LOSS PREVENTION AUDIT
(December 13, 1994)

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PLANT CONTACTS: John Dizor, Jeff Harrison, Roy Kolter, Steve Tedeschi

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Following is a list of recommendations from the Loss Prevention portion of the Consolidated Audit. This includes also the Chemical Exposure Index audit and the Burner Management considerations for the gas turbines.

The Loss Prevention audit objectives and content are as outlined in the questionaire that was used as the agenda for the audit process. In addition to the loss prevention questions, the audit provides a process to assure compliance with some of the OSHA 1910.119 requirements in the area of Process Safety. These are listed in the Loss Prevention questionaire.

This audit also provides part of the basis for further audit and risk assessment considerations that are a part of the Dow "Process Risk Management" review for facilities and distribution.

There were several recommendations identified by the plant staff that are specific to the details of the plant and process. These have been tabulated by the various staff people and should be included in the list of follow up action items.

EQUIPMENT / BUILDING LOCATION & FIRE RISK

Emergency procedures need updating to include appropriate action for the office area air intake.

Inspect and correct interior fire wall design. Some penetrations have been made and not properly repaired to restore adequate fire protection design. The area of primary concern is the wall between the B-2601 MCC and the printer room.

The wooden hot box in the B-2601 shop area is not an acceptable design for this service.

ELECTRICAL SYSTEMS

Consider any recommendations from the Electrical Dept. inspection to be a part of this audit for follow up actions.

The Electrical Area Classifications plot plan drawings were last updated, 1987/90. Review them to be sure they are still current.

FIRE PROTECTION SYSTEMS

Reconsider a smoke detector system for B-2601. This should include the MCC area. There is an existing smoke detector control panel located in the computer room that may be adequate to control the system. Contact Bill Franklin to get a certified professional vendor design and cost estimate.

Review the fire extinguisher distribution and type in B-2601. Several extinguisher type and locations need to be changed. Contact Bill Franklin to make these changes.

CRITICAL INSTRUMENTS

Review the critical instruments list. Some Mod5 redundancies can substitute for scheduled off line testing. Contact the Safety Department for a recent update of the Critical Instrument program guidelines.

Review your testing procedures to determine which ones should be loop tests and not just instrument checks.

EMERGENCY BLOCK VALVES

Review the Hydrogen area for EBV's to comply with Tech Center and Reactive Chemical recommendations.

PRESSURE VESSELS

Check any vendor supplied vessels to be sure they meet the LAD Pressure Vessel program registration requirements.

MANAGEMENT OF CHANGE

Operating Discipline - Management of Change is currently being audited for compliance with Level #6 requirements. When the CA2 audit is done (12/14/94), include the recommendations in this section of the Consolidated Audit for follow up.

PROJECT REVIEWS

To comply with the OSHA 1910.119 requirements, any project reviews need to be documented and files organized so recommendation follow ups can be tracked to completion.

CHEMICAL EXPOSURE INDEX

Inspect the liquid chlorine line to the Chlorine plant for the following maintenance items:

1. Insulation repair
2. Need for pipe shoes
3. Small piping repair / replacement in the storage tank area

A C.E.I. greater than 200 using Version 2 requires further risk assessment studies (HAZOP) to be done to comply with the Dow "Process Risk Management Guidelines for Facilities and Distribution". Contact Loss Prevention for further discussion and evaluation of this recommendation.

I appreciate the extent of preparation done by the Chlor Alkali staff in conducting this audit. This made it possible for the meetings to be conducted well in advance of the wrap up session. We were able to concentrate the pre-audit meetings on discussions of concerns without having to track down the necessary documentation information. Overall, it was one of the best prepared groups that I have worked with.

If I can be of any further service in the follow up to these recommendations please contact me.

Buck Bailey
Loss Prevention

MISCELLANEOUS B-2601 INSPECTION OBSERVATIONS

1. Printer room clutter and paper items scattered about.
2. Some un-necessary items cluttered in the MCC.
3. Housekeeping in the air handling room. (Inst.shop)
4. Rubber boots piled up in the hot water heater room. (Change room)
5. Table top clutter (Lab)
6. Housekeeping in the small parts area of the shop.
7. Paper boxes on top of the hot box.