



# General Chemical West Richmond Works 525 Castro Street, Richmond, CA

## Safety Audit Summary

### **Introduction**

Contra Costa Health Services (CCHS) conducted a third comprehensive audit/inspection of the safety programs, policies, and procedures developed by General Chemical West Richmond Works (GCR) located at 525 Castro Street in Richmond. The safety audit, conducted in the spring of 2006, was performed to assess compliance with the California Accidental Release Prevention (CalARP) Program and the more comprehensive City of Richmond's Industrial Safety Ordinance (RISO) Safety Program. These prevention programs address maintenance, operating procedures, contractor safety, personnel training, incident investigations and understanding hazards at the plant. The inspection also examined the management systems in place to use these programs and the plant's emergency response program to ensure that the plant is prepared to respond to an emergency involving a hazardous chemical.

The audit also checks to verify that GCR has addressed the City of Richmond'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 plant 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 assigning blame to an employee, in order to prevent similar incidents from occurring.
- » Reviewing the plant'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.
- » Assessing ways to improve equipment and processes to reduce the impact of the hazards and make them safer to run.

During a comprehensive safety audit, CCHS reviews individual safety programs through answering more than 470 questions. The CCHS 2006 safety audit at GCR resulted in 59 corrective actions for GCR to implement and 25 other items that are not required, but may assist in accident prevention. The following is a summary of some of the issues, 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 City of Richmond ISO requirements.

## **Management Systems**

- » Management Oversight: At the time of the audit, a significant portion of the management staff was new to the plant. The management staff needs to become more familiar with the existing safety programs in place and the requirements of the CalARP and RISO programs.
- » Procedures and Policies: Extensive policies and procedures are in place to manage the safety and prevention programs at this plant.
- » Training: The plant has a system in place for training of personnel, but needs to improve the documentation and tracking of the training.
- » Compliance Audit: The plant documented that internal reviews were performed to verify that prevention programs are in place and working, and at the time of the CCHS audit, over half of the internal review actions were already addressed.
- » Contractor Safety: The plant routinely uses contractors for maintenance work. The plant needs to improve the prescreening and on-site review process to evaluate contractor's health and safety programs.

## **Process/Equipment Issues**

- » Mechanical Integrity: At the time of the audit, the plant was in the process of compiling and finalizing a database that documents inspections, tests and repairs on the process equipment, and this work was not yet complete. Some equipment did not yet have inspection schedules. The plant needs to make sure that the process of including all equipment in the inspection schedule and repair-tracking database is complete.
- » Operating Procedures/Process Hazards Analysis: The plant has extensive operating procedures. The plant needs to improve their tracking of process hazards analysis action item tracking.
- » Process and Equipment Information: The plant has compiled process chemistry information, process flow diagrams, physical chemical data, and process data. The plant needs to improve the quality of its relief design and ventilation design information.

## **City of Richmond Industrial Safety Ordinance (RISO) Requirements**

- » A significant portion of the site management is new to the plant and needs to be more active in continuing and establishing safety program initiatives. There needs to be senior staff accountability for the success of the safety programs. Having ownership of programs will greatly improve and enhance the overall safety of the plant.
- » The plant needs to improve the following:
  - o The use and documentation of methods that minimize potential for human error.
  - o Participation of employees in the safety program by including more non-management employees on incident investigation teams.
  - o Documentation of inherently safer systems for new and existing plant processes, and ways to make the plant processes safer.

## **Next Steps**

The results of the safety audit and GCR's proposed plan to address the action items is currently in discussion between GCR and CCHS. An announcement to review the complete safety audit will be made and a public meeting will be held to provide opportunity for CCHS to receive public comments and questions.

## **Additional Information**

For more information, call 925-646-2907 or log on to the CCHS website ([cchealth.org](http://cchealth.org)).