Audit
File
I.D. H

December 10, 1992

To: Mike Breckenridge
cc: Mackie Comeaux
R.J. Grahek
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M.M. Marshall
E.C. Martinelli/W.F. Patient
C. Mattia
J. Kovac

From: Dan Gleghorn

PLAQUEMINE
1992
INDUSTRIAL HEALTH AUDIT

Enclosed is the final report of the Geon Vinyl Division Industrial Health Audit conducted in your facility by Herm Waltemate and me during the period of December 1 through 4, 1992.

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

Mackie Comeaux's assistance helped me complete the audit in a timely manner. I also appreciate the help provided by you and others at the facility even though you are very busy.

You are fortunate to have Mackie Comeaux who has been working diligently to reformulate and implement your industrial health strategy in addition to all his other duties.

During the audit, we pointed out conditions that violated BFGoodrich or OSHA standards or were inconsistent with good health practices.

The facility was rated with 72 "Satisfactory", 25 "Needs Attention" and 65 "Does Not Apply" items.

Items to be corrected were developed from the Audit Checklist and the Inspection Tour notes. These documents can serve as a reference as you develop your abatement plan. The report formate 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 the items requiring attention is due in 60 days and on a quarterly basis thereafter until completion of all items. All items are to be resolved within a one (1) year time frame.

A computer disk in Word Perfect format is included for your use in complying with this request.

The report includes the following:

I Favorable Observations
II Items from Previous Audit
III Items to Be Corrected
IV Industrial Health Program Rating

Dan Gleghorn

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INDUSTRIAL HEALTH AUDIT

December 1 & 4, 1992

I Favorable Observations

1. As mentioned before, you are fortunate to have Mackie Comeaux to redefine and implement your Industrial Health Strategy. It is obvious that your facility supports the strategy.

2. Although you do not have a nurse your Medical Surveillance program is administered well by Mackie. Your relationship with Dr. Grace and Barbie Landry of the Grace Clinic appears to be working well.

3. The training programs are very good.

4. Mackie and the VCM Task Force is to be commended for the fine work they did in reducing worker exposures to VCM in the Resin Area. This program was carried forward even though the Resin Area was to be shut down.

II. **Items from 1990 IH Audit**

IH-1990-2 Raw Materials are not all labeled with hazard information. This is a divisional problem which is being handled now. You will be advised of actions required by your facility. This item has been designated as IH-1992-2.

III. 1992 Items To Be Corrected

IH-1992-1 **For Information Only:** Product specific MSDS were **not** available for each compound produced by the plant. This is an issue that is being corrected on a divisional level. As you receive Product MSDS you should continue to add them to the MSDS books in addition to updating the book's index.

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IH-1992-2 OSHA 29 CFR 1910.1200 (f) (5), Hazard Communication, requires that each container of Hazardous Material be Labeled. The following items must be corrected:

1. Bags of raw material including:
   a. Glycolube 825 FG (the pallet was labeled but not the individual bags)
   b. Witco Sunlite 160 (BFG Code 160)
   c. Emersol 132 NF (BFG Code L-2 & L-22)
   d. Rhodiastab 50
   e. Hoechst Wax E

By copy of the is report I am asking John Kovac to contact the suppliers of the above unlabeled material to assure future shipments are properly labeled.

2. Three Fiber Drums of Powder Compound, from Deer Park, in the Warehouse are not labeled. They are marked 87717-W-1001.

These are issues that must be corrected on a divisional level. You will be advised of the necessary response require of the plant.

3. A Bulk storage box, intended for storing compound, was found in the Compound Warehouse labeled Zinc Stearate. The box retains the Compound Labels. These labels do <u>not</u> indicate the true contents of the container and must be deleted.

4. Containers and partial bags of raw materials must be labeled.

John Kovac is requested to advise correction of Item 1. and the plant is requested to advise correction of this item 2, 3 and 4.

<u>Response</u>

_____

_____

_____

<u>Status</u>

_____ Complete
_____ In-progress
_____ No Action

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IH-1992-3 The monitoring program to support your monitoring priority strategy is progressing. Cadmium, Chromium, Dust, Lead, Noise (dosimetry) and Tin exposures found in your monitoring priority strategy need to be monitored. Please advise me of your time table to do this monitoring and when it has been completed.

Response

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Status

_____ Complete
_____ In-progress
_____ No Action

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IH-1992-4 IH-101 "Ventilation Section" deals with ventilation equipment designed for control of health hazards and requires annual ventilation flow and maintenance checks which are documented. Engineering Standard "ST-411" gives engineering and design standards for ventilation equipment. This item could be added to your maintenance PM system. Please advise me your method for handling this matter and the time table for initiation.

Response

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Status

_____ Complete
_____ In-progress
_____ No Action

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IH-1992-5 Several Industrial Health Written Programs require updating to delete references to the Resin Manufacturing. They include:

1. Respiratory
2. Hazard Communication
3. Chemical Hygiene Plan
4. Lead
5. Vinyl Chloride

Please indicate your time table to revise these standards.

Response

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Status

_____ Complete
_____ In-progress
_____ No Action

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NGC 12950

IH-1992-6 Most Noise Hazardous Areas are posted but several are not. Your Noise Exposure Survey should be consulted to determine which areas should be posted.

Please advise when posting of the remaining areas is complete.

Response

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Status

_____ Complete
_____ In-progress
_____ No Action

IH-1992-7 Your Noise Audiodosimeters and Sound Level Meter need to be factory calibrated.

Please advise when this item has been completed.

Response

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Status

_____ Complete
_____ In-progress
_____ No Action

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IH-1992-8 Some Breathing Air Stations in Compounding are not marked. An air hoist was observed connected up-stream of the Breathing Air Station at the cooler (CLR-3L). Breathing Air connectors are compatible with other hose connectors.

The Above items must be corrected or you may want to discontinue the use of Breathing Air in the Compound Area.

Please advise the correction of the above or the discontinuance of the use of Breathing Air in the Compound Area.

Response

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Status

_____ Complete
_____ In-progress
_____ No Action

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IH-1992-9 You must develop and implement a Written Program to comply with IH-204, "Protection of Potable Water Supply".

Please advise when this item has been completed.

Response

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Status

_____ Complete
_____ In-progress
_____ No Action

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VI.

GEON VINYL DIVISION
SPECIALTY POLYMERS & CHEMICALS DIVISION
INDUSTRIAL HEALTH AUDIT
CHECKLIST

LOCATION Plaquemine DATE 12/1 - 4, 92

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

A. INDUSTRIAL HEALTH PROGRAM ADMINISTRATION

1. Industrial Health Coordinator

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

2. Periodic Industrial Health Program Reports

a.	Timely	S
b.	Content	S
c.	Quarterly Reports	S
d.	Year-end Report	S
e.	Goals for Next Year	S

3. Medical Services

a.	Physical Examination	S
b.	Medical Equipment Certification Calibration	DNA
c.	Professional Training	DNA
d.	Illness and Complaint Investigation	S

4. Job Exposure Surveys

a.	Complete	S
b.	New Exposure Review	S
b.	Annual Review and Update	DNA

5. Chemical Hazard Review and Use

a.	Committee Established (New Chemical Review)	S
b.	MSDS	
	1. Available (Need GVD PVC MSDS's)	NA
	2. Employees Trained in Use	S

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6. Reply to Industrial Health Audits

a.	Initial	S
b.	Final Report	S

7. PEL's and Fetal Toxicity

		Written Program	Medical Surveillance	Training
a.	Hazard Communication	NA	DNA	S
b.	Acrylonitrile	DNA	DNA	DNA
c.	Benzene	DNA	DNA	DNA
d.	Carbon Tetrachloride	DNA	DNA	DNA
e.	Chromium VI	DNA	DNA	DNA
f.	Chloroform	DNA	DNA	DNA
g.	Dimethyl Acetamide	DNA	DNA	DNA
h.	Ethylene Thiourea	DNA	DNA	DNA
i.	Lead	NA	DNA	DNA
j.	Mercury (Vapors)	DNA	DNA	DNA
k.	Methyl Ethyl Ketone	DNA	DNA	DNA
l.	Vinyl Chloride	NA	S	S

8. Monitoring for OSHA PEL's and Fetal Toxicity (FT) by Area From (month/year) 1/1/91 to Present

	Number of Samples	% Over PEL	% Over PEL Without Protection
a. Chromium III** PEL 0.5 ppm			
Department Number & Name			
0 (NA)	DNA	DNA	DNA
b. Chromium VI** PEL Not Established - TLV 0.05 mg/m3 Fetal Toxin > 0.05 mg/m3			
Department Number & Name			
0 (NA)	DNA	DNA	DNA

** These chemicals have been included in the Plant's monitoring schedule but have not been monitored yet.

	Number of Samples	% Over PEL	% Over PEL Without Protection
c. Lead PEL 50 $\mu g/m^3$ Fetal Toxin if blood lead level <30ug/100gm blood.			
Department Number & Name	0 (NA)	DNA	DNA
d. Vinyl Chloride PEL 1 ppm Fetal Toxin <1 ppm			
Department Number & Name	426(S)	62(NA)	16(NA)
e. Cadmium** 0.2 mg/m^3			
Department Number & Name	0 (NA)	DNA	DNA
f. Tin** 2 mg/m^3			
Department Number & Name	0 (NA)	DNA	DNA
g. Dust** 15 ppm Total Dust 5 ppm Respirable Fraction			
Department Number & Name	0 (NA)	DNA	DNA

** These chemicals have been included in the Plants monitoring schedule but have not been monitored yet.

A plan has been written to address all Over Exposures without personal protection. NA

** These chemicals have been included in the plants monitoring schedule but have not been monitored yet.

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B. INDUSTRIAL HEALTH PROCEDURES

1. **Respiratory Procedure**

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

2. **Asbestos Handling and Disposal**

a.	Sources Identified	S
b.	Monitoring	DNA
c.	Medical Examination	DNA
d.	Demolition and Removal	S
e.	Protective Clothing	DNA
f.	Written	DNA

3. **Industrial Health Exposure Evaluation and Monitoring**

a. Strategies

1.	OSHA Compliance	NA
2.	Exposure Evaluation	S
3.	Special Requests	S

b.	Sample Procedures	S
c.	Analytical Procedures/Cross Check Program	S
d.	Employee Notification, Interview & Documentation (Excellent program)	S

4. **Radiation**

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

5. **Ventilation for Health Hazard Control**

a.	Periodic Flow or Maintenance Checks	NA
b.	Laboratory Hoods	
	1. Yearly Flow Checked	DNA
	2. Rating or Flow-Rate Posted	DNA
c.	Modifications Reviewed	S
d.	New Systems Reviewed	S

6. **Leak Detection**

a.	Written	DNA
b.	Area Monitoring Response	DNA
c.	Leak Repair Control	DNA

7. **I.H. Equipment Calibration**

a.	Audiodosimeters	
	1. Daily Field Calibration	S
	2. Laboratory Calibration	NA
b.	Sound Level Meters	
	1. Daily Field Calibration	S
	2. Laboratory Calibration/Three Years	NA
c.	Acoustic Field Calibrators Every Three Years	DNA
d.	Radiation Detection Device - Annually	DNA
e.	Area Monitoring Devices (Self calibrates)	DNA
f.	Personnel Monitoring Pumps	S

8. **Laboratory Safety**

a.	Chemical Hygiene Plan (in use)	NA
b.	Chemical Hygiene Officer Named	S
c.	Lab Hoods Adequate for Hazard	S
d.	Personnel Protective Clothing and Equipment	S

9. **Bloodborne Pathogen**

a.	Written Exposure Control Plan	S
b.	List of Job Covered by the Plan	S
c.	Training	S
d.	Immunization	S

10. Potable Water Safety

a.	Written Policy	NA
b.	Water Systems Identification	NA
c.	Cross Connection Avoidance (All systems are tagged)	NA

C. Hearing Conservation and Noise Control

1. All jobs with an eight hour TWA exposure of 85 dBA (50% dose), have been identified. — S

2. Noise hazardous (BFG > 85 dBA) areas have been posted. — NA

3. A formal list is available at the plant specifically designating hazardous and non-hazardous noise exposure jobs. — S

4. Records are available showing monitoring results for those jobs that were monitored. — S
NOTE: A copy of monitoring result must be entered into the Medical Surveillance System in Bath. The plant must retain its records for at least two years (OSHA).

a. Monitoring for OSHA Noise PEL by Area From (month/year) 1/1/92 to Present

Department Number & Name	Number of Samples	% Over 50% Without Hearing Protection	% Over 100%
	0(NA)	DNA	DNA

Hearing Protection Action Level 50%
Engineering Control PEL 100%

5. When employees working on noise hazardous jobs are monitored, they are informed of the monitoring results (OSHA). — S

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6. Engineering and/or maintenance efforts are being directed at reducing noise in those areas/jobs with an eight hour TWA of 90 dBA or greater (100% dose)(OSHA). Note: Details of this effort must be documented. — NA

7. Hearing protection worn in all noise hazardous areas. — S

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 Industrial Health in Cleveland if more information is needed). — S

9. Employees are provided a choice of two or more different types/varieties of hearing protection (OSHA). — S

10. Personnel working at noise hazardous jobs receive annual training which includes at least the following information (OSHA).

    a. The effect of noise on hearing. — S

    b. The purpose of hearing protectors, the advantage and attenuation of various types, and instructions on selection, fitting, use, and care. — S

    c. The purpose of audiometric testing and an explanation of the test procedures. — S

11. Care is exercised to insure a proper initial fit and correct use of all hearing protectors (OSHA). — S
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 examinations are provided for:

    a. All new hires (pre-employment). S
    b. Transfers to noise hazardous jobs. S
    c. Employees working on noise hazardous jobs (annually). S

    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. S

14. Employees with audiograms showing a standard threshold shift (STS) are notified of this fact in writing within 21 days (OSHA). S
    NOTE: Employees showing a STS are to be retested within 30 days.

15. Employees exhibiting a STS are refitted with hearing protection and retrained in its use (OSHA). S
    NOTE: Hearing protectors with greater attenuation may be needed.

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. S

17. Cases with a confirmed average 25 dB shift from the original baseline in the frequencies 2000, 3000, and 4000 Hz, either ear, are recorded on the OSHA 200 Log. S

18.* The audiometer in use satisfies requirements of the ANSI standard 3.6-1969. S

19.* An acoustical or biological calibration is performed daily on the audiometer before use. S
    NOTE: Results of these tests must be kept on record for at least one year.

20.* An acoustic check is performed on the audiometer annually, S
    NOTE: Audiometer must meet requirements of ANSI S3.6-1969.

21.* An exhaustive calibration of the audiometer is performed at least every two years by the manufacturer or his approved agent. S
NOTE: (#18, #19, #20) Results of all checks and calibrations must be kept on record.

22. A copy of the OSHA noise standard is posted in the workplace or is available to employees. S

*Numbers 18, 19, 20, 21 - Where an outside audiometric testing service is employed, it must be established that these requirements are satisfied.

D. Check List Totals

Satisfactory	**72**
Needs Attention	**25**
Does Not Apply	**65**

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