INDUSTRIAL SAFETY ORDINANCE
ANNUAL PERFORMANCE REVIEW AND EVALUATION REPORT

February 12, 2013

CONTRA COSTA
HEALTH SERVICES

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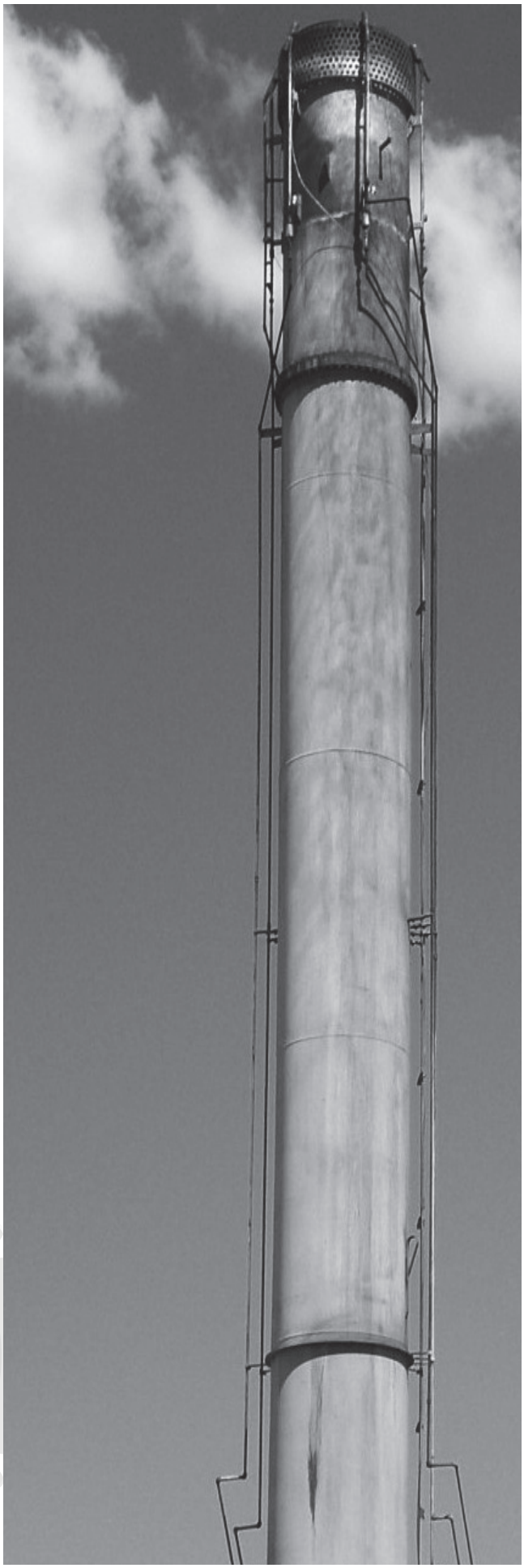
Executive Summary

On December 15, 1998, the Contra Costa County Board of Supervisors adopted a landmark Industrial Safety Ordinance requiring regulated facilities in the County to implement a multitude of safety programs aimed to prevent chemical accidents that could have detrimental impacts to the surrounding communities. The requirements of the Industrial Safety Ordinance are some of the most stringent in the United States, if not the world. Additionally, the Industrial Safety Ordinance is mandated to include participation from all stakeholders, including industries, agencies, elected officials and the public at large.

There has been over a 10-year period a trend of fewer and less severe Major Chemical Accidents or Releases (MCAR) incidents in the County since the adoption of the Ordinance. However, there were several Community Warning System (CWS) Level II incidents and one CWS Level III incident this year. This is causing some concern; however, CCHMP believes that this is not directly reflective of the effectiveness of the Industrial Safety Ordinance requirements, but serves as a reminder that we all have to stay vigilant in ensuring safe facility operations and that implementation of mature prevention programs are challenging.

The Accidental Release Prevention Program Engineers in the Hazardous Materials Division of Contra Costa Health Services have oversight of the Industrial Safety Ordinance and are continuing to explore ways to improve the overall implementation of the Industrial Safety Ordinance and the prevention program elements. The staff continues to work with other agencies such as the U.S. Environmental Protection Agency, the California Occupational Safety and Health Administration and other local program agencies for sharing of regulatory interpretations and inspection results. The staff also cooperated with the U.S. Chemical Safety and Hazard Investigation Board's (CSB) investigation of the No. 4 Crude Unit fire at Chevron that occurred August 6, 2012.



Public Participation

The Hazardous Materials Programs have an established public outreach process and is continually looking at ways to improve. The following items have been implemented based on recommendations from stakeholders and the actions taken this year:

- Public outreach information booths at existing venues
  - » Air Products' and Shell Martinez Refinery's Safety Plans were shared at the John Muir Birthday/Earth Day celebration at the John Muir National Historic Site in Martinez on April 21, 2012
  - » Tesoro Golden Eagle Refinery's Preliminary Audit Findings and Safety Plan were shared at the Concord Emergency Preparedness Fair at Todos Santos Park, Concord on September 6, 2012
- Presentations to Interested Groups
  - » Shell Martinez Refinery's preliminary audit results and general Industrial Safety Ordinance information to Shell Community Advisory Panels (CAP) members at the Shell Club House on March 5, 2012
  - » General Chemical Bay Point Works preliminary audit findings were presented to the Bay Point Municipal Advisory Council (MAC) and the public at Ambrose Community Center in Bay Point on October 2, 2012
  - » Tesoro Golden Eagle Refinery's Preliminary Audit Findings and general Industrial Safety Ordinance information were presented to CAP members October 24, 2012
- Attend public meetings after major incidents:
  - » CCHMP hosted a joint public meeting with Supervisor Glover and Phillips 66 to address public concern at the Crockett Community Center on July 2, 2012 regarding the June 15, 2012 sour water tank incident
  - » CCHMP presented and gathered information about the Phillips 66 June incident at that Rodeo Community Advisory Panel meeting on July 23, 2012 in Rodeo
- Most recent audit findings summarized in an easily read format in English and Spanish
- Information on regulated businesses in an easily read format in English and Spanish
- Industrial Safety Ordinance Information Sheet in English and Spanish

The Board of Supervisors also requested that staff provides copies of the Annual Report to communities through the Community Advisory Panels (CAP). CCHMP provided copies of the 2010 and 2011 ISO Annual Reports to CAP representatives for distribution for Phillips 66, General Chemical Bay Point Works, General Chemical Richmond, Shell Martinez Refinery and Tesoro Golden Eagle Refinery. This 2012 Annual Report is available on our website and will be sent to CAP representatives for distribution.

Audits

Audits of the regulated businesses are required at least once every three years to ensure that the facilities have the required programs in place and are implementing the programs. We completed two ISO audits this year:

- Shell Martinez Refinery – February 2012
- Air Products at Shell and Air Products at Tesoro – April 2012

Major Chemical Accidents or Releases

Since the 2011 report to the County Board of Supervisors, there were three Major Chemical Accidents or Releases (MCAR) with a severity level I and one MCAR with a severity level II for the County Industrial Safety Ordinance facilities that occurred from October 2011 to October 2012 which were captured in this reporting period. It is unsettling to report that there has been one severity level III incident at the Chevron Refinery which is under the jurisdiction of the Richmond Industrial Safety Ordinance.

Conclusion

Up until the summer of 2012, the number and severity of the Major Chemical Accidents or Releases have been in a general declining trend since the implementation of Industrial Safety Ordinance. The implementation of the Industrial Safety Ordinance has improved safety programs and operations at the facilities that are regulated. However, CCHMP will seek assistance from stakeholders including the regulated facilities, workers and community members to explore additional measures that can be taken that will further reduce likelihood of chemical accidents at these industrial facilities. CCHMP will also work closely with the CSB on any recommendations that they may have to strengthen the County's and the City of Richmond's Industrial Safety Ordinances.

Introduction

The Contra Costa County Board of Supervisors passed the Industrial Safety Ordinance due to accidents that occurred at oil refineries and chemical plants in Contra Costa County. The effective date of the Industrial Safety Ordinance was January 15, 1999. The ordinance applies to oil refineries and chemical plants with specified North American Industry Classification System (NAICS) codes that were required to submit a Risk Management Plan to the U.S. EPA and are program level 3 stationary sources as defined by the California Accidental Release Prevention (CalARP) Program. The ordinance specifies the following:

- Stationary sources had one year to submit a Safety Plan to Contra Costa Hazardous Materials Programs stating how the stationary source is complying with the ordinance, except the Human Factors portion (completed January 15, 2000)
- Contra Costa Hazardous Materials Programs develop a Human Factors Guidance Document (completed January 15, 2000)
- Stationary sources had one year to comply with the requirements of the Human Factor Guidance Document that was developed by Contra Costa Hazardous Materials Programs (completed January 15, 2001)
- For Major Chemical Accidents or Releases, the stationary sources are required to perform a root cause analysis as part of their incident investigations (ongoing)
- Contra Costa Hazardous Materials Programs may perform its own incident investigation, including a root cause analysis (ongoing)
- All of the processes at the stationary source are covered as program level 3 processes as defined by the California Accidental Release Prevention Program
- The stationary sources are required to consider Inherently Safer Systems for new processes or facilities or for mitigations resulting from a process hazard analysis
- Contra Costa Hazardous Materials Programs will review all of the submitted Safety Plans and audit/inspect all of the stationary sources' Safety Programs within one year of the receipt of the Safety Plan (completed January 15, 2001) and every three years after the initial audit/inspection (ongoing)
- Contra Costa Hazardous Materials Programs will give an annual performance review and evaluation report to the County Board of Supervisors

The 2006 amendments to the Industrial Safety Ordinance require or expand the following:

1. Expand the Human Factors Program to include Maintenance
2. Expand the Management of Organizational Change to include Maintenance and all of Health and Safety positions
3. Require the stationary sources to perform Safety Culture Assessments one year after the Hazardous Materials Programs develop guidance on performing a Safety Culture Assessment (November 2009)
4. Perform Security Vulnerability Analysis

The seven stationary sources now covered by the Industrial Safety Ordinance are:

1. Air Products at the Shell Martinez Refining Company
2. Air Products at the Tesoro Golden Eagle Refinery
3. Shell Martinez Refining Company
4. General Chemical West in Bay Point
5. Phillips 66 Rodeo Refinery
6. Tesoro Golden Eagle Refinery
7. Air Liquide Rodeo Hydrogen Plant

The Air Liquide Rodeo Hydrogen Plant began operation in July 2009 and is located adjacent to the Phillips 66 Rodeo Refinery. The facility produces purified hydrogen for Phillips 66 Refinery and other industrial customers, and also produces steam and electricity for the Phillips 66 Refinery. Contra Costa Hazardous Materials Programs completed the CalARP/ISO audit of this facility June 29, 2010, and made the audit report available to the public at local libraries and at the Rodeo-Hercules Fire District Open House in October 2011.

Contra Costa Hazardous Materials Programs completed and issued the first Contra Costa County Safety Program Guidance Document on January 15, 2000. The stationary sources were required to comply with the Human Factors section of this guidance document by January 15, 2001.

Hazardous Materials Programs staff has worked with the stationary sources to develop a Safety Culture Assessment Guidance Document, which was finalized and issued November 10, 2009. Staff began reviewing these Safety Culture Assessments in December 2010. Additionally, staff issued a revised Safety Program Guidance Document to reflect the ISO amendments, and clarifications based on the audit findings in July 2011.

Contra Costa Hazardous Materials Programs reviewed all Safety Plans submitted to the Department and started the fifth round of audits of the stationary sources, as required by the ordinance. In addition, Contra Costa Hazardous Materials Programs performed a specialized audit for all the stationary sources for their Human Factors programs and for Inherently Safer Systems in 2002. The status of the reviews and all audits are discussed in Table I within the report.

Annual Performance Review and Evaluation Report

The Industrial Safety Ordinance specifies that the contents of the annual performance review and evaluation report contain the following:

- A brief description of how Hazardous Materials Program is meeting the requirements of the ordinance as follows:
  - » Effectiveness of the Department's program to ensure stationary sources comply with the ordinance
  - » Effectiveness of the procedures for records management
  - » Number and type of audits and inspections conducted by Hazardous Materials Programs as required by the ordinance
  - » Number of root cause analyses and/or incident investigations conducted by Hazardous Materials Programs
  - » Hazardous Materials Programs' process for public participation
  - » Effectiveness of the Public Information Bank
  - » Effectiveness of the Hazardous Materials Ombudsperson
  - » Other required program elements necessary to implement and manage the ordinance

- A listing of stationary sources covered by the ordinance, including for each:
  - » The status of the stationary source's Safety Plan and Program
  - » A summary of the stationary source's Safety Plan updates and a listing of where the Safety Plans are publicly available
  - » The annual accident history report submitted by the regulated stationary sources and required by the ordinance
  - » A summary, including the status, of any root cause analyses and incident investigations conducted or being conducted by the stationary sources and required by the ordinance, including the status of implementation of recommendations
  - » A summary, including the status, of any audits, inspections, root cause analyses and/or incident investigations conducted by Hazardous Materials Programs, including the status for implementing the recommendations
  - » Description of Inherently Safer Systems implemented by the regulated stationary source
  - » Legal enforcement actions initiated by Hazardous Materials Programs, including administrative, civil and criminal actions
- Total penalties assessed as a result of enforcement of the ordinance
- Total fees, service charges and other assessments collected specifically for the support of the ordinance
- Total personnel and personnel years used by the jurisdiction to directly implement or administer the ordinance
- Comments that raise public safety issues from interested parties regarding the effectiveness of the local program
- The impact of the ordinance in improving industrial safety

Effectiveness of Contra Costa Hazardous Materials Programs' Implementation of the Industrial Safety Ordinance

Hazardous Materials Programs has developed policies, procedures, protocols and questionnaires to implement the California Accidental Release Prevention Program and the Industrial Safety Ordinance. The policies, procedures, protocols and questionnaires for these programs are listed below:

- Audits/Inspections Policy
- Conducting the Risk Management Plan/Safety Plan Completeness Review Protocol
- Risk Management Plan Completeness Review Questionnaires
- Safety Plan Completeness Review Questionnaires
- Conducting Audits/Inspections Protocol
- Safe Work Practices Questionnaires
- CalARP Program Audit Questionnaires
- Safety Program Audit Questionnaires
- Conducting Employee Interviews Protocol
- Employee Interview Questionnaires
- Public Participation Policy
- Dispute Resolution Policy
- Reclassification Policy
- Covered Process Modification Policy
- CalARP Internal Performance Audit Policy
- Conducting the Internal Performance Audit
- CalARP Internal Audit Performance Audit Submission
- Fee Policy
- Notification Policy
- Unannounced Inspection Policy
- Risk Management Plan Public Review Policy

Hazardous Materials Programs has developed the *Contra Costa County CalARP Program Guidance Document* and the *Contra Costa County Safety Program Guidance Document including the Safety Culture Assessment.* An updated Contra Costa County Safety Program Guidance Document, which incorporated updates from the ISO amendments and additional clarifications from all the audits, was issued July 22, 2011, to the regulated facilities. These documents give guidance to the stationary sources for complying with the Industrial Safety Ordinance. The policies, procedures, protocols and questionnaires are available through Hazardous Materials Programs. The guidance documents can be downloaded through Health Services' website: http://www.cchealth.org/groups/hazmat/california_accidental_release_prevention_guidance_document.php and http://www.cchealth.org/groups/hazmat/industrial_safety_ordinance_guidance.php

Effectiveness of the Procedures for Records Management

Hazardous Materials Program has set up hard copy and digital files for each stationary source. The files include the following folders:

1. Annual status reports
2. Audits & Inspections
3. Communications
4. Completeness Review
5. Emergency Response
6. Incident Investigation
7. Trade Secret Information

Hard copy files for the stationary sources are kept in a central location. Digital copies of the files are stored on the Hazardous Materials Programs network and are accessible to the Accidental Release Prevention Programs Engineers, Supervisor and the Environmental Health and Hazardous Materials Chief. Portable document format (PDF) of these files is also available at the Hazardous Materials Programs office for public access and viewing. The Accidental Release Prevention Program files contain regulations, policies, information from the U.S. EPA, the Governor's Office of Emergency Services, the U.S. Chemical Safety and Hazards Investigation Board, and other information pertinent to the engineers. The risk management and safety plans received are kept at the Hazardous Materials Programs office.

Number and Type of Audits and Inspections Conducted

The Hazardous Materials Programs staff was required to audit and inspect all seven regulated stationary sources that were required to comply with the Industrial Safety Ordinance within one year after the initial submittal of their Safety Plans. Hazardous Materials Programs reviewed all of the Safety Plans and audited/inspected all of the stationary sources' Safety Programs within that year (2000). Hazardous Materials Programs performed focused audits of the stationary sources for their Human Factors Programs (this was not included in the original audit/inspection, since the stationary sources were not required to have their Human Factors Program in place until January 2001) and Inherently Safer Systems in 2001 and 2002. Additional focused audits were performed to look at how two stationary sources would manage the organizational change in case there was a strike and non-striking personnel were used instead of the striking personnel (2002). Hazardous Materials Programs completed the second round of audits for all of the Industrial Safety Ordinance stationary sources in 2003 and 2004 and began a third round of audits in the autumn

of 2005, which were completed in the spring of 2007. The fourth round of audits was completed in August 2009. Air Liquide submitted a Risk Management Plan and Safety Plan to Hazardous Materials Program in July 2009 and was audited in June 2010. CCHMP began the fifth round of audits in spring of 2011 and completed these audits in spring of 2012.

When the Hazardous Materials Programs staff reviews a Safety Plan, a Notice of Deficiencies is produced that documents what changes to a Safety Plan the stationary source is required to make before Hazardous Materials Programs determines that the Safety Plan is complete. The stationary source has 60 to 90 days to respond to the Notice of Deficiencies. When the stationary source has responded to this Notice of Deficiencies, the Hazardous Materials Programs staff will review the response. Hazardous Materials Programs will either determine that the Safety Plan is complete or will work with the stationary source until the Safety Plan contains the required information for it to be considered complete. When the Safety Plan is deemed complete, Hazardous Materials Programs will open a public comment period on the Safety Plan and will make available the plan in a public meeting or venue. The Hazardous Materials Programs staff will respond to all written comments in writing and when appropriate use the comments in the audit/inspection of the regulated stationary sources.

The Hazardous Materials Programs staff will issue Preliminary Audit Findings after an audit/inspection is complete. The stationary source will have 90 days to respond to these findings. Hazardous Materials Programs will review the response from the stationary source on the Preliminary Audit Findings. When the stationary source has developed an action plan to come into compliance with the regulations, the Hazardous Materials Programs staff will issue the Preliminary Audit Findings for public comment and will make available the findings in a public meeting or venue. The Hazardous Materials Programs staff will consider any public comments that were received during the public comment period and if appropriate will revise the Preliminary Audit Findings. When this is complete, the Hazardous Materials Programs staff will issue the Final Audit Findings and will respond in writing to any written public comments received. Table I lists the status of the Hazardous Materials Programs staff review of each stationary source's Safety Plan, and audit and inspections of their Safety Programs.

Number of Root Cause Analyses and/or Incident Investigations Conducted by Hazardous Materials Program

The Hazardous Materials Programs staff has not performed any root cause analyses or incident investigations this past year. The Hazardous Materials Programs staff did work closely with the U.S. Chemical Safety and Hazard Investigation Board, Cal/OSHA, US EPA, and the Bay Area Air Quality Management District during their investigations and follow-up audits and inspections. A historical listing of Major Chemical Accidents or Releases starting in 1992 is on the Health Services website at www.cchealth.org/groups/hazmat/accident_history.php. This list includes major accidents that occurred prior to the adoption of the Industrial Safety Ordinance.

Hazardous Materials Programs' Process for Public Participation

Hazardous Materials Programs in 2005 worked with the community and developed materials that would describe the Industrial Safety Ordinance using a number of different approaches. The community representatives suggested that the Hazardous Materials Programs staff look at existing venues that are attended by the public that the Hazardous Materials Programs staff can share and receive comments on Preliminary Audit Findings and the stationary source's Safety Plans.

Effectiveness of the Public Information Bank

The Hazardous Materials Programs section of Health Services website www.cchealth.org/groups/hazmat/ includes the following information:

- Industrial Safety Ordinance
  - » Description of covered facilities
  - » Risk Management Chapter discussion
  - » Copy of the ordinance
  - » Land Use Permit Chapter discussion
  - » Copy of the ordinance
  - » Safety Program Guidance Document
  - » Frequently Asked Questions
  - » Public Outreach strategies
- California Accidental Release Prevention (CalARP) Program
  - » Contra Costa County's California Accidental Release Prevention

Program Guidance Document
  - » Program Level description
  - » Discussion on Public Participation for both CalARP Program and the Industrial Safety Ordinance
  - » A map locating the facilities that are subject to the CalARP Program and are required to submit a Risk Management Plan to Hazardous Materials Program. The map links to a description of each of the facilities and the regulated substances handled.
- Hazardous Materials Inventories and Emergency Response Program
  - » Descriptions
  - » Forms
- Underground Storage Tanks
  - » Description of the program
  - » Copies of the Underground Storage Tanks Health & Safety Code sections
  - » Underground Storage Tanks forms
- Green Business Program
  - » Description of the Green Business Program with a link to the Association of Bay Area Government's website on the Green Business Program
- Hazardous Materials Incident Response Team
  - » Including information of the Major Chemical Accidents or Releases that have occurred
  - » The County's Hazardous Materials Incident Notification Policy
- A link to the Phillips 66 Fenceline Monitors
- Hazardous Materials Program Incident Search
  - » Online search of the hazardous materials incident database for incidents that occurred from 1993 to present by entering a date range, address, city or facility name
- Facility Search
  - » Online search of the facilities that handle hazardous materials by name of the facility, street name and city, or any combination of the three
- Unannounced Inspection Program
  - » Lists the facilities that are subject to unannounced inspections under the Unannounced Inspection Program
- Hazardous Materials Interagency Task Force
  - » Includes a matrix of who has what hazardous materials and regulatory responsibilities
  - » Minutes from past meetings
  - » Presentations from past meetings
- Incident Response
  - » Accident history that lists summaries of major accidents from industrial facilities in Contra Costa County from most recent to 1992
  - » Additional resource links for more information
- Incidents
  - » Information on the June 15, 2012 Phillips 66 incident, including the follow-up reports and the public meetings
  - » Information on the August 6, 2012 Chevron Crude Unit fire, including the follow-up reports and the public meetings

TABLE I
INDUSTRIAL SAFETY ORDINANCE STATIONARY SOURCE STATUS

NAME	SAFETY PLAN (SP) RECEIVED	NOTICE OF DEFICIENCIES (NOD) ISSUED-SP	SAFETY PLAN COMPLETE	SP PUBLIC MEETING DATE	AUDIT/ INSPECTION	AUDIT PUBLIC MEETING
Air Liquide Rodeo Hydrogen Plant	7/10/09 7/14/2010				6/1/2010	10/8/11
Air Products – Shell & Tesoro	1/14/00 1/16/01 (HF update) 6/26/03 7/14/05 12/01/06 6/20/2008 6/30/2010	6/15/00 5/10/01 (HF update) 8/24/07 3/14/2011	8/30/00 6/19/01 (HF update) 9/14/07 7/1/2008	9/13/00 5/8/03 9/23/07 6/19/2010 4/21/2012	11/22/00 5/3/02 (HF) 2/27/04 1/22/07 7/20/09 4/16/2012	5/8/03 9/24/06 9/23/07 6/19/2010
General Chemical/ Bay Pt. Works	1/14/00 1/15/01 (HF update) 12/10/03 10/9/07 10/24/2011	6/12/00 7/23/01 (HF update) 7/28/2008	12/20/00 11/16/01 (HF update) 3/17/04 12/13/08 9/20/2012	1/2/01 5/1/03 11/16/05 1/31/06 11/04/08 10/2/2012	8/11/00 5/20/02 (HF) 6/20/03 8/29/05 1/7/08 3/21/11	1/2/01 5/1/03 11/16/05 1/31/06 11/8/06 1/2/07 11/04/08 10/2/2012
Phillips 66 (formerly Conoco Phillips) – Rodeo	1/15/00 1/12/01 (HF update) 8/10/05 8/7/09	3/14/00 9/10/01 (HF update) 3/28/06 11/22/2010	5/30/00 3/18/02 (HF update) 8/9/02 11/5/07 1/27/2011	6/15/00 5/9/02 10/7,13/07 10/8/2011	6/30/00 11/5/01 (HF) 8/1/03 8/15/06 10/6/08 8/1/11	4/9/02 6/22/04 7/8/04 10/7,13/07 7/18/10, 10/9/10 10/8/11
General Chemical/ Bay Pt. Works	1/14/00 1/15/01 (HF update) 12/10/03 10/9/07 10/24/2011	6/12/00 7/23/01 (HF update) 7/28/2008 9/10/2012	12/20/00 11/16/01 (HF update) 3/17/04 10/30/08 9/20/2012	1/2/01 5/1/03 11/16/05 1/31/06 11/04/08 10/2/2012	8/11/00 5/20/02 (HF) 6/20/03 8/29/05 1/7/08 3/21/11	1/2/01 5/1/03 11/16/05 1/31/06 11/8/06 1/2/07 11/04/08 10/2/2012
Shell Martinez Refinery	1/14/00 1/16/01 (HF update)7/22/02 1/11/06 9/3/2010	7/19/00 11/9/01 (HF update) 3/21/03 8/15/06 10/25/2011	4/9/01 1/3/02 (HF update) 9/15/03 11/2/06 3/27/2012	5/8/03 9/24/06 9/23/07 4/21/2012	10/31/00 4/29/02 (HF) 11/26/04 10/23/06 4/30/09 2/13/2012	5/8/03 9/24/2006 9/23/07 6/19/2010
Tesoro Golden Eagle Refinery	1/14/00 1/12/01 (HF update) 6/21/02 6/22/07 12/11/09 6/1/2012	8/16/00 9/18/01 (HF update) 7/30/07 8/6/2012	1/31/01 12/14/01 (HF update) 6/21/03 11/5/07 6/4/10 8/27/2012	5/6/03 9/23/07 6/10/10 9/6/2012	9/15/00 12/3/01 (HF) 9/8/03 11/07/05 8/18/08 4/18/2011	5/6/03 9/24/06 9/23/07 6/10/2010 9/6/2012

Effectiveness of the Hazardous Materials Ombudsperson

The County Board of Supervisors created the Hazardous Materials Ombudsperson position in 1997. This position was filled in April 1998. The Board believed that the ombudsperson would be a conduit for the public to express their concerns about how Hazardous Materials Programs personnel are performing their duties. Attachment A is a report from the Hazardous Materials Ombudsperson on the effectiveness of the position.

Other Required Program Elements Necessary to Implement and Manage the Industrial Safety Ordinance

The California Accidental Release Prevention (CalARP) Program is administered in Contra Costa County by the Hazardous Materials Division of Contra Costa Health Services. The Industrial Safety Ordinance expands on this program. Stationary sources are required to submit a Risk Management Plan that is similar to the Safety Plans that are submitted. Hazardous Materials Programs reviews these Risk Management Plans and perform the CalARP Program audit simultaneously with the Industrial Safety Ordinance audit.

Hazardous Materials Programs performs Unannounced Inspections of stationary sources that are part of the CalARP Program and are also required to submit a Risk Management Plan to the U.S. EPA. These inspections look at a focused portion of the CalARP Program or Industrial Safety Ordinance requirements, as well as elements from the other Hazardous Materials Programs.

Regulated Stationary Sources Listing

The Status of the Regulated Stationary Sources' Safety Plans and Programs

All of the stationary sources regulated by the Industrial Safety Ordinance were required to submit their Safety Plans to Hazardous Materials Program by January 15, 2000 and to have their Safety Programs completed and implemented. The stationary sources were also required to have a Human Factors Program in place that follows the County's Safety Program Guidance Document by January 15, 2001. The status of each of the regulated stationary sources is given in Table I and includes the following:

- When the latest updated Safety Plan was submitted
- When the Notice of Deficiencies was issued
- When the plan was determined to be complete by Hazardous Materials Programs
- When the public meeting was held on the Safety Plan
- When the audits were complete
- When the public meetings were held on the preliminary audit findings
- When the Human Factors to the Safety Plan were revised
- When the Notice of Deficiencies was issued for the Human Factors revised Safety Plan
- When the Human Factors Safety Plan was determined to be complete
- When the Audit/Inspection was completed
- When the Human Factors Audit preliminary findings Public Meeting was held

Locations of the Regulated Stationary Sources Safety Plans

Each of the regulated stationary sources was required to submit a Safety Plan to Hazardous Materials Program on January 15, 2000 and an updated Safety Plan that includes the implementation of the stationary source's Human Factors Program by January 15, 2001. The regulated stationary sources are required to update their Safety Plan at least once every three years. These plans are available for public review at the Hazardous Materials Programs Offices at 4585 Pacheco Blvd., Suite 100, Martinez. When Hazardous Materials Programs determines that the Safety Plan is complete, and prior to going out for a 45-day public comment period, Hazardous Materials Programs will place the plan in the library(ies) closest to the regulated stationary source. Table II lists the regulated stationary sources with the location of each Safety Plan.

Annual Accident History Report and Inherently Safer Systems Implemented as Submitted by the Regulated Stationary Sources

The Industrial Safety Ordinance requires the stationary sources to update the information on their accident history in their Safety Plans and include how they have used inherently safer processes within the last year. Table III lists some of the Inherently Safer Systems that have been implemented by the different stationary sources during the same period. Attachment B includes the individual reports from the stationary sources.

TABLE II
LOCATION OF SAFETY PLANS - LIBRARIES

REGULATED STATIONARY SOURCE	LOCATION 1	LOCATION 2	LOCATION 3
Air Liquide Large Industries	Hazardous Materials Programs Office		
Air Products at Shell	Hazardous Materials Programs Office	Martinez Public Library	
Air Products at Tesoro	Hazardous Materials Programs Office	Martinez Public Library	
Shell Refining – Martinez	Hazardous Materials Programs Office	Martinez Public Library	
General Chemical West Bay Point Works	Hazardous Materials Programs Office	Bay Point Public Library	
Phillips 66 (formerly ConocoPhillips) Rodeo Refinery	Hazardous Materials Programs Office	Rodeo Public Library	Crockett Public Library
Tesoro Golden Eagle Refinery	Hazardous Materials Programs Office	Martinez Public Library	

TABLE III
INHERENTLY SAFER SYSTEMS

REGULATED STATIONARY SOURCE	INHERENTLY SAFER SYSTEM IMPLEMENTED	DESIGN STRATEGY	CATEGORY
Air Liquide Large Industries	No new inherently safer systems have been implemented (in this period)		
Air Products at Shell Martinez Refinery	No new inherently safer systems have been implemented (in this period)		
Air Products at Tesoro	No new inherently safer systems have been implemented (in this period)		
General Chemical West Bay Point Works	Reduction of chemical inventory from elimination of process equipment. (9 times)	Inherent	Elimination
Phillips 66 (formerly ConocoPhillips)- Rodeo Refinery	Reduced inventory by combining or removing equipment from the process (3 times)	Inherent	Minimization
	Reduced number of chemicals by consolidation of chemical usage (1 time)	Inherent	Simplify
	Upgraded equipment metallurgy, or design to reduce potential of a hazard (11 times)	Passive	Moderate
	Reduced the potential of a hazard by using a less corrosive chemical (1 time)	Passive	Moderate
Shell Martinez Refinery	Reduction of inventory by removing equipment and piping or deinventory (3 times)	Inherent	Minimization
	Reduced potential of exposure by changing equipment metallurgy or design (3 times)	Passive	Moderate
	Change equipment configuration to reduce potential of a hazard (4 times)	Passive	Simplify
	Reduced the potential of a hazard by adding equipment, or controls (6 times)	Active	Moderate
	Reduced potential of error by standardizing into procedure (10 times)	Procedural	Simplify
Tesoro Golden Eagle Refinery	Eliminated hazardous materials storage, equipment or off-site transporation (6 times)	Inherent	Minimization
	Reduced hazardous conditions or impact of exposure by equipment design features. (7 times)	Passive	Moderate
	Reduced potential of the hazardous condition by using smaller amounts (2 Times)	Passive	Minimization
	Reduced frequency of exposure by changing equipment design (1 time)	Passive	Simplify

Status of the Incident Investigations, Including the Root Cause Analyses Conducted by the Regulated Stationary Sources

The Industrial Safety Ordinance requires the regulated stationary sources to do an incident investigation with a root cause analysis for each of the major chemical accidents or releases as defined by the following: *"Major Chemical Accident or Release means an incident that meets the definition of a Level 3 or Level 2 incident in the Community Warning System incident level classification system defined in the Hazardous Materials Incident Notification Policy, as determined by Contra Costa Health Services; or results in the release of a regulated substance and meets one or more of the following criteria:*

- *Results in one or more fatalities*
- *Results in greater than 24 hours of hospital treatment of three or more persons*
- *Causes on- and/or off-site property damage (including cleanup and restoration activities) initially estimated at $500,000 or more. On-site estimates shall be performed by the regulated stationary source. Off-site estimates shall be performed by appropriate agencies and compiled by Health Services*
- *Results in a vapor cloud of flammables and/or combustibles that is more than 5,000 pounds*"

The regulated stationary source is required to submit a report to Hazardous Materials Programs 30 days after the root cause analysis is complete. There were four Major Chemical Accidents or Releases that occurred within the last year in Contra Costa County. Major Chemical Accidents or Releases that occurred within the last year and the status of each of these incidents investigations are included in Table IV. The 72-hour reports related to these four incidents are available at the Hazardous Materials Programs office and website.

TABLE IV

FACILITY	MCAR DATE	CWS	SEVERITY	MCAR DESCRIPTION	ONSITE IMPACT	OFFSITE IMPACT
Shell-Flexicoker PRV Release	Aug 14, 2012	2	1	A PRV on a distillation column in the Flexicoker failed open at 1230 hours. A Level 1 was issued through the CWS at 1241 hours. A level 2 was issued at 1334 hours as a result of flaring activity. The PRV was isolated at 1425 hours. Flaring took place as the column was depressured and the flare had intermittent black smoke.	No injuries or equipment damage were reported	Odors of mercaptans and H2S were detected in Martinez, Concord, Bay Point, Pittsburg, Antioch and Clayton. A number of complaints were received from the community. Flaring had intermittant black smoke and loud rumbling noises. The following materials were estimated as released: 7700 lbs hydrocarbon, 6 lbs mercaptans, 24 lbs H2S, 17 lbs SO2.
Shell-Hydro-cracker Lube Oil Fire	Aug 13, 2012	2	1	A compressor in the first stage of the Hydrocracker tripped off-line due to an external lube oil fire at 1400 hours. The fire was put out by onsite personnel within 15 minutes. Flaring was performed as the 1st stage was brought down. CCHMP was notified of the event through the CWS by 1408 hours.	A small fire resulted in slight damage to ancillary tubing and electrical lines.	The fire sent a visible black cloud up into the air that drifted south down Pacheco Blvd as far as CCHMP's offices. The Shell community sampling team detected no H2S or benzene. The refinery estimated that approximately 580 pounds of SO2 was released through the flare. 7 community calls were made to the refinery during the flaring.

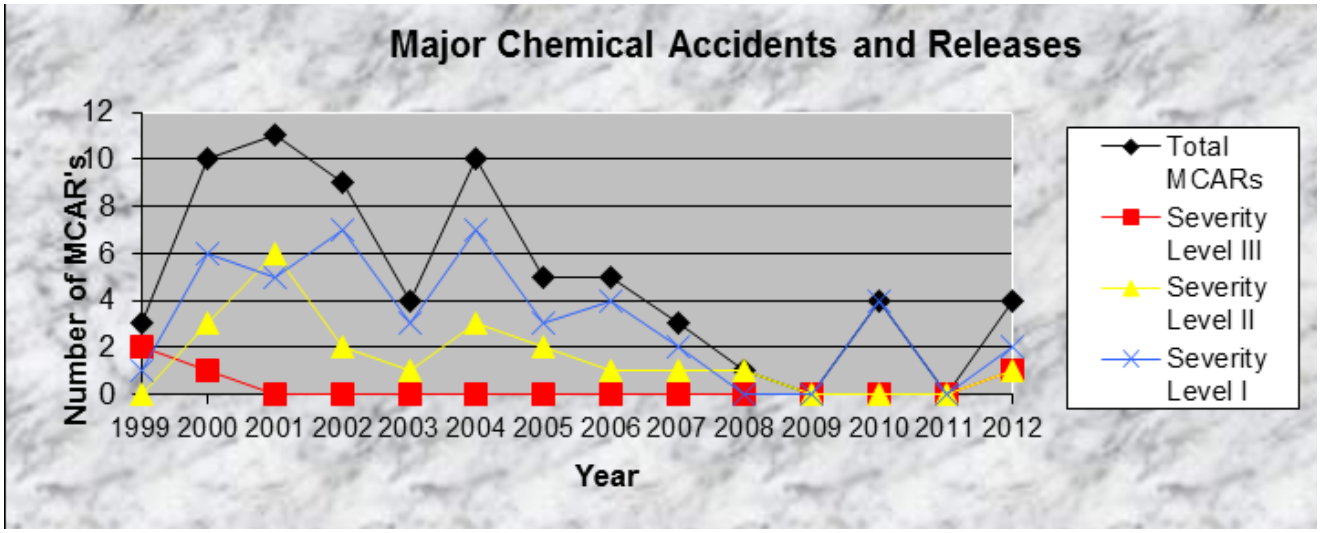
FACILITY	MCAR DATE	CWS	SEVERITY	MCAR DESCRIPTION	ONSITE IMPACT	OFFSITE IMPACT
Chevron-#4 Crude fire	Aug 6, 2012	3	3	# 4 Crude Unit Fire. An 8" line from the atmospheric distillation column, number 4 Side Cut, with hot diesel like material, leaked and caught fire.	5 Chevron emergency responders were treated for minor burns, and received first aid.	Between 400 and 900 people sought medical attention.
Phillips 66-Sour Water Tank	June 15, 2012	2	2	A sour water tank (T-294) was over pressured resulting in a split in the top seam of the fixed roof tank. Vapors left the tank through the opening until it could be sealed. Chemicals involved included H2S, other sulfur compounds, natural gas, light hydrocarbons, nitrogen. Since the seam of the tank was ruptured, the repairs took some time to complete. The event started at 7:10am on 6/15/12 and continued as a Level 2 until approximately 12:05am on 6/17/12 when it was downgraded to a Level 1. The event was determined to be a Level 0 at around 8:30am on 6/17/12 and then closed. During this time, various actions were performed to empty the tank, inert the tank with nitrogen to minimize flammable hazards, connect odor abatement equipment to control vapors, and to patch the tank. CCHMP performed monitoring in the community, staffed the Hazmat DOC, and was present at Phillips 66 EOC continuously for 36 hours. Staff rotated shifts to cover all necessary positions.	Atmospheric tank T-294 was overpressured resulting in a rupture along approximately 20 feet of the top seam of the roof. The rupture allowed vapors from the tank to exit into the surrounding area. H2S was one of the chemicals detected onsite although many other sulfur compounds were present. Operations were modified to remove the tank from active service. Various actions and repairs were made to the vessel. After approximately 36 hours temporary patches were positioned over the ruptured seam using heavy plastic tarping, gorrilla tape, and magnets. Eventually the tank was re-connected to the odor abatement system.	Strong sulfur odors were detected by Hazmat IR personnel on Friday in areas from I-80 and the surrounding communities. The highest readings were approximately 1 ppm (as H2S) on I-80, which is a few hundred feet from the storage tank. Readings from 5-20 ppb (as H2S) were detected by Hazmat IR personnel around the town of Crockett on 6/15/12. On 6/16/12 concentrations from 1-5 ppb (as H2S) were found in Rodeo, Hercules, and Crockett. Numerous calls and complaints were received at Hazmat throughout the weekend regarding the odor (from skunk to rotten eggs to natural gas type odors).

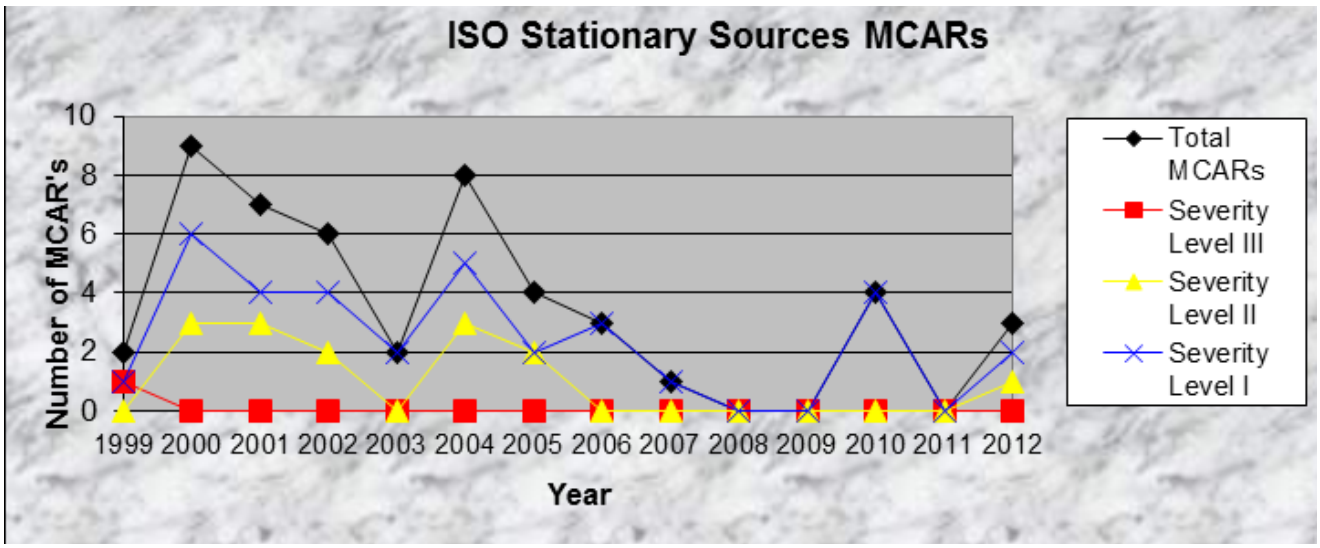
Major Chemical Accidents or Releases

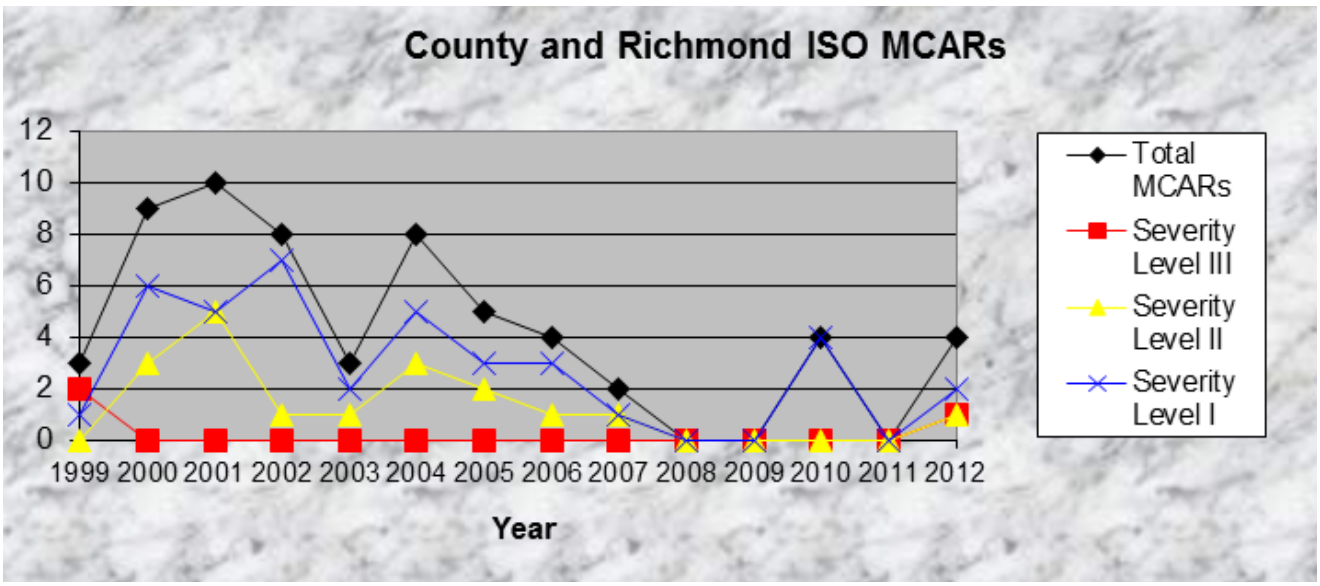
Hazardous Materials Programs analyzed the Major Chemical Accidents or Releases (MCAR) that occurred since the implementation of the Industrial Safety Ordinance. The analysis includes the number of MCARs and the severity of the MCARs. Three different levels of severity were assigned:

- Severity Level III – A fatality, serious injuries or major on-site and/or off-site damage occurred
- Severity Level II – An impact to the community occurred, or if the situation was slightly different the accident may have been considered major, or there is a recurring type of incident at that facility
- Severity Level I – A release where there was no or minor injuries, the release had no or slight impact to the community, or there was no or minor onsite damage

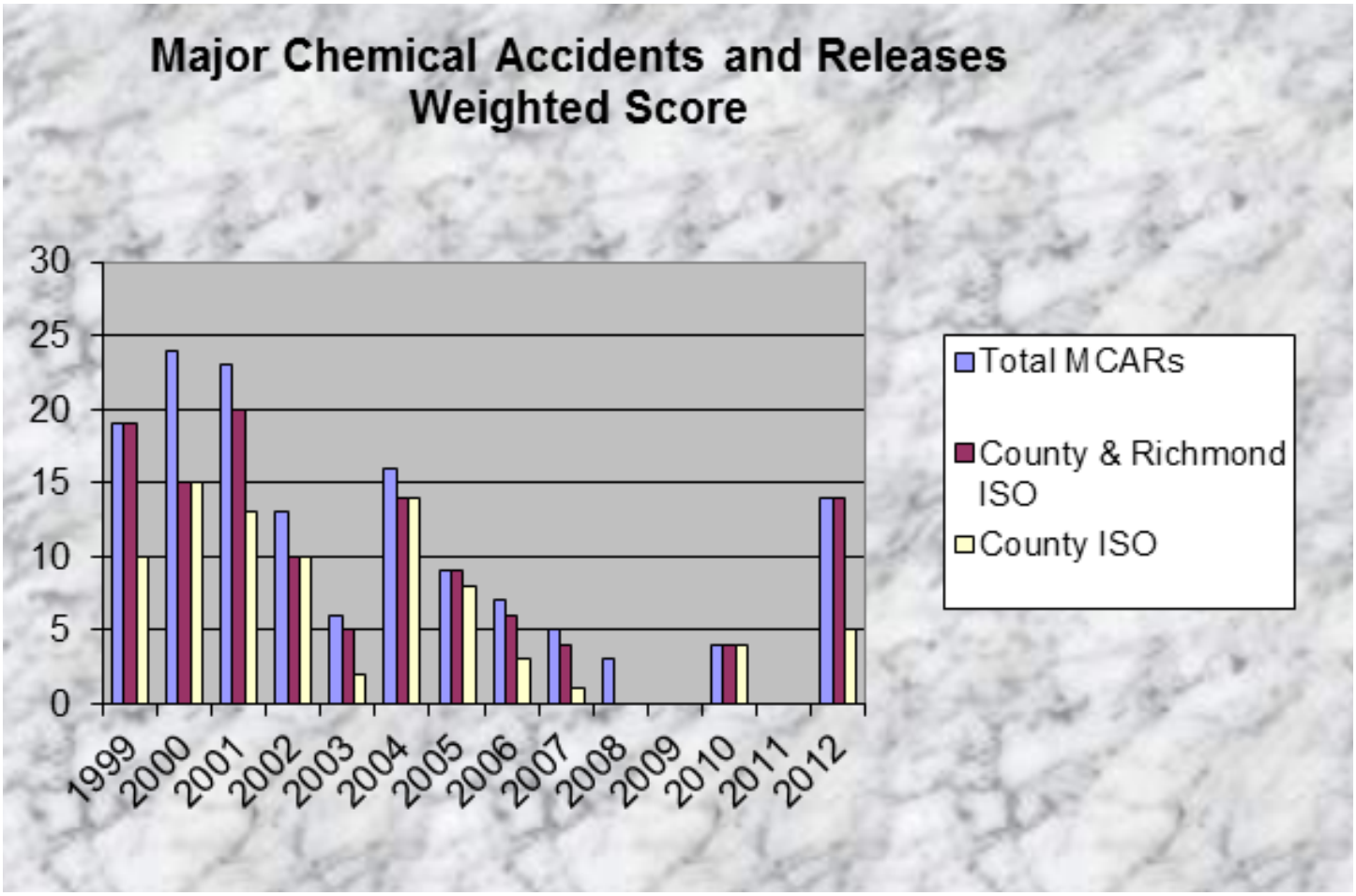
Below are charts showing the number of MCARs from January 1999 through October 2012 for all stationary sources in Contra Costa County, the MCARs that occurred at stationary sources regulated by the County's Industrial Safety Ordinance, and a chart showing the MCARs that have occurred at the County and the City of Richmond's Industrial Safety Ordinance stationary sources. The charts also show the number of severity level I, II and III MCARs for this period. **NOTE: The charts do not include any transportation MCARs that have occurred.**







A weighted score has been developed giving more weight to the higher severity incidents and a lower weight to the less severe incidents. The purpose is to developed a metric of the overall process safety of facilities in the County, the facilities that are covered by the County and the City of Richmond Industrial Safety Ordinances, and the facilities that are covered by the County's Industrial Safety Ordinance. A severity level III incident is given 9 points, severity level II is given 3 points and severity level I is given 1 point. Below is a graph of this weighted scoring.



Legal Enforcement Actions Initiated by Hazardous Materials Program

As part of the enforcement of the Industrial Safety Ordinance and the CalARP Program, Hazardous Materials Programs issues Notices of Deficiencies on the Safety and Risk Management Plans and issues Audit Findings on what a stationary source is required to change to come into compliance with the regulations. Table I shows the action that has been taken by Hazardous Materials Programs. Hazardous Materials Programs has not taken any action through the District Attorney's Office for noncompliance with the requirements of the Industrial Safety Ordinance.

Penalties Assessed as a Result of Enforcement

No penalties have been assessed this year for noncompliance with the Industrial Safety Ordinance.

Total Fees, Service Charges and Other Assessments Collected Specifically for the Industrial Safety Ordinance

The fees charged for the Industrial Safety Ordinance are to cover the time that the Accidental Release Prevention Engineers use to enforce the ordinance, the position of the Hazardous Materials Ombudsperson, outreach material and to cover a portion of the overhead for the Hazardous Materials Programs. The fees charged for administering this ordinance and the Richmond Industrial Safety Ordinance for the fiscal year 2011–12 is $442,713.

Total Personnel and Personnel Years Used by Hazardous Materials Program to Implement the Industrial Safety Ordinance

The Accidental Release Prevention Programs Engineers have reviewed resubmitted Safety Plans, prepared and presented information for public meetings, performed audits of the stationary sources for compliance with both the California Accidental Release Prevention Program and Industrial Safety Ordinance and did follow-up work after a Major Chemical Accident or Release. The following is a breakdown of the time that was spent on the County's and the City of Richmond's Industrial Safety Ordinances:

- Three ISO/CalARP Program facility audits were done between November 2011 and October 2012. It takes four to five engineers four weeks to perform the on-site portion of an ISO/CalARP Program audit. The audit process encompasses off-site time that includes a quality assurance process, working with the facility to address any questions, posting public notices, attending a public forum to share audit findings, addressing any questions from the public and issuing the final report. The total time taken to perform these audits in 2012 was 3,000 hours. Approximately one-third of the time was dedicated to the Industrial Safety Ordinance, for a total of 1,000 hours.
- Updating Audit questionnaire to reflect revised Safety Program Guidance document – 300 hours
- Reviewing information for the website – 99 hours
- Reviewing Safety Plans and following up with the facilities on any deficiencies – 200 hours
- Review root cause analysis and proposed recommendations – 202 hours
- Health Services Community Education and Information Office or the Accidental Release Prevention Engineers prepare material for presentations and public meetings – total approximately 400 personnel hours.
- Total of 2,201 hours is the approximate personnel time spent on the Industrial Safety Ordinance.

This is not including the Ombudsperson time spent helping prepare for the public meetings, working with the engineers on questions arising from the Industrial Safety Ordinance, and answering questions from the public on the Industrial Safety Ordinance.

Comments from Interested Parties Regarding the Effectiveness of the Industrial Safety Ordinance

No comments were received on the County's or the City of Richmond's Industrial Safety Ordinances during the last year.

The Impact of the Industrial Safety Ordinance on Improving Industrial Safety

Four programs are in place to reduce the potential of an accidental release from a regulated stationary source that could impact the surrounding community. The four programs are the Process Safety Management Program administered by Cal/OSHA, the federal Accidental Release Prevention Program administered by the U.S. EPA, the California Accidental Release Prevention Program administered locally by the Hazardous Materials Programs staff, and the Industrial Safety Ordinance administered by the Hazardous Materials Programs staff. Each of the programs is very similar in requirements, with the Industrial Safety Ordinance being the most stringent. The prevention elements of the program level 3 regulated stationary sources under the federal Accidental Release Prevention Program is almost identical to the Process Safety Management Program. The main differences between the federal Accidental Release Prevention and the CalARP Programs are:

- The number of chemicals regulated
- The threshold quantity of these chemicals
- An external events analysis, including seismic and security and vulnerability analysis, is required
- Additional information in the Risk Management Plan
- Hazardous Materials Program is required to audit and inspect stationary sources at least once every three years
- The interaction required between the stationary source and Hazardous Materials Program

The differences between the CalARP and the Industrial Safety Ordinance Safety Programs are:

- Stationary sources are required to include a root cause analysis with the incident investigations for Major Chemical Accidents or Releases
- The stationary sources are required to consider inherently safer systems

- All of the processes at the regulated stationary sources are covered
- Managing changes in the organization for operations, maintenance and emergency response
- The implementation of a Human Factors Programs

The Board of Supervisors amended the County's Industrial Safety Ordinance to expand the requirement of the ordinance in 2006. These amendments are:

- Expand the Human Factors section of the Industrial Safety Ordinance to include the following:
  - » Maintenance procedures
  - » Management of Organizational Changes
    - – Maintenance personnel
    - – A job task analysis for each of the positions that work in operations, maintenance, emergency response and Health and Safety
    - – Include temporary changes in the Management of Organizational Change
- A requirement that the stationary sources perform a Security and Vulnerability Analysis and test the effectiveness of the changes made as a result of the Security and Vulnerability Analysis
- The stationary sources perform a Safety Culture Assessment

The Safety Culture Assessment guidance chapter was finalized in November 2009. The Industrial Safety Ordinance Guidance Document is being updated to include the remaining changes to the ordinance and a draft was issued in September 2010. The Accidental Release Prevention Engineers have participated with the Center for Chemical Process Safety on developing the second edition of the *"Inherently Safer Chemical Processes"* book that is referenced in the ordinance and with the Center for Chemical Process Safety on developing process safety metrics for leading and lagging indicators.

All of these requirements will and have lowered the probability of an accident occurring. Contra Costa County has been recognized in the Chemical Safety and Hazard Investigation Board Report on the BP March 23, 2005 Texas City Investigation as an alternative model for doing process safety inspections. The report states *"Contra Costa County and the U.K. Health and Safety Executive conduct frequent scheduled inspections of PSM and major hazard facilities with highly qualified staff."* This was done to compare to the number of OSHA process safety management audits. Carolyn W. Merritt, the Chemical Safety and Hazard Investigation Board Chair at that time, also recognized Contra Costa County in testimony to the House of Representatives Committee on Education and Labor chaired by U.S. Rep. George Miller. U.S. Sen. Barbara Boxer, during a hearing to consider John Bresland's nomination to the Chemical Safety and Hazard Investigation Board as the Chair (replacing Carolyn Merritt), asked Mr. Bresland about the Contra Costa County program for process safety audits of refineries and chemical companies. The Chemical Safety and Hazard Investigation Board also mentions Contra Costa County in a DVD *"Anatomy of a Disaster: Explosion at BP Texas City Refinery"* on the resources given to audit and ensure facilities are complying with the regulations. The Chemical Safety and Hazard Investigation Board made a recommendation in their final investigation report on an incident that occurred at the Bayer CropScience Institute, West Virginia facility that West Virginia or the Kanawha Valley adopts a process of auditing their chemical facilities using the Contra Costa County auditing process. The Hazardous Materials Programs staff and a representative from the local United Steelworkers Union were part of a panel when the Chemical Safety and Hazard Investigation Board presented this report to the Kanawha Valley community.

Contra Costa Hazardous Materials Programs was asked to give testimony at the hearing on "Work Place Safety and Worker Protections in the Gas and Oil Industry" before the U.S. Senate Committee on Health, Education, Labor, and Pensions Subcommittee on Employment and Workplace Safety. The testimony was on the success of the Accidental Release Prevention Programs that are in place in Contra Costa County. The hearing was specific on two major incidents that occurred in Anacortes, Wash. at a Tesoro Refinery and the Deepwater Horizon incident in the Gulf of Mexico. A link to the testimony is posted on the Health Services website and can be found at http://help.senate.gov/hearings/hearing/?id=fe34048f-5056-9502-5d69-2609a5d5501a.

In September 2012, Contra Costa Hazardous Materials Programs was asked to be a presenter at the "Expert Forum on the Use of Performance-based Regulatory Models in the U.S. Oil and Gas Industry: Offshore and Onshore" in Texas City, Texas to share the regulatory experience at Contra Costa County. And give testimony on how local, state and Federal agencies can work together and have an unprecedented alignment on regulations that is required for the same facilities. This informational meeting was

spearheaded by Federal Occupational Safety and Health Administration and attended by Bureau of Safety and Environmental Enforcement, United States Coast Guard, United States Environmental Protection Agency, Pipeline and Hazardous Materials Safety Administration, United Steelworkers, American Petroleum Institute, academia and industry representatives.

City of Richmond Industrial Safety Ordinance

The City of Richmond on December 18, 2001 passed its version of the Industrial Safety Ordinance, which became effective January 17, 2002. Richmond's Industrial Safety Ordinance (RISO) mirrors the County's Industrial Safety Ordinance, with the exception of the 2006 amendments to the County's Ordinance. Richmond adopted the County's 2006 amendments in October 2012. Richmond's Industrial Safety Ordinance covers two stationary sources: Chevron Richmond Refinery and General Chemical West Richmond Works.

Chevron and General Chemical West Richmond Works submitted their Safety Plans to Hazardous Materials Programs, which have been reviewed and considered complete. The public comment period for these plans ended in January 2004. Public meetings held in 2004 in North Richmond and Richmond discussed Chevron and General Chemical West Richmond Works audit findings. The second Richmond Industrial Safety Ordinance/CalARP Program audits for these facilities occurred in 2006 and public meetings were held in June 2007 at Hilltop Mall at "Lessons from Katrina," the 2007 Neighbor Works Week Homeownership Faire & Disaster Preparedness Expo.

Hazardous Materials Programs followed up on the January 15, 2007 fire at the Chevron Refinery. The follow-up included a public meeting, City Council meetings, meetings with Chevron on the investigation and the root cause analysis. Chevron Richmond Refinery was audited for the third time for RISO/CalARP program in April 2008 The report was finalized and results were available at the Recycle More Earth Day Event in Richmond in June 2009. Copies of the audit results are available at the Richmond Library and a summary of the audit is also available on Hazardous Materials Programs' website.

CCHMP performed an RISO/CalARP program audit at General Chemical Richmond in January 2012 and is working with General Chemical on the proposed remedies to the audit actions. The final report from the 2009 audit was shared in a public event in Richmond in September 2010. CCHMP performed the fifth RISO/CalARP program audit at Chevron Richmond Refinery in February 2011. The final audit report was shared at the West County Emergency Preparedness Fair in El Cerrito in September 2011. CCHMP also made presentation to Point Richmond Neighborhood Council at the Point Richmond Firehouse about General Chemical Richmond Works and Chevron Richmond Refinery's audit history, incidents and general Industrial Safety Ordinance information on January 25, 2012.

Hazardous Materials Programs followed up with Chevron Richmond Refinery and worked each with U.S. EPA, Cal OSHA, BAAQMD and CSB in their independent investigation of the August 6 2012 fire at the No. 4 Crude Unit. At the time of this report, none of the investigations are finalized. To date, CCHMP co-hosted two public meetings in conjunction with the City of Richmond to share information regarding this severity level III incident. CCHMP, City of Richmond and representatives of the agencies performing the investigation shared preliminary results and addressed public issues and concerns. Written comments were gathered and are posted on the Health Services' website.

CCHMP presented the 2010 annual RISO report to the Richmond City Council on July 26, 2011. Copies of the 2011 RISO report were submitted to the Richmond City Council and posted on cchealth.org. Select community members were also included in the distribution.

ATTACHMENT A
HAZARDOUS MATERIALS OMBUDSMAN REPORT

Hazardous Materials Ombudsman Evaluation
October, 2011 through November, 2012

I. Introduction

On July 15, 1997 the Contra Costa County Board of Supervisors authorized creation of an Ombudsman position for the County's Hazardous Materials Programs. The first Hazardous Materials Ombudsman began work on May 1, 1998. The Contra Costa County Board of Supervisors adopted an Industrial Safety Ordinance on December 15, 1998. Section 450-8.022 of the Industrial Safety Ordinance requires the Health Services Department to continue to employ an Ombudsman for the Hazardous Materials Programs. Section 450-8.030(B)(vii) of the Industrial Safety Ordinance requires an annual evaluation of the effectiveness of the Hazardous Materials Ombudsman, with the first evaluation to be completed on or before October 31, 2000.

The goals of section 450-8.022 of the Industrial Safety Ordinance for the Hazardous Materials Ombudsman are:

1) To serve as a single point of contact for people who live or work in Contra Costa County regarding environmental health concerns, and questions and complaints about the Hazardous Materials Programs.

2) To investigate concerns and complaints, facilitate their resolution, and assist people in gathering information about programs, procedures, or issues.

3) To provide technical assistance to the public.

The Hazardous Materials Ombudsman currently accomplishes these goals through the following program elements:

1) Continuing an outreach strategy so that the people who live and work in Contra Costa County can know about and utilize the program.

2) Investigating and responding to questions and complaints, and assisting people in gathering information about programs, procedures, or issues.

3) Participating in a network of environmental programs for the purpose of providing technical assistance.

This evaluation covers the period from October, 2011 through November, 2012 for the Hazardous Materials Ombudsman program. The effectiveness of the program shall be demonstrated by showing that the activities of the Hazardous Materials Ombudsman meet the goals established in the Industrial Safety Ordinance.

II. Program Elements

1. Continuing an Outreach Strategy

This period efforts were focused on maintaining the outreach tools currently available. Copies of the Ombudsman Brochure were translated into Spanish and were distributed to the public at meetings, presentations, public events, and through the mail. A contact person was also established in Public Health that could receive calls from the public in Spanish and serve as an interpreter to respond to these calls. In addition to explaining the services provided by the position, the brochure also provides the phone numbers of several other related County and State programs. The web page was maintained for the program as part of Contra Costa Health Services web site. This page contains information about the program, links to other related web sites, and information about upcoming meetings and events. A toll-free phone number is published in all three Contra Costa County phone books in the Government section.

2. Investigating and Responding to Questions and Complaints, and Assisting in Information Gathering

During this period, the Hazardous Materials Ombudsman received 188 information requests. Over 95 percent of these requests occurred via the telephone, and have been requests for information about environmental issues. Requests via e-mail are slowly increasing, mainly through referrals from Health Services main web page. Most of these requests concern problems around the home such

as asbestos removal, household hazardous waste disposal, pesticide misuse, mold and lead contamination.

Information requests about environmental issues received via the telephone were generally responded to within one business day of being received. Many of the information requests were answered during the initial call. Some requests required the collection of information or written materials that often took several days to compile. Telephone requests were responded to by telephone unless written materials needed to be sent as part of the response.

Complaints about the Hazardous Materials Programs can also be received via telephone and in writing. Persons that make complaints via telephone are also asked to provide those complaints in writing. During this period, the Hazardous Materials Ombudsman did not receive any complaints about the Hazardous Materials Program.

The Ombudsman facilitated a meeting with small businesses to discuss potential hazardous materials program fee increases.

This year, the Ombudsman facilitated community meetings after two major accidents at local oil refineries. On June 15, 2012 at the Phillips 66 oil refinery in Rodeo, a large quantity of hydrogen sulfide was released from a storage tank after the tanked ruptured due to being over-pressured. While a Shelter-in-Place was not advised for the down-wind community of Crockett, many people were impacted by the strong odors from the release. On July 2, 2012 the Ombudsman organized and facilitated a community meeting in coordination with County Supervisor Glover's staff at the Crocket Community Center. Representatives from the refinery, the County's Hazardous Materials Program and the Public Health Department responded to questions from the audience of over 100 individuals. The Ombudsman also helped facilitate follow-up responses to questions raised at the meeting that were posted at the Health Department's web site.

On August 6, 2012 a large fire broke out at the Chevron refinery in Richmond after petroleum leaking from a pipe in the crude oil processing unit ignited. A Shelter-in-Place advisory was issued for Richmond, San Pablo and North Richmond. Over the next two weeks approximately 15,000 people sought medical attention as a result of the fire. On September 24, 2012 the Ombudsman facilitated a community meeting at the Richmond auditorium which he helped plan with the Staff from Supervisor Gioia's office and other agencies where representatives from the refinery, the Hazardous Materials Program, the Bay Area Air Quality Management District, Cal OSHA, the US EPA, the US Chemical Safety Board, the Community Warning System and the Public Health department responded to questions from an audience of over 100. The Ombudsman also helped facilitate follow-up responses to questions raised at the meeting that were posted at the Health Department's web site, and participated in debriefings about the emergency response efforts.

3. Participating in a Network of Environmental Programs for the Purpose of Providing Technical Assistance.

Technical assistance means helping the public understand the regulatory, scientific, political, and legal aspects of issues. It also means helping them understand how to effectively communicate their concerns within these different arenas. This year, the Ombudsman continued to staff a number of County programs and participate in other programs to be able to provide technical assistance to the participants and the public.

- CAER (Community Awareness and Emergency Response) - This non-profit organization addresses industrial accident prevention, response and communication. The Ombudsman participated in the Emergency Notification subcommittee of CAER.
- Hazardous Materials Commission – In 2001, the Ombudsman took over as staff for the commission. As staff to the commission, the Ombudsman conducts research, prepared reports, writes letters and provides support for 3 monthly Commission meetings. In addition, during this period the Ombudsman made a presentation to the Contra Costa Pharmacist Association concerning the proper disposal of unused pharmaceuticals and tracked the development of the Alameda County Pharmaceutical Disposal Ordinance, worked with the Department of Toxic Substances Control to develop a method for the County to be able to tract 5-year reviews at contaminated sites.

- Public and Environmental Health Advisory Board – As staff to the Environmental Health subcommittee of PEHAB, the Ombudsman keeps the committee informed on issues they are interested in such as refinery flaring, contaminated fish consumption, climate change, and Integrated Pest Management.
- Integrated Pest Management Advisory Committee - During this period the Ombudsman represented the Health Department on, and was elected to be chairperson of, the County Integrated Pest Management Advisory Committee. This Committee brings Department representatives and members of the public together to help implement the County's Integrated Pest Management policy.
- Asthma Program – The Ombudsman participated in the Public Health Department's asthma program as a resource on environmental health issues. The Ombudsman represented the Asthma program in two regional collaboratives related to asthma issues, particularly diesel pollution – the Ditching Dirty Diesel Collaborative and the Bay Area Environmental Health Collaborative.
- Bay Area Air Quality Management District's Community Air Risk Evaluation Program

During this period the Ombudsman represented the Public Health Division on the advisory board to this Air District program. This advisory board meets quarterly to discuss implementation of this program that identifies and creates strategies to address health risks in communities with high air pollution emissions in the Bay Area. Two of these areas are in Contra Costa County.

- **Richmond General Plan Health Element**

During this period the Ombudsman provided technical assistance to the City of Richmond as part of an effort to implement the new Health and Wellness Element of their updated General Plan.

- **Climate Change**

During this period the Ombudsman worked with staff from the Community Wellness and Prevention Program of the Public Health Department to prepare an evaluation of the health co-benefits of the proposed greenhouse gas reduction measures contained in the County's Draft Climate Action Plan. This evaluation is part of the draft County Climate Action Plan and is scheduled to be adopted in 2013.

The Ombudsman also worked with Contra Costa Climate Leaders to put on a workshop for local planning department officials about the health benefits of climate mitigation measures.

- **San Francisco Bay Stakeholder Advisory Group for Contaminated Fish Consumption**

The Ombudsman was invited to serve on the California Department of Public Health's San Francisco Bay Stakeholder Advisory Group for Contaminated Fish Consumption. This was a two year effort to develop updated and effective public messaging for the new fish consumption advisories for San Francisco Bay that have been developed by the State, which ended in November.

The Hazardous Materials Ombudsman also attended workshops, presentations, meetings and trainings on a variety of environmental issues to be better able to provide technical assistance to the public. Topics included Environmental Justice, Cumulative impacts assessment, emergency management practices, health mitigations for consumption of contaminated fish, and land-use planning for greenhouse gas reduction.

III. Program management

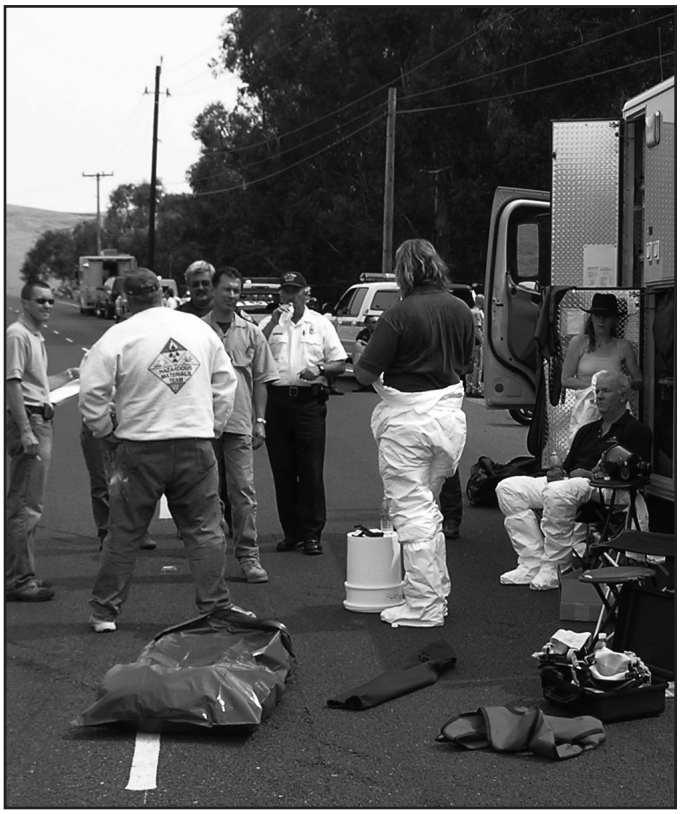
The Hazardous Material Ombudsman continued to report to the Public Health Director on a day-to-day basis during this period, while still handling complaints and recommendations about the Hazardous Materials Programs through the Health Services Director. The Ombudsman also was a member of Health Services Emergency Management Team and participates on its HEEP management team.

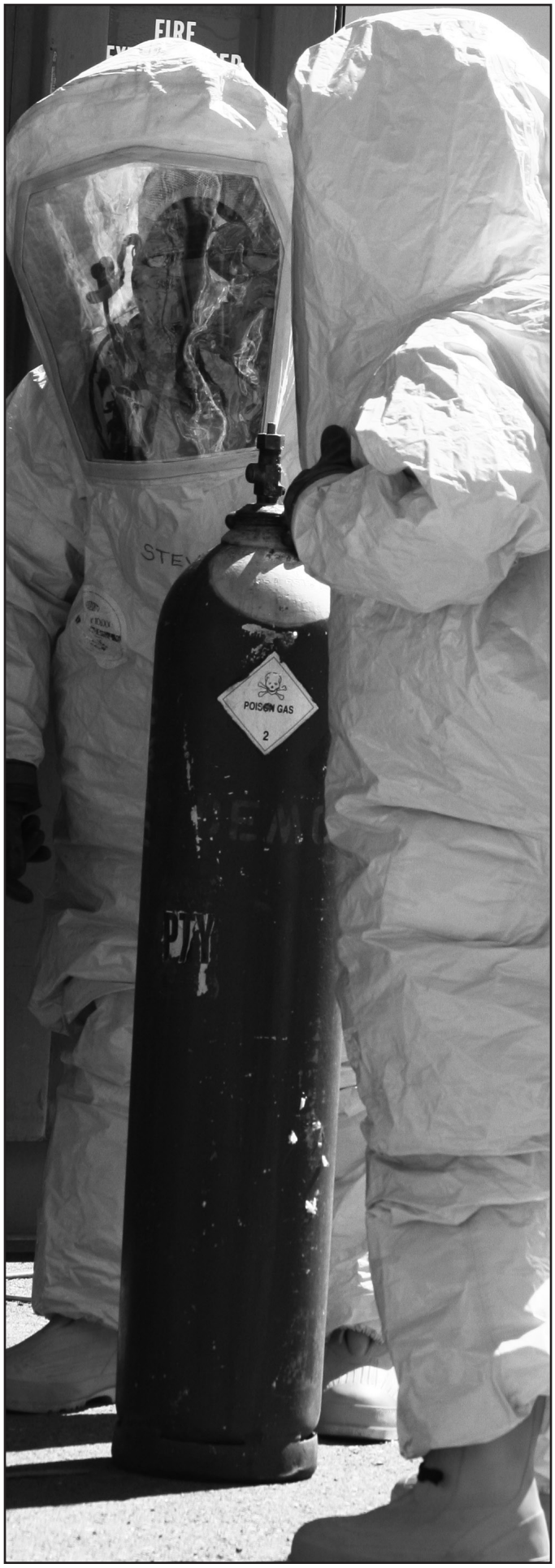
IV. Goals for the 2012/13 period

In this period, the Ombudsman will provide essentially the same services to Contra Costa residents as was provided in the last period. The Ombudsman will continue respond to questions and complaints about the actions

of the Hazardous Materials Programs; answer general questions that come from the public and assist them in understanding regulatory programs; staff the Hazardous Materials Commission and the Public and Environmental Health Advisory Board; represent the Public Health Department as part of the Ditching Dirty Diesel Collaborative and the Bay Area Environmental Health Collaborative; represent the Health Department on the Integrated Pest Management Advisory Committee and the Air District CARE Advisory Board; and participate in the CAER Emergency Notification committee.

During this period the Ombudsman will continue to work with the Public Health Department on finalizing the evaluation of the co-health benefits of the County's Climate Action Plan and begin to develop a strategy to determine the Health Department's role in adapting to climate change.





ATTACHMENT B
REGULATED SOURCES ANNUAL PERFORMANCE WITH ACCIDENT HISTORY AND INHERENT SAFETY IMPLEMENTATION

Annual Performance Review and Evaluation Submittal
June 30, 2012

*Attach additional pages as necessary

1. Name and address of Stationary Source: **Air Liquide Rodeo Hydrogen Plant, 1391 San Pablo Blvd., Rodeo, California 94572**
2. Contact name and telephone number (should CCHMP have questions): **Jared Wittry 510-245-7285 ext 2204**
3. Summarize the status of the Stationary Source's Safety Plan and Program (450-8.030(B)(2)(i)): **The plan was submitted to Contra Costa County in July of 2010. Waiting on results review.**
4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)): **There have been no updates to the plan in 2011.**
5. List of locations where Safety Plans are/will be available for review, including contact telephone numbers if the source will provide individuals with copies of the document (450-8.030(B)(2)(ii)): CCHMP Office at 4585 Pacheco Boulevard, Suite 100, Martinez, CA 94553; **Rodeo Public Library; Crockett Public Library (library closest to the stationary source).**
6. Provide any additions to the annual accident history reports (i.e. updates) submitted pursuant to Section 450-8.016(E)(2) of County Ordinance 98-48 (450-8.030(B)(2)(iii)) (i.e., provide information identified in Section 450-8.016(E)(1) for all major chemical accidents or releases occurring between the last annual performance review report and the current annual performance review and evaluation submittal (12-month history)): **An RCFA was performed on the PG&E voltage sag which occurred October 19, 2011.**
7. Summary of each Root Cause Analysis (Section 450-8.016(C)) including the status of the analysis and the status of implementation of recommendations formulated during the analysis (450-8.030(B)(2)(iv)): **On October 19, 2011 the feed compressor shutdown due to a voltage sag from a PG&E transmission fault. The action items formulated for PG&E were scheduled for implimentation in December of 2011 to prevent reoccurance.**
8. Summary of the status of implementation of recommendations formulated during audits, inspections, Root Cause Analyses, or Incident Investigations conducted by the Department (450-8.030(B)(2)(v)): **The RCFA action items for PG&E were scheduled for completion in December of 2011. Audit action items from the 2011 audit are currently being implimented. See section 15 and 16 for details. The current action plan has completion of the 2011 items in August.**
9. Summary of inherently safer systems implemented by the source including but not limited to inventory reduction (i.e., intensification) and substitution (450-8.030(B)(2)(vi)): **No new inherently safer systems have been implimented.**
10. Summarize the enforcement actions (including Notice of Deficiencies, Audit Reports, and any actions turned over to the *Contra Costa County District Attorney's Office*) taken with the Stationary Source pursuant to Section 450-8.028 of County Ordinance 98-48 (450-8.030(B)(2)(vii)): **There were no enforcement actions during this period.**
11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(3)): **No penalities have been assessed against this facility.**
12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the *ISO* (450-8.030(B)(4)): **The total CalARP Program fees for the nine facilities subject to the Industrial Safety Ordinance was $463,493. The total Industrial Safety Ordinance program fees for these nine facilities was $442,713. (NOTE: These fees include those for the County and City of Richmond ISO facilities)**
13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): **2,201 hours were used to audit/inspect and issue reports on the Risk Management Chapter of the Industrial Safety Ordinance.**
14. Copies of any comments received by the source (that may not have been received by the Department) regarding the effectiveness of the local program that raise public safety issues(450-8.030(B)(6)):**None**
15. Summarize how this Chapter improves industrial safety at your stationary source (450-8.030(B)(7)): **This chapter has prompted us to improve safety culture through SafeStart training. All personnel have been trained through 2 of 5 program units with all units to be covered by calendar end 2013. SafeStart is the most successful training process in the world for developing personal**

safety skills both on and off the job and has proven to reduce injuries 30%-70% in 6-18 months by more than 2,500 clients in 50+ countries. Air Liquide Large Industries also devoloped Fundamental Safety Rules requiring 100% compliance of employees and contractors to 6 key rules selected due to their potential to cause serious injury, quality or reliability loss including Standard Operating Procedures, Work Permitting, Management of Change, Safety System Override, Energy Control and Isolation and Fall Protection. The source has also improved contractor safety through requiring contractors to attend local safety councils for required safety training prior to beginning work at the site. Furthermore, all contractor companies working on-site during turn around activity will be assessed through a standard contractor safety checklist. The Rodeo Hydrogen Facility was audited to an internal quality audit protocal named IMS which includes a safety component and is scheduled to undergo an annual Health, Safety, Environmental and Security Audit in September 2012. A hydrogen safety committee was developed last year and one operations employee from the Rodeo facility is a Co-Chair to the committee as well as the new safety champion to the location. The safety champion process was developed in 2011 and is comprised of a multidisciplinary network of non-management volunteers chartered to enhance our safety culture and create safe environments for our employees, contractors and visitors. All employees at the Rodeo facility were also retrained in the LIVES safety program which includes components such as Hot Work, Confined Space, Energy Control and Isolation and Safe Working Conditions.

16. List examples of changes made at your stationary source due to implementation of the Industrial Safety Ordinance (e.g., recommendations from PHA's, Compliance Audits, and Incident Investigations in units not subject to CalARP regulations; recommendations from RCA's) that significantly decrease the severity or likelihood of accidental releases: **The stationary source has implemented a Latent Conditions program that focuses on reducing the potential human error associated with Management of Change, procedure development and modification, Incident Investigation and Process Hazard Analysis. The stationary source has implemented a Management of Organization Change process to better manage changes to ensure process safety activities are accomplished. In addition, the stationary source has conducted procedural HAZOPs on including Reformer Emergency Shutdown, Reformer Trip Checklist Emergency Shutdown, Reformer Normal Shutdown, Ammonia Unloading, Natural Gas System Initial Start-Up and Reformer Normal Start-Up which will help operations run our facility in a reliable and safe manner. Stationary source completed its 5-year Process Hazard Analysis revalidation using the HAZOP methodology. Findings will be risk ranked and entered into our internal PHA action tracking system (Simon) to be tracked to closure.**

17. Summarize the emergency response activities conducted at the source (e.g., CWS or TEN activation) in response to major chemical accidents or releases: **None**

Annual Performance Review and Evaluation Submittal
June 30, 2012

*Attach additional pages as necessary

1. Name and address of Stationary Source: Air Products
   Shell Martinez Refinery, 110 Waterfront Road, Martinez, CA 94553
2. Contact name and telephone number (should CCHMP have questions): Eric Schneider (925) 372-9302
3. Summarize the status of the Stationary Source's Safety Plan and Program (450-8.030(B)(2)(i)): The stationary Source's Safety Plan is complete per the CCHS requirements.. The program was audited in the past year by CCHS as part of the three year CCHS site audit . The Safety Cultral Survey was completed with follow actions underway. Iimprovement comments were received from CCHS on the Cutural Survey also during the recent audit and these will be implemented in the coming year.. CCHS's unannounced Inspection of CalARP Program, Hazardous Materials Business Plan and Hazardous Waste Generator Inspection at Tesoro Martinez--July 11, 2011, have been completed..
4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)): No planned changes at this time. The three year periodic aduit of the site safety program by CCHS , will require some updates of the Plan.
5. List of locations where Safety Plans are/will be available for review, including contact telephone numbers if the source will provide individuals with copies of the document (450-8.030(B)(2)(ii)): CCHMP Office at 4585 Pacheco Boulevard, Suite 100, Martinez; Martinez Library (library closest to the stationary source).
6. Provide any additions to the annual accident history reports (i.e. updates) submitted pursuant to Section 450-8.016(E)(2) of County Ordinance 98-48 (450-8.030(B)(2)(iii)) (i.e., provide information identified in Section 450-8.016(E)(1) for all major chemical accidents or releases occurring between the last annual performance review report and the current annual performance review and evaluation submittal (12-month history)): There were no major chemical accidents or releases to report.
7. Summary of each Root Cause Analysis (Section 450-8.016(C)) including the status of the analysis and the status of implementation of recommendations formulated during the analysis (450-8.030(B)(2)(iv)): A potential MCAR near miss occurred on January 27, 2012. The incident involved a ruptured furnace tube that led to an energy release contained wihtin the furnace. Immediate response was to remove ruptured tube and an additional tube with similar MI inspection results to reduce the risk of another ruptured tube. A systems change to reduce the potential for a subsequent energy release should a rupture tube occur is pending.
8. Summary of the status of implementation of recommendations formulated during audits, inspections, Root Cause Analyses, or Incident Investigations conducted by the Department (450-8.030(B)(2)(v)): Air Products and CCHS completed the formal (3 year) CalARP ISO audit in May, 2012 action items are under review. RMP Plan actionitems have been reviewed and presented to CCHS along with this annual update. Action actionitems from the CCHS Unannounced Inspection of CalARP Program, Hazardous Materials Business Plan and Hazardous Waste Generator Inspection at Shell Martinez--July 11, 2011, have been completed.
9. Summary of inherently safer systems implemented by the source including but not limited to inventory reduction (i.e., intensification) and substitution (450-8.030(B)(2)(vi)): None
10. Summarize the enforcement actions (including Notice of Deficiencies, Audit Reports, and any actions turned over to the *Contra Costa County District Attorney's Office*) taken with the Stationary Source pursuant to Section 450-8.028 of County Ordinance 98-48 (450-8.030(B)(2)(vii)): There were no enforcement actions during this period.
11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(3)): No penalities have been assessed against this facility.

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the *ISO* (450-8.030(B)(4)): The total CalARP Program fees for the nine facilities subject to the Industrial Safety Ordinance was $463,493. The total Industrial Safety Ordinance program fees for these nine facilities was $442,713. (NOTE: These fees include those for the County and City of Richmond ISO facilities)
13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): 2,201 hours were used to audit/inspect and issue reports on the Risk Management Chapter of the Industrial Safety Ordinance.
14. Copies of any comments received by the source (that may not have been received by the Department) regarding the effectiveness of the local program that raise public safety issues(450-8.030(B)(6)): None
15. Summarize how this Chapter improves industrial safety at your stationary source (450-8.030(B)(7)): Air Products is committed to the safer operation of our facilities and has implemented applicable requirements outlined in the ISO and CalARP regulations. Both the ISO and Human Factors programs are an integral part of our five year Operating Hazard Review revalidations and on-going management of change process. This has helped the site maintain a safety record of no recordable or Lost Time Injuries since the last plan submittal. There have been no incidents resulting in an offsite impact. The Chapter has helped reinforce the need to maintain and follow a structured safety program to help ensure the safety of our employees and the communities in which we operate
16. List examples of changes made at your stationary source due to implementation of the Industrial Safety Ordinance (e.g., recommendations from PHA's, Compliance Audits, and Incident Investigations in units not subject to CalARP regulations; recommendations from RCA's) that significantly decrease the severity or likelihood of accidental releases: Air Products has continued to refine the Tier IV site specific documents at the request of CCHS to clarify ISO requirements, The implementation of the ISO standards, the Safety Cultural Survey and the recent 3 year audit have resulted in ongoing improvement of our, RMP plan and Safety Plan and Standard work instruction documentation, contributing to our ongoing safe operation..
17. Summarize the emergency response activities conducted at the source (e.g., CWS or TEN activation) in response to major chemical accidents or releases: There were no emergency response activities to this site since the previous Annual Performance Review and Evaluation submittal

Annual Performance Review and Evaluation Submittal
June 30, 2012

*Attach additional pages as necessary

1. Name and address of Stationary Source: Air Products
   Tract 1, Tesoro Refinery (Golden Eagle - Avon), Solano Way, Martinez, CA
2. Contact name and telephone number (should CCHMP have questions): Eric Schneider (925) 372-9302
3. Summarize the status of the Stationary Source's Safety Plan and Program (450-8.030(B)(2)(i)): *The stationary Source's Safety Plan is complete per the CCHS requirement.. The program was audited in the past year by CCHS as part of the three CCHS site audit . The Safety Cultral Survey was completed with follow actionunderway and improvement comments were received from CCHSon the Cutural Survey during the recent audit and these will be implemented in the coming year.*
4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)): No updates are planned at this time. The periodic three year audit of our safety programs was completed in May of this year. Action items identified as a result of the audit will be completed.
5. List of locations where Safety Plans are/will be available for review, including contact telephone numbers if the source will provide individuals with copies of the document (450-8.030(B)(2)(ii)): CCHMP Office at 4585 Pacheco Boulevard, Suite 100, Martinez; Martinez Library (library closest to the stationary source).
6. Provide any additions to the annual accident history reports (i.e. updates) submitted pursuant to Section 450-8.016(E)(2) of County Ordinance 98-48 (450-8.030(B)(2)(iii)) (i.e., provide information identified in Section 450-8.016(E)(1) for all major chemical accidents or releases occurring between the last annual performance review report and the current annual performance review and evaluation submittal (12-month history)): No evnets
7. Summary of each Root Cause Analysis (Section 450-8.016(C)) including the status of the analysis and the status of implementation of recommendations formulated during the analysis (450-8.030(B)(2)(iv)): **No events**
8. Summary of the status of implementation of recommendations formulated during audits, inspections, Root Cause Analyses, or Incident Investigations conducted by the Department (450-8.030(B)(2)(v)): Air Products and CCHS completed the formal (3 year) CalARP ISO audit in May, 2012 action items are under review. RMP Plan actionitems have been reviewed and presented to CCHS along with this annual update. Action actionitems from the CCHS Unannounced Inspection of CalARP Program, Hazardous Materials Business Plan and Hazardous Waste Generator Inspection at Tesoro Martinez--July 11, 2011 , have been completed.
9. Summary of inherently safer systems implemented by the source including but not limited to inventory reduction (i.e., intensification) and substitution (450-8.030(B)(2)(vi)): None
10. Summarize the enforcement actions (including Notice of Deficiencies, Audit Reports, and any actions turned over to the *Contra Costa County District Attorney's Office*) taken with the Stationary Source pursuant to Section 450-8.028 of County Ordinance 98-48 (450-8.030(B)(2)(vii)): There were no enforcement actions during this period.
11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(3)): No penalities have been assessed against this facility.
12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the *ISO* (450-8.030(B)(4)): The total CalARP Program fees for the nine facilities subject to the Industrial Safety Ordinance was $463,493. The total Industrial Safety Ordinance program fees for these nine facilities was $442,713. (NOTE: These fees include those for the County and City of Richmond ISO facilities)

13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): 2,201 hours were used to audit/inspect and issue reports on the Risk Management Chapter of the Industrial Safety Ordinance.

14. Copies of any comments received by the source (that may not have been received by the Department) regarding the effectiveness of the local program that raise public safety issues(450-8.030(B)(6)): None

15. Summarize how this Chapter improves industrial safety at your stationary source (450-8.030(B)(7)): *Air Products is committed to the safer operation of our facilities and has implemented applicable requirements outlined in the ISO and CalARP regulations. Both the ISO and Human Factors programs are an integral part of our five year Operating Hazard Review revalidations and on-going management of change process. This has helped the site maintain a safety record of no recordable or Lost Time Injuries since the last plan submittal. There have been no incidents resulting in an offsite impact. The Chapter has helped reinforce the need to maintain and follow a structured safety program to help ensure the safety of our employees and the communities in which we opera*

16. List examples of changes made at your stationary source due to implementation of the Industrial Safety Ordinance (e.g., recommendations from PHA's, Compliance Audits, and Incident Investigations in units not subject to CalARP regulations; recommendations from RCA's) that significantly decrease the severity or likelihood of accidental releases: *Air Products has continued to refine the Tier IV site specific documents at the request of CCHS to clarify ISO requirements, The implementation of the ISO standards, the Safety Cultural Survey and the recent 3 year audit have resulted in ongoing improvement of our, RMP plan and Safety Plan and Standard work instruction documentation, contributing to our ongoing safe operation.*

17. Summarize the emergency response activities conducted at the source (e.g., CWS or TEN activation) in response to major chemical accidents or releases: *There were no emergency response activities to this site since the previous Annual Performance Review and Evaluation submittal*

Annual Performance Review and Evaluation Submittal
June 25, 2012

*Attach additional pages as necessary

1. Name and address of Stationary Source: Phillips 66 Rodeo Refinery, 1380 San Pablo Avenue, Rodeo, CA. 94572
2. Contact name and telephone number (should CCHMP have questions): Jim Ferris: 510-245-4517
3. Summarize the status of the Stationary Source's Safety Plan and Program (450-8.030(B)(2)(i)): The Safety Plan was last revised in July 2009 per the required 3 year schedule. CCHMP reviewed and the changes they requested were completed on 11-4-2010. Safety Plan is next due for update in August 2012.
4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)): The original Safety Plan for this facility was filed with Contra Costa Health Services on January 14, 2000. A revised plan was filed on April 7, 2000 with the updated recommendations requested by CCHS. A Human Factors Amendment was submitted on January 15, 2001. In conjunction with CCHSs required 2nd public meeting on our plan and audit findings, we submitted a complete revision of the plan to reflect the change in ownership of our facility and to update where needed. We took this opportunity to include Human Factors within the plan instead of having it as an amendment. On August 9, 2002 the plan was resubmitted. Public meetings for our plans were held on June 22, 2004 in Rodeo and July 8, 2004 in Crockett. As required the Plan was fully updated in August 2005 on the 3 year cycle. The Plan was reviewed by CCHS and was revised on July 28, 2006 with recommended changes. The last update to the Safety Plan was in July 2009. Recommendations requested by CCHMP were incorporated into the Safety Plan 11-4-2010. Safety Plan is due for update per the 3 year cycle in August 2012.
5. List of locations where Safety Plans are/will be available for review, including contact telephone numbers if the source will provide individuals with copies of the document (450-8.030(B)(2)(ii)): CCHMP Office at 4585 Pacheco Boulevard, Suite 100, Martinez; Rodeo Public Library; Crockett Public Library (libraries closest to the stationary source).
6. Provide any additions to the annual accident history reports (i.e. updates) submitted pursuant to Section 450-8.016(E)(2) of County Ordinance 98-48 (450-8.030(B)(2)(iii)) (i.e., provide information identified in Section 450-8.016(E)(1) for all major chemical accidents or releases occurring between the last annual performance review report and the current annual performance review and evaluation submittal (12-month history)): 6-15-12 Tank 294 Overpressure —See Attachment 1.
7. Summary of each Root Cause Analysis (Section 450-8.016(C)) including the status of the analysis and the status of implementation of recommendations formulated during the analysis (450-8.030(B)(2)(iv)): 6-15-12 Incident is under investigation at this time.
8. Summary of the status of implementation of recommendations formulated during audits, inspections, Root Cause Analyses, or Incident Investigations conducted by the Department (450-8.030(B)(2)(v)): The 2011 CalARP/ISO audit fiinding action items were submitted in May 2012 for County review. Action items are being worked per their target dates.
9. Summary of inherently safer systems implemented by the source including but not limited to inventory reduction (i.e., intensification) and substitution (450-8.030(B)(2)(vi)): See Attachment 2
10. Summarize the enforcement actions (including Notice of Deficiencies, Audit Reports, and any actions turned over to the *Contra Costa County District Attorney's Office*) taken with the Stationary Source pursuant to Section 450-8.028 of County Ordinance 98-48 (450-8.030(B)(2)(vii)): There were no enforcement actions during this period.
11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(3)): No penalities have been assessed against this facility.

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the *ISO* (450-8.030(B)(4)): The total CalARP Program fees for the nine facilities subject to the Industrial Safety Ordinance was $463,493. The total Industrial Safety Ordinance program fees for these nine facilities was $442,713. (NOTE: These fees include those for the County and City of Richmond ISO facilities)
13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): 2,201 hours were used to audit/inspect and issue reports on the Risk Management Chapter of the Industrial Safety Ordinance.
14. Copies of any comments received by the source (that may not have been received by the Department) regarding the effectiveness of the local program that raise public safety issues(450-8.030(B)(6)): No comments have been received.
15. Summarize how this Chapter improves industrial safety at your stationary source (450-8.030(B)(7)): In addition to the Phillips 66 Corporate Health Safety Environment Management Systems the ISO provides another tool for the continuation of improvement of health and safety performance.
16. List examples of changes made at your stationary source due to implementation of the Industrial Safety Ordinance (e.g., recommendations from PHA's, Compliance Audits, and Incident Investigations in units not subject to CalARP regulations; recommendations from RCA's) that significantly decrease the severity or likelihood of accidental releases Units not covered by RMP, CalARP, and PSM are covered under the ISO and PHAs are scheduled and performed on all these units. Recommendations from the PHAs are implemented at an accelerate rate. A list of inherently safer systems as required by the ISO for PHA recommendations and projects are listed in Attachment 2.
17. Summarize the emergency response activities conducted at the source (e.g., CWS or TEN activation) in response to major chemical accidents or releases: See item #6 and Attachment 1.

Attachment 1
Tank 294 Overpressure Summary

At 7:10 AM on June 15, 2012, an over-pressure occurred on Tank 294 causing an approximately twenty-foot separation in the roof-shell seam. Tank 294 stores "sour water" (dissolved ammonia and sulfur compounds) and light hydrocarbon. The opening released a combination of the natural gas blanket, hydrocarbons and hydrogen sulfide vapors into the air. Phillips 66 initiated its emergency response procedures, which included emergency response team members responding directly to Tank 294 and activation of the Refinery Incident Management Team (IMT) and Emergency Operations Center (EOC). We also made all required agency notifications

The Community Warning System was activated for a Level 1 incident at 7:40 AM and the following agencies were notified:

- Contra Costa Health Services Department
- Bay Area Air Quality Management District
- Rodeo Hercules Fire Protection District
- Contra Costa County Sherriff's Office

At 08:00 AM the Incident was up-graded to a CWS Level-2 and the following additional agency notifications were subsequently made:

- Cal OES
- National Response Center
- CA Dept of Public Health
- CARB – Office of Emergency Response

The following agencies responded:
Contra Costa Health Services – Hazmat
Bay Area Air Quality Management District

The day was Clear, Warm, and Sunny with Wind from the SW @ 3-8 mph and the Temperature was 65^0 F.

The Refinery Incident Management Team and the Emergency Operations Center were activated to manage the incident in conjunction with agency representatives. Representatives from the Contra Costa County Health Services Hazmat Division and the Bay Area Air Quality Management District participated in the ICS-201 development, Incident Objectives and strategic decisions made to manage the incident.

Throughout the day on June 15th and 16th, various actions were taken to mitigate the release and reduce odors, including:

- Atmospheric monitoring was conducted in the local community to assess whether the incident impacted human health and/or the environment. Direct readings were taken downwind of the release location in the town of Crockett and along I-80 between Cummings Skyway and Willow Avenue exits
- Providing a nitrogen supply to the tank to purge the tank vapor space with nitrogen gas to replace the natural gas blanket and maintain the oxygen-free atmosphere inside the tank.
- Applying a water spray to the tank opening to suppress vapors.
- Removing the remaining material in the tank as rapidly as possible.
- Mutual Aid was requested to provide an aerial foam truck. This truck was used to provide a water suppressing spray and then to apply foam into the tank to further suppress vapors.
- A specialty contractor and materials were mobilized and a repair plan was developed to apply a patch to the roof-shell opening. The patch was completed at approximately 11:00 p.m. on June 16th.

Attachment 1
Tank 294 Overpressure Summary (continued)

At 8:30 am on June 17th, 2012 the Incident was downgraded to a CWS Level-0 and emergency response operations were suspended. Activities will continue to further remove sour water and hydrocarbons from the tank in a safe manner until the tank can be taken out of service and ultimately cleaned and repaired.

Our refinery Ground Level Monitoring system recorded the following maximum levels: Crockett GLM Max 3-Minute Average 0.215 ppm and Max 1-Hour Average 0.068 ppm, East Refinery GLM Max 3-Minute Average 0.105 ppm and Max 1-Hour Average 0.036 ppm.

Representatives from the refinery Health & Safety Department conducted offsite monitoring using a RAE Systems Multi-RAE 5-gas meters. Odors were detected in the surrounding community; however measured levels of VOCs (Volatile Organic Compounds) and H_2S were low. Additional measurements were taken by BAAQMD and CCHS-Hazmat. All off-site measured levels of H_2S were below 1.0 ppm and were most often below 0.1 ppm. Measured levels of VOCs were below 2.0 ppm.

Natural gas, hydrogen sulfide and naphtha vapors were released. Calculations are being compiled to estimate release quantities.
No Injuries Occurred.

The refinery received approximately 100 odor complaints. The BAAQMD and Contra Costa Health Services also received numerous odor complaints.

A formal incident investigation is underway to determine the cause(s) of the incident and corrective actions.

Attachment 2

June 2011 - May 2012 ISS improvements

Reference	Type	ISS category	Description
M2007344-001	Project	Passive	Upgraded tank metallurgy
M2008757-001	Project	Passive	Upgraded tank metallurgy
M2008891-001	Project	Passive	Upgraded piping metallurgy
M2009968-001	Project	Passive	Upgraded piping metallurgy
M20101599-001	Project	Passive	Upgraded piping metallurgy
M20101754-001	Project	Passive	Upgraded tank wall thickness.
M20101983-001	Project	Passive	Upgraded piping metallurgy
M20102325-001	Project	Passive	Upgraded piping metallurgy
M2010642-001	Project	Passive	Upgraded piping metallurgy
M2011255-001	Project	Inherent	Modified piping layout to eliminate dead legs.
M20112623-001	Project	Passive	Upgraded to a less corrosive chemical.
M2011528-001	Project	Inherent	Modified piping layout to eliminate dead legs.
M2011569-001	Project	Inherent	Replaced unused heat exchanger with piping.
M2011870-001	Project	Inherent	Consolidated chemical usage
M20112094-001	Project	Passive	Upgraded piping metallurgy
M20111151-001	Project	Passive	Upgraded piping metallurgy

Annual Performance Review and Evaluation Submittal
June 30, 2011

*Attach additional pages as necessary

1. Name and address of Stationary Source: General Chemical West LLC, Bay Point Works, 501 Nichols Rd., Bay Point, CA 94565
2. Contact name and telephone number (should CCHMP have questions): Jim Craig, 925-458-7363
3. Summarize the status of the Stationary Source's Safety Plan and Program (450-8.030(B)(2)(i)): The facility's safety plan has been updated as of May 31, 2011.
4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)): There have been numerous revisions to the plan during 2011 (rev date 5/31/11) as well as corresponding revisions to the other safety manual chapters to reflect current ISO compliant practices.
5. List of locations where Safety Plans are/will be available for review, including contact telephone numbers if the source will provide individuals with copies of the document (450-8.030(B)(2)(ii)): CCHMP Office at 4585 Pacheco Boulevard, Suite 100, Martinez, CA 94553; Bay Point Library (library closest to the stationary source). The plan is located at the Bay Point Works office complex as well as electronically, it was signed and approved by the Director of Manufacturing on 6/28/11.
6. Provide any additions to the annual accident history reports (i.e. updates) submitted pursuant to Section 450-8.016(E)(2) of County Ordinance 98-48 (450-8.030(B)(2)(iii)) (i.e., provide information identified in Section 450-8.016(E)(1) for all major chemical accidents or releases occurring between the last annual performance review report and the current annual performance review and evaluation submittal (12-month history)): There have been no MCAR events since last update.
7. Summary of each Root Cause Analysis (Section 450-8.016(C)) including the status of the analysis and the status of implementation of recommendations formulated during the analysis (450-8.030(B)(2)(iv)): There have been no MCAR events, thus no root cause analyses were required to be performed.
8. Summary of the status of implementation of recommendations formulated during audits, inspections, Root Cause Analyses, or Incident Investigations conducted by the Department (450-8.030(B)(2)(v)): At this time 46 (78%) of the 59 recommendations as result of the 2011 triannual ISO Audit are considered by the facility to be closed with the remainder in progress.
9. Summary of inherently safer systems implemented by the source including but not limited to inventory reduction (i.e., intensification) and substitution (450-8.030(B)(2)(vi)): The facility has reduced overall regulated hazardous material inventories by 47% or 1,711,792 pounds since its prior submission. Notable specifics include: NH_3 < 30%, NH_4F <17%, NH_4F/H_3PO_4 Blends <93%, NH_4OH <85%, HCl <92%, AHF <4%, HNO_3 <82%, and Mixed Acid Etchants <43%. Additionally the facility used its' ISS worksheets and checklists for the 2 PHA's conducted this year to ensure ISS is considered.
10. Summarize the enforcement actions (including Notice of Deficiencies, Audit Reports, and any actions turned over to the *Contra Costa County District Attorney's Office*) taken with the Stationary Source pursuant to Section 450-8.028 of County Ordinance 98-48 (450-8.030(B)(2)(vii)): There were no enforcement actions during this period.
11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(3)): No penalities have been assessed against this facility.
12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the *ISO* (450-8.030(B)(4)): The total CalARP Program fees for the nine facilities subject to the Industrial Safety Ordinance was $568,631. The total Industrial Safety Ordinance program fees for these nine facilities was - $713,631. (NOTE: These fees include those for the County and City of Richmond ISO facilities)
13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): 1510 hours were used to audit/inspect and issue reports on the Risk Management Chapter of the Industrial Safety Ordinance.
14. Copies of any comments received by the source (that may not have been received by the Department) regarding the effectiveness of the local program that raise public safety issues(450-8.030(B)(6)): No comments were received since the last update.

15. Summarize how this Chapter improves industrial safety at your stationary source (450-8.030(B)(7)): By providing regulatory guidance and supprt when it is requested and through thorough compliance audits that are conducted triannually.
16. List examples of changes made at your stationary source due to implementation of the Industrial Safety Ordinance (e.g., recommendations from PHA's, Compliance Audits, and Incident Investigations in units not subject to CalARP regulations; recommendations from RCA's) that significantly decrease the severity or likelihood of accidental releases: Improved analyses of processes at the facility in regards to continuous improvement of the physical units as well as internal program oversight.
17. Summarize the emergency response activities conducted at the source (e.g., CWS or TEN activation) in response to major chemical accidents or releases: No emergency response activities took place since the last update.

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*Attach additional pages as necessary

1. Name and address of Stationary Source: Shell Oil Products U.S. Martinez Refinery , 3485 Pacheco Blvd., Martinez, CA 94553
2. Contact name and telephone number (should CCHMP have questions): Ken Axe; 925-313-5371
3. Summarize the status of the Stationary Source's Safety Plan and Program (450-8.030(B)(2)(i)): SMR's Safety Plan was last updated in September 2010. SMR's Safety Program is being implemented. SMR's Safety Program was most recently reviewed by CCHS during the CalARP/ISO audit conducted in May 2009.
4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)): Updates to SMR's Safety Plan submitted in September 2009 address comments from CCHS generated during the May 2009 CalARP/ISO Audit. While some of the comments pertained specifically to the Safety Plan document, others pertained directly to program elements, which were subsequently documented in the Safety Plan.
5. List of locations where Safety Plans are/will be available for review, including contact telephone numbers if the source will provide individuals with copies of the document (450-8.030(B)(2)(ii)): CCHMP Office at 4585 Pacheco Boulevard, Suite 100, Martinez; Martinez Public Library (library closest to the stationary source).
6. Provide any additions to the annual accident history reports (i.e. updates) submitted pursuant to Section 450-8.016(E)(2) of County Ordinance 98-48 (450-8.030(B)(2)(iii)) (i.e., provide information identified in Section 450-8.016(E)(1) for all major chemical accidents or releases occurring between the last annual performance review report and the current annual performance review and evaluation submittal (12-month history)): There were no MCAR's in the current reporting period (July 1, 2010 to June 30, 2011), and therefore no updates to the Accident History.
7. Summary of each Root Cause Analysis (Section 450-8.016(C)) including the status of the analysis and the status of implementation of recommendations formulated during the analysis (450-8.030(B)(2)(iv)): There were no MCAR's in the current reporting period (July 1, 2010 to June 30, 2011), and therefore no RCA's were required.
8. Summary of the status of implementation of recommendations formulated during audits, inspections, Root Cause Analyses, or Incident Investigations conducted by the Department (450-8.030(B)(2)(v)): 52 of 55 action items arising from the May 2009 CalARP/ISO Audit have been closed, and none of the remaining action items are overdue. There have been no RCA's or Incident Investigations conducted by the Department.
9. Summary of inherently safer systems implemented by the source including but not limited to inventory reduction (i.e., intensification) and substitution (450-8.030(B)(2)(vi)): See Attachment 1, Table 1.
10. Summarize the enforcement actions (including Notice of Deficiencies, Audit Reports, and any actions turned over to the *Contra Costa County District Attorney's Office*) taken with the Stationary Source pursuant to Section 450-8.028 of County Ordinance 98-48 (450-8.030(B)(2)(vii)): There were no enforcement actions during this period.
11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(3)): No penalities have been assessed against this facility.
12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the *ISO* (450-8.030(B)(4)): The total CalARP Program fees for the nine facilities subject to the Industrial Safety Ordinance was $568,631. The total Industrial Safety Ordinance program fees for these nine facilities was - $713,631. (NOTE: These fees include those for the County and City of Richmond ISO facilities)
13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): 1510 hours were used to audit/inspect and issue reports on the Risk Management Chapter of the Industrial Safety Ordinance.
14. Copies of any comments received by the source (that may not have been received by the Department) regarding the effectiveness of the local program that raise public safety issues(450-8.030(B)(6)): None received.

15. Summarize how this Chapter improves industrial safety at your stationary source (450-8.030(B)(7)): SMR has integrated requirements of the Industrial Safety Ordinance into our Health, Safety, and Environment Management System; in the context of our HSE MS, the ISO requirements help drive continual improvement in our HSE performance.
16. List examples of changes made at your stationary source due to implementation of the Industrial Safety Ordinance (e.g., recommendations from PHA's, Compliance Audits, and Incident Investigations in units not subject to CalARP regulations; recommendations from RCA's) that significantly decrease the severity or likelihood of accidental releases: See Attachment 1, Table 2.
17. Summarize the emergency response activities conducted at the source (e.g., CWS or TEN activation) in response to major chemical accidents or releases: There were no MCAR's in the current reporting period (July 1, 2010 to June 30, 2011).

Attachment 1
Table 1. Summary of Implemented ISS

ISS Item Number	ISS Type	Source/Study	Description
M20101614-001 M20103368-001 M20103367-002	Minimize	ISS Review of Existing Process	Seal Weld Shut Furnace Explosion Doors per LFI 2009AC04. Martinez furnaces built prior to 1995 have explosion doors; which have been shown in the industry and within Shell to provide no meaningful protection for furnace overpressure. The LFI describes a hazard inherent to these doors as a result of air leakage which has resulted in misleading flue gas O2 measurements. As a result the LFI requires all Manufacturing locations to seal heater explosion doors to prevent the hazard described in the LFI.
M2011950-001	Minimize	ISS Review of Existing Process	Remove Alky Caustic Washout Line from Settler 1. Line had not been used for several years and it was a dead leg.
M2011740-001	Minimize	ISS Review of Existing Process	Upgraded EB-860 tube bundle from Carbon Steel to 316L Stainless Steel.
M20113043-001	Minimize	ISS Review of Existing Process	Upgraded SWS-7 Reflux Pump P-14591 Outlet Piping to Alloy material.
M20112934-001	Minimize	ISS Review of Existing Process	Added valve to SCOT-1 absorber drain pipe to remove a dead-leg, which becomes plugged with corrosion products in the MDEA.
R2010020-001	Minimize	ISS Review of Existing Process	Installed Dual Class 1 check valves on pump P-12564/5 discharge to mitigate reverse flow scenarios.

Table 2. ISO-only Recommendations Implemented (not required by CalARP)

Recommendation Number	Source/Study	Description
R2012002-003	2012 OPCEN Flare PHA	Configured a high level alarm on V-17399 and V-1074, OPCEN FLARE KO POT to provide warning of high liquid level in the OPCEN Flare KO Pot.
M20112390-001	2011 VGT PHA Revalidation	Replaced VGT SP-498 (untreated gas liquid trap) with a pipe spool. The system is no longer used because there is not much liquid entrainment and a downstream knock-out vessel is sufficient for liquid removal. Because this trap is no longer used; there is potential to create a deadleg condition with potential hazardous release
R2011020-001	2011 CR2 PHA Revalidation	Installed label on discharge header from P-14469/70 to avoid incorrect line-up
R2010050-001	2010 LOP Flare PHA Revalidation	Added signs along the fence lines around our flare area and informed all our contractors of the requirement to evacuate this area in the event of a flaring incident to minimize personnel exposure to heat fluxes
R2010045-007	2010 ETP PHA Revalidation	Added strapping level information to work instruction for operator use while writing safe work permits for offloading ferric chloride.
R2010045-006	2010 ETP PHA Revalidation	Added strapping level information to work instruction for operator use while writing safe work permits for offloading caustic.
R2010045-005	2010 ETP PHA Revalidation	Added strapping level information to work instruction for operator use while writing safe work permits for offloading sulfuric acid.
R2010045-002	2010 ETP PHA Revalidation	Installed overfill controls on API Separator.
R2010044-005	2010 Recovered Oil System PHA Revalidation	Updated training manuals for Recovered Oil Coordinator to meet current Shell L&D requirements.
R2010044-003	2010 Recovered Oil System PHA Revalidation	Sulfuric acid system at the Recovered Oil facilities has been deinventoried. Idle signs are on the tank.
R2010035-017	2010 COGEN PHA Revalidation	Critical equipment has been identified with normally on and normally off labels in the PECC and at the STG lube oil skid. In addition to the labels a gas turbine diagram was posted in each PECC identifying normally on equipment and their location on the gas turbine.
R2010035-016	2010 COGEN PHA Revalidation	Added valve extensions to bypass valves around 650 psig steam non-return valve to safely access valves.
R2010035-015	2010 COGEN PHA Revalidation	Reviewed and documented Mark V instrument alarms for operator response actions (include in ESP Variables Table).
R2010035-014	2010 COGEN PHA Revalidation	Added Ejector downstream block valves to CSO checklist.
R2010035-010	2010 COGEN PHA Revalidation	Added Car Seal Open to 2” block valves; N2 & N3 entering Degasser from Natural Gas Scrubbers.
R2010035-009	2010 COGEN PHA Revalidation	Added Car Seal to block valves in the Battery Limit flare lines.

Table 2. (continued)

Recommendation Number	Source/Study	Description
R2010035-007	2010 COGEN PHA Revalidation	Added the 4" block valves where the condensate from V14825 and V14925 ties in to the continuous blowdown bypass lines to V14829 and V14929 to COGEN Call Card No. 20.
R2010035-002	2010 COGEN PHA Revalidation	Car Sealing Closed the PSV14821 & PSV14921 bypass valves and including on car seal checklist.
R2009159-006	2009 Spent Caustic Neutralizer PHA Revalidation	Replaced SCN AR-637 Time Tank to meet pressure equipment rated vessel code requirements
R2008309-006	2008 HP-1 PHA Revalidation	Installed more reliable level transmitters on V-500, V-501, and V-502.
R2008309-003	2008 HP-1 PHA Revalidation	Disconnected the instrument air supply to the HV891 valve actuator so that the valve cannot be moved. Chained locked valve open to prevent overpressure of upstream equipment.

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*Attach additional pages as necessary

1. Name and address of Stationary Source: Tesoro Golden Eagle Refinery, 150 Solano Way, Martinez, CA 94553

2. Contact name and telephone number (should CCHS have questions): Claire Spencer at (925) 370-3274, Rich Leland at (925) 370-3264 or Sabiha Gokcen at (925) 370-3620.

3. Summarize the status of the Stationary Source's Safety Plan and Program (450-8.030(B)(2)(i)): An updated Safety Plan was submitted to Contra Costa Hazardous Materials Program on December 10, 2009. Contra Costa Health Services has completed five audits on the safety programs. The first audit was in September, 2000 on the safety programs. The second audit was in December, 2001 and focused on Inherently Safer Systems and Human Factors. An unannounced inspection occurred in March, 2003. CalARP/ISO audits were conducted in August, 2003, November-December, 2005, August-October, 2008 and most recently April-May 2011. All safety program elements required by the ISO have been developed and are implemented.

4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)): The original Safety Plan for this facility was filed with Contra Costa Health Services on January 14, 2000. An amended plan, updated to reflect CCHS recommendations and ownership change, was filed on November 30, 2000. A Human Factors Amendment was submitted on January 15, 2001. A Power Disruption Plan was submitted, per Board of Supervisor request, on June 1, 2001. An amended Safety Plan, updated to reflect ownership change was submitted on June 17, 2002.

   The Safety Plan for this facility will be updated whenever changes at the facility warrant an update or every three years from June 17, 2002. In addition, the accident history along with other information is updated every year on June 30. Most recently, updated Safety Plan was submitted to Contra Costa Health Services on December 10, 2009.

5. List of locations where Safety Plans are/will be available for review, including contact telephone numbers if the source will provide individuals with copies of the document (450-8.030(B)(2)(ii)): CCHS Office, 4585 Pacheco Boulevard Ste 100 Martinez CA, Martinez library

6. Provide any additions to the annual accident history reports (i.e. updates) submitted pursuant to Section 450-8.016(E)(2) of County Ordinance 98-48 (450-8.030(B)(2)(iii)) (i.e., provide information identified in Section 450-8.016(E)(1) for all major chemical accidents or releases occurring between the last accident history report submittal (January 15) and the annual performance review and evaluation submittal (June 30)): There have been three accidents meeting the major chemical accident or release criteria during this reporting period. The root cause analysis reports for two are attached to this filing.
   October 10, 2010 – Tank 650 Seal Fire (report attached)
   November 9, 2010 – Refinery-wide Power Outage (still under investigation)
   December 10, 2010 – Refinery-wide Power Outage (report attached)

7. Summary of each Root Cause Analysis (Section 450-8.016(C)) including the status of the analysis and the status of implementation of recommendations formulated during the analysis (450-8.030(B)(2)(iv)): Status of Root Cause Analysis Recommendations:
   For the March 24, 2006 #2HDS fire investigation, one recommendation remains open. It is a long-term recommendation updating the P&IDs to include metallurgy on the P&IDs. It is on target for its completion date.

   For the October 10, 2010 Tank 650 Seal Fire and the December 10, 2010 Power Outage, all recommendations are on target for resolution on the dates submitted to Contra Costa Health Services in the root cause analysis reports.

8. Summary of the status of implementation of recommendations formulated during audits, inspections, Root Cause Analyses, or Incident Investigations conducted by the Department (450-8.030(B)(2)(v)): "CCHS Information": CCHS completed an audit on September 15, 2000, December, 2001, August, 2003, November/December, 2005, August-October, 2008, and April-May 2011. There are no RCA or Incident Investigations that have been conducted by the Department.

Facility status of audit recommendations: All recommendations from CCHS audits prior to 2008 are closed. For the 2008 audit, there are 73 recommendations total in the audit and all are closed.

9. Summary of inherently safer systems implemented by the source including but not limited to inventory reduction (i.e., intensification) and substitution (450-8.030(B)(2)(vi)): Golden Eagle is submitting a list of the Inherently Safer Systems (ISS) that meet the criteria for Inherent or Passive levels only and that were completed within the last year (see attached).

10. Summarize the enforcement actions (including Notice of Deficiencies, Audit Reports, and any actions turned over to the Contra Costa County District Attorney's Office) taken with the Stationary Source pursuant to Section 450-8.028 of County Ordinance 98-48 (450-8.030(B)(2)(vii)): "CCHS Information": none

11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(3)): "CCHS Information": No penalties have been assessed against this facility.

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the ISO (450-8.030(B)(4)): "CCHS Information": The total CalARP program fees for the nine facilities subject to the Industrial Safety Ordinance was $568,631. The total Industrial Safety Ordinance Program fees for these nine facilities was $713,631. Note: these fees include those for the County and City of Richmond ISO facilities.

13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): "CCHS Information": 1510 hours were used to audit/inspect and issue reports on the Risk Management Chapter of the Industrial Safety Ordinance.

14. Copies of any comments received by the source (that may not have been received by the Department) regarding the effectiveness of the local program that raise public safety issues(450-8.030(B)(6)): This facility has not received any comments to date regarding the effectiveness of the local program.

15. Summarize how this Chapter improves industrial safety at your stationary source (450-8.030(B)(7)): Chapter 450-8 improves industrial safety by expanding the safety programs to all units in the refinery. In addition, the timeframe is shorter to implement recommendations generated from the Process Hazard Analysis (PHA) safety program than state or federal law. This has resulted in a faster implementation of these recommendations.

    Chapter 450-8 also includes requirements for inherently safer systems as part of implementing PHA recommendations and new construction. This facility has developed an aggressive approach to implementing inherently safer systems in these areas.

    Chapter 450-8 has requirements to perform root cause analyses on any major chemical accidents or releases (MCAR). This facility has applied that rigorous methodology to investigate any MCARs that have occurred since January, 1999.

    Chapter 450-8 requires a human factors program. This facility has developed a comprehensive human factors program and is in the process of implementing the program.

16. List examples of changes made at your stationary source due to implementation of the Industrial Safety Ordinance (e.g., recommendations from PHA's, Compliance Audits, and Incident Investigations in units not subject to CalARP regulations; recommendations from RCAs) that significantly decrease the severity or likelihood of accidental releases.

    This question was broadly answered under question 15 above. Some examples of changes that have been made due to implementation of the ordinance are as follows. There are some units that were not covered by RMP, CalARP or PSM. Those units are now subject to the same safety programs as the units covered by RMP, CalARP and PSM. They have had PHAs performed on them according to the timeline specified in the ISO and the PHA recommendations have been resolved on the timeline specified in the ISO. A list of inherently safer systems as required by the ISO for PHA recommendations and new construction is attached to this filing as mentioned in the response to question 9. With respect to Compliance Audits, there was a compliance audit performed in April, 2009 in addition to the CCHS audits mentioned above. All audit findings are being actively resolved. Root Cause Analysis findings and recommendations for MCARs are listed in the response under question 6.

17. Summarize the emergency response activities conducted at the source (e.g., CWS or TEN activation) in response to major chemical accidents or releases: Please refer to #6 which has the CWS classifications for the major chemical accidents and releases as well as any information regarding emergency responses by agency personnel.

Inherently Safer Designs Implemented

Item Identifier	*Implementation Category*	*Risk Reduction Category*	*Risk Reduction Strategy - Description*
ARO 044	Project	Inherent	Eliminate – Demolished a hazardous materials storage vessel.
ARO 209	Project	Inherent	Eliminate – Demolished a hazardous materials storage vessel.
ARO 269	Project	Inherent	Eliminate – Demolished a hazardous materials storage vessel.
ARO 271	Project	Inherent	Eliminate – Demolished a hazardous materials storage vessel.
ARO 367	Project	Inherent	Eliminate – Demolished a hazardous materials storage vessel.
ARO 374	Project	Inherent	Eliminate – Demolished a hazardous materials storage vessel.
ARO 377	Project	Inherent	Eliminate – Demolished a hazardous materials storage vessel.
ARO 378	Project	Inherent	Eliminate – Demolished a hazardous materials storage vessel.
ARO 588	Project	Inherent	Eliminate – Demolished a hazardous materials storage vessel.
PTS 12106	Project	Inherent	Eliminate – Demolished a hazardous materials storage vessel.
PTS 11870	Project	Passive	Moderate – Reduction of hazardous conditions by process design features.
PTS 12136	Project	Passive	Moderate – Reduction of hazardous conditions by equipment design features.
PTS 12144	Project	Passive	Moderate – Reduction of hazardous conditions by equipment design features.
PTS 12161	Project	Passive	Moderate – Reduction of hazardous conditions by equipment design features.
Item Identifier	Implementation Category	Risk Reduction Category	Risk Reduction Strategy - Description
A005-2008-001	PHA	Passive	Simplify – Used alternate design features that make operating errors less likely.
A011-2004-256	PHA	Passive	Simplify – Used alternate design features to reduce the frequency of the hazard.
A013-2004-103	PHA	Passive	Simplify – Used alternate design features to reduce the frequency of the hazard.
A016-2001-056	PHA	Inherent	Eliminate – Demolished a hazardous materials storage vessel.
A022-2010-001	PHA	Passive	Moderate – Reduction of hazardous conditions by process and equipment design features.
A054N-2004-010	PHA	Inherent	Eliminate – Demolished two hazardous materials storage vessels.

Item Identifier	*Implementation Category*	*Risk Reduction Category*	*Risk Reduction Strategy - Description*
A054N-2004-085	PHA	Passive	Moderate – Reduction of hazardous conditions by process design features.
A060-2007-004	PHA	Passive	Moderate – Reduction of hazardous conditions by equipment design features.