

Safety Audit Summary

Air Products and Chemicals Inc.

110 Waterfront Road, Martinez

Introduction

Contra Costa Health Services Hazardous Materials Programs (CCHSHMP) conducted the seventh comprehensive audit/inspection of the safety programs, policies, and procedures developed by Air Products and Chemicals, Inc. (APCI) at the Martinez Refinery Company. This safety audit conducted in 2020, 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 examined the management systems in place to implement 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 verified that AP-MRC plant have 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 plant so there is minimal impact to emergency response and operations;
- Conducting detailed incident investigations to correct safety programs or management system that contributed to the incident instead of assigning blame to an employee in order to prevent similar incidents from occurring in the future;
- Reviewing the plant's operations and physical layouts for signs of hidden problems that could lead to possible significant incidents. Identifying these signs and correcting them are the primary purposes of the ISO's Human Factors Program;
- Assessing ways to improve new and existing equipment/processes to make them safer to run and to reduce the impact of the hazards in case of an incident.

During a comprehensive safety audit, CCHSHMP reviews individual safety programs through answering up to 480 questions. The CCHSHMP 2020 safety audit at APCI Martinez plant resulted in 16 corrective actions for APCI to implement, and 22 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:* Systems to manage the safety programs were in place and functioning per the requirements of the regulation. However, there were many changes to management and APCI should closely monitor their programs.
- *Compliance Audit:* The facility documented that completed compliance audits have been performed to verify that all CalARP/ISO programs are in place.

Process/Equipment Issues

- *Operating Procedures:* were mostly consistent and in line with the requirements, but the lack of temporary operating procedures and a need for human factors consideration could be improved.
- *Compliance Audit:* The stationary source did not always document periodic evaluations of contractor performance by name, and the EAP did not have a record of annual fire department visits.
- *Contractors:* The facility did not always document periodic evaluations of contractor performance by name, and the EAP did not have a record of annual fire department visits.

Industrial Safety Ordinance (ISO) Requirements

- A more thorough review must be conducted to identify which procedures require procedural PHAs and these PHAs must be conducted.
- A more thorough review must be conducted to identify which procedures require procedural PHAs and these PHAs must be conducted.

Next Steps

The results of the entire safety audit are available for review at the Martinez library and at the Hazardous Materials Program Office. (See information below).

Additional Information

For more information, logon to the Hazardous Materials Programs website: <http://www.cchealth.org/groups/hazmat/>. The complete safety audit report is at the Martinez Public Library at 740 Court St., Martinez or call 925-335-3200 for an appointment to view the report at CCHSHMP's offices.



April 2023