



TO Distribution DATE May 17, 1988
FROM R. J. McCorquodale SUBJECT 4/88 Derivatives Safety Audit

The final report (attached) from Roger Corley on the April, 1988, Safety Review of Derivatives has arrived.

So as to expedite and properly coordinate our response, I would like each of you to attend a meeting in which we establish responsibility and time lines for closing items.

Meeting Time & Date: Monday, 5/23/88 - 10:00 A.M.
Location: H. R. Conference Room

Attendees: Lamar White
Roy Sanders
Bob Byars
Jon Shepherd
Al Bresley
Clyde Dennis

RJM/fb

Distribution:

Lamar White
Roy Sanders
Bob Byars
Jon Shepherd
Al Bresley
Clyde Dennis

F.Y.I.
Tom Brown
John Fike
Chuck Bellon
Roger Corley

F F E

INTER-OFFICE CORRESPONDENCE

To: Tom Brown

Date: May 6, 1988

From: Roger Corley *RC*

Location: General Office

Subject: Safety Review

With the telephone closing conference yesterday, the safety review conducted in Lake Charles on April 18-19 by Ron Williams and myself is now complete. As we discussed, the attachments are in two parts. The "observations" are things seen, heard from employees, and impressions from the two reviewers, which form the background and basis for the second part, the "recommendations". The observations are offered for information only, as a way to give better context and perspective to the recommendations.

In general, we find the basic elements of an effective safety program in place and functioning well. Of special note are the Management-Union Safety Committee, the recently reissued safety procedures manual, and the use of the Total Quality Process for safety program activities. In these areas, the Lake Charles plant serves as a model for the Chemicals Group.

A special encouragement was perceived by us in the attitudes of a number of hourly employees interviewed. Both Ron and I, as former Lake Charles employees, felt an increased acceptance of personal responsibility for safety among hourly employees. As an example, one operator told us "I know I'm responsible for the safety of everyone in this control room".

The recommendations deal almost exclusively with maintaining the standards of the safety effort. These are areas where we have allowed the level of execution to slip through oversight or distraction. With a comprehensive safety program such as yours, the formula for success lies primarily in identifying and controlling these slippages.

The cooperation and hospitality of Lake Charles employees was again excellent, and appreciation is extended on behalf of both Ron Williams and myself.

cc: Jim Barter
Joe Cafaro
R. L. Miller
R. E. Williams
Ron Williams

SL 049309

OBSERVATIONS

1. Mechanics at VCM II using grease gun while standing 5 feet above grade with one foot on a 2" pipe and the other spread to the top of a pneumatic valve activator.
2. Mechanics inside dike on west side of Bottoms unit drilling hole in concrete without goggles.
3. A high level of uncertainty and concern appears to exist over the reliability of liver function tests, the interpretation of the results, and the potential impact on reassignment or loss of job.
4. Laydown area E of VCM bullet tanks at VCM II is an eyesore, with some of the fence down flat.
5. A number of employees contacted had a poor understanding of how "points" were awarded in the incentive program, but they also knew that they could get all the information they wanted from their SPU Leader or safety department contact. The impression was that they didn't want or need to know how the safety incentive plan worked.
6. Some employees discussed casually, in a matter-of-fact way, the inconsistency of safety requirements between supervisors. As an example, one supervisor has a thing about wearing safety belts, the next is not concerned in a similar situation. There was no emotion in these comments - just an observation which seemed to be accepted as "the way it is".

7. Hazard Communications

Organics loaders reported not having MSDS sheets on unsymmetrical EDC, Triethane Lights, and pivaloyl chloride. In addition, there was no MSDS available for Nalco 7329, a bis-tributyl tin oxide solution.

On the positive side, operators questioned at VCM II demonstrated a good understanding of how to use their MSDS inventory and microfiche reader. If the Nalco compound had been in their inventory, they would have shown me the MSDS within 5 minutes.

The observation here is that some internal policing is required to assure the integrity of the MSDS inventory, and continued close communication between Purchasing, Safety and operating departments. On the other hand, the HazCom training on MSDS access was demonstrated favorably.

8. Safety Department

A blending of comments received from supervisors and hourly personnel shows the safety department people and function are perceived as follows:

- a. We only see a safety man in our area when there is a problem. Every time they show up, they find fault or a problem of some kind.
- b. Shift safety people have a better rapport with employees than day safety people. Shift safety people are seen as very valuable and necessary.
- c. Safety coordinators should have more authority.
- d. A better job could have been done on asbestos training for maintenance foreman.

9. Management

Management is reported to be more open and receptive to safety ideas and suggestions.

10. Safety Accountability

The majority of the small sample of supervisors who were asked about safety accountabilities, thought only in terms of injury numbers. Accountabilities for specific personal action to improve safety in his area seemed to be a new idea to several supervisors.

11. Safety Training

It appears a good job has been done in complying with OSHA required training, and this can be largely verified from records. Training records lack a mechanism for tracking or identifying employees who missed required training.

12. Communication

This is another area where good work is being done. Employees mentioned a number of avenues of safety information:

- Weekly gangbox meetings
- Monthly safety meetings
- Posted injury narratives
- Posted significant incident reports
- Safety Grams
- "Scoop" articles
- Plant newspaper
- SPU leaders and committees.

One area that was a surprise was that only 1 in 6 hourly employees knew what the Safety Quality Action Team was, even after its function and composition was described.

13. The Management/Union Safety Committee appears to be functioning effectively with positive results. This committee can be considered the model for the Chemicals Group.

RECOMMENDATIONS

1. Audit the condition of contract vacuum trucks for mechanical guards (belt drives), pressure relief valves, and for work practices such as chocking wheels while engine is at high speed in power take off, and backing trucks while wearing full face mask.
2. Install handrails or similar personnel protection at the east side of the clear well for utility pumps at Sportsman's Lake.
3. Study the compatibility of water deluge with product at $PVC1_2$ storage tanks, and/or the need for foam.
4. Install hose racks for large loading hoses at ground level on CPC truck rack.
5. Review the need for coveralls or similar clothing for operators on the Bottoms unit, and communicate results of recommendation to M/U safety committee.
6. Communicate the membership, purpose and activity of the SQAT more effectively to the workforce, especially in the non-management ranks.
7. Review the work procedure for replacing bearings on operating fin fan coolers, to reduce personnel exposure to high temperature surfaces and environment.
8. Remove the weathering wood structure from the catwalk on the west side of Per tri heavies still at the top of the reboiler, or make it a permanent walking surface of grating.
9. Install goggle required signs at the acid tanks on the east side of VCM II.
10. Modify fire monitor #310 handles so it can swing a full arc without the handle striking the chain link fence around transformers for VCM II.
11. Modify the contractor hazard communication program to include more information, such as MSDS information, to contractor management, and more information on hazards and effects of chlorine inhalation to contractor workers.

Repair or replace the respiratory protection portion of the orientation program as it is badly worn.
12. Provide explanations or remedies for the following concerns about the critical alarm testing procedures. These items should be considered questions by the reviewers, based on not having the time to explore each detail.
 - a. What are the safe guards to prevent inappropriate alarm set points in those instances where operators may vary these points as operating rates or conditions change?

- b. What is the decision logic for choosing which instruments or detectors are included in the critical alarm test system?
 - c. Test intervals for alarms do not appear to be consistent. As an example, #4 OHC reactor has many items on a 31 day test cycle, while #6 OHC reactor uses a 180 day cycle for what appears to be the same tests.
 - d. Since the testing is shared by the Critical Alarm Crew and the Analyzer Group, how is communication assured, and possible redundancy or omission of a test addressed?
13. Create opportunities to continue employee education on liver function tests, and look for ways to reduce anxiety over the results.
- Review the cost effectiveness of the current monitoring schedule on the "liver function population" with Jim Barter and Carl Myers. Now that we have had a few month's experience with saturation monitoring, it may be appropriate to reduce the frequency. Repeated monitoring and blood sampling is contributing to employee anxiety.
14. Review procedures for assuring that SRV's removed and sent outside for test/repair are properly cleaned and safe for work. The Bozman case should be borne in mind when reviewing the potential for contaminated valves being sent out.
15. Encourage the inclusion of specific personal actions for safety improvement in the supervisor's area of responsibility as an accountability item, in addition to safety number objectives.
16. Develop a mechanism for auditing attendance lists of regulatory required training to identify and follow up on those who missed the training for any reason.