

2003 Internal Health and Safety Audit Aberdeen

Final Report

March 3, 2003

ABERDEEN INTERNAL HEALTH AND SAFETY AUDIT REPORT**3/03/03****PAGE 2****1. Introduction**

This report summarizes the results of the 2003 Internal Health and Safety Audit at the Aberdeen, MS facility conducted on 2/18/03 to 2/20/03

2. Purpose

The internal health and safety audit program covers the health and safety programs and associated procedures of Georgia Gulf Corporation. Although a strong emphasis is placed on compliance with applicable regulations and corporate policies, the ultimate goal is continuous improvement of the health and safety management system.

The objectives of the audit are to

1. Provide management with a tool to evaluate the continuous improvement of the health and safety program
2. Evaluate the written health and safety management systems to ensure elements required by OSHA regulations are in place
3. Ultimately, improve the health and safety of the workplace environment

This report is not intended to imply legal certification of compliance or noncompliance

3. Scope

The Aberdeen Audit addressed the following modules

Fire Prevention and Emergency Action Plans

Confined Space Entry

Means of Egress

Lockout/Tagout

Electrical Safety

Power Industrial Trucks

Hearing Conservation

Hazard Communication

Walking and Working Surfaces

Contractor/Visitor Safety program

Personal Protective Equipment

Hoisting Equipment

Machine Guarding

Incident Investigation

Chemical Storage

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Review Audit Action Items

4. General Audit Technique

The audit was conducted on site on 2/18/03 to 2/20/03. The audit included Physical inspections of the facility, Document reviews of written health and safety programs, policies, and procedures as well as safety, administrative, and operating records,

Interviews and discussions with facility management, staff, and employees (where applicable), and verification of the facility's application of, and adherence to applicable OSHA regulations and related and facility policies and procedures

The process by which the audit was conducted is consistent with accepted health and safety auditing protocols and the professional judgment of the audit team members

5. Audit Team

The audit was conducted using an audit team knowledgeable in the topics being audited and the basic audit process. The audit team consisted of Dwight Dobbins, Safety Technician (Oklahoma City), Emmitt Cavalier Safety Engineer (Madison) and Fred Wisbar, Safety Engineer (Plaquemine)

6. Follow-Up on Audit Findings

After receiving the audit report, the Plant Manager should ensure that a written plan of action is developed to address the audit findings

The action plan should include

A list of corrective actions (or reason why no action is necessary)

A timetable for implementation of corrective actions

Responsibilities for implementation

Note: The corrective actions should be entered into the company tracker and forwarded to the Corporate Audit Coordinator as soon as practical

A status report on progress in achieving the items detailed in the written action plan should be submitted to the Manufacturing Manager and the Corporate Audit Coordinator every quarter until all corrective actions have been completed

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For each module, the auditors developed an opinion as to the implementation of safety management systems at the facility as follows

Module	Requires Significant Improvement	Requires Improvement	Generally Meets	Meets	Substantially Meets
Hazard Communication		X			
Confined Space Entry				X	
Lockout/Tagout				X	
Means of Egress				X	
Fire Prevention and Emergency Action Plans		X			
Contractor/Visitor safety program				X	
Walking and Working Surfaces		X			
Electrical Safety			X		
Hearing Conservation				X	
Powered Industrial Vehicles			X		
Hoisting Equipment			X		
Personal Protective Equipment				X	
Machine Guarding			X		
Incident Investigation			X		
Chemical Storage				X	
Review Audit Action Items			X		

Description of Audit Opinion Categories:**Substantially Meets Governmental and Internal Requirements**

The audit results substantiate a high degree of compliance. The facility is in compliance with most of the applicable requirements reviewed but only a few requirements were not satisfied. These departures are considered to represent isolated exceptions in an otherwise effective compliance program.

Meets Governmental and Internal Requirements

The facility is judged to meet all (or virtually all) applicable items included in the audit scope. For those very few requirements where isolated exceptions are noted, these departures are determined to be occasional and anomalous and are considered inconsequential in comparison to the overall level of compliance achieved. It is intended for locations that are found to be in full compliance with applicable requirements.

Generally Meets Governmental and Internal Requirements Except as Noted

Several exceptions to applicable requirements are noted. These exceptions are more than isolated anomalies and reflect weakness in the design and/or implementation of compliance programs.

Requires Improvement to Meet Governmental and Internal Requirements

Several exceptions to applicable requirements are noted and some of the exceptions reflect the absence of required programs, significant departures from established criteria, or lapses in program implementation.

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Requires Significant Improvement to Meet Governmental and Internal Requirements

Many exceptions to applicable requirements are noted, including several significant departures from established criteria, the absence of several required programs, or prolonged inattention to the resolution of previously identified issues

8 **Specific Audit Findings****8.1 Fire Prevention and Emergency Action Plans 29 CFR 1910.155**

8 1 1 Consider repairing the 2" main sprinkler pipe that is protecting the reactors (break is on deck under the condenser RX 700) as soon as practical This is a critical line of defense for our reactors 29 CFR1910 38 (b)(2)(i)

8.2 Means of Egress 29 CFR 1910.35

8 2 1 Consider reviewing exit signs in the plant Some need to be installed and some need to be repaired 29CFR 1910 36

8.3 Electrical Safety 29 CFR 1910.333

8 3 1 Consider reattaching the ground on vessel 87-475 29 CFR1910 106 (e)(6)(ii)

8 3 2 Consider labeling electrical box on 2nd floor and roof of compound plant 29CFR 1910 303(f)

8 3 3 Consider putting appropriate covers on conduits in the following locations Compound plant – Bagging area by forklift entrance top north and south side 29 CFR 1910 305(b)(2)

8 3 4 Consider a proper plug on an electrical box over the #8 bird It is presently covered by electrical tape 29 CFR1910 305 (b)(2)

8 3 5 Consider replacing a missing breaker cover (B-13) on what appears to be a live system 29 CFR1910 305 (b)(2)

8 3 6 Consider removing old wiring and capping conduits in the old sample line area 29 CFR1910 305 (b)(2)

8 3 7 Consider removing or replacing temporary wiring (extension cord) with permanent wiring by substation #5 29 CFR1910 307 (b)

8 3 8 Consider establishing a PM/inspection program for GFCI At the time of this audit proof could not be established of testing GFCI 29 CFR 1910 119

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8.4 Powered Industrial Vehicles 29 CFR 1910.178

- 8 7 1 Consider developing and documenting monthly inspections of cranes critical items (i.e. brakes, crane hooks) Documentation could not be provided at the time of this audit Also noted was a missing safety latch on the Grove crane 29 CFR 1910 180 (d)(6)
- 8 7 2 Consider installing a load rating on both sides of your cranes 29 CFR 1910 179 (b)(8)
- 8 7 3 Consider establishing a daily documented inspection program for forklifts, cranes, man lifts, pallet jacks and industrial vehicles Although a inspection system is on the back of some forklifts there is evidence showing that inspections are not being done (forklift M39712 with out a horn) (missing inspection cards - M391006, M39712, M39712, 50, M391006, M39356 and M390094) Pallet jacks are not under any type of inspection program or repair program 29 CFR 1910 178 (q)(7)
- 8 7 4 Rail car unloading PA was not chocked properly Other incidents of not chocking or chocking improperly were noted during this inspection 29 CFR 1910 178 (k)(2)
- 8 7 5 Consider developing a monthly inspection and certification program for the crane's running ropes CFR 1910 180 (g)(1)

8.5 Confined Space Entry 29 CFR 1910.146

See Good Management Practices (GMP) 8 18 12

8.6 Lockout/Tagout (Control of Hazardous Energy) 29 CFR 1910.147

- 8 6 1 Consider reviewing lockout-tagging procedures In MCC (compound) lock was noted with out identification 29 CFR 1910 147(c)(5)(ii)(d)

8.8 Hearing Conservation 29 CFR 1910.95

- 8 8 1 Consider ensuring the noise level drawing on site At the time of the audit this record could not be produced 29 CFR 1910 95(b)(1)
- 8 8 2 Consider placing hearing protection signs where needed 29 CFR 1910 95(b)(1)

8.9 Hazard Communication 29 CFR 1910.1200

- 8 9 1 Consider installing HazCom labeling through out the plant There were some vinyl tanks marked but the rest of the plant needs consideration 29 CFR 1910 1200(f) and (g)

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- 8 9 2 Consider reviewing drums that are stored in the "old chiller" building. Some are marked as water/glycol others are not marked. 29 CFR 1910 1200(f) and (g)
- 8 9 3 Consider installing a Hearing Protection sign by the doorway leading to the compressor area at the compound unit. 29 CFR 1910 1200
- 8 9 4 Consider removing the lead signs. If lead is no longer an issue. 29 CFR 1910 1201
- 8 9 5 Consider replacing the caustic unloading sign. It is very worn. 29 CFR 1910 1201
- 8 9 6 Consider marking the types of hazardous materials stored in the Hazardous materials storage area (Compound plant). 29 CFR 1910 1200(f) and (g)

8.10 Walking and Working Surfaces 29 CFR 1910.176

- 8 10 1 Consider repairing in the interlock on the elevator (1st floor) of the make-up area. The bottom floor protective cage was open while the elevator was on the 2nd floor. Leaving a hazardous open area for someone to walk into. 29 CFR 1910 23 (a)(2)
- 8 10 2 Consider installing handrail on top of the Recovery building. This is used as a work area where only partial coverage of the roof is guarded by handrails. 29 CFR 1910 23 (a)(3)
- 8 10 3 Consider installing handrail on top of the "old chiller" building. There is access to the roof and handrails guard only part of the roof. 29 CFR 1910 23 (a)(3)
- 8 10 4 Consider a total clean up of the "old chiller" building (wet floors, tripping hazards and is used as an "unorganized" storage area. 29 CFR 1910 23 (c) 29 CFR 1910 22 (a)(2)
- 8 10 5 Consider repairing temporary flooring that has foot size holes in the old sample line area. 29 CFR 1910 23 (a)(8)(i) and (ii)
- 8 10 6 Consider re-stripping the yellow VCM borders. 29 CFR 1910 23 (a)(3)

8.11 Contractor /Visitor Safety Program 29 CFR 1910.119(h)

- 8 11 1 Consider including your contract security in your PSM audit system. 29 CFR 1910 119(h)(2)(v)

8.12 Hoisting Equipment 29 CFR 1910.184-219-179

- 8 12 1 Consider developing and documenting a program for sling inspections. No documentation could be provided at the time of this audit. Note: Sling in cyclone dryer building area is in very poor shape and should be replaced as soon as practical. 29 CFR 1910 184 (e)(3b)(i) and (ii)

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8 12 2 Consider reviewing all chain falls through out the plant The auditor noted several hooks with missing safety latches and load rating capacities 29 CFR 1910 184 (d)

8.13 Personal Protective Equipment 29 CFR 1910.132

8 13 1 Consider enforcing the clean-shaven policy for permanent employees several employees were noted with facial hair growth that would not produce a adequate respirator fit 29 CFR 1910 134(g)(l)

8.13.2 Consider enforcing the hearing protection program employees were noted not wearing their hearing protection 29 CFR 1910 95(i)(2)(i)

8.14 Machine Guarding 29 CFR 1910.212-217

8 14 1 Consider replacing the protective guards on the Kneader(s) in the compound plant 29 CFR 1910 219 (29CFR 1910 213(a)(9))

8 14 2 Consider reviewing and securing machine guarding on pumps in the recovery building (West side) 29 CFR 1910 219 (29CFR 1910 213(a)(9))

8 14 3 Consider replacing the machine guarding on the top of the slurry tank (**SW corner**) that has fallen off 29 CFR 1910 219 (29CFR 1910 213(a)(9))

8 14 4 Consider replacing the guards on the Stearate Feeder to #10 cyclone 29 CFR 1910 219 (29CFR 1910 213(a)(9))

8 14 5 Consider a plant review of Machine Guarding 29 CFR 1910 219 (29CFR 1910 213(a)(9))

8.15 Incident Investigation 29 CFR 1910.119

8 15 1 Consider updating incident investigation form to include the start date of the investigation 29 CFR 1910 119(m)(3)

Note This was also a Recommendation from the 2001 PSM audit It was not one of the recommendations that was audited

8.16 Chemical Storage 29 CFR 1910.106

8 16 1 Consider installing a containment area around the chemical storage area (Compound plant) 29 CFR 1910 106

8.17 Review of Audit Action Items

A representative sample (6 of 30) of closed recommendations were picked from the past PMS and Health and Safety audits Out of the 6 that were picked 2 appeared partially completed they are as follows

- 1 2/2002 H&S audit (no reference available) – 2 of 3 sections were complete – Requirements for blue flags and derails on tracks when

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railcars are connected or personnel must work on or near the railroad tracks - Closure comments indicated procedures were revised At the time of this audit supporting evidence could not be provided

- 2 5/2001 PSM Ref 9 2 4 The IRD Data logger used for vibration analysis is not being calibrated on an established schedule – The closure comments states – IRD data logger has been sent out for calibration PM set up for this The IRD logger was sent out for calibration but is now overdue A PM program could not be provided at the time of this audit
- 3 See 8 15 1

8.18 Other Areas of Interest

- 8 18 1 Consider repairing a major crack the runs from top to bottom of the Recovery building (4 floors, can see through the cinder block) General Duty clause section 5(a)(1)
- 8 18 2 Consider reviewing weep holes on relief valves two of ten Relief valves check had weep hole plugged (yellow RV top of recovery building and large RX West side of plant floor below the condensers) 29 CFR 1910 119(j)
- 8 18 3 Consider replacing asbestos siding on the dryer building Friable asbestos is visible in multiple places due to forklift damage 29 1910 1001(k)
- 8 18 4 Consider removing a Chicago coupling located in the recovery area It is on a line from the seal water separator to the coupling Environmental markings are located on other valves on this line but not on the Chicago coupling which is open to the atmosphere LDAR
- 8 18 5 Consider removing friable asbestos from the bottom of an old suspending agent tank 29 1910 1001
- 8 18 6 Consider removing friable asbestos from the "old chiller" building CFR 29 1910 1001(k)

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8 18 7 Consider the removal of the "old chiller" building Appears the floor is sinking (informed that a sump is located under the floor) General Duty Clause (5)(a) (1)

8 18 8 Consider developing a ladder inspection program 29 CFR 1910 27(f)

8.19 Good Management Practices (GMP)

8 19 1 Consider installing a car seal program for your AMS kill system (main and nitrogen) Car seal valves in their correct position GMP

8 19 2 Consider fixing the latch on the Hydraulic instrument box under RX 700 It is wired shut GMP

8 19 3 Consider updating your Contractor Qualification form to indicate the OSHA 300 log which is required GMP

8 19 4 Consider total decommission of the old electrical panel in the "old chiller" building This area has exposed wiring missing panels and poor out of service labeling There are also some live boxes within this system GMP

8 19 5 Consider securing the instrumentation on the top of RX 400 GMP

8 19 6 Consider enforcing the plastic side shield policy GMP

8 19 7 Consider updating the emergency response plan to indicate manpower changes GMP

8 19 8 Consider moving fire extinguisher #105 in maintenance shop – air hose reel could limit access GMP

8 19 9 Consider moving break area in maintenance shop It is located in the work area next to operating equipment GMP

8 19 10 Consider upgrading identification of breakers in 120v panels throughout the plant GMP

8 19 11 Consider replacing signs that are faded GMP

8 19 12 Consider labeling activator pits with Confined Space Entry required signs GMP

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- 8 19 13 Consider installing overhead clearance markings for piping over plant road GMP
- 8 19 14 Consider placing signs that designate hearing protection required hard hat safety glasses in the appropriate place in the compound area GMP
- 8 19 15 Consider placing signs that designate hearing protection required hard hat safety glasses in the appropriate place in the compound area GMP
- 8.19 16 Consider reviewing the status of what makes a Permit Required Confined Space Several Confined Spaces appeared questionable i.e boiler entry, hydro blasting the condensers on the reactors GMP
- 8 19 17 Consider reviewing the use of DMS for MSDS with employees Some employees did not know their password or how to use DMS Most employees knew where the backs up copies were located

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Aberdeen, MS

2/18/03 to 2/20/03

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	No Basis
1 The audit objectives were clearly communicated to me						
2 The audit took an acceptable amount of time (from entrance to exit)						
3 The disruption of daily activities was minimized as much as possible during the audit						
4 My concerns (such as interviews, schedules, etc) on the manner in which the audit was conducted were adequately considered						
5 Communication of the progress of the audit and immediate concerns was timely and adequate						
6 The audit team demonstrated technical proficiency in the audit areas						
7 The audit team demonstrated courtesy, professionalism, and a constructive approach during the audit						
8 The audit team's conclusions were logical and substantiated						
9 Audit results were accurately reported and appropriate perspective was provided						
10 The audit report was clearly written and logically organized						
11 Overall, the audit will add value to my safety management system						

Comments on any of the areas listed above or other items noted during the audit