A

Environmental Audit, (11-87)

1. Complete
2. Complete
3. Complete
4. Complete
5. Complete
6. Complete

7. The numerous empty bags generated in the compound and dry blend area are troubling. Even though disposal of these bags is not regulated, some of these bags contain hazardous residues such as lead. Political pressure is building over trash. It is directionally correct to minimize solid waste such as bags and move toward bulk or returnable containers. Is there any reasonable reduction projects?

Response

At the present time, we have no reasonable reduction projects to minimize the number of empty bags we dispose of. We are actively evaluating methods to reduce this type of waste.

Response 11/1/88:

Lead, antimony, and arsenic containing bags are all disposed of at a hazardous waste landfill.

We are working with our lead suppliers on ways to reduce employee lead dust exposure (e.g. pelletized lead, lead spills, and semi-bulk systems). In addition to lower exposures, all of these methods directionally reduce the amount of lead that leaves the plant in the empty containers. The semi-bulk systems reuse the containers, and eliminate lead contaminated bags.

Response 3/89:

Engineering work continues. In February, a team was sent to our primary lead supplier to see a semi-bulk in operation. This system worked well, and there was no evidence of fugitive lead sources when transfers were made.

Response 5/89:

An AFE for a trial semi-bulk system for Line III will be submitted in the 4th Quarter of FY1989.

Samples of compound made with pelletized lead were produced and are waiting for customer trials.

Response 5/90:

Construction of the semi-bulk system is scheduled to be completed by 10/90.

Environmental Audit, 2/90 - Continued

5. Done.

6. Done.

7. Done.

8. Done.

9. Done.

10. Done.

11. Done.

12. Done.

13. Done.

14. Done.

15. Done.

16. Done.

17. Done.

PRESTOLITE AUDIT (4/90)

CORRECTIVE ACTION PLAN

VISTA POLYMERS

ABERDEEN, MS

QUALITY ORGANIZATION

1. Done.

2. Done.

3. Done.

4. Done.

5. Prestolite Comment - Add procedure for annual review of the Quality Manual and a log to document all changes made.

   Status 5/91: Review of the Quality Manual is accomplished ~~semi~~-annually via the internal audit. We will develop a log to document changes and will number all pages of the Quality Manual to facilitate control of revisions. TJA by 6/1/91.

   Status 9/91: In progress - manual is being revised to include change control/ numbering of pages (about 20% complete - estimated completion 3/92).

   Status 12/91: Same.

CONTROL CHARACTERISTICS

6. Done.

7. Done.

8. Done.

STATISTICAL PROCESS CONTROL

9. Done.

14. **Prestolite Comment** - Develop procedures for the identification and quarantine of equipment found to be out of calibration. Document the steps taken to re-certify repaired equipment.

Status 5/91: Procedure for identification of equipment out of calibration is addressed by the calibration schedule in the Vista Maintenance System (VMS). A procedure for the re-certification of repaired equipment will be added to the Measurement and Gauge Control section of our Quality Manual. TJA by 7/1/91.

Status 9/91: Will be part of the Quality Manual revision (3/1/92).

Status 12/91: Same 6/92 target.

15. Done.

INSPECTION AND TESTING

16. **Prestolite Comment** - Provide rework instruction for all employees performing rework and re-inspection on all part numbers.

Status 5/91: We will develop rework and re-inspection instructions for all formulas supplied to Prestolite. JEN/JME by 7/1/91.

Status 9/91: New target date 3/1/92.

Status 12/91: Same.

17. Done.

CORRECTIVE ACTION

18. Done.

DRAWINGS AND CHANGE CONTROL PROCEDURES

25. Done.

26. Done.

27. Done.

28. Done.

29. Done.

30. Done.

DCS disc/Updated 1-92/rah

Status 9/91: In progress - estimated completion 3/1/92.

Status 12/91: Same.

3. Need written procedures for performance of statistical process capability analysis followed by ongoing process control.

Status 2/91: We will write quality plans for product areas that will include the extent and timing of SPC analysis. (TJA, SCH, JDO by 6/1/91)

Status 5/91: In progress.

Status 9/91: In progress.

Status 12/91: In progress. Target as 90% complete in FY92.

D. **Statistical Process Control**

1. All personnel must be trained in use of S.P.C.

Status 2/91: Approximately 90% of our employees have received S.P.C. training. Our goals for FY91 include the development of an SPC chart use and interpretation course. Our goal also targets teaching this course to forty employees during the fiscal year. (TJA by 9/30/91)

Status 5/91: Same.

Status 9/91: SPC training is planned for the first half of 1992.

Status 12/91: Same.

2. Done.

3. Must document reactions to all trends, runs and other out of control situations on control charts.

Status 2/91: The course referred to in #D1 will emphasize the need to "dirty-up" control charts.

Status 5/91: Same.

Status 9/91: Same.

Status 12/91: Same.

2. Done.

3. Done.

G. **Corrective Action**

1. Probable causes must be identified and documented.

Status 2/91: Identification and documentation of probable causes will be covered in the comprehensive quality plans discussed in C3.

Status 5/91: Same.

Status 9/91: Same.

Status 9/91: Same.

Status 12/91: Same.

2. Done.

3. Done.

H. **Returned Material**

1. A written procedure is needed addressing effective method to assure material returned is inspected and corrective actions implemented.

Status 2/91: We will develop a method and process flow diagram for handling/inspecting returned material (JME by 6/1/91). Our Customer Needs Response System has been implemented to ensure needed corrective action is identified, communicated and taken to ensure customer satisfaction.

Status 5/91: Same.

Status 9/91: In progress - estimate completion 3/92.

Status 12/91: Same.

I. **Quality System Self-Audit**

1. Done.

2. Done.

K. General

1. Done.

2. Investigate requirements and develop program to achieve Lab Self-Certification Status by G.M. or A.A.L.A.

Status 2/91: We will investigate the requirements for a program to achieve Lab self-certification. (JME by 4/1/91)

Status 5/91: Investigation not completed.

Status 9/91: Lab self-certification will not be pursued at this time.

Status 12/91: Same.

Copies of the appropriate guide pages are Attachment 3, 4 and 5.

ERG 31: Phthalic Anhydride
ERG 31: 610P, 108P Plasticizer (Vista ERI sheets made)
ERG 27: Synpron 1641, Polyvic, Mark 2045, Mark 4734
ERG 55: Altastab 777, 2-Mercaptoethanol
ERG 26: Alfol[R] 810, Alfol[R] 610 (Vista ERI sheets made)
ERG 17: Vinyl Chloride (Vista ERI sheets made)

9. Preparation of BOL's for hazardous waste shipments: We recommend that for preprinted hazardous waste manifests, the shipping description be checked carefully to make sure all mandatory parts are present. Vista is liable for the information on the manifest.

10. Placard requirements: Two placards should be on the Polyvic totes in the plant. (Only one flammable liquid placard was on a tote in the plant).

DCS disc/1-92/rah

B.O.E. AUDIT

NOVEMBER, 1991

1. **Tank Cars: Several tank cars noted were contrary to the DOT Regulations and AAR Interchange Rules for failure to have the load limits and light weights rounded off to the nearest 50 KG's.**

DOT AUDIT

OCTOBER, 1991

1. Several Emergency Response Guidebooks have been sent by John Farrier to Don Barclay. Don agreed to distribute the books to appropriate Aberdeen employees. We can assist Don in ordering more, if needed.

2. Preparation of switch list for rail moves: The switch list should contain the proper shipping description, the placard notation, RQ (if appropriate), and the "Residue: Last Contained" statement when returning empties. (According to §174.25 (b)(1), §174.25 (b)(3), §174.24 (b)(4), and §174.25 (c), respectively. The new descriptions for the switch list are outlined on Attachment 1.

3. The emergency response telephone number should be included on the switch list because the list performs the function of the shipping paper. [§174.25 (b) and §172.604 (a)(3)].

4. Preparation of "Empty Return" BOL's: The shipping descriptions for returning purchased hazardous material residue containers should be corrected for future bills of ladings. A list of the correct descriptions is on Attachment 2.

5. The hazardous material descriptions should be listed at the top as the first entries so that they stand out as hazardous materials. See §172.201 (a)(1)(i), (ii), and (iii).

6. Monitoring Procedures: "Throughout the entire period of unloading and while the car is connected to unloading device, the car must be attended by the unloader." [§174.67 Ii)].

7. Determination of required container specifications: For sample shipments of hazardous materials, performance-oriented certified packagings must be used for air shipments. We recommend using performance-oriented certified packagings for all hazardous material sample shipments to be consistent and insure package integrity.

8. Emergency Response Guidebook pages should be attached to residues of hazardous materials being returned. HM-126C:

> "The requirements under 49 CFR §173.29, for empty packagings that contain any residue of hazardous material, specify that unless a packaging is cleaned and purged of all residue, ... it must be transported in the same manner as required when it previously contained a greater quantity of hazardous materials. This provision also applied to conformance with emergency response information requirements."

J. **Documentation of Quality Control Records and Inspection Instruction Sheets**

1. Current written inspection and/or testing instructions should be revised to include:

   A. Sample size
   B. Gages or tools to be used
   C. Standards for approval
   D. Reaction procedure when non-conforming conditions are encountered
   E. Identification of department or individuals responsible for performance
   F. Received, dated and signed by appropriate authority
   G. "Accept Zero Defects", statement on I and T plan

   Status 2/91: We will reissue I and T instructions to include all the above items. (JME by 7/1/91)

   Status 5/91: Same.

   Status 9/91: In progress - estimated completion 3/1/92.

   Status 12/91: Same.

2. All test procedures should include, "Accept Zero Defects" statements.

   Status 2/91: We will include the "Accept Zero Defects" statement on all test procedures. (JME by 7/1/91)

   Status 5/91: Same.

   Status 9/91: Estimated completion 3/1/92.

   Status 12/91: Same.

3. Receiving inspection should verify C.O.A. by actual testing on a specified frequency, as well as current acceptance approval of C.O.A.

   Status 2/91: Quality Control will review our needs concerning raw material testing and will issue recommendations. (JME by 5/1/91)

   Status 5/91: Not completed yet.

   Status 9/91: In progress - estimated completion 3/1/92.

   Status 12/91: Verification of COA's is now part of normal raw material receiving procedures. Some testing of raw materials is also done. No wide spread scale testing is planned.

4. Action Plan must be documented for correction of out of control conditions on Control Charts.

   Status 2/91: This will be part of the quality plan referred to in #C3.

   Status 5/91: Same.

   Status 9/91: Same.

   Status 12/91: An overall plan to improve the use of SPC is being coordinated by the Manager's Natural Team. This item, as well as other improvements, is the goal of the FY92 effort.

5. Done.

E. **Pre-Production Product Quality Planning**

1. Implement program including procedure pertaining to advance quality planning activities on new products, including control plans, quality plan, F.M.E.A.'s and long-term process capability studies.

   Status 2/91: This item will be covered in the quality plans referred to in #C3.

   Status 5/91: Same.

   Status 9/91: Same.

   Status 12/91: This is part of overall SPC quality plan.

F. **Measurement System Analysis and Gage Control**

1. Enhance documented and effective method for the calibration of gages test equipment to include R&D lab, in-process and final inspection areas. (computer areas)

   Status 2/91: In process and final inspection areas are complete. The R&D lab will be completed by 4/1/91. (RDJ)

   Status 5/91: The R&D lab has not yet been added to the VMS PM schedule.

   Status 9/91: Same.

   Status 12/91: Same.

UTA AUDIT (11/90)

CORRECTIVE ACTION PLAN

VISTA POLYMERS, ABERDEEN, MS

A. **Quality Organization and Authority**

1. Done.

2. Done.

B. **Purchased and Subcontracted Materials Control**

1. Done.

2. Done.

3. Done.

4. Done.

C. **In-Process Inspection**

1. Operating Procedures Manual must include method of approval, revision history log and procedures dated and signed by appropriate authority.

Status 2/91: The Operating Procedures Manuals will be revised to include method of approval, revision history log and dated signatures for procedures. (DFJ [redacted] by 6/1/91)

Status 5/91: Compound procedure manual was revised. The vinyl manual revisions are in progress.

Status 9/91: Revision of the vinyl manual is in progress.

Status 12/91: Same.

2. Zero discrepancy policy statement should be noted as part of sampling plan procedure and used as the criteria to determine accept/reject status of material.

Status 2/91: Zero discrepancy policy statement will be added to each written procedure controlling in-process inspection. (JME by 3/1/91)

Status 5/91: In progress.

[redacted]

CORRECTIVE ACTION - Continued

19. **Prestolite Comment** - Develop a policy that defines the responsibilities and the procedures used to notify Prestolite Purchasing and Quality Assurance of suspect material that may have been shipped.

Status 5/91: We will establish a procedure for notifying Prestolite in the event material is shipped. However, we believe our positive release method is effective at guarding against this happening. JME by 7/1/91.

Status 9/91: New target date 3/1/92.

Status 12/91: Same.

INCOMING INSPECTION AND CONTROL

20. Done.

21. **Prestolite Comment** - Institute incoming material test instructions to clearly identify which are to be performed and at what frequencies.

Status 5/91: We will develop instructions depicting which tests are to be done and at what frequencies. JME by 7/91.

Status 9/91: We do not plan to institute testing of incoming materials. We rely on SQC data from suppliers to assure conformance.

Status 12/91: Same.

22. Done.

MATERIAL CONTROL PROCEDURES

23. Done.

24. Done.

STATISTICAL PROCESS CONTROL - continued

10. Done.

11. **Prestolite Comment** - Implement statistical process control on identified process characteristics.

Status 5/91: We will target our compound SPC effort on measuring the amount of raw materials charged to the blender. Implementation of process measurement is targeted to begin by 7/1/91. MRK,JEN,TJA.

Status 9/91: Measurement parameters are under consideration.

Status 12/91: Charting of one parameter has begun; Compound Process Review Team will recommend additional parameters.

12. Done.

MEASUREMENT SYSTEMS AND GAUGE CONTROL

13. **Prestolite Comment** - State the acceptance criteria for each gauge for calibration performed against known standards.

Status 5/91: Acceptance criteria for all quality control gauges will be indexed in the Measurement and Gauge Control section of our Quality Manual. JME by 8/1/91.

Status 9/91: In progress along with overall Quality Manual revision. Revision completion targeted by 3/1/92.

Status 12/91: Same.

Aberdeen Plant FDA Audit (2/91)

1. Done.

2. Done.

3. EVC will be asked to provide a certificate of analysis for BUS-80. EVC should also be asked whether there are any SARA 313 chemicals in BUS-80.

   Status 2/91: A request was made to EVC for this information.

   Status 5/91: We have received an interim MSDS with SARA 313 information. Methyl alcohol is contained in BUS-80 and is on the SARA 313 list. Done.

4. Water and steam additives will be reviewed to assure they are FDA allowed.

   Status 2/91: R&D are doing this testing.

   Status 5/91: Conversion to FDA allowed additives is complete. Done.

5. Work will continue to assure that reactor agitator seal oil is FDA allowed or that the chance of leakage of seal oil into the reactors is negligible.

   Status 2/91: A trial is planned in the Old Module after the next seal failure.

   Status 5/91: D500 is currently undertrial.

   Status 9/91: As seal maintenance is required, the use of the FDA allowed oil will be phased in.

   Status 12/91: Two reactors use the new oil. All should be converted in 1992.

6. Done.

7. Done.

8. Done.

9. It was pointed out that Vista is now selling Pacific Western PVC from the Pace, FL plant and that some of the resin may be represented as FDA allowed. JCL will contact Rick Smith and advise him of the effort at Aberdeen and ask what Pacific Western is doing.

   Status 2/91: The Business Area is reviewing.

   Status 5/91: Same.

   Status 9/91: Same.

   Status 12/91: Same.

Environmental Audit, (11-87) - Continued

Response 8/90:

Construction of the semi-bulk system is in progress.

Status 11/90: The semi-bulk system will be complete by 2/91.

Status 02/91: Completion expected by March 1.

Status 05/91: Problems with valves identified during startup in March are being resolved. The system will be ready to restart in June.

Status 9/91: Modifications were made; we are waiting on manpower to resume trials.

Status 12/91: A trial on non-lead filler went well. Plans are to start using the system with lead stabilizer in 1QCY92.

Environmental Audit, 2/90

1. Done.

2. Done.

3. Done.

4. Incinerator sewer tie-in integrity should be evaluated.

Status 5/90: No progress. The tie-in will be evaluated during a shutdown this fiscal year.

Status 8/90: This is delayed until the next scheduled turnarounds (currently scheduled for the summer of 1991).

Status 11/90: This is delayed until the next scheduled turnarounds (currently scheduled for the summer of 1991).

Status 2/91: Same as 11/90.

Status 5/91: Same as 11/90.

Status 9/91: The planned summer shutdown was delayed to October.

Status 12/91: Because of the VCM groundwater source investigation, a video inspection of sewers is being planned. This item will be part of this inspection.

THIS IS A NOT PROOFED VERSION

To: M. S. Thomas

From: D. C. Skokna
Date: January 6, 1992

Interoffice Communication

Subject: **QUARTERLY AUDIT REPORT STATUS**
ABERDEEN PLANT

VISTA

Audit Title	Audit Date	Status
Environmental Audit	11/87	6/7 Completed
Environmental Audit	2/90	16/17 Completed
Aberdeen Plant FDA Review	1/91	7/9 Completed
U.T.A. Audit	11/90	14/30 Completed
Prestolite Audit	4/90	22/31 Completed
DOT Audit	10/91	0/10 Completed
BOE Audit	11/91	0/1 Completed

The DOT and BOE audits were received very recently and we have not prepared our initial response on plans to correct.

D. C. Skokna
Plant Superintendent

rah

attachment

cc: RWS

CONFIDENTIAL

$1,000,000 ANNUAL CASH FLOW IMPROVEMENT

CONFIDENTIAL

PROJECT	$ ESTIMATE	RESPONSIBLE	STATUS	ACTUAL CASH
INVENTORY CONTROL - Continued				
9. Raw Materials - Cont.				
Reduce Stores			PAW heading project team working on this. JBA's natural team also working on streamlining stocking of items. Continue 1992.	53,226
Sale of Surplus Capital Assets	30,100		High pressure water system sold:	31,000
	4,500		Baby dryer sale.	4,500
			Surplus tank used for BFW project. Old Line III - 1992.	20,000
10. Bar Coding ($35,000)			1992 Q-Scorecard item.	
PRODUCTIVITY GROUP				
11. Improve Maintenance Productivity	112,000	DCS	Presently we have 4 unfilled positions. Four additional vacancies are anticipated in CY91.	140,000/Year
Some progress - three positions are currently being left unfilled.				
12. Designer Cost Optimization	25,000	DCS	1. Lead Designer in Budget - 1992.	