

INSURANCE PACKAGE:Recommendations:

1. Make minor corrections to the "Unit Loss Prevention Summary Form" and type up. I will send it and the other insurance package items on to Midland.

**CONTROL OF PROCESS CHANGE/SAFETY & LOSS
PREVENTION REVIEWS:**

The CA II plant will develop a formal procedure for process change reviews when the new US Area Management of Change standard is implemented.

Recommendations:

1. Verification of materials for maintenance or new projects. (Ref. your identified opportunities)

Again, I appreciate the advance preparations and cooperation by the Chlor-Alkali staff. If you have any further questions, contact me or Jean Larroux or Bill Franklin for Fire Protection.

CEI AUDIT

(Tuesday, July 28, 1992 - 1:00 - 3:15 PM)

AUDIT TEAM: Jim Gibson, Mark McCullough, Buck Bailey

ATTENDANCE: Ed Pittman, Tom Normand,
Roger Hudson, Howard Wilkinson, Allan Sandow,
Bill Cook, Mike Sticklen

PRESENTER: Bob Bartholomew

WRITER: Jim Gibson, Mark McCullough

In general, the Chlor-Alkali II plant appears to be in good shape from a CEI standpoint. CA II is clean, appears to be well run, operators are

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knowledgeable, well trained, and seem to have a good attitude. Plant documentation and procedures are on-line with easy access from any VAX terminal. Operators seem comfortable with this system and proficient in its use. Conversion of the training program to the IPT format is approximately 80% complete and is proceeding at a good pace. One area in which improvement could be made is the updating of the Heat and Material Balances and P&IDs. These appear to be out of date in areas not affected by the recent Mod V conversions.

The first phase of the CEI Audit, the Pre-Audit Review was held at CA II on Wednesday, July 15. People present at this meeting were Mark McCullough and Jim Gibson of the CEI Audit team and Bob Bartholomew of CA II. The pre-audit questionnaire, plant documentation, scenario selection and calculations were reviewed at this time. The operator interview and emergency drill portion of the Pre-Audit Review were held on July 28. The operator interview was conducted with Debbie Halbert. Operations personnel involved in the emergency drill were Sidney Williams, Bobby Gueho, and Anita Ruiz. The scenario used in the emergency drill was a one inch diameter hole in the liquid chlorine transfer line between CA II and the Chlorine plant. Both the operator interview and emergency drill were satisfactory.

Recommendations:

1. It is apparent that a lot of work went into the development of the worst credible scenarios and the resulting spill calculations. It may be beneficial to include more explanation in the documentation to prevent "re-inventing the wheel" at future audits. In addition, these scenarios should be discussed with operations. The intent of these discussions should be to give operations a better understanding of the potential impact on the public of spills of this size and to initiate discussions of better methods to prevent or mitigate such spills.
2. The most likely "worst case" scenarios at CA II involve leaks or breaks in liquid chlorine lines or tanks. It would be beneficial for CA II to audit all liquid chlorine containing lines and tanks for screwed connections and small fittings. These should be eliminated where possible. It is recognized that CA II is not aware of the existence of any such connections or fittings, but this should be verified. CA II should also investigate whether it is practical to develop a means of monitoring corrosion in plant piping systems containing hazardous materials.
3. CA II should address ownership of interplant pipelines. This would eliminate confusion concerning ownership and who is responsible for preventive monitoring of these lines.

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4. CA II should consider the development of a procedure describing the desired operator response in the event of an emergency involving potential impact on the public. The procedure should focus only on a "key few steps" and should be specific to each operator job type. Consideration should also be given to the development and implementation of an emergency response IPT module on these procedures.
 5. Documented training of employees on immediate response to area monitoring system alarms is needed. An IPT module might be the most appropriate means of accomplishing this task.
 6. Follow-up actions to emergency drills need to be documented. Emergency drills are properly reviewed and action items developed when required. All that is needed to complete the files is to document when the follow-up action items are complete.
 7. A plan to update the CA II P&IDs and H&MBs needs to be implemented. Federal regulations may soon be in effect which require all P&IDs to be current. CA II should consider assigning someone to define the scope of this task and to develop a plan to bring these documents up to date. The plan could be to continue the present practice of bringing P&IDs and H&MBs up to date as projects are completed. However, it would be good to know where CA II stands in this effort and when it expects to be completed.
 8. CA II should work towards a more consistent annual review of all operating procedures. The plant does review the majority of the procedures but a 100% review is required.
 9. A method of quickly and accurately estimating the size of a spill is needed for agency reporting. Consideration should be given to adopting the new spills program "EMIT." EMIT was developed by Engineering Services in conjunction with Environmental.
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