To: Mike Marshall

From: Glenn Higby

June 24, 1991

RESPONSE TO CORPORATE HS&E AUDIT

Per your request we have not responded directly to Carl Mattia regarding the audit they conducted at Avon Lake Technical Center. Attached to this memo is my proposed cover letter and the complete audit response that we have drafted.

Please distribute per the distribution and c.c. list once you have read and agree with our comments. I have not copied anyone besides you and will leave it up to you to do the proper distribution.

Give me a call if you need anything further.

Glenn Higby

'ahg
Attachment

BFG RESTRICTED

TO: Carl Mattia June 24, 1991

FROM: Glenn Higby

SUBJECT: Requested Response to Corporate HS&E Audit

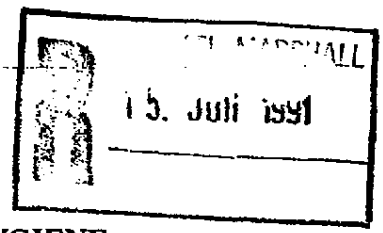
Attached is the requested Corrective Action Report covering all items in the Arthur D. Little HS&E Assurance Audit conducted March 18-22, 1991 at the Avon Lake Technical Center. Of the 68 items covered, we are pleased to report the completion of 47, active process on 20 and only one with no action to date. Overall I was very pleased with the audit and its thoroughness has helped us greatly in further improving what was portrayed by your audit team as "a very effective program . . . would rate at least an 8.5 on a scale of ten." We believe that we have one of the best programs around and through continued auditing, plan on keeping it that way.

Glenn Higby

GH:drf
1991Audit.jpg

cc: R.J.Grahek
W.C.Holbrook
M.Marshall
W.F.Patient
K.J.Willings
L.Maresca
R.Hardesty
J.P.Griffin

NGC 13186



Mike

BFG RESTRICTED

INDUSTRIAL HYGIENE

1. **Chemical Hygiene Plan (CHP)** *(Regulatory/Good Management Practice)*

During a review of the facility's Chemical Hygiene Plan and interviews with employees, we noted the following:

a. The plan does not include provisions for supplying information to the physician and obtaining a written opinion from the physician. [29 CFR 1910.1450(e)(3)(vi) and (g)(3)-(4)]

Response: Complete 6-20-91.

b. The plan does not specify the information that must be given to employees. [29 CFR 1910.1450(c)(3)(iv) and (f)(3)]

Response: The Avon Lake Technical Center (ALTC) Chemical Hygiene Plan (CHP) was completed on 1-10-91. This plan was developed by a group from the Brecksville Research & Development Center and the Avon Lake Technical Center. This sixty-one page document was used as a prototype for the Specialty Polymers & Chemicals Division and the Geon Vinyl Division. Section 10 of the CHP "Information & Training" addressed 1910.1450(c)(3)(iv) and (f)(4). We did, however, fail to list the employee information using the same definition as the OSHA standard. That wording has been addressed and completed on 6-7-91.

c. The plan does not specifically address reproductive toxins (hazards), including those which are present at the facility, and how they will be handled. [29 CFR 1910.1450(e)(3)(viii)]

Response: Section 7 of the CHP, "Additional Controls Relating to Select Carcinogens, Reproductive Toxins and Highly Acute Toxins", addresses 910.1450(e)(3)(viii).
We did not include a list of reproductive toxins presently at our facility because the standard does not require that information to be included in the CHP. At the Avon Lake Technical Center all PEL chemicals, including carcinogens, highly acute toxins and reproductive toxins are computer tracked and identified on the "Chem-Store" system. To comply with this recommendation, we put the list of reproductive toxins in the CHP and referenced the appropriate handling practices.

Complete 6-20-91

NGC 13187

d. Training required under the plan has not been implemented. [29 CFR 1910.1450(e)(3)(iv) and (f)(4)]

Response: The CHP was reviewed by department personnel during the first quarter 1991. Additional training is scheduled during the June and July safety meetings. Item to be complete 8-1-91.

e. The information placed on hood inspection cards is inconsistent with what is required in the plan. [Good Management Practice]

Response: Section 6.1.1 of the CHP "Fume Hood Maintenance and Inspection", listed the documentation requirements for Laboratory Fume Hoods. Hood profiles, including Face Velocity grids and Dust Traverse measurements, are filed in the Health & Safety Department. Individual hood inspection cards are an additional documentation step. The CHP stated that "design velocity" would be included on the card. This CHP requirement was changed on 6-18-91.

Complete 6-18-91.

f. Five out of five individual laboratories reviewed have not prepared standard operating procedures required by the plan. [Good management Practice]

Response: Section 4 of the CHP, "Standard Operating Procedures", contains guidelines for writing SOP's. These guidelines suggest when an SOP should be required and what must be included. It is the responsibility of each scientist or engineer to determine when SOP's are necessary and to insure that SOP's are written and included in each laboratory's copy of the ALTC Chemical Hygiene Plan.

At the time of the audit, the CHP had been in existence less than 4 months. We realize that it will take much effort and resources to produce the necessary Standard Operating Procedures. To expedite this process we have put in place a task force to identify "generic" SOP's and assist in developing both unit operations and equipment-specific SOP's. The timetable for completion is 9-15-91 for high priority procedures and 12-15-91 for low priority Standard Operating Procedures.

g. The current Level A contractor training is not consistent with the training specified in the plan. [Good Management Practice]

Response: Complete 6-20-91.

2. **Hazard Communication Program** *(Regulatory/Good Management Practice)*

During a review of the facility's hazard communication program, we noted the following:

a. The facility does not maintain MSDS's for consumer products that are used in an industrial process. [29 CFR 1910.1200(g)(8)]

Response: During the audit, one MSDS was missing for an aerosol spray paint that was used for marking boxes. We have audited "consumer product" Material Safety Data Sheets at the Center. If these materials are used in "industrial applications", we have obtained an MSDS. Complete 6-10-91.

b. The program does not identify a facility coordinator. [Good Management Practices]

Response: We have a complete written program in compliance with the OSHA Hazard Communications Standard. It was identified during the audit as a "Good Management Practice" to identify the facility coordinator by name in the written program.

Complete 5-10-91.

c. The program does not identify methods that will be used to evaluate the effectiveness of training. [Good Management Practice]

Response: In May of 1990 we implemented a certification program for Hazard Communications. The testing procedures and documents are on file for all employees. We did, however, fail to put a copy of the procedure and example document in the written Hazard Communication plan.

Complete 5-10-91.

d. The facility does not have a mechanism to ensure that an MSDS is available before a new chemical is used at the facility. [Good Management Practices]

Response: Our plant written policy does not allow a hazardous material to be brought on site without an MSDS. We have done extensive audits and have not found a failure in the system. During the Corporate H-S-E audit, the only chemical on site identified without an MSDS was the can of spray paint mentioned in Item 2a. Due to this recommendation however, we are developing a chemical "gate" system in our distribution center. This will allow us to prevent chemical usage without an MSDS.

e. The facility does not have a system in place to ensure that MSDS's are kept current. For instance, a large percentage of MSDS's reviewed were issued prior to 1985, and almost all were issued prior to 1990 (when it became mandatory to include SARA information). [Good Management Practices]

Response: As of 6-1-91, all Material Safety Data Sheets received at ALTC are distributed to the chemical owner as well as the previous standard of a central file in the Raw Material Control Department.

Complete 6-1-91.

3. **Respiratory Protection** *(Regulatory/Good Management Practice)*

During a review of the facility's respiratory policy and use of respirators, we noted the following:

a. The facility does not prohibit employees with beards from wearing positive pressure respirators. [29 CFR 1910.134(e)(5)(i)]

Response: The facility has a formal program for respirator training, fit test and pulmonary functions. Beard restrictions only applied to negative fit (cartridge style) respirators. This policy was changed to include positive fit respirators on 6-21-91.

Complete 6-21-91.

b. Three of five airline respirator facepieces inspected in Building 414 were not stored in plastic bags or other suitable containers to prevent possible facepiece contamination. [29 CFR 1910.134(f)(5)(i)]

Response: A formal audit was implemented on 6-1-91 to address this problem. Three additional respirators were found that were not stored in bags. This was corrected on 6-14-91.

Complete 6-14-91.

c. No formalized means exist for Avon Lake General Chemical (ALGC) to notify ALTC of problems with the breathing air supply. [Good Management Practices]

Response: Past practice for notification has been to used the foreman's radio system. On 6-13-91 we implemented a 1-5 alarm on the gamewell system (Fire Alarm) as a All-Plant alarm for breathing air malfunctions.

Complete 6-13-91.

4. **Medical Examinations** *(Regulatory)*

During a review of the facility's medical examinations, we noted that 10% of employees had not received the required medical examinations. [29 CFR 1910.95(g)(6) and 1910.134(b)(10)]

Response: In 1990, approximately 10% of the employees on the medical examination inventory did not participate in the medical surveillance program. These were primarily employees who had worked in a VCM regulated area at some time in their work history, but were not presently assigned to a regulated area. The OSHA Standard Subpart Z accepts the employer position of "offering" medical examinations in this application. This is also an accepted position in the Acrylonitrile, Ethylene Oxide and Benzene standards.

On 1-1-91 the Avon Lake Technical Center implemented a policy requiring "participation" in the medical surveillance program for all employees on the medical examination inventory with the exception of past VCM personnel.

Complete 1-1-91.

5. **Hearing Conservation** *(Company Policy)*

During a review of the facility's hearing conservation program and a tour of the facility, we noted that high noise areas (>85 dBA) identified through required periodic surveys have not been appropriately posted. [OHP 5.05-2]

Response: A follow up audit of the entire facility identified two enclosures above 86 dBA without an area warning sign. Both of these enclosures were identified on the semi-annual facility Noise survey. The area signs have been installed.

Complete 5-4-91.

6. **Job Exposure Inventories** *(Company Policy/Good Management Practice)*

During a review of the facility's exposure assessment program, we noted the following:

a. The facility has not completed (or updated) the job exposure inventory. [BFGoodrich Company Policy]

Response: At the time of the audit, one department job exposure survey had not been completed. This department had several personnel who were out of the country when the inventory was completed. The remaining thirty-

eight departments were complete at the time of the audit. Additionally, we were instructed by the Corporate Health Department to delay sending the survey in for computer entry because of the inability to enter the data into the system. As of this writing, job exposure surveys completed at ALTC during the first quarter of 1991 have yet to be entered into the Corporate Medical Surveillance system by the Corporate Health Department. Since that time, the remaining one department has been completed. (5-2-91)

b. No procedure exists to update a job exposure inventory if there are significant changes in chemical inventory or usage between formal evaluation. [Good Management Practice]

Response: The inventory is updated immediately on "Chem-Store" when there is a change in inventory levels or usage. This system is audited routinely. In addition, we complete a formal job exposure inventory annually. We consider this item complete.

7. **Local Exhaust Ventilation (LEV)** *(Good Management Practice)*

During a review of LEV systems at the facility, we noted the following:

a. LEV systems, other than chemical fume hoods, are not included in a preventative maintenance program.

Response: Complete 6-15-91.

b. LEV systems (chemical fume hoods) in process and maintenance areas are not labeled in the same manner as fume hoods in research areas.

Response: Complete 6-15-91.

EMPLOYEE SAFETY

8. **Lockout/Tagout** *(Regulatory)*

The facility does not certify that periodic inspections of its lockout/tagout program have been performed. [29 CFR 1910.147(c)(6)(ii)]

The documentation of these inspections was not complete at the time of the audit. A formal inspection and documentation program was implemented on 6-8-91.

Complete 6-8-91.

9. **Eye Protection** *(Regulatory)*

During a tour of the extruder building, we noted that employees are not required to wear goggles or a face shield when cleaning equipment with compressed air. [29 CFR 1910.133(a)(1)]

Response: An aggressive action plan was implemented in 1990 to reduce the amount of cleaning with compressed air in building 426. New and upgrade vacuum systems were installed. We were able to reduce the compressed air used for cleaning by approximately 70%. During the audit one employee was observed using compressed air. He was wearing safety glasses with side shields, but was not wearing goggles or a faceshield.

The standard operating procedures addressing compressed air for cleaning have been modified to require goggles or a faceshield as additional personal protective equipment. All necessary personnel have been trained. We have audited the process and found 100% compliance.

Please note that 29 CFR 1910.133(a)(1) does not require goggles or a face shield when using compressed air. We did, however, implement this activity.

Complete 6-20-91.

10. **Peroxide Storage Bunker** *(Company Policy)*

During a review of the facility's storage practices for organic peroxides, we noted the following:

a. No inventory is posted for the materials stored in the three freezers.

Response: Complete 6-18-91.

b. The freezers are not labeled as to their storage temperatures.

Response: Complete 6-18-91.

c. No spare or auxiliary freezer is present. [Division Safety Standard SA-134]

Response: Complete 6-18-91.

11. **Electrical and Process Control Room Pressurization** *(Company Policy)*

During a tour of the facility, we noted that three of seven rooms do not have low-pressure alarms and that the rooms in Building 421 do not have secondary pressurization systems. [Geon Safety Standard SA-103]

Response: We have completed an audit of these pressurized rooms. They are all maintaining a minimum of 0.1" of water pressure as per the BFG engineering standard. An Appropriations Request has been generated. We project a 7-15-91 completion for an AR grade estimate with a project completion date in the fourth quarter of 1991 to implement the necessary upgrades for alarms and secondary pressurization systems.

12. **Low Voltage Lights** *(Company Policy)*

The facility does not maintain a record of annual inspections of its low voltage lights. [Geon Safety Standard SA-105]

Response: Complete 5-27-92.

13. **Scaffolds** *(Company Policy)*
The facility does not conduct annual inspections of scaffolding material that is erected or in storage. [Geon Safety Standard SA-122]

Response: Complete 5-27-91.

14. **Maintenance Work Order System** *(Company Policy)*

During a tour of the facility, we noted a maintenance project in Building 414 that did not have approval signatures authorizing the maintenance people to begin work. [Facility Safety Standard SAF-5800]

Response: A periodic auditing system of the Maintenance Work Order program has been implemented by the maintenance department. Compliance to the signature authorization requirement has been 100%. This inspection system includes a "Field" audit as well as clerical checks of work orders after completion.

Complete 6-1-91.

15. **Refrigerated Chemical Storage** *(Good Management Practice)*

The Hycar refrigerator in Building 421 is not equipped to signal a loss of power to the refrigerator.

Response: A Maintenance Work Order has been generated to upgrade this refrigerator with a 8-1-91 projected completion date.

16. **Emergency Electrical Generator** *(Good Management Practice)*

The emergency electrical generator in Building 424 does not have a posted sign stating "Danger, Equipment May Start Automatically."

Response: Complete 5-1-91.

LOSS PREVENTION AND EMERGENCY RESPONSE

17. **Means of Egress** *(Regulatory)*

During a tour of the facility, we noted that the facility did not provide free and unobstructed egress from the main lobby (i.e., one of the two front doors was not unlocked). [29 CFR 1910.36(b)(4)]

Response: Please note that 29 CFR 1910.36(b)(4) does not require both doors for egress. We did, however, implement this change.

Complete 5-1-91.

18. Portable Fire Extinguishers *(Regulatory)*

During a review of the facility's portable fire extinguisher inspection, training, and education programs, we noted the following:

a. The facility has numerous portable fire extinguishers that have not been hydrostatically tested at intervals listed in 29 CFR 1910.157, Table L-1. [29 CFR 1910.157(f)(2)]

Response: We have completed both visual and maintenance inspections on these extinguishers. To expedite hydrostatic testing, a program has been implemented whereas twenty units are exchanged with spares and sent out for certification.

Completion date 9-1-91.

b. Employees are not, upon initial employment or at least annually thereafter, educated with the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting. [29 CFR 1910.157(g)(1)-(2)]

Response: The employee orientation program has been expanded to include incipient stage fire training. The "Core" H-S-E program has been upgraded to include annual training for all ALTC employees.

Complete 6-1-91.

19. **Flammable and Combustible Liquids** *(Good Management Practice)*

During a tour of areas where flammable and combustible liquids were stored, we noted the following:

a. One drum without proper relief venting and one drum without an approved self-closing valve are stored at Building 414. [29 CFR 1910.106(d)(2)(ii)]

Response: Complete

b. General storage of flammable liquid drums and containers, inside and outside, appears to exceed recommended quantities and safe storage practices. [Good Management Practice]

Response: A formal audit was complete to assure compliance with NFPA 30-33 "containers and portable storage tanks." The audit did not identify any deficiencies in the general storage of flammable liquid drums and containers.

Complete 5-25-91.

20. **Insurance Carrier Reports** *(Good Management Practice)*

During a review of the facility's response to insurance carrier reports, we noted that the IRI report dated April 18, 1989 did not arrive at the facility until January 27, 1991, and that the IRI report dated October 31, 1990 has yet to arrive, creating undue delay in implementing report recommendations.

Response: A wrap-up session is conducted at the completion of all Industrial Risk Insurers inspections at the Avon Lake Technical Center. It is at that wrap session that we begin implementing corrective actions in regards to recommendations. We do not believe that a delay in recurring reports has a significant impact on expediating this action.

We did, however, contact Paul Gaydos and he has assured us that the referenced reports will be generated without undue delay.

Complete 6-1-91.

AIR POLLUTION CONTROL

21. **Hydrin Semi-Works Permit to Operate (PTO)** *(Regulatory)*

The facility operated the Hydrin Semi-Works for approximately two months (during January, February, and March of 1990) without having an effective permit to operate (PTO) (the PTO expired January 19, 1990). (The facility obtained verbal approval to operate the semi-works; however, the facility does not have the approval documented.) [Permit Number 0247030004-P011, Condition 5]

Response: The Hydrin Semi-Works had a PTO which expired on 1-19-90. It was not renewed before it expired because BFG originally shut down Hydrin in July of 1989 and planned to come back up running Stat-Rite. Instead, another run of Hydrin was made from January 1990 to March 1990. Stat-Rite required a revision of the PTO to show the expected changes in emissions due to different stripping and drying techniques. When it was decided to run Hydrin until March of 1990, Dennis Bush of Ohio EPA gave interim verbal approval over the phone for this Hydrin run operating under the old PTO conditions. This verbal approval is documented internally by a note to file. Then, BFG would submit a revised PTO reflecting only operating in the Stat-Rite mode.

In the future we will not operate a process without a valid PTO or written approval from OEPA.

Complete

22. **SA Poly Reactor Management** *(Regulatory/Good Management Practice)*

During a review of the facility's polyvinyl chloride research and development operation, which utilizes a reactor with a nominal capacity of 1,100 gallons, we noted the following:

a. The facility has not submitted a description of the leak detection and elimination program for the SA Poly reactor to the EPA. [40 CFR 61.65(b)(8)(i)]

b. The facility does not have standard operating procedures that include, where applicable, loading and unloading lines, slip gauges, manual venting of gas, opening of equipment, vinyl chloride samples, and leak detection and elimination for the SA Poly reactor. [40 CFR 61.65(c)]

c. The facility did not submit an initial report to the administrator addressing the SA Poly reactor. [40 CFR 61.69(b)(1)]

d. The facility did not submit quarterly reports to the administrator addressing the SA Poly reactor. [40 CFR 61.70(b)(1)]

e. The facility does not sample inprocess wastewater to ensure that the wastewater does not contain greater than 10 ppm vinyl chloride. [Good Management Practice]

Response: SA Poly has always been viewed as a partially exempt R&D reactor per 61.60(c). This means that only certain sections of the standard apply. Therefore all the findings listed in 22a to e would not apply.

The NESHAP standard listed the reactor capacity cut off as 4.07 m^3 (1100 gal). The EPA did this with the intention of partially exempting R&D reactors which existed at the time. A 9-23-88 Federal Register notice changed this to 4.07m^3 (1075 gal). In BFG's opinion, the agency should have changed the metric number to conform to the English number vs. the change they made.

EPA verbally agrees with BFG and we have asked them to confirm this in writing. We expect a response by 8-1-91.

Completion 8-1-91

SPILL CONTROL AND EMERGENCY PLANNING

23. **Spill Prevention Control and Countermeasures (SPCC) Plan** *(Regulatory)*

During a review of the facility's SPCC Plan, we noted the following:

a. The facility has not reviewed the SPCC Plan within the last three years (the plan was last revised May 1, 1980). [40 CFR 112.5(b)]

Response: The ALTC SPCC Plan was not revised because it was determined by inventory that the petroleum products level was below the trigger level at ALTC. There existed two SPCC plans for this site. One was revised and up to date as required by the regulation. However, it was not reviewed by the auditors during the audit. Subsequent to the audit, we have reviewed both plans and combined them into one SPCC plan.

Complete 7-15-91

b. The plan does not include written procedures for inspecting tanks and containers storing petroleum products. [40 CFR 112.7(e)(8)]

Response: Procedures for inspecting of tanks and containers is included.

Complete 7-15-91

24. **Spill Prevention and Control Management** *(Regulatory/Good Management Practice)*

During a review of the facility's spill prevention and control activities, we noted the following:

a. The facility does not maintain records of inspections of tanks and containers containing petroleum products. [40 CFR 112.7(e)(2)(vi) and (8) and Good Management Practice]

Response: Procedures for inspecting of tanks and containers is included.

Complete 7-15-91

b. The facility did not conduct training to familiarize personnel with the contents of the SPCC Plan. [40 CFR 112.7(e)(10)(iii)]

Response: Since it was felt an SPCC Plan was not needed, training on its implementation was not done. Training on the revised SPCC Plan will be done by 8-15-91.

c. The facility has not designated a person to be accountable for oil spill prevention and who reports to line management. [40 CFR 112.7(e)(10)(iv)]

Response: Richard Hardesty, Manager Environmental Affairs, has been designated as accountable for oil spill prevention.

Complete 7-15-91

25. **Secondary Containment** *(Regulatory/Good Management Practice)*

During tours of areas where petroleum products were stored, we noted the following:

a. Six drums of DOWtherm were stored southeast of Building 419 near a storm sewer drain. [40 CFR 112.7(e)(1)(iii)]

Response: The six drums were moved the day of the audit to an area which has the proper spill collection system.

Complete 3-19-91

b. The 250-gallon gasoline tank at Building 424 was not supplied with secondary containment. [40 CFR 112.7(e)(2)(ii)]

Response: A metal pan dike has been installed under the tank.

Complete 7-1-91

c. Drums in the west drum yard, which are used to disperse materials, were not supplied with drip pans. (There were several areas with visible soil contamination.) [Good Management Practice]

Response: Drip pans have been installed. A Maintenance Work Order has been written to remove the superficial soil contamination.

Completion 9-1-91

HAZARDOUS WASTE MANAGEMENT

26. Contingency Plan *(Regulatory)*

During a review of the facility's contingency plan, Summary of Emergency and Contingency Plans Prepared for RCRA Compliance (dated February 23, 1988), we noted the following:

a. The plan does not describe arrangements with local authorities to coordinate emergency services. [OAC 3745-54-52(C)]

Response: Copies had been sent to the local authorities. The combined plan will describe what response the local authorities will provide.

Completion 8-15-91

b. The list of emergency equipment does not include fire extinguishers and the specific locations and physical descriptions of emergency equipment are not provided. [OAC 3745-54-52(E)]

Response: A list of fire extinguishers will be added. The lists exist in the safety records, but will be added to RCRA plan.

Completion 8-15-91

c. The evacuation plan does not provide the identification of evacuation routes or alternate routes. [OAC 3745-54-52(f)]

Response: The Contingency Plan described the facility evacuation plan and references the posted route maps throughout the facility. We will include copies of the posted info in the Contingency Plan.

Completion 8-15-91

d. Emergency procedures do not describe how the emergency coordinator will: identify the character, exact source, amount, and real extent of any released materials in the event of a spill or fire; assess possible hazards to human health or the environment that may result from a fire or spill; and submit a written report of the incident to the Regional Administrator. [OAC 3745-54-52(A) and 3745-54-56(B), (C), and (J)]

Response: The emergency coordinators have been trained in assessment, but the specific assignments will be documented in the revised plan.

The emergency forms that are completed as response to an incident is occurring contain this information and assessment.

Complete

27. **Waste Determination** *(Regulatory)*

The facility has not determined whether the six drums of "unknown" materials stored to the southeast of Building 422 are hazardous waste. [OAC 3745-52-11(A)]

Response: The audit team felt they should be labeled "Hazardous Waste" during the analysis phase. We disagree. OAC 3756-52-11(A) requires you to determine if the waste is excluded under OAC 3756-51-04. However, this presupposes that you already have a waste. In order to determine that, sometimes you must test materials. While testing, materials are marked "Unknown" because at this point the material has not been determined to be a waste. No change in procedure required.

Complete

28. **Hazardous Waste Assimilation** *(Regulatory)*

During tours of the hazardous waste storage areas, "satellite" accumulation areas, and other areas where hazardous wastes are stored, we noted the following:

a. Two drums of hazardous waste at the hazardous waste storage area and one drum of waste (marked WPS 35344 and with the words "oil wastes") outside Building 416 were not labelled "Hazardous Waste." [OAC 3745-52-34(A)(3)]

Response: The drums were properly labeled immediately. Labeling procedures were reviewed with appropriate personnel.

Complete

b. Two drums containing T-butylamine awaiting a WPS number and one drum marked "cresol," all outside Building 422, were not marked or labelled with the words "Hazardous Waste" or with the accumulation start date. [OAC 3745-52-34(A)(2)-(3)]

Response: These drums were viewed as "waste" by the auditor, but they were in fact material awaiting further testing. The material is not a waste. R&D required analysis of all streams for material balance purposes. These materials may ultimately end as waste, but had not been declared as such yet

because of ongoing legitimate testing. Therefore, no "Hazardous Waste" label or "date" is required.

Complete

c. Two drums of waste stored southeast of Building 419 were not labelled or marked with the words "Hazardous Waste", and the area was not supplied with spill control equipment. (The drums were located near a storm sewer drain.) [OAC 3745-52-34(A)(3)-(4)]

Response: We believe the material in question was scrap Estol. This material is not hazardous waste and, in addition, is a solid material. Therefore the waste is not subject to 3745-52-34.

Complete

d. Funnels used to access two waste drums stored outside Building 416 were not closed. [OAC 3745-52-34(A)(1) and 3745-66-73(A)]

Response: The funnels were removed and the bungs closed the same day of the audit. It is BFG policy to either use funnels with normally closed lids or insert funnels during filling, using bungs when not filling.

Complete

29. **Hazardous Waste Recordkeeping** *(Regulatory)*

During a review of 40 of a total of approximately 100 manifests used to ship restricted wastes during the period January 1990 to February 1991, we noted the following:

a. The facility did not submit exception reports in two instances when signed copies of the manifests were not received by the generator from the treatment, storage, or disposal facility (TSDF) within 45 days after the waste was accepted by the initial transporter. [OAC 3745-52-42(B)]

Response: We had already caught this problem in our tracking system by our auditing system. The tracking system had already been revised to prevent a reoccurrence. There is no way to go back and correct not submitting the exception reports. We now have signed copies of the manifests.

Complete

b. The facility did not have on file a land ban restriction notification for one manifest that required such notification. [40 CFR 268.7(a)(6)]

Response: The land ban restriction notification had been done; a copy had just not been maintained by BFG. The TSDF sent us a copy of their copy so that our file is now complete.

Complete

30. **Training Program Documentation** *(Regulatory)*

During a review of hazardous waste training program documentation, we noted the following:

a. The facility does not have written job descriptions containing the requisite skill, education, or other qualifications and duties of facility personnel assigned hazardous waste responsibilities. [OAC 3745-54-16(D)(2)]

Response: The facility did have written job descriptions which described the duties of waste personnel, but the descriptions did not include the skill, education and other qualifications. These will be added.

Completion 8-15-91

b. The list containing job titles and employees with responsibilities related to hazardous waste management does not include persons required to act as emergency coordinators. [OAC 3745-54-16(D)(1)]

Response: There was a list of job titles and employees meeting the requirements of (D)(1). The emergency coordinators were listed in the RCRA Contingency Plan but not in the Training manual. They have been added to both.

Complete

c. Written descriptions of the type and amount of both introductory and continuing training that will be given to each person assigned hazardous waste responsibilities, including emergency coordinators listed int he facility's contingency plan, were not provided. [OAC 3745-54-16(D)(3)]

Response: Training was completed. But a written description of the expected training was not in the plan. It will be added to the site plan.

Completion 8-15-91

d. Facility does not have documentation indicating that the five emergency coordinators have received hazardous waste management training. (The emergency coordinators receive hazardous material (HAZMAT) training; however, this training does not address hazardous waste contingency plan requirements.) [OAC 3745-54-16(D)(4)]

Response: We will establish guidelines to document traininig as required by OAC 3745-54-16(D)(4).

Completion 8-15-91

31. **Spent Isopropyl Alcohol (IPA) Management** *(Regulatory)*

The facility does not manage drums containing spent IPA generated at Building 422 as hazardous waste (i.e., label with the words "Hazardous Waste" and the accumulation start date, inspect weekly) prior to sending to the back plant, where the material is reclaimed, and then reused in the hydrophilics process. [OAC 3745-52-34(A)(1)-(3)]

Response: The IPA is used as reaction solvent medium in the R&D process. It is stripped off, drummed, and put into the ALGC solvent make-up tanks. This ALGC solvent make-up is then re-used as is by both ALGC and ALTC. These drums do not contain waste as per OAC 3745-51-02. The material is simply re-used as is. We feel OAC 3745-51-02(e)(1)(b) applies which states that recycled materials "re-used as effective substitutes for commercial products" are not waste.

Complete

32. **ADVA Process Waste** *(Regulatory)*

The facility discharges ADVA process wastewater, which is ignitible and contains approximately 18% acetone (19% total organic carbon), into the industrial sewer system where it is treated in ALGC's wastewater pretreatment system. The wastewater is generated in 250-gallon batches; however, the wastewater is metered into the industrial sewer at a rate of 20 gallons per hour. [40 CFR 268.3(b) and 268.42(a)]

Response: The wastewater discharge was stopped. The stream is now collected and run through a distillation system for recovery and reuse of the acetone.

Completion date 7-15-91.

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