record for at least one year. X _____
- 19.* An accoustic check is performed on the audiometer annually. NOTE: Audiometer must meet requirements of ANSI S3.6-1969. X _____
- 20.* An exhaustive calibration of the audiometer is performed at least every two years by the manufacturer or his approved agent. NOTE: (#18, #19, #20) Results of all checks and calibrations must be kept on record. X _____
21. A copy of the OSHA noise standard is posted in the workplace or is available to employees. A notice of availability has been posted on the bulletin board (OSHA). X _____
22. Any information provided by OSHA pertaining to the standard is made available to affected employees. X _____
23. Questionnaire answered by:
- Name _____
- Title _____
- Plant # _____

*Numbers 17, 18, 19, 20 - Where an outside audiometric testing service is employed, it must be established that these requirements are satisfied.

TO: W. E. HORTON
FROM: R. D. HARDESTY

DATE: 8/28/86

ALGC ENVIRONMENTAL AUDIT REPORT

An Environmental Audit was conducted of the ALGC plant simultaneously with a Safety Audit and an Industrial Hygiene Audit the week of July 28 through August 1, 1986. The attached report summarizes what I reviewed and the findings thereof.

R. D. Hardesty
Richard D. Hardesty *RDH*

RDH/kp
8630q

Attachment

ALGC ENVIRONMENTAL AUDIT REPORT

JULY 28 THROUGH AUGUST 1, 1986

Index to Recommendations

- a. Written Records Of Asbestos Removal.
- b. Clean Up Asbestos Insulation, B/468.
- c. Clean Up Asbestos Insulation on Steam Valves, B/441.
- d. Determine If PCB Drips Are Occurring.
- e. Label 440 and 220 Volt Capacitors With PCB's.
- f. Remove Solids From East Lagoon.
- g. Pursue Leachate Testing of WWTP Solids.
- h. Do Not Store Hydrophilics Flammable Solvent Wastes.
- i. Ship Scrap Lead Batteries to Reclaimer.
- j. Train On What Can Or Cannot Go Into A Particular WPS Waste Drum.
- k. Write General Spill Procedures.
- l. Continue Work Towards Community Evacuation Plan.
- m. Complete VCM Sphere Turnaround Projects.
- n. Continue Storage Tank CAT With More Attention To Bottom Valves.
- o. Replace Cylinders Every Five Years.
- p. Conduct Specific Emergency Shutdown Procedures Training.

Regulatory Requirements

1. Vinyl Chloride NESHAP Regulation. The VCM NESHAP regulations were not audited because of the U.S. and Ohio EPA had just completed their audit. Whatever EPA's findings are, they should be regarded as the NESHAP section of this audit also.
2. Asbestos NESHAP Regulation. Since you are going to use outside contractors for most asbestos removal projects, you must make sure you still have written records of prior EPA notification, amount removed and disposal (a).

If the insulation on the ground beside the scrap metal bin (B/468) is asbestos, it should be cleaned up (b). The insulation on the main steam valves (B/441) is falling off (c). I recommend it be repaired.

3. Toxic Substances Control Act (TSCA).

- PCB Regulations. The quarterly monitoring and sign requirements were all being met. Semi-dried up small oil spots, reported as leaks on the quarterly monitorings, should be cleaned up; then looked at during the next inspection to determine if slow rip leaks are occurring or not (d).

While not required, I recommend your PCB capacitors in 440 and 220 volt service be labeled with PCB labels (e). This will warn the firefighters in case of fire or alert your electricians, if they see a leak, that these capacitors do contain PCB's.

- Substantial Risk Reporting. A copy of your program is posted on the bulletin board and Nurse Chris Riddle knows about the program.

4. Ohio Air Pollution Control Regulations. Both your Permits to Install and Permits to Operate appear to be in order. One PTO must be renewed, but that is normal.

5. Wastewater Discharge Regulations. ALGC does not have any NPDES permits. The discharge from your WWTP to the city has been satisfactory. You are and must continue to evaluate how the new pretreatment regulations will affect your discharge.

The East lagoon should be drained, the solids removed and then landfilled. The lagoons have not been used for several years and proposed regulations could make these solids hazardous waste; therefore, the solids should be removed (f).

You must continue to also pursue leachate testing of the WWTP sludge to determine if this material would be classed as hazardous under the proposed regulation (g).

6. Spill/Release Prevention and Control Programs.

- Spill Prevention Control and Countermeasure (SPCC) Plans. Nothing has changed. Okay.

- Comprehensive Environmental Response, Compensation and Liability Act of 1980 (Superfund) Compliance is satisfactory. Planning for spill reporting should be addressed under your planned spill procedure. Refer to Section entitled "Community Awareness and Major Release Preparedness."

7. Solid/Hazardous Waste Regulations (RCRA). Hydrophilics currently accumulate flammable solvent wastes in a 500 gallon tank in the building and then transfer to a ROSS tank trailer. This tank trailer has not been emptied in eleven months. You must either change this practice and ship every 90 days or apply for a TSDF permit (h).

If scrap lead batteries are sent to a battery reclaimer, they are not considered hazardous waste. Your pile of used batteries should be gotten rid of via this manner (i).

After interviewing several operators, I feel they need to understand better what can or cannot be poured into a particular WPS waste drum (j).

Community Awareness and Major Release Preparedness

In this part of the audit, I tried to make an assessment of where you are and then need to go, rather than reviewing if certain regulations are being met. I am also very much aware that at the time of this audit several projects are being actively worked on, which when finished, will increase your preparedness.

The items listed below are in no particular order or priority, but are items I felt warranted enough attention to be included:

- k. Write a general spill procedure. Should include requirements for RCRA, notification plant, etc.
- l. Continue sessions with Avon Lake Fire and Police to clarify roles of each in emergencies and ultimately get to a community evacuation plan.
- m. Complete VCM sphere turn around projects in September. In order to comply with SA-132, the deluge system needs to be installed and the relief valves need to be revised.
- n. Continue storage tank CAT with additional attention to bottom valves. I found some flammable liquid storage tanks with the first valve out of the tank a Teflon only seal ball valve. Under fire conditions, the Teflon could melt, leaving one with no way to isolate the tank. Also, some bottom valves did not have automatic shutoffs or remote shutoffs. In a leak someone would have to go through spill to isolate tank.

Have CAT review all bottom valves and decide for each chemical the approach you wish to take.

- o. Inspect compressed gas cylinders and send back cylinders over five years old. Several locations had cylinders which are only used periodically or are used in an emergency. These need to be inspected and I recommend replacing every five years.

Locations where I saw such cylinders were:

B/461	- Ammonia Cylinder
Cat House	- White Cylinders
B/481	- Outside on West Side

- p. Conduct specific training on emergency shutdown procedures. From employee interviews, I felt everyone knew where to go in case of plant evacuation, but some departments were not clear about what to shut down before evacuating. I recommend you discuss two types of shutdowns -- one where the process will be unattended for one hour; the other, unattended for 48-72 hours.
- q. Obtain computer generated dispersion models for certain chemicals. A step in getting to a community evacuation plan is having computer generated dispersion models of chemical releases. Cleveland has contracted to do this, but ALGC/ALTC must submit preliminary data.

Remarks and Comments

On the positive side, two items impressed me. One, your follow-up response to the ethyl acrylate spill in trying to learn from that mishap and prevent/prepare for future spills. Second, ALGC and ALTC are working together to form a mutual aid effort. Recent combined meetings organized by ALGC have helped further this goal. In talking to employees, they also see the need for such cooperation.

It was a privilege for me to learn a lot about my sister plant. Having all three audits at once was challenging at times, but overall went very well.

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