

October 26, 1990

TO: Glenn Higby

FROM: Dan Gleghorn

LOUISVILLE
INDUSTRIAL HEALTH AUDIT

Enclosed is the final report of the Industrial Health Audit conducted in your facility by Herm Waltemate, Mike DeMent and myself during the period of August 20 through August 24, 1990.

I would like to thank you for the hospitality afforded us during our visit to your facility.

You are fortunate to have Ron Martin on your staff. His leadership has brought your Industrial Health Program a long way.

The ground work laid by Alice Simpson is a good basis for a continuing Industrial Health Program in your facility. I believe Susan Panas is a capable person who needs some Industrial Hygiene Training in order to continue this work and expand upon it.

During our audit, we pointed out conditions that violated BFGoodrich or OSHA Standard or were inconsistent with good health practices. It should be noted, even though you may be taking corrective action on an item, if the item is considered to be in violation at the time of the Audit it will be indicated as such.

The facility was rated with 73 "satisfactory", and 12 "needs attention" items.

The report format is laid out for you to write in your abatement program and indicate the status as Complete, In-Progress or No Action. A progress report giving the status of items IH-1990-7 and IH-1990-9 requires attention and are due 60 days after receipt of the report and all other items are due as indicated.

NGC 12477

The report included the following:

- I Favorable Observations
- II 1990 Items to be Corrected
- III Industrial Health Program Rating
- IV Hearing Conservation Audit Checklist
- V Facility Inspection Tour

Dan Gleghorn

DEG/JS
audlvle

cc: D. Dimas - CHQ
R. J. Grahek/C. J. Nosal
G. F. Krcmar/K. H. Lee, Jr.
E. C. Martinelli/W. F. Patient
M. DeMent
H. Waltemate

NGC 12478

LOUISVILLE
INDUSTRIAL HEALTH AUDIT

August 20 - August 24, 1990

I. Favorable Observations

1. Your Industrial Health Training Strategy is outstanding. The use of the Safety and Training Supervisors is an excellent idea which should give each area more responsibility for and ownership of the health concerns.
2. Your Contractor and Visitor Orientation Program is outstanding. The fact that every visitor must receive the orientation, including the Auditors, speaks well of your approach to this issue.
3. The Medical Surveillance Programs for potentially hazardous exposures are administered very carefully by Mary Duffy with follow-ups and corrective action when questionable or high biological results are reported. The Medical Records are some of the best I have seen during my audits.
4. It appears you have a good working relationship with Dr. Creech. He understands your facility and is interested in providing care for your employees.
5. Your Laboratories are in excellent condition and are well along their way to meeting the, OSHA 29 CFR 1910.1450, "Occupational Exposures to Hazardous Chemicals in the Laboratory" Standard.
6. Your Breathing Air System appears to be in excellent condition. It meets all OSHA and BFG Engineering Standards and I was pleased to see the condition of your units and overall program.

NGC 12479

II. 1990 Items to be Corrected

IH-1990-1 Your Quarterly Industrial Health Reports must be brought up to date and continued on a regular basis.

The next report should be submitted no later than January 15, 1991.

Response

_____ Status _____
 _____ Completed _____
 _____ In-Progress _____
 _____ No Action _____

IH-1990-2 Your revised strategies for Industrial Hygiene Monitoring need to be implemented.

The plan you submitted to me looks like a positive approach.

Please advise me your initiation of the plan and time table for completion of the first Priority Group by December 15, 1990.

Response

_____ Status _____
 _____ Completed _____
 _____ In-Progress _____
 _____ No Action _____

NGC 12480

IH-1990-3

There is a new Audiometer and Acoustical Ear on order for your Audiometric Testing Program.

Please indicate that this equipment has been installed, calibrated and is functional by November 30, 1990.

Response

Status☐ Completed☐ In-Progress☐ No Action

IH-1990-4

Mary Duffy needs her Training and Certification in Spirometry and Audiometric Technician renewed.

This training should be completed prior to your annual Respiratory and Audiometric Physical Examination Programs.

Please advise the schedule for providing this training and certification by November 30, 1990.

Response

Status☐ Completed☐ In-Progress☐ No Action

IH-1990-5 The results of the Audiometric Examinations, including Standard Threshold Shifts, need to be communicated to the Safety and Training Supervisors so that they can inform the affected employees and take corrective action in their areas.

Please indicate your procedure and time schedule to implement this program by November 30, 1990.

Response

_____ Status _____
 _____ Completed
 _____ In-Progress
 _____ No Action

IH-1990-6 A copy of the Hearing Conservation Standard, OSHA 29 CFR 1910.95 (or the Kentucky equivalent), must be Posted.

Please indicate that you have Posted this or instructions on where the document can be found by November 16, 1990.

Response

_____ Status _____
 _____ Completed
 _____ In-Progress
 _____ No Action

IH-1990-7

The OSHA Hazard Communication Standard, 29 CFR 1910.1200 (f), requires that hazardous chemical materials be Labelled. This includes Hand Weighs.

Your system of Labelling Hand Weighs appears to be in compliance when the materials are first weighed out. Materials returned to the weigh area from the production area had lost their identity.

Please advise your strategy for correcting this item.

Response

Status

☐ Completed☐ In-Progress☐ No Action

IH-1990-8

Mike Warfield is updating your VCM Training. Please indicate your schedule for the training update and Training completion by December 15, 1990.

Response

Status

☐ Completed☐ In-Progress☐ No Action

NGC 12483

IH-1990-9

You have done considerable work on your Job Exposure Inventory.

Please provide me an update on your Job Exposure Inventory.

Response

StatusCompletedIn-ProgressNo Action

IV. CHEMICAL GROUP INDUSTRIAL HYGIENE PROGRAM RATING

LOCATION: Louisville

Date of Audit: August 20-24, 1990

RATING INDUSTRIAL HYGIENE PROGRAM ADMINISTRATIONIndustrial Hygiene Coordinator

S Named
 NA Knowledgeable
 S Walk-throughs

Periodic Industrial Hygiene Program Reports

NA Timely
 NA Content
 S Year-end Summary
 S Goal for Next Year

Medical Services

S Physical Examination
 NA Medical Equipment Certification/Calibration
 NA Training
 S Illness and Complaint Investigation

Hazard Inventory

NA Complete
 NA Annual Review and Update

Chemical Hazard Review and UseMSDS

S Committee Established
 S Available
 S Employees Trained to Use

Reply to Industrial Hygiene Audits

S Initial
 S Final Report

Training

S Hazard Communication
 NA Vinyl Chloride
 DNA Lead
 DNA Acrylonitrile

NGC 12485

Respiratory Procedure

S Written
 S Selected per Hazard
 S Training
 S Fit Testing
 S Medical Examination
 S Cleaning
 S Storage
 S Inspection
 S Approval
 S Usage

Asbestos Handling and Disposal

S Sources Identified
 S Monitoring
 S Medical Examination
 DNA Demolition and Removal
 S Protective Coating
 DNA Written

Industrial Hygiene Sampling

NA OSHA Compliance
 S Hazard Evaluation
 S Special Requests
 S Sample Procedures
 DNA Analytical Procedures/Cross Check Program
 S Employee Interview

Hearing Conservation

S 21 Total (See Checklist Attached)
 NA 3 Total (See Checklist Attached)

Radiation

S Hazards Identified and Labelled
 S License Requirements
 S Records
 DNA Dosimetry Program
 S Periodic Leak Check
 S Radiation Protection Officer

Ventilation for Health Hazard Control

S Periodic Flow of Maintenance Checks

Lab Hoods

S Yearly Flow Checked
 S Rating of Flow-Rate Posted
 S Modifications Reviewed
 S New Systems Reviewed

Leak Detection

S Written
 S Area Monitoring Response
 S Leak Repair Control

I. H. Equipment CalibrationAudiotosimeters

S Daily Calibration
 DNA Laboratory Calibration

Sound Level Meters

S Daily Calibration
 S Laboratory Calibration/Three Years

DNA Acoustic Field Calibrators Every Three Years
 S Radiation Detection device - Annually
 S Area Monitoring Devices
 S Personal Monitoring Pumps

Laboratory Safety

S Lab Hoods Adequate for Hazards
 -S Lab Procedures Reviewed
 S Personnel Protective Clothing and Equipment

Total	Needs	Does Not
Satisfactory: 83	Attention: 12	Apply: 8

* The status of the individual program elements will be indicated by:

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

NGC 12487

V. HEARING CONSERVATION AUDIT CHECKLISTLOCATION 1802 PLANT LOUISVILLE

- | | | O.K. | Needs
Attn | Needs
Help |
|----|--|----------|---------------|---------------|
| 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 result 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 nose 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 of 90 dBA or greater (100% dose)(OSHA).

<u>NOTE:</u> Details of this effort must be documented. | <u>X</u> | — | — |
| 7. | Hearing protection 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 (NOTE: "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> | — | — |

V. HEARING CONSERVATION AUDIT CHECKLIST - CONTINUED

10. Personnel working at noise hazardous jobs receive annual training which includes at least the following information (OSHA). X — —
- a. The effect of noise on hearing
- b. The purpose of hearing protectors, the advantage 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). X — —
- NOTE: 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 employees complaining of an ear problem should be referred to medical personnel for examination.
12. Audiometric examination are provided for:
- a. All new hires (pre-employment) X — —
- b. Transfers to noise hazardous jobs. — X —
- c. Employees working on noise hazardous jobs (annually) X — —
- NOTE: Details for conducting proper audiometric exams are provided in BFG's OHP Manual, Section 5.05.
13. Audiograms are permanently retained for each employee. X — —
14. Employees with audiograms showing a standard threshold shift (STS) are notified of this fact in writing within 21 days (OSHA). X — —
- NOTE: Employees showing a STS can be retested within 30 days.

NGC 12489

V. HEARING CONSERVATION AUDIT CHECKLIST - CONTINUED

- | | | | | |
|------|--|----------|----------|---|
| 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. | <u>X</u> | — | — |
| 17.* | The audiometer in use satisfies requirements of the ANSI standard 3.6-1969. | <u>X</u> | — | — |
| 18.* | A biological calibration is performed daily on the audiometer before use. (electronic calibration is performed daily)
<u>NOTE:</u> Results of these tests must be kept on record for at least one year. | <u>X</u> | — | — |
| 19.* | An acoustic check is performed on the audiometer annually, <u>NOTE:</u> Audiometer must meet requirements of ANSI S3.6-1969. | <u>X</u> | — | — |
| 20.* | An exhaustive calibration of the audiometer is performed at least every two years by the manufacturer or his approved agent. <u>NOTE:</u> (#18, #19, #20) Results of all checks and calibrations must be kept on record. | <u>X</u> | — | — |
| 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). | — | <u>X</u> | — |
| 22. | Any information provided by OSHA pertaining to the standard is made available to affected employees. | <u>X</u> | — | — |
| 23. | Questionnaire answered by: | | | |
| | Name: Mary Duffy | | | |
| | Title: Nurse | | | |
| | Plant: Louisville | | | |

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

VI. Facility Tour1. Compounding

- a. Hand Weighs are not individually labelled. OSHA 1910.1200 (g) requires materials be labelled.
- b. There are unmarked Hand Weigh bags with no indication what is in them.
- c. 2nd level - Dust Masks are stored properly.
- d. 3rd level - Breathing Air line is painted but not labelled.
- e. 4th level - Breathing Air lines are painted and marked. There are covers over the quick connects to keep the dust out.
- f. 2nd level - Breathing Air line needs repainted and labelled.
- g. SW corner - Tank without any indication what is in it.

2. Laboratory

- a. Laboratory Chemical MSDS Books need a material List [1910.1200 (e)(i)].
- b. Butadiene Sample Bombs need Hazard Labels.

3. LPA

- a. Poly Building has a Laser sign on the door. - The sign should be removed or training and personal protection instituted for persons entering the building.
- b. Breathing Air lines on the Column Feed Tanks need to be relabeled. (Painting is in progress)
- c. SCBA (Scott) at Bldg 140 has a dirty mask and no indication of inspection.
- d. SCBA (Scott) at SW corner of the Dryer Bldg is OK.
- e. Breathing Air lines at Tank 1G needs Labelled.

4. Breathing Air System
 - a. The Breathing Air System meets Standard. Air is monitored for Butadiene, Acrylonitrile and Total Hydrocarbons at Bldg 169 and VCM at Bldg 121. This is a good system.
5. Arrowhead
 - a. MSDS Book needs Chemical List. Hazard Warning Labels

DEG/JS
audlvle

I N T E R O F F I C E M E M O R A N D U M

Date: 12-Dec-1990 12:04pm EST
From: PANASS
PANASS@LVLC@MRGATE@CLE
Dept:
Tel No:

TO: SUHAY, JAN@A1
TO: GLEGHORN, DAN@A1

Subject: Audit response

Dan,
I received a copy of the Louisville Industrial Health Audit Report yesterday. A formal response to your questions will be submitted to you sometime in January, however, I thought you would like to know where we currently stand.

IH 1990-3: The new audiometer and acoustical ear were calibrated on May 11, 1990 and installed after the dispensary was completed.

IH 1990-4: Mary Duffy is scheduled to be retrained in spirometry at the University of Cincinnati on February 4-6, 1991. She has scheduled training in audiometry at the University of Kentucky in March.

IH 1990-5: Effective immediately, a copy of an employee's STS will be forwarded to the Safety/Training Supervisor of his/her department.

IH 1990-6: Notice of how to obtain a copy of the Hearing Conservation Standard is posted in the dispensary lobby.

If you have any other questions just call.

Susan Panas

12-12-90
G
SW

NGC 12493