

Safety Audit Summary

General Chemical Corporation Bay Point Works

501 Nichols Road, Bay Point

Introduction

Contra Costa Health Services (CCHS) conducted a fourth comprehensive audit/inspection of the safety programs, policies, and procedures developed by General Chemical Bay Point Works (BPW) located at 501 Nichols Road, Bay Point. This safety audit, conducted in January 2008, was performed to determine compliance with the California Accidental Release Prevention (CalARP) Program and the more comprehensive Contra Costa County Industrial Safety Ordinance (ISO) Safety Program. The prevention programs address maintenance, operating procedures, contractor safety, personnel training, incident investigations and understanding hazards at the plant. The inspection also examines the management systems in place to implement these programs and the plant's emergency response program to make sure that the plant is prepared to respond to an emergency involving a hazardous chemical.

The audit also checks to make sure that General Chemical plant has addressed Contra Costa County's specific requirements for managing additional safety programs beyond those already required under State and Federal regulations. These additional safety programs include:

- Effectively managing organizational changes at the facility so there is minimal impact to emergency response and operations;
- Conducting detailed incident investigations to fix the systems or safety programs that were at fault, instead of just assigning blame to an employee, in order to prevent possible future similar incidents from occurring;
- Reviewing the facility's operations for signs of hidden problems that could lead to possible significant incidents. Identifying these signs and correcting them are the primary purposes of the human factors program; and;
- Assessing ways to improve new and existing equipment/processes to reduce the impact of the hazards and make them safer.

During a comprehensive safety audit, CCHS reviews individual safety programs through answering up to 480 questions. The CCHS 2008 safety audit at General Chemical resulted in 60 corrective actions for General Chemical BPW to implement and 16 other items that are not required but may assist in accident prevention. Identified below is a summary of some of the findings, both good and bad, within the various safety programs. For ease of presentation, the safety programs have been grouped into three broad topics: management systems, process/equipment issues, and the County ISO requirements.

Management System

- Management Oversight: CCHS found that there was a lack of adequate union/management safety committee meetings to allow employees take an active role in health and safety programs.
- Changes in Process and Equipment: When process changes were made, complete documentation was not in place for training and revised procedures. Process change approvers needed to be re-trained on documentation requirements. A process was not in place to track completion of temporary changes including returning the equipment and procedures to the original design at the end of the temporary change period. Proper safety reviews were not performed to confirm that construction and equipment are same as design and all appropriate procedures are in place.
- Compliance Audit: BPW completed a compliance audit in August 2007. However, BPW did not review the recommendations from their compliance audit timely and did not promptly determine and document an appropriate response to each of the findings of the compliance audit.
- Contractor Safety: BPW has made significant improvements in their Contractor Program. BPW obtains and evaluates information regarding the contractor safety programs when selecting a contractor. BPW provided contractors with a site orientation and performed field surveys.
- Training: Operating procedures refresher training was not properly documented.

Process/Equipment Issues

- Mechanical Integrity: BPW has made significant improvements in using their computerized maintenance management program.
- Process/Equipment Safety Information: BPW achieved great improvement in upgrading their Process Safety Information binder. However, BPW still needs to confirm that all information is consistent for all Safety Information binders at the facility for all processes.
- Process Hazard Analysis (PHA): The seismic study associated with PHAs was not performed at least every five years for that process to assess whether seismic hazards have been adequately considered. Criteria were not established to identify when to require a recommendation in a PHA. The PHA resolutions implemented were not adequate for the service conditions they will face. The results of the PHAs were not communicated to employees who may be affected by the PHA recommendations. The justification for rejecting PHA recommendations were not adequately documented that implementing the action is impractical.
- Operating Procedures: Operating procedure did not include safety and health considerations. The operating procedures did not consistently describe safety systems and their functions.

Industrial Safety Ordinance (ISO)

Requirements

- BPW had trouble retaining operators and engineers, although the positions were not eliminated. Training of replacement personnel and employees conducting incident investigations, PHAs and writing operating procedures were found to be inadequate.
- CCHS also identified significant deficiencies in the following: Review of each operating procedure for human factors deficiencies and ensuring that the deficiencies are tracked through resolution; maintaining an effective safety program and implementing facility wide reviews for signs of hidden problems that could lead to possible significant incidents; encouraging employee participation in addressing and reviewing documentation related to safety elements; and effectively addressing inherently safer systems/design (look for ways to reduce the hazard and make the process safer).

Follow-up Safety Program Activities

Prior to and after the 2008 audit, BPW has been working with CCHS in monthly meetings to complete the following actions:

- Continue on making improvements in their internal Safety Culture
- Update their Safety Plan
- Schedule and Implement the actions identified from the 2008 CCHS safety audit. BPW has been aggressively implementing these actions. BPW has provided their proposed remedies and a schedule to CCHS to review the status of the actions completed and their plan for completion of the remaining actions.
- Based on a review of the BPW proposed remedies to the CCHS audit, BPW has made good progress and plans to address the majority of the recommendations by the end of 2008.

Next Steps

The results of the entire safety audit are now available for review and CCHS encourages the public to provide comments. Written comments postmarked no later than December 15, 2008 should be sent via email to ARPTeam@hsd.cccounty.us or addressed to Contra Costa Health Services Hazardous Materials Programs, c/o Randy Sawyer, 4333 Pacheco Blvd., Martinez, CA 94553. CCHS will respond to all written comments.

Additional Information

For more information, call 925-646-2930 or logon to the CCHS website (cchealth.org). To review the complete safety audit report, visit the Bay Point Library at the Riverview Middle School, 205 Pacifica Avenue, Bay Point, CA 94565 or call 925-646-2286 for an appointment to view the report at CCHS' offices..