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Executive Summary

The public and the Board of Supervisors were concerned about the number of Major Chemical Accidents and Releases and the severity of the incidents that were occurring throughout the 1990s. The Board of Supervisors took action and adopted the County's Industrial Safety Ordinance. The main goal of the Industrial Safety Ordinance is to prevent chemical accidents from occurring that could have a detrimental impact to the community surrounding chemical facilities and petroleum refineries. This is accomplished by requiring the regulated facilities to implement a safety program that is designed to be the most stringent in the United States, if not the world. The Industrial Safety Ordinance is designed to include participation from all of the stakeholders, including industry, agencies, elected officials, and the public.

This is the first year, since the Board of Supervisors passed the County's Industrial Safety Ordinance that there has not been a Major Chemical Accident or Release at a facility that is regulated under the County's or the City of Richmond's Industrial Safety Ordinances or the California Accidental Release Prevention Program. One Major Chemical Accident or Release did occur at Reaction Products in Parchester Village when over 3,000 gallons of toluene were spilled into the wetlands. The trend has been less and less Major Chemical Accidents or Releases each year. This is an indication of the success of the County's Industrial Safety Ordinance, the regulated facilities implementation of the requirements and the oversight from the Accidental Release Prevention Programs Engineers.

The Accidental Release Prevention Programs Engineers are continuing to develop ways to improve the overall implementation of the Industrial Safety Ordinance. The Hazardous Materials Programs Staff participated with the Center for Chemical Process Safety in writing the second edition of the book “Inherently Safer Chemical Processes,” which will be coming out this autumn. The staff has also been working with the Contra Costa County regulated businesses, as well as the Center for Chemical Process Safety in developing process safety metrics for lagging and leading indicators.

The U.S. Chemical Safety and Hazard Investigation Board has recognized the efforts of Contra Costa County ensuring that the process safety requirements are being implemented by the regulated businesses in its DVD Anatomy of a Disaster: Explosion at BP Texas City Refinery.

Public Participation

The Hazardous Materials Programs has a very strong public outreach process and is constantly looking at ways to improve this process. The following items have been implemented based on recommendations from interested stakeholders and the actions taken this year:

- A public meeting was held after the Reaction Products spill. Approximately 100 people attended this meeting. A summary of the meeting is included in Attachment C.
- General Chemical Audit Findings Presentation at the Bay Point Municipal Advisory Council.
- Most recent audit findings summarized in easily read format in both 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.

Q: Does it affect the drinking water?
A: No

Q: What is the chemical?
A: Toluene, a solvent similar to model airplane glue

Q: Health effects? Rash? Respiratory?
A: Check with your local doctor.

Q: Was the creek behind Jenkins cleaned up?
A: Channel under the railroad tracks is being assessed and cleaned up.

Q: Are there any medical sites set up for health checks?
A: The North Richmond Health Center.

Q: Is there a criminal investigation?
A: Yes, it is being investigated by the D.A.

Q: Why did the CWS not go off for 2-3 days until after the spill had occurred?
A: No one was notified that the spill occurred until Monday morning.

Q: Where is the City of Richmond rep?
A: There are violations against the company that are still under investigation. And one question to answer is why the tanks were marked empty? (Answered by BC Rayon, RFD; no City of Richmond rep available)

Q: Is the owner of Reaction Products still operating his business?
A: No answer

Randall Sawyer explains the Business Plan program and Aboveground Tank reporting and inspections.

Michael Kent explains that the City of Richmond is looking at future zoning of the Community.

Q: Why didn’t the siren go off throughout the City?
A: It is only sounded in the areas that are in immediate danger of hazard.
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. The audits that were completed this year are:

- General Chemical Bay Point Works—January 2008
- Tesoro Golden Eagle Refinery—September 2008
- ConocoPhillips Rodeo Refinery—October 2008

Major Chemical Accidents or Releases

Another measure of the effectiveness of the Industrial Safety Ordinance is by the number and severity of the Major Chemical Accidents or Releases that have occurred. Since the last report to the Board there has been no Major Chemical Accidents or Releases at a business regulated by the County or City of Richmond Industrial Safety Ordinance or the California Accidental Release Prevention Program. As mentioned earlier, this is the first year that this has occurred. One Major Chemical Accident or Release did occur at Reaction Products that is located in Parchester Village.

Conclusion

The number and severity of the Major Chemical Accidents or Releases have been decreasing since the implementation of Industrial Safety Ordinance. The implementation of the Industrial Safety Ordinance has improved and, in most cases, is being done as required by the ordinance. It is believed that by continuing implementation of the Industrial Safety Ordinance and strengthening the requirements of the Ordinance that the possibility of accidents that could impact the community has decreased.

Luz Gomez – Introduction
- Protocols when Haz Mat goes out needs to be reviewed.
- Prevention
- Hold the company (Reaction Products) accountable

USCG, Chief of Response Operations
- Discuss timeline of events
- Several ongoing investigations, but can’t speak on it until the final outcome is achieved.

Randall Sawyer, CCC Haz Mat
- Explain the measurements of toluene that was present
  - 14 ppm in a ditch area
  - 1-2 ppm in a ditch that was closest to a house
- Explain OSHA exposure limits are 100 ppm
- The sirens were sounded from 2:06 pm – 2:51 pm in a 1000 yards vicinity of spill
- Haz Mat will be working with Richmond Fire and the City of Richmond on communication efforts.
- Haz Mat will review the notifications policy.
- Will review issues of secondary containment at Reaction Products.
- Investigate inventory that was being reported by Reaction Products.

Steve Edgar – Dept of Fish & Game
- Explains Dept of Fish & Game role of being first responder for water events.
- Violations existed at Reaction Products that are still being investigated.
- To date; 3 mallards and 400 fish have been killed; test results are pending.

Art Botterell - Community Warning System, OES
- Discuss the CWS and how it works.

East Bay Regional Park District
- Explain that they were informed that they are the landowners of the affected areas of marshland.

Q & A’s
Q: What are the symptoms and side effects?
Introduction

The Board of Supervisors passed the Industrial Safety Ordinance because of accidents that occurred at the 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, which 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 Health Services stating how the stationary source is complying with the ordinance, except the Human Factors portion (completed January 15, 2000).
- Contra Costa Health Services develop a Human Factors Guidance Document (completed January 15, 2000).
- Stationary sources had one year to comply with the requirements of the Human Factors Guidance Document that was developed by Contra Costa Health Services (completed January 15, 2000).
- 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 Health Services 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 Health Services will review all of the submitted Safety Plans and audit/inspect all of the stationary source’s Safety Programs within one year of the receipt of the Safety Plans (completed January 15, 2000) and every three years after the initial audit/inspection (ongoing).
- Contra Costa Health Services will give an annual performance review and evaluation report to the Board of Supervisors.

The 2006 amendments to the Industrial Safety Ordinance requires or expands the following:

- Expands the Human Factors to include Maintenance and all of Health and Safety.
- Requires the stationary sources to perform Safety Culture Assessments one year after the Hazardous Materials Programs develops guidance on performing a Safety Culture Assessment.
- Perform Security Vulnerability Analysis.

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

- Air Products at the Shell Martinez Refining Company.
- Air Products at the Tesoro Golden Eagle Refinery.
- Shell Martinez Refining Company.
- General Chemical West in Bay Point.
- ConocoPhillips Rodeo Refinery.
- Tesoro Golden Eagle Refinery.
Contra Costa Health Services completed and issued the 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. Health Services is working with the stationary sources to develop the Safety Culture Assessment Guidance, which should be completed by June 2009.

Contra Costa Health Services has reviewed all of the Safety Plans submitted to the department and has started the fourth round of audits of the stationary sources, as required by the ordinance. In addition, Contra Costa Health Services has performed a specialized audit for all the stationary sources for their Human Factors programs and for Inherently Safer Systems completed in 2002. The status of the reviews and audits are discussed 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 Health Services is meeting the requirements of the ordinance as follows:
  a. Effectiveness of the Department’s program to ensure stationary source’s compliance with the ordinance
  b. Effectiveness of the procedures for records management
  c. Number and type of audits and inspections conducted by Health Services as required by the ordinance
  d. Number of root cause analyses and/or incident investigations conducted by Health Services
  e. Health Services’ process for public participation
  f. Effectiveness of the Public Information Bank
  g. Effectiveness of the Hazardous Materials Ombudsperson
  h. Other required program elements necessary to implement and manage the ordinance

- A listing of stationary sources covered by the ordinance, including for each:
  a. The status of the stationary source’s Safety Plan and Program
  b. A summary of all stationary sources’ Safety Plan updates and a listing of where the Safety Plans are publicly available
  c. The annual accident history report submitted by the regulated stationary sources and required by the ordinance
  d. 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
  e. A summary, including the status, of any audits, inspections, root cause analyses and/or incident investigations conducted by Health Services, including the status for implementing the recommendations
  f. Description of inherently safer systems implemented by the regulated stationary source
  g. Legal enforcement actions initiated by Health Services, 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 from interested parties regarding the effectiveness of the local program that raise public safety issues
• The impact of the ordinance in improving industrial safety

Effectiveness of Contra Costa Health Services’ Implementation of the Industrial Safety Ordinance

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

• Audit/Inspection Policy
• Conducting the Risk Management Plan/Safety Plan Completeness Review Protocol
• Risk Management Plan Completeness Review Questionnaires
• Safety Plan Completeness Review Questionnaires
• Conducting Audit/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

Health Services has developed the Contra Costa County CalARP Program Guidance Document and the Contra Costa County Safety Program Guidance Document. These documents give guidance to the stationary sources for complying with the Industrial Safety Ordinance. The policies, procedures, protocols, and questionnaires are available through Health Services. The guidance documents can be downloaded through Health Services’ website: www.cchealth.org/groups/hazmat/california_accidental_release_prevention_guidance_document.php and www.cchealth.org/groups/hazmat/industrial_safety_ordinance_guidance.php

Effectiveness of the Procedures for Records Management

Health Services has set up hard copy and computer files for each of the stationary sources. The files include the following folders:

• Annual status reports
• Audit & Inspections
• Communications
The paper files for the stationary sources are kept in a central location. The Accidental Release Prevention Programs staff has files set up on the Health Services Network where the files for each of the different stationary sources are found and are accessible to each of the Accidental Release Prevention Programs Engineers, Supervisors, and Hazardous Materials Programs Director. The Accidental Release Prevention Programs files also 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 two different Health Services locations: the Hazardous Materials Program Offices and the Accidental Release Prevention Program Offices.

Number and Type of Audits and Inspections Conducted

Health Services was required to audit and inspect all seven (currently six) regulated stationary sources that were required to comply with the Industrial Safety Ordinance within one year after the initial submittal of their Safety Plans. Health Services reviewed all of the Safety Plans and audited/inspected all of the stationary sources’ Safety Programs within that year (2000). Health Services 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). Health Services 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 fall 2005, which was completed in the spring of 2007. The beginning of the fourth round of audits began January 2008.

When Health Services reviews a Safety Plan, a Notice of Deficiencies is produced that documents what changes to their Safety Plan a stationary source are required to make before Health Services 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, Health Services will review the response. Health Services will either determine that the Safety Plan is complete or will work with the stationary source until the Safety Plan is determined to be complete. When the Safety Plan is deemed complete, Health Services will open a public comment period on the Safety Plan and present the plan in a public meeting or venue. Health Services will respond to all written comments in writing and when appropriate use the comments in the audit/inspection of the regulated stationary sources.

Health Services will issue Preliminary Audit Findings after an audit/inspection is complete. The stationary source will have 90 days to respond to these findings. Health Services 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, Health Services will issue the Preliminary Audit Findings for public comment and will present the findings in a public meeting or venue. Health Services 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, Health Services will issue the Final Audit Findings and will respond in writing to any written public comments received. Table I lists the status of Health Services review of the different stationary sources’ Safety Plans and audit and inspections of their Safety Programs.
Number of Root Cause Analyses and/or Incident Investigations Conducted by Health Services

Health Services has not performed any incident investigations, including a root cause analysis, within the last year. Reaction Products submitted a root cause analyses report to Health Services as part of its 30-day report. A listing of the Major Chemical Accidents or Releases can be found on the Health Services website at the following address: www.cchealth.org/groups/hazmat/accident_history.php This list includes accidents that occurred prior to the adoption of the Industrial Safety Ordinance.

Health Services' Process for Public Participation

Health Services, 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 Health Services look at existing venues that are attended by the public that the Health Services' can present and receive comments on Preliminary Audit Findings and the stationary source's Safety Plans. Health Services plans to present Audit Findings for General Chemical Bay Point Works as an agenda item to the Municipal Advisory Council in Bay Point on November 4, 2008.

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 Health Services. 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 ConocoPhillips Fenceline Monitors

• Hazardous Materials Program Incident Search
  » Online search of the hazardous materials incident database for incidents that have occurred from 1993 to current year by entering a date range, address, city, and/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 list summaries of major accidents from industrial facilities in Contra Costa County from 1992 to most recent

• Additional resource links for more information

**Effectiveness of the Hazardous Materials Ombudsman**

The Board of Supervisors created the Hazardous Materials Ombudsman position in 1997. This position was filled in April 1998. The Board believed that the ombudsman 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 Ombudsman on the effectiveness of the position.

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17. Summarize the emergency response activities conducted at the source (e.g., CWS or CAN 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.

---

Analysis findings and recommendations for MCARe are listed in the response under question 6.
Table I

Industrial Safety Ordinance Stationary Source Status

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Safety Plan (SP) Received</th>
<th>Notice of Deficiencies (NOD) Issued-SP</th>
<th>Safety Plan Complete</th>
<th>SP Public Meeting Date</th>
<th>Audit/Inspection</th>
<th>Audit Public Meeting Date</th>
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<tr>
<td>Air Products – Shell &amp; Tesoro</td>
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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.

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

Chapter 450-8 requires a root cause analysis of 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 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.

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 time frame 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 includes requirements for inherently safer systems as part of implementing PHA recommendations and new construction. This facility has developed an inherently safer systems approach to implementing inherently safer systems in these areas.
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 Contra Costa Health Services. The Industrial Safety Ordinance expands on this program. Stationary sources are required to submit a Risk Management Plan to Health Services that is similar to the Safety Plans that are submitted. Health Services reviews these Risk Management Plans and performs the CalARP Program audit simultaneously with the Industrial Safety Ordinance audit.

Health Services performs Unannounced Inspections of the 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 that are regulated by the Industrial Safety Ordinance were required to submit their Safety Plans to Health Services 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 Health Services
- 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 its Safety Plan to Health Services 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 4333 Pacheco Blvd., Martinez. When Health Services determines that the Safety Plan is complete and prior to going out for a 45-day public comment period, Health Services will place the plan in the library(ies) closest to the regulated stationary source. Below in Table II is a listing of the regulated stationary sources with the location of each of their Safety Plans.

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 any 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”: CalARP program fees for these eight facilities are $524,244. The Risk Management Chapter of the Industrial Safety Ordinance fees are $382,393.

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”: 4000 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.
gas blanket system and developing an operating procedure for operating a single spent acid tank.

For the February 20, 2004 power failure investigation, one recommendation remains open. This recommendation is to clearly establish parties responsible for load shedding procedure reviews.

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 and November/December, 2005. There are no RCA or Incident Investigations that have been conducted by the Department.

Facility status of audit recommendations:

Two recommendations regarding maintenance training and procedures remain open from the 2003 CCHS audit.

Eight (8) recommendations remain open from the 2005 CCHS audit. One recommendation is development of a system to track qualifications of operators cross-qualified in multiple jobs – this is on target for completion later this year. Two recommendations remain open on MOC that require site-wide training to close completely. Site MOC training will commence later this year after a comprehensive change to the MOC program per new corporate guidelines that have been recently developed. Two recommendations remain open on latent condition review and are on target for completion later this year. One recommendation on contractor qualification is on target for completion in the next few months. One recommendation regarding updating all policies and procedures is nearly complete. One recommendation regarding maintenance procedures and training remains open.

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):

<table>
<thead>
<tr>
<th>Regulated Stationary Source</th>
<th>Location 1</th>
<th>Location 2</th>
<th>Location 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Products at Shell</td>
<td>Hazardous Materials Programs Office</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
</tr>
<tr>
<td>Air Products at Tesoro</td>
<td>Hazardous Materials Programs Office</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
</tr>
<tr>
<td>Shell Refining – Martinez</td>
<td>Hazardous Materials Programs Office</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
</tr>
<tr>
<td>General Chemical West Bay Point Works</td>
<td>Hazardous Materials Programs Office</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
</tr>
<tr>
<td>ConocoPhillips Rodeo Refinery</td>
<td>Hazardous Materials Programs Office</td>
<td>Rodeo Public Library</td>
<td>Crockett Public Library</td>
</tr>
<tr>
<td>Tesoro Golden Eagle Refinery</td>
<td>Hazardous Materials Programs Office</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
</tr>
</tbody>
</table>
### Table III
Inherently Safer Systems

<table>
<thead>
<tr>
<th>Regulated Stationary Source</th>
<th>Inherently Safer System Implemented</th>
<th>Design Strategy</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Products at Shell Martinez Refinery</td>
<td>Reduced the frequency of the hazard by changing design features (once)</td>
<td>Passive</td>
<td>Moderate</td>
</tr>
<tr>
<td>Air Products at Tesoro</td>
<td>Implemented risk reduction strategies (active) no new inherently safer systems implemented</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ConocoPhillips-Rodeo Refinery</td>
<td>Reduction of inventory by removing piping/equipment from the process (four times)</td>
<td>Inherent</td>
<td>Minimization</td>
</tr>
<tr>
<td></td>
<td>Use a less hazardous chemical (once) (Nineteen times)</td>
<td>Passive</td>
<td>Substitution</td>
</tr>
<tr>
<td>ConocoPhillips-Rodeo Refinery</td>
<td>Reduced the potential of a hazard by moving to an alternate location (four times)</td>
<td>Passive</td>
<td>Moderate</td>
</tr>
<tr>
<td>General Chemical West</td>
<td>Reduced the frequency of the hazard by changing design features (Three times)</td>
<td>Passive</td>
<td>Moderate</td>
</tr>
<tr>
<td>Bay Point Works</td>
<td>Minimize exposure to the hazard by changing design features and frequency of operation (Twice)</td>
<td>Passive</td>
<td>Minimize</td>
</tr>
<tr>
<td>Shell Martinez Refinery</td>
<td>Elimination of glass gauge to eliminate exposure to hazard (once)</td>
<td>Inherent</td>
<td>Simplify</td>
</tr>
<tr>
<td></td>
<td>Upgrade tubing and equipment metallurgy to reduce potential of a hazard or the frequency (three times)</td>
<td>Passive</td>
<td>Simplify</td>
</tr>
<tr>
<td>Tesoro Golden Eagle Refinery</td>
<td>Remove out of service piping and utility connections (two times)</td>
<td>Inherent</td>
<td>Simplify</td>
</tr>
<tr>
<td></td>
<td>Elimination of atmospheric PSVs (once)</td>
<td>Inherent</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>Remove process storage (once)</td>
<td>Inherent</td>
<td>Minimization</td>
</tr>
<tr>
<td></td>
<td>Reduced the frequency of the hazard by changing design features (nine times)</td>
<td>Passive</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>Reduced potential of a hazard or the frequency by changing design features (two times)</td>
<td>Passive</td>
<td>Simplify</td>
</tr>
</tbody>
</table>

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 no accidents meeting the major chemical accident or release criteria during his reporting period.

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:**

All investigation recommendations from root cause analyses submitted to CCHS are closed except as noted below.

For the March 24, 2006 #2HDS fire investigation, four recommendations remain open. One recommendation is a long-term updating of the P&IDs to include metallurgy on the P&IDs. Two of the recommendations are regarding development of gasket material standards and training personnel on these standards. The last open recommendation is regarding issuance of an expectation that maintenance personnel consult with ME&I prior to purchasing/replacing ring joint gaskets.

For the October 26, 2005 power outage investigation, one recommendation remains open. This recommendation is to review procedures with operators on taking timely action when units are out of environmental compliance limits.

For the October 14, 2004 naphtha pump fire investigation, one recommendation remains open. The open recommendation involves development of refinery-wide guidelines on pump startups.

For the September 16, 2004 Spent Acid tank fire investigation, three recommendations remain open. The first is to review all gas blanketing regulators for chemical storage tanks in flammable service to verify that all their documentation is correct and maintenance tracked. The remaining two recommendations are involving operating procedures – revision of tank operating procedures to include step on checking for positive pressure on the
Annual Performance Review and Evaluation Submittal
June 30, 2008

*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):

   Alan Savage at (925) 335-3490 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 Health Services on June 22, 2007. Contra Costa Health Services has completed four audits of 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. A CalARP/ISO audit was in August, 2003. The most recent CalARP/ISO audit was in November-December, 2005. All safety program elements required by the ISO have been developed and are being 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. An updated Safety Plan will be submitted this year along with an updated RMP. 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 June 22, 2007.

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, 4333 Pacheco Boulevard, Martinez library.

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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 1 or 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 Health Services 30 days after the root cause analysis is complete. The record of the major chemical accidents or releases that have occurred within the last year and the status of each of these incidents investigations are included in Table IV.

<table>
<thead>
<tr>
<th>Table IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulated Source</td>
</tr>
<tr>
<td>Reactions Products</td>
</tr>
</tbody>
</table>

When Health Services Hazardous Materials Response Team arrived onsite and took measurements of the amount of toluene in the air, the shelter-in-place was lifted. Health Hazardous Materials Programs is classifying this incident as a Community Warning System Level II and a Major Chemical Accident or Release Severity Level II, because if the toluene ignited the damage and consequences of the incident would be major.
Major Chemical Accidents or Releases

Health Services has analyzed the Major Chemical Accidents or Releases (MCAR) that have 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 onsite and/or offsite 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 were 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 September 2008 for all stationary sources in Contra Costa County, the MCARs that have occurred at the County’s Industrial Safety Ordinance stationary sources, 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 I, II and III MCARs for this period. NOTE: The charts do not include any transportation MCARs that have occurred.

### Charts

**Major Chemical Accidents and Releases**

![Graph showing the number of MCARs from 1999 to 2008 for all stationary sources.](image)

**ISO Stationary Sources MCARs**

![Graph showing the number of MCARs for ISO stationary sources from 1999 to 2008.](image)

**Attachment 1**

<table>
<thead>
<tr>
<th>ISS Item Number</th>
<th>ISS Type</th>
<th>Source/Study</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M20063127-001</td>
<td>Passive</td>
<td>Project</td>
<td>Updated metallurgy of heat exchanger tube bundle to resist corrosion.</td>
</tr>
<tr>
<td>M20063614-001</td>
<td>Passive</td>
<td>Project</td>
<td>Upgraded metallurgy of furnace tubes to minimize corrosion.</td>
</tr>
<tr>
<td>M20072672-001</td>
<td>Passive</td>
<td>Project</td>
<td>Replaced Reactor with new vessel incorporating upgraded metallurgy.</td>
</tr>
<tr>
<td>M20072417-001</td>
<td>Inherent</td>
<td>Project</td>
<td>Eliminated gauge glass from transfer pump.</td>
</tr>
</tbody>
</table>

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**Page B-15 of 24**
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 develop 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 3 points, and Severity Level I 1 point. Below is a graph of this weighted scoring.

**Major Chemical Accidents and Releases Weighted Score**

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)(vii)):

   - None

11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(3)):

   - No penalties have been assessed against any facility.

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the ISO (450-8.030(B)(4)): CalARP Program fees for these eight facilities are - $524,244, the Risk Management Chapter of the Industrial Safety Ordinance fees are - $382,393.

13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)):

   - 4000 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 list in Attachment 1.

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 (from July 1, 2007 to June 30, 2008).

**Legal Enforcement Actions Initiated by Health Services**

As part of the enforcement of the Industrial Safety Ordinance and the CalARP Program, Health Services issues Notice 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 1 shows the action that has been taken by Health Services. Health Services 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 Ombudsman, 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 2008–09 are $524,244.
Total Personnel and Personnel Years Used by Health Services to Implement the Industrial Safety Ordinance

The Accidental Release Prevention Programs Engineers have reviewed resubmitted Safety Plans, 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:

- Accidental Release Prevention Programs Engineers Time—480 personnel hours or 0.74 personnel years
  - Four ISO/CalARP Program facilities audits were done between December 2007 and December 2008.
  - It takes four or five engineers four weeks to perform an ISO/CalARP Program audit the total time taken to perform the four audits in 2008 is 1000 hours. Approximately 1/4 of the time is dedicated to the Industrial Safety Ordinance for a total of, 1000 hours.
- Follow-up work to audits—60 hours per audit, or 240 total hours
- Developing Safety Culture Assessment Guidance and establishing Process Safety Measurement—240 hours
- Reviewing information for the website—11 hours
- Health Services Communications Office or the Accidental Release Prevention Engineers prepare material for presentations and public meetings—total approximately 80 personnel hours.
- Total of 1,640 hours is the approximate personnel time spent on the Industrial Safety Ordinance, or 0.82 personnel years.

This is not including the Ombudsman 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. Attachment C includes questions and summary of the meeting that was held in Parchester Village after the spill of toluene from Reaction Products.

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 Health Services, and the Industrial Safety Ordinance administered by Health Services. Each of the programs is very similar, 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 identical to the Process Safety Management Program. The main differences between the federal Accidental Release Prevention and the CalARP Programs are as follows:

- The number of chemicals regulated
- The threshold quantity of these chemicals

Annual Performance Review and Evaluation Submittal

June 30, 2008

*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 CCHS 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)(ii)): SMR’s Safety Program is being implemented. An Unannounced Inspection was conducted by CCHS on June 19 and 20, 2008. Inherently Safer Systems analyses for existing processes are being conducted, and are expected to be complete for all processes at SMR by August 15, 2008. SMR’s Safety Plan was last updated in September 2007, incorporating updates addressing findings from the October/November 2006 ISO/CalARP audit. There were no MCAR’s in the current reporting period (from July 1, 2007 to June 30, 2008), and therefore no updates to the Accident History.

4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)): SMR’s Safety Plan was last updated in September 2007; incorporating updates addressing findings from the October/November 2006 ISO/CalARP audit. There were no MCAR’s in the current reporting period (from July 1, 2007 to June 30, 2008), and therefore no updates to the Accident History.

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, 4333 Pacheco Boulevard, 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 and evaluation submittal (12-month history). There were no MCAR’s in the current reporting period (from July 1, 2007 to June 30, 2008), 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 (from July 1, 2007 to June 30, 2008), and therefore no RCA’s 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)): 76 of the 82 action items arising from the October/November 2006 ISO/CalARP audit have been implemented. None of the remaining 6 action items are overdue. No action items are anticipated as a result of the Unannounced Inspection conducted by CCHS on June 19 and 20, 2008. 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)(v)): See list in Attachment 1.
11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(3)): None

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the ISO (450-8.030(B)(4)): CCCHS reports. CalARP Program fees for these eight facilities are - $524,244, the Risk Management Chapter of the Industrial Safety Ordinance fees are - $382,703.

13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): CCCHS reports, 4000 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)): The facility has not received any comments (that may not have been received by the department).

15. Summarize how this Chapter improves industrial safety at your stationary source (450-8.030(B)(7)): It helps minimize the potential risks and exposure to the employees, the community and the environment.

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: PHAs were conducted for processes and some are subject to CalARP regulations. Many recommendations from the PHAs have been implemented.

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 has been no emergency response activities in response to chemical accidents and or releases conducted at this site during this period.

- An external events analysis, including seismic and security and vulnerability analysis, is required
- Additional information in the Risk Management Plan
- Health Services is required to audit and inspect stationary sources at least once every three years
- The interaction required between the stationary source and Health Services

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

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

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

- 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

Work is being done to develop Safety Culture Assessment guidance. The Industrial Safety Ordinance Guidance document is being updated to include the remaining changes to the ordinance. The Accidental Release Prevention Engineers have participated with the Center for Chemical Process Safety on developing the second edition of the Inherently Safe 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 Representative George Miller. Senator 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.
Chevron and General Chemical West Richmond Works submitted their Safety Plans to Health Services, which reviewed the plans. 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 Fair & Disaster Preparedness Expo. Health Services followed up on the January 13, 2007 fire at the Chevron Refinery. The follow-up included a public meeting, City Council meetings, meetings with the investigation and the root cause analysis. Chevron Richmond Refinery was audited for the fourth time for CalARP program and the third time for RISO in April 2008 and the final report is being finalized.

City of Richmond Industrial Safety Ordinance

The City of Richmond passed its version of the Industrial Safety Ordinance on December 18, 2001 that became effective on January 17, 2002. Richmond’s Industrial Safety Ordinance mirrors the County’s Industrial Safety Ordinance, with the exceptions of the 2006 amendments to the County’s Ordinance. Richmond’s Industrial Safety Ordinance covers two stationary sources: Chevron and General Chemical West Richmond Works.

Annual Performance Review and Evaluation Submittal

June 30, 2008

*Attach additional pages as necessary

1. Name and address of Stationary Source: General Chemical Bay Point Works, 501 Nichols Road, Bay Point, California 94565

2. Contact name and telephone number (should CCHS have questions): Sid Olia, 925-458-7365

3. Summarize the status of the Stationary Source’s Safety Plan and Program (450-8.030(B)(2)(i)): GCC-BPW Safety Plan and Program are currently in place. The safety plan and program are under ongoing review and enhancement. The Safety Plan was last updated in September 2007.

4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)): Number of salaried, hourly and contract employees working at General Chemical during 2007 and the organizations chart included in the Safety Plan were updated in September 2007.

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)(iii)): GCC Office, 4333 Pacheco Boulevard, Martinez; Bay Point 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)(iv)): Reduce small batch production which lead to reduction of employee exposure. Hydrochloric acid exchanger was replaced from glass to Fluoropolymer. During drum filling, reduced employee exposure through closed dispensing system. Reduced small batch production which lead to reduction of employee exposure. Hydrochloric acid exchanger was replaced from glass to Teflon lined steel.

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)(v)): There has been no root cause analysis performed during this period.

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)(vi)): An audit was conducted in January 2008, resulting in 76 audit findings. General Chemical is currently in the process of reviewing and proposing an action plan for each audit finding. To date approximately 20 recommendations have been completed and verified.

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)(vii)): Inherently Safer Systems (ISS) were implemented during the previous review period. Nitric Acid distillation unit was replaced to Teflon lined SS from glass. Replaced CP scrubber from glass to Fluoropolymer. During drum filling, reduced employee exposure through closed dispensing system. Reduced small batch production which lead to reduction of employee exposure. Hydrochloric acid exchanger was replaced from glass to Teflon lined steel.

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)(viii)): None
<table>
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<tr>
<th>Document No.</th>
<th>Project Level</th>
<th>Project Description</th>
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<td>M2008256-001</td>
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### July 2007–June 2008 ISS Improvements

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I. Introduction


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

- 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.
- To investigate concerns and complaints, facilitate their resolution, and assist people in gathering information about programs, procedures, or issues.
- To provide technical assistance to the public.

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

- Continuing an outreach strategy so that the people who live or work in Contra Costa County can know about and utilize the program.
- Investigating and responding to questions and complaints, and assisting people in gathering information about programs, procedures, or issues.
- Participating in a network of environmental programs for the purpose of providing technical assistance.

This evaluation covers the period from November 2007 through September 2008 for the Hazardous Materials Ombudsman program. The effectiveness of the program shall be demonstrated by describing 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 websites, and information about upcoming meetings and events. A toll-free phone number is still 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 148 information requests. More than 95 percent of these requests occurred via the telephone, and have been requests for information about environmental issues. Requests via email are slowly increasing, mainly through referrals from Health Services’ main webpage. Most of these requests concern problems around the home such as asbestos removal, household hazardous waste disposal, pesticide misuse 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 have been received via telephone and in writing. Persons who have made complaints via telephone have been also asked to provide those complaints in writing. During this period, the Hazardous Materials Ombudsman received one inquiry about activities or actions of the Hazardous Materials Programs. This complaint was about the proposed hazardous materials fees being assessed against a business. The Ombudsman supported the position that the fees being assessed by the Hazardous Materials Programs were justified. The key consideration was whether annual fees could be charged for tri-annual inspections.

   b. Assisting in Information Gathering

      Many of the environmental pollution issues that Contra Costa residents are concerned about are ongoing regulatory programs or industrial activities. Helping people to participate in these regulatory activities or to effectively advocate their interests about an industrial activity usually means providing them with more information or advice than can be done with a single phone call. Often these issues are complex and can take months to resolve. Some of this is done through technical assistance, which will be covered in the next section.
15. Summarize how this Chapter improves industrial safety at your stationary source (450-8.030(B)(7)): Air Products is committed to the safe operation of our facilities and has implemented applicable requirements outlined in the ISO as well as the CalARP regulation. The Human Factors program is implemented, and has helped the site maintain a safety record of no recordable or Lost Time Injuries since the last plan submittal. Likewise, there have been no events that resulted in offsite impact. This 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 developed and implemented a Human Factors Program as required by the Industrial Safety Ordinance. Per the request of CCCHS, the site clarified issues associated with the Management of Change by creating a site-specific Tier IV document. In addition, the Air Products Corporate Assurance Department formulated an internal audit template developed specifically to verify compliance to the elements of the CCC ISO program.

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.

Another way of helping the public to gather information is to ensure the public has the opportunity to be informed about, and participate in, important decisions related to environmental protection. The Hazardous Materials Ombudsman has done this by organizing, promoting, and facilitating public involvement in important hazardous materials issues. These are as follows:

- **Incident Response**—On May 5, 2008 a small manufacturing company on the edge of Parchester Village in Richmond had a spill of 3,000 gallons of the flammable solvent toluene from an above-ground storage tank. The Community Warning System was used to notify nearby residents of the spill, and the County’s Hazardous Materials Program responded to the spill along with several other local, state, and federal agencies.

- At the request of County Supervisor Gioia, the Ombudsman organized and facilitated a community meeting on May 10, 2008 to allow community residents to hear about what occurred and the response directly from the responding agencies, and to voice any questions or concerns they had. Seven different agencies and the Supervisor’s Office participated in the community meeting, which was held as part of the Parchester Neighborhood Association meeting. Approximately 75 people attended the meeting. The Ombudsman also sent follow-up letters to all Parchester Village householders on May 30, 2008 responding to questions that could not be answered at the meeting.

- **Industrial Safety Ordinance Public Participation**—The ordinance requires that public meetings be held at various stages of the process. The Hazardous Materials Ombudsman has worked closely with the Hazardous Materials Programs staff and the Board of Supervisors to develop an intensive public outreach strategy for the Industrial Safety Ordinance. During this period, the Ombudsman helped the Hazardous Materials Program develop programs and prepare information for public presentations about audits completed during the year.

- **Laotian Telephone Emergency Notification Project**—As a result of a major fire at a refinery in Richmond in 1999, the Laotian community in the Richmond area was concerned about the lack of understanding of many Laotians about the Community Warning System and what to do in the event of a release. They requested the County to develop a way to send the Telephone Emergency Notification System message, which is part of the Community Warning System, to Laotian households in four Laotian languages. The Hazardous Materials Ombudsman worked with the Director of the Hazardous Materials Programs and the Laotian Organizing Project to develop a pilot methodology. In 2001, $40,000 of funding was secure to implement the pilot project and a project coordinator was hired. In 2002, the Hazardous Materials Ombudsman hired four outreach staff and supervised all five staff people to implement this pilot program. The pilot project was completed in the spring of 2003.

- At that time, the Board of Supervisors directed the Ombudsman to participate in an evaluation of a new technology to provide automated telephone alerts in various languages. The Ombudsman hired two Laotian staff to test this technology in 100 Laotian homes. This test was completed in early 2004 and the recommendation to pursue this new technology instead of the methodology used in the first pilot study was accepted by the Internal Operations Committee of the Board of Supervisors. In 2005 the Hazardous Materials Ombudsman worked with the Community Warning System Program in the Sheriff’s Office to begin installing these alert boxes. Several technical problems delayed the implementation of the project.
In 2007, these technical problems were resolved and the Ombudsman oversaw two Laotian outreach workers who were hired to install the alert boxes under a one-year contract. This contract was completed this year with the installation of approximately 100 boxes, and the program was completed.

Concord Naval Weapons Station Landfill Remediation—The Ombudsman provided technical support concerning diesel emissions to efforts by the County’s Conservation and Development Department and Supervisor Bonilla’s office to mitigate the impacts to communities near the Concord Naval Weapons Station from an effort to cap a contaminated landfill.

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, as well as participate in other programs to be able to provide technical assistance to the participants and the public.

CAER (Community Awareness and Emergency Response)—This nonprofit 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, prepares reports, writes letters and provides support for 3 monthly Commission meetings. This year the Ombudsman developed a public survey to solicit concerns about hazardous materials and attitudes about relative risk, is preparing to conduct two town hall forums about Household Hazardous Waste issues with County Supervisors, is planning an educational forum on cumulative impacts, conducted research on brownfield issues in the County, conducted research on the status of Environmental Justice issues in the County, and helped the Commission prepare recommendations to the Board of Supervisors concerning the County’s Environmental Justice policy.

Public and Environmental Health Advisory Board (PEHAB)—As staff to the Environmental Health subcommittee of PEHAB, the Ombudsman completed a report on pest management issues in the County in March, 2001. In response to this report, the Board of Supervisors asked Health Services and the County Agricultural Commissioner to convene a Task Force to develop an Integrated Pest Management Policy for the County. The Ombudsman represented Health Services as co-chair of this Task Force from 2001 till March of 2007. The Board of Supervisors adopted the policy in November of 2002. During 2008 the Ombudsman continued to represent Health Services on the Task Force as they implemented the policy.

The Ombudsman also participated in a regional program developing public education programs about the consumption of contaminated fish out of San Francisco Bay and the Delta as a result of PEHAB’s concern about the Environmental Justice issues raised by the significant subistence determination. The submittal date for the proposed remedies and proposed due dates was August 14, 2007. As agreed to by CCHS all Action Items are on schedule to be completed by August 2009.

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)):
   1) Plant uses aqueous ammonia rather than anhydrous ammonia in its emission control system. This helps reduce the off-site consequence of an ammonia release.
   2) Plant is designed without a liquid hydrogen backup system. This reduces the inventory of hazardous chemicals on-site.
   3) Plant switched from 99% monooctanolamine to 85% monooctanolamine in order to eliminate the need for installation around the water treatment tanks. This reduces the potential for a fire.

More recently the plant:
   4) Added an automatic bypass around the F-119 level control valve, providing an additional layer of protection against potential vessel overflow to compressor suction
   5) Replaced one of three steam drum differential pressure level transmitters with a guided Wave Radar type level transmitter, providing an inherently more reliable level measurement and eliminating a single point failure mechanism.
   6) Installed an additional regulated power transformer and power panel to supply power to critical instruments, eliminating a single point failure mechanism.
   7) Added several active devices in additional layers of protection for the prevention of potential reformer furnace over-flying.
   8) Redesigned and replaced all ten of the 24” pipe spools on the PSA vessel blow-down outlets, eliminating pipe strain and cracking potential due to severe cyclic pressure service.

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)): None.

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

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the ISO (450-8.030(B)(4)): CalARP Program fees for these eight facilities are - $524,244, the Risk Management Chapter of the Industrial Safety Ordinance fees are - $382,393.

13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): 4000 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.
Annual Performance Review and Evaluation Submittal

June 13, 2008

*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 CCHS have questions): Michael Cabral. (925) 372-9302

3. Summarize the status of the Stationary Source’s Safety Plan and Program (450-8.030(B)(2)(ii)):
   The Stationary Source’s Safety Plan is complete per CCHS requirements and submitted to CCHS for review. The Program has been implemented as required.

4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(iii)):
   Date: 5 February 2007 - update: Section 7 (Annual Accident History) and Section 8 (Annual Performance Review and Evaluation Submittal).
   Date: 5 February 2007 - update: Section 7 (Annual Accident History) and Section 8 (Annual Performance Review and Evaluation Submittal).

5. List of locations where Safety Plans are/will be available (450-8.030(B)(2)(iv)): CCHS Office, 4333 Pacheco Boulevard, Martinez; Martinez Library (library closest to the stationary source); Air Products - See contact in #2 above.

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)): None.

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)(v)): No events triggered this requirement since the previous Annual Performance Review and Evaluation submittal.

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)(vi)):
   Air Products provided a response to the CCHS administrative draft of preliminary audit report on May 9, 2006. CCHS provided via Email on May 16, 2007, that the department agrees with the comments provided by JPC1 to the Administrative Draft of Preliminary Audit Report. JPC-1 responded within 90 days in writing and provided proposed remedies and due dates to address the corrective actions identified in the preliminary

 III. Program Management

The Hazardous Materials 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 duties of the Hazardous Materials Ombudsman also included direct supervision of two contract employees for the Laotian Telephone Emergency Notification System project and management of the Caltrans grant about Goods Movement. The Ombudsman also was a member of Health Services Emergency
Management Team and participates on its HEEP management team. The Ombudsman helped secure funding from the federal EPA and the San Francisco Foundation for continuing the East County Environmental Justice work, and helped the County’s Public Works Department apply for funding from a Federal EPA penalty settlement to upgrade its diesel fleet.

IV. Goals for 2009

In 2009, the Ombudsman will provide essentially the same services to Contra Costa residents as was provided in 2008. The Ombudsman will continue to respond to 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; provide technical support to the Asthma program and the Public Health Collaboration unit; and participate in the Integrated Pest Management Taskforce and CAER committees. In particular, the Ombudsman will continue to oversee the implementation of the Caltrans goods movement grant and continue to provide technical support to the East County Environmental Justice Collaborative project, and conduct household hazardous waste townhall forums for the Hazardous Materials Commission.

In 2009, the Ombudsman will continue efforts to re-distribute his brochures throughout the County and promote his services via the County’s website. He will also continue to give presentations to community groups and governmental agencies to promote the services of the position. The Ombudsman will also continue to seek out and pursue funding from grants, settlements and penalties for environmental projects in Contra Costa County with the appropriate partners.
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)):
   1) Plant uses aqueous ammonia rather than anhydrous ammonia in its emission control system. This helps reduce the off-site consequence of an ammonia release.
   2) Plant is designed without a liquid hydrogen backup system. This reduces the inventory of hazardous chemicals on-site.
   More recently the plant:
   3) Re-designed shutdown associated with isolating plant power due to a butane sphere leak to a more reliable design.
   4) Added several active devices as additional layers of protection for the prevention of potential reformer furnace over-firing.
   5) Added two thermocouples on the crossover monitoring flue gas temperature and upgraded the high temperature shutdown to a 2 out of 3 vote to trip versus a single element vote to trip.
   6) Added a second vibration switch on our compressor and upgraded the shutdown to 1 out of 2 versus 1 out of 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)): None

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

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the ISO (450-8.030(B)(4)): CalARP Program fees for these eight facilities are - $524,244, the Risk Management Chapter of the Industrial Safety Ordinance fees are - $382,393.

13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): 4,000 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 safe operation of our facilities and has implemented applicable requirements outlined in the ISO, as well as the CalARP regulation. The Human Factors program is implemented, and has helped the site maintain a safety record of no recordable or Lost Time Injuries since the last plan submittal. Likewise, there have been no events that resulted in offsite impact. This 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 developed and implemented a Human Factors Program as...
### Annual Performance Review and Evaluation Submittal

June 13, 2008

*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 94553

2. **Contact name and telephone number (should CCHS have questions):** Michael Cabral, (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 CCHS requirements and submitted to CCHS for review. The Program has been implemented, as required.

4. **Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)):**
   - Date: 15 June 2007 - update: Section 7 (Annual Accident History) and Section 8 (Annual Performance Review and Evaluation Submittal);
   - Date: 5 February 2007 - Updated information to the CCC ISO Plan as requested: Cover page 12/01/06, Rev 14; Sections 4.0 - 6.4; Section 9 Safety Plan Certification; RMP/CalARP/ISO Safety Plan Revision History

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, 4333 Pacheco Boulevard, Martinez; Martinez Library (library closest to the stationary source); Air Products – See contact in #2, above.

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):** None

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 triggered this requirement since the previous Annual Performance Review and Evaluation submittal.

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)):**
   - CCCHS completed a planned formal (3-year) CalARP/ISO audit at the facility from January 22 – February 7, 2007. Air Products provided a response to the CCCHS administrative draft of preliminary audit report on May 9, 2007. CCCHS indicated via Email on May 16, 2007, that the department agrees with the comments provided by APC1 in the Administrative Draft of Preliminary Audit Report. APC1 responded within 90 days in writing and provided proposed remedies and the dates to address the corrective action identified in the preliminary.
Annual Performance Review and Evaluation Submittal

June 13, 2008

*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 94553

2. Contact name and telephone number (should CCHS have questions): Michael Cabral, (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 CCHS requirements and submitted to CCHS for review. The Program has been implemented, as required.

4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)):
   Date: 15 June 2007 - update: Section 7 (Annual Accident History) and Section 8 (Annual Performance Review and Evaluation Submittal;
   Date: 5 February 2007 - Updated information to the CCC ISO Plan as requested: Cover page 12/01/06, Rev 14; Sections 4.0 - 6.4; Section 9 Safety Plan Certification; RMP/CalARP/ISO Safety Plan Revision History

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, 4333 Pacheco Boulevard, Martinez; Martinez Library (library closest to the stationary source); Air Products – See contact in #2, above.

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): None

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 triggered this requirement since the previous Annual Performance Review and Evaluation submittal.

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)):
   CCCHS completed a planned formal (3-year) CalARP/ISO audit at the facility from January 22 – February 7, 2007. Air Products provided a response to the CCCHS administrative draft of preliminary audit report on May 9, 2007. CCCHS indicated via Email on May 16, 2007, that the department agrees with the comments provided by APCI in the Administrative Draft of Preliminary Audit Report. APCI responded within 90 days in writing and provided proposed remedies and the dates to address the corrective actions identified in the preliminary...
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)):

1) The plant uses aqueous ammonia rather than anhydrous ammonia in its emission control system. This helps reduce the off-site consequence of an ammonia release.

2) The plant is designed without a liquid hydrogen backup system. This reduces the inventory of hazardous chemicals on-site.

More recently the plant:

3) Re-designed shutdown associated with isolating plant power due to a butane sphere leak to a more reliable design.

4) Added several active devices as additional layers of protection for the prevention of potential reformer furnace over-firing.

5) Added two thermocouples on the crossover monitoring flue gas temperature and upgraded the high temperature shutdown to a 2 out of 3 vote to trip versus a single element vote to trip

6) Added a second vibration switch on our compressor and upgraded the shutdown to 1 out of 2 versus 1 out of 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)): None

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

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the ISO (450-8.030(B)(4)): CalARP Program fees for these eight facilities are $524,244, the Risk Management Chapter of the Industrial Safety Ordinance fees are $382,393.

13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): 4000 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 safe operation of our facilities and has implemented applicable requirements outlined in the ISO, as well as the CalARP regulation. The Human Factors Program is implemented, and has helped the site maintain a safety record of no recordable or Lost Time Injuries since the last plan submittal. Likewise, there have been no events that resulted in offsite impact. This 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 developed and implemented a Human Factors Program as
Management Team and participates on its HEEP management team. The Ombudsman helped secure funding from the federal EPA and the San Francisco Foundation for continuing the East County Environmental Justice work, and helped the County’s Public Works Department apply for funding from a Federal EPA penalty settlement to upgrade its diesel fleet.

IV. Goals for 2009

In 2009, the Ombudsman will provide essentially the same services to Contra Costa residents as was provided in 2008. The Ombudsman will continue to respond to 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; provide technical support to the Asthma program and the Public Health Collaboration unit; and participate in the Integrated Pest Management Taskforce and CAER committees. In particular, the Ombudsman will continue to oversee the implementation of the Caltrans goods movement grant and continue to provide technical support to the East County Environmental Justice Collaborative project, and conduct household hazardous waste townhall forums for the Hazardous Materials Commission.

In 2009, the Ombudsman will continue efforts to re-distribute his brochures throughout the County and promote his services via the County’s website. He will also continue to give presentations to community groups and governmental agencies to promote the services of the position. The Ombudsman will also continue to seek out and pursue funding from grants, settlements and penalties for environmental projects in Contra Costa County with the appropriate partners.

required by the Industrial Safety Ordinance. Per the request of CCCHS, the site clarified issues associated with the Management of Change by creating a site-specific Tier IV document. In addition, the Air Products Corporate Assurance Department formulated an internal audit template developed specifically to verify compliance to the elements of the CCC ISO program.

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 13, 2008

*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 CCHS have questions): Michael Cabral, (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 CCHS requirements and submitted to CCHS for review. The Program has been implemented as required.

4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii));
   Date: 15 June 2007 - update: Section 7 Annual Accident History and Section 8 Annual Performance Review and Evaluation Submittal;
   Date: 5 February 2007 - Updated information to the CCC ISO Plan as requested. Cover page 12/01/06, Rev. 1, Sections 4.0 -6.4, Section 9 Safety Plan Certification, RMP/CalARP/ISO Safety Plan Revision History

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)(iii));
   CCHS Office, 4333 Pacheco Boulevard, Martinez; Martinez Library (library closest to the stationary source); Air Products - See contact in #2 above.

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)(ii)); (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)); None

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 triggered this requirement since the previous Annual Performance Review and Evaluation Submittal.

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));
   CCC/IS completed a planned format (3-year) CalARP/ISO audit at the facility from January 22 - February 7, 2007. Air Products provided a response to the CCC/IS administrative draft of preliminary audit report on May 9, 2007. CCC/IS indicated via Email on May 16, 2007, that the department agrees with the comments provided by JPC/1 to the Administrative Draft of Preliminary Audit Report. JPC/1 responded within 90 days in writing and provided proposed remedies and due dates to address the corrective actions identified in the preliminary report.

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 biomonitoring, Environmental Justice, emergency management practices, health mitigations for consumption of contaminated fish, effective techniques for public education and outreach, and diesel pollution.

III. Program Management

The Hazardous Materials 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 duties of the Hazardous Materials Ombudsman also included direct supervision of two contract employees for the Laotian Telephone Emergency Notification System project and management of the Caltrans grant about Goods Movement. The Ombudsman also was a member of Health Services Emergency
In 2007, these technical problems were resolved and the Ombudsman oversaw two Laotian outreach workers who were hired to install the alert boxes under a one-year contract. This contract was completed this year with the installation of approximately 100 boxes, and the program was completed.

Concord Naval Weapons Station Landfill Remediation—The Ombudsman provided technical support concerning diesel emissions to efforts by the County’s Conservation and Development Department and Supervisor Bonilla’s office to mitigate the impacts to communities near the Concord Naval Weapons Station from an effort to cap a contaminated landfill.

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, as well as participate in other programs to be able to provide technical assistance to the participants and the public.

CAER (Community Awareness and Emergency Response)—This nonprofit 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, prepares reports, writes letters and provides support for 3 monthly Commission meetings. This year the Ombudsman developed a public survey to solicit concerns about hazardous materials and attitudes about relative risk, is preparing to conduct two town hall forums about Household Hazardous Waste issues with County Supervisors, is planning an educational forum on cumulative impacts, conducted research on brownfield issues in the County, conducted research on the status of Environmental Justice issues in the County, and helped the Commission prepare recommendations to the Board of Supervisors concerning the County’s Environmental Justice policy.

Public and Environmental Health Advisory Board (PEHAB)—As staff to the Environmental Health subcommittee of PEHAB, the Ombudsman completed a report on pest management issues in the County in March, 2001. In response to this report, the Board of Supervisors asked Health Services and the County Agricultural Commissioner to convene a Task Force to develop an Integrated Pest Management Policy for the County. The Ombudsman represented Health Services as co-chair of this Task Force from 2001 till March of 2007. The Board of Supervisors adopted the policy in November of 2002. During 2008 the Ombudsman continued to represent Health Services on the Task Force as they implemented the policy.

The Ombudsman also participated in a regional program developing public education programs about the consumption of contaminated fish out of San Francisco Bay and the Delta as a result of PEHAB’s concern about the Environmental Justice issues raised by the significant subsistence determination. The submittal date for the proposed remedies and proposed due dates was August 14, 2007. As agreed to by CCCHS all Action Items are on schedule to be completed by August 2009.

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)):

1) Plant uses aqueous ammonia rather than anhydrous ammonia in its emission control system. This helps reduce the off-site consequence of an ammonia release.

2) Plant is designed without a liquid hydrogen backup system. This reduces the inventory of hazardous chemicals on-site.

3) Plant switched from 99% monoethanolamine to 85% monoethanolamine in order to eliminate the need for installation around the water treatment tanks. This reduces the potential for a fire.

More recently the plant:

1) Added an automatic bypass around the F-119 level control valve, providing an additional layer of protection against potential vessel overflow to compressor suction

2) Replaced one of these steam drum differential pressure level transmitters with a guided Wave Radar type level transmitter, providing an inherently more reliable level measurement and eliminating a single point failure mechanism.

3) Installed an additional regulated power transformer and power panel to supply power to critical instruments, eliminating a single point failure mechanism.

4) Added several active devices as additional layers of protection for the prevention of potential reformer furnace over-firing.

5) Redesigned and replaced all ten of the 24” pipe spools on the PSA vessel blow-down outlets, eliminating pipe strain and cracking potential due to severe cyclic pressure service.

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)(vi)): None

11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(B)): None

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the ISO (450-8.030(B)(4)): CalARP Program fees for these eight facilities are $524,244, the Risk Management Chapter of the Industrial Safety Ordinance fees are $382,393.

13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): 4000 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 safe operation of our facilities and has implemented applicable requirements outlined in the ISO as well as the CalARP regulation. The Human Factors program is implemented, and has helped the site maintain a safety record of no recordable or Lost Time Injuries since the last plan submitted. Likewise, there have been no events that resulted in offsite impact. This 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 developed and implemented a Human Factors Program as required by the Industrial Safety Ordinance. Per the request of CCCHS, the site clarified issues associated with the Management of Change by creating a site-specific Tier IV document. In addition, the Air Products Corporate Assurance Department formulated an internal audit template developed specifically to verify compliance to the elements of the CCC ISO program.

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.

Another way of helping the public to gather information is to ensure the public has the opportunity to be informed about, and participate in, important decisions related to environmental protection. The Hazardous Materials Ombudsman has done this by organizing, promoting and facilitating public involvement in important hazardous materials issues. These are as follows:

- **Incident Response**—On May 5, 2008 a small manufacturing company on the edge of Parchester Village in Richmond had a spill of 5000 gallons of the flammable solvent toluene from an above-ground storage tank. The Community Warning System was used to notify nearby residents of the spill, and the County’s Hazardous Materials Program responded to the spill along with several other local, state and federal agencies.

- At the request of County Supervisor Gioia, the Ombudsman organized and facilitated a community meeting on May 10, 2008 to allow community residents to hear about what occurred and the response directly from the responding agencies, and to voice any questions or concerns they had. Seven different agencies and the Supervisor’s Office participated in the community meeting, which was held as part of the Parchester Neighborhood Association meeting. Approximately 75 people attended the meeting. The Ombudsman also sent follow-up letters to all Parchester Village households on May 30, 2008 responding to questions that could not be answered at the meeting.

- **Industrial Safety Ordinance Public Participation**—The ordinance requires that public meetings be held at various stages of the process. The Hazardous Materials Ombudsman has worked closely with the Hazardous Materials Programs staff and the Board of Supervisors to develop an intensive public outreach strategy for the Industrial Safety Ordinance. During this period, the Ombudsman helped the Hazardous Materials Program develop programs and prepare information for public presentations about audits completed during the year.

- **Laotian Telephone Emergency Notification Project**—As a result of a major fire at a refinery in Richmond in 1999, the Laotian community in the Richmond area was concerned about the lack of understanding of many Laotians about the Community Warning System and what to do in the event of a release. They requested the County to develop a way to send the Telephone Emergency Notification System message, which is part of the Community Warning System, to Laotian households in four Laotian languages. The Hazardous Materials Ombudsman worked with the Director of the Hazardous Materials Programs and the Laotian Organizing Project to develop a pilot methodology. In 2001, $40,000 of funding was secured to implement the pilot project and a project coordinator was hired. In 2002, the Hazardous Materials Ombudsman hired four outreach staff and supervised all five staff people to implement this pilot program. The pilot project was completed in the spring of 2003.

- At that time, the Board of Supervisors directed the Ombudsman to participate in an evaluation of a new technology to provide automated telephone alerts in various languages. The Ombudsman hired two Laotian staff to test this technology in 100 Laotian homes. This test was completed in early 2004 and the recommendation to pursue this new technology instead of the methodology used in the first pilot study was accepted by the Internal Operations Committee of the Board of Supervisors. In 2005 the Hazardous Materials Ombudsman worked with the Community Warning System Program in the Sheriff’s Office to begin installing these alert boxes. Several technical problems delayed the implementation of the project.
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 County Health Services web site. This page contains information about the program, links to other related websites, and information about upcoming meetings and events. A toll-free phone number is still 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
   a. Responding to Questions and Complaints
      During this period, the Hazardous Materials Ombudsman received 148 information requests. More than 95 percent of these requests occurred via the telephone, and have been requests for information about environmental issues. Requests via email are slowly increasing, mainly through referrals from Health Services’ main webpage. Most of these requests concern problems around the home such as asbestos removal, household hazardous waste disposal, pesticide misuse 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 have been received via telephone and in writing. Persons who have made complaints via telephone have been also asked to provide those complaints in writing. During this period, the Hazardous Materials Ombudsman received one inquiry about activities or actions of the Hazardous Materials Programs. This complaint was about the proposed hazardous materials fees being assessed against a business. The Ombudsman supported the position that the fees being assessed by the Hazardous Materials Programs. This complaint was about the proposed hazardous materials fees being assessed against a business. The Ombudsman supported the position that the fees being assessed by the Hazardous Materials Programs were justified. The key consideration was whether annual fees could be charged for tri-annual inspections.
   b. Assisting in Information Gathering
      Many of the environmental pollution issues that Contra Costa residents are concerned about are on-going regulatory programs or industrial activities. Helping people to participate in these regulatory activities or to effectively advocate their interests about an industrial activity usually means providing them with more information or advice than can be done with a single phone call. Often these issues are complex and can take months to resolve. Some of this is done through technical assistance, which will be covered in the next section.

Annual Performance Review and Evaluation Submittal June 24, 2008

*Attach additional pages as necessary

1. Name and address of Stationary Source: ConocoPhillips Rodeo Refinery, 1380 San Pablo Avenue, Rodeo, CA 94572

2. Contact name and telephone number (should CCHS have questions): John Driscoll 510-245-4466

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 2006.

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 2000 with the updated recommendations requested by CCHS. A Human Factors Amendment was submitted on January 15, 2001. In conjunction with CCHS’s request for a public meeting on our plan and audit findings, we submitted a complete revision of the plan to reflect the changes 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 27, 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 CCH and was revised on July 28, 2006 with recommended changes. The next update is scheduled for July 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)(iii)): CCHS Office, 4333 Pinheco Boulevard, 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)). There have been no major chemical accidents or releases during the current reporting year.

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)). All corrective action items except one have been completed for the 3-18-07 incident shown in the last report. This action item was reevaluated and a more appropriate course of action was determined which will extend the completion to the 3rd quarter 2008.
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)(vi)):

Action items and target dates were submitted for the 2006 CalARP/ISO audit as required by CCHS and are being actively resolved.

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

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)):

None

11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(B)(3)):

No penalties have been assessed against any facility.

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the ISO (450-8.030(B)(4)):

CalARP Program fees for these eight facilities are - $524,244, the Risk Management Chapter of the Industrial Safety Ordinance fees are - $382,393.

13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)):

4000 hours were used to audit/inspect and issue reports on the Risk Management and CCHS and are being actively resolved.

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 conjunction with the ConocoPhillips Corporate Health Safety Environment Management Systems the ISO is another tool in the continuation of improving 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 BMP, CalARP, and PSM are covered under the ISO and PHAs are scheduled and performed on these units. A list of inherently safer systems as required by the ISO for PHA recommendations and new construction is attached.

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 have occurred since the last report.
### July 2007-June 2008 ISS improvements

<table>
<thead>
<tr>
<th>ID</th>
<th>ISS improvement category</th>
<th>Type</th>
<th>ISS Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFE 06-150</td>
<td>Inherent</td>
<td>PHA</td>
<td>The Inherent level of risk was implemented by removing equipment and piping from the process</td>
</tr>
<tr>
<td>SFE 07-141</td>
<td>Passive</td>
<td>Project</td>
<td>The passive level of risk reduction was implemented by upgrading equipment with metallurgy that has increased corrosion resistance</td>
</tr>
<tr>
<td>SFE 07-119</td>
<td>Passive</td>
<td>Project</td>
<td>The passive level of risk was implemented by removing access for personnel to a hazardous situation</td>
</tr>
<tr>
<td>WO</td>
<td>Inherent</td>
<td>PHA</td>
<td>The Inherent level of risk was implemented by removing equipment and piping from the process</td>
</tr>
<tr>
<td>SFE 06-111</td>
<td>Passive</td>
<td>Project</td>
<td>The passive level of risk reduction was implemented by upgrading piping with metallurgy that has increased corrosion resistance</td>
</tr>
<tr>
<td>SFE 06-015</td>
<td>Passive</td>
<td>Project</td>
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</tr>
<tr>
<td>SFE 06-138</td>
<td>Passive</td>
<td>Project</td>
<td>The passive level of risk reduction was implemented by upgrading piping with metallurgy that has increased corrosion resistance</td>
</tr>
<tr>
<td>SFE 06-139</td>
<td>Passive</td>
<td>Project</td>
<td>The passive level of risk reduction was implemented by upgrading piping with metallurgy that has increased corrosion resistance</td>
</tr>
<tr>
<td>SFE 07-140</td>
<td>Passive</td>
<td>Project</td>
<td>The passive level of risk reduction was implemented by upgrading piping with metallurgy that has increased corrosion resistance</td>
</tr>
<tr>
<td>SFE 04-150</td>
<td>Passive</td>
<td>Project</td>
<td>The passive level of risk reduction was implemented by moving equipment and personnel to an alternative location thus removing the hazard and exposure</td>
</tr>
<tr>
<td>WO</td>
<td>Passive</td>
<td>PHA</td>
<td>The passive level of risk was implemented by removing access for personnel to a hazardous situation</td>
</tr>
<tr>
<td>M2008020-001</td>
<td>Passive</td>
<td>Project</td>
<td>The passive level of risk reduction was implemented by upgrading equipment with metallurgy that has increased corrosion resistance</td>
</tr>
<tr>
<td>M2008030-001</td>
<td>Passive</td>
<td>Project</td>
<td>The passive level of risk reduction was implemented by upgrading piping and equipment with metallurgy that has increased corrosion resistance</td>
</tr>
<tr>
<td>M2008032-001</td>
<td>Passive</td>
<td>Project</td>
<td>The passive level of risk reduction was implemented by upgrading equipment with metallurgy that has increased corrosion resistance</td>
</tr>
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<td>Project Name</td>
<td>Level of Risk</td>
<td>Project Description</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
<td>---------------------</td>
<td></td>
</tr>
<tr>
<td>M2008044-001</td>
<td>Inherent</td>
<td>The Inherent level of risk was implemented by removing piping from the process</td>
<td></td>
</tr>
<tr>
<td>M2008111-001</td>
<td>Passive</td>
<td>The passive level of risk reduction was implemented by upgrading equipment with metallurgy that has increased corrosion resistance</td>
<td></td>
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<tr>
<td>M2008162-001</td>
<td>Passive</td>
<td>The passive level of risk reduction was implemented by upgrading equipment with metallurgy that has increased corrosion resistance</td>
<td></td>
</tr>
<tr>
<td>M2008214-001</td>
<td>Passive</td>
<td>The passive level of risk reduction was implemented by upgrading equipment with metallurgy that has increased corrosion resistance</td>
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<tr>
<td>M2008229-001</td>
<td>Passive</td>
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<tr>
<td>M2008241-001</td>
<td>Passive</td>
<td>The passive level of risk reduction was implemented by upgrading piping and equipment with metallurgy that has increased corrosion resistance</td>
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<tr>
<td>M2008295-001</td>
<td>Passive</td>
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<tr>
<td>M2008369-001</td>
<td>Passive</td>
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</tr>
<tr>
<td>M2008096-001</td>
<td>Passive</td>
<td>The passive level of risk reduction was implemented by adding equipment to be operated remotely thus removing personnel from hazardous situations</td>
<td></td>
</tr>
<tr>
<td>M2008098-001</td>
<td>Inherent</td>
<td>The Inherent level of risk was implemented by removing equipment and piping from the process</td>
<td></td>
</tr>
<tr>
<td>M2008146-001</td>
<td>Passive</td>
<td>The passive level of risk reduction was implemented by upgrading equipment with metallurgy that has increased corrosion resistance</td>
<td></td>
</tr>
<tr>
<td>M2008206-001</td>
<td>Passive</td>
<td>The passive level of risk reduction was implemented by upgrading piping and equipment with metallurgy that has increased corrosion resistance</td>
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</tr>
<tr>
<td>M2008256-001</td>
<td>Inherent</td>
<td>The inherent level of risk was implemented by using a less hazardous chemical</td>
<td></td>
</tr>
</tbody>
</table>
City of Richmond Industrial Safety Ordinance

The City of Richmond passed its version of the Industrial Safety Ordinance on December 18, 2001 that became effective on January 17, 2002. Richmond’s Industrial Safety Ordinance mirrors the County’s Industrial Safety Ordinance, with the exceptions of the 2006 amendments to the County’s Ordinance. Richmond’s Industrial Safety Ordinance covers two stationary sources: Chevron and General Chemical West Richmond Works.

Chevron and General Chemical West Richmond Works submitted their Safety Plans to Health Services, which reviewed the plans. 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 Fair & Disaster Preparedness Expo. Health Services 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 fourth time for CalARP program and the third time for RISO in April 2008 and the final report is being finalized.

Chevron and General Chemical West Richmond Works submitted their Safety Plans to Health Services, which reviewed the plans. 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 Fair & Disaster Preparedness Expo. Health Services 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 fourth time for CalARP program and the third time for RISO in April 2008 and the final report is being finalized.

Annual Performance Review and Evaluation Submittal

June 30, 2008

*Attach additional pages as necessary

1. Name and address of Stationary Source: General Chemical Bay Point Works, 501 Nichols Road, Bay Point, California 94565

2. Contact name and telephone number (should CCHS have questions): Sid Olia, 925-458-7365

3. Summarize the status of the Stationary Source’s Safety Plan and Program (450-8.030(B)(2)(i)): GCC-BPW Stationary Source’s Safety Plan and Program are currently in place. The safety plan and program are under ongoing review and enhancement. The Safety Plan was last updated in September 2007.

4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)): Number of salaried, hourly and contract employees working at General Chemical during 2007 and the organizations chart included in the Safety Plan were updated in September 2007.

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)(iii)): LCHS Office, 4333 Pacheco Boulevard, Martinez; Bay Point Library (library closest to the stationary source).

6. Provide any additions to the annual accident history reports (i.e. updates) submitted pursuant to Section 450-8.030(B)(2)(iv): None.

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)(v)): There has been no root cause analysis performed during this period.

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)(vi)): An audit was conducted in January 2008, resulting in 76 audit findings. General Chemical is currently in the process of reviewing and proposing an action plan for each audit finding. To date approximately 20 recommendations have been completed and verified.

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)(vii)): Inherently Safer System (ISS) were implemented during the previous review period. Nitric Acid distillation unit was replaced to Teflon lined SS from glass. Replaced CP scrubber from glass to Fluoropolymer. During drum filling, reduced employee exposure through closed dispensing system. Reduced small batch production which lead to reduction of employee exposure. Hydrochoric acid exchanger was replaced from glass to Fluoropolymer.

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)(viii)): None.
11. Summarize total penalties assessed as a result of enforcement of this Chapter (450-8.030(3)): **None**

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the ISO (450-8.030(B)(4)): CCCHS reports. CalARP Program fees for these eight facilities are - $524,244, the Risk Management Chapter of the Industrial Safety Ordinance fees are - $382,393.

13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): CCCHS reports, 4000 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)): The facility has not received any comments that may not have been received by the department.

15. Summarize how this Chapter improves industrial safety at your stationary source (450-8.030(B)(7)): It helps minimize the potential risks and exposure to the employees, the community and the environment.

16. List examples of changes made at your stationary source due to implementation of the Industrial Safety Ordinance (450-8.030(B)(8)): These amendments are as follows:

   - 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 implementation of a Human Factors Program.
   - An external events analysis, including seismic and security vulnerability analysis, is required.
   - Additional information in the Risk Management Plan.
   - Health Services is required to audit and inspect stationary sources at least once every three years.
   - The interaction required between the stationary source and Health Services.

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

- 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 safe practices.
- All of the processes at the regulated stationary source are covered.
- Managing changes in the organization for operations, maintenance, and emergency response.
- The implementation of a Human Factors Program.

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

- 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.

Work is being done to develop the Safety Culture Assessment guidance. The Industrial Safety Ordinance Guidance document is being updated to include the remaining changes to the ordinance. The Accident 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 Representative George Miller. Senator 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.
Total Personnel and Personnel Years Used by Health Services 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:

- Accidental Release Prevention Programs Engineers Time—480 personnel hours or 0.74 personnel years
- Four ISO/CalARP Program facilities audits were done between December 2007 and December 2008.
- It takes four or five engineers four weeks to perform an ISO/CalARP Program audit the total time taken to perform the four audits in 2008 is 1000 hours. Approximately 1/10 of the time is dedicated to the Industrial Safety Ordinance for a total of, 100 hours.
- Follow-up work to audits—60 hours per audit, or 240 total hours
- Developing Safety Culture Assessment Guidance and establishing Process Safety Measurement—240 hours
- Reviewing information for the website—11 hours
- Health Services Communications Office or the Accidental Release Prevention Engineers prepare material for presentations and public meetings—total approximately 80 personnel hours.
- Total of 1,640 hours is the approximate personnel time spent on the Industrial Safety Ordinance, or 0.82 personnel years.

This is not including the Ombudsman 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. Attachment C includes questions and summary of the meeting that was held in Parchester Village after the spill of toluene from Reaction Products.

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 Health Services, and the Industrial Safety Ordinance administered by Health Services. Each of the programs is very similar, 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 identical to the Process Safety Management Program. The main differences between the federal Accidental Release Prevention and the CalARP Programs are as follows:

- The number of chemicals regulated
- The threshold quantity of these chemicals

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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 CCHS 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 Program is being implemented. An Unannounced Inspection was conducted by CCHS on June 19 and 20, 2008. Inherently Safer Systems analyses for existing processes are being conducted, and are expected to be complete for all processes at SMR by August 15, 2008. SMR’s Safety Plan was last updated in September 2007, incorporating updates addressing findings from the October/November 2006 ISO/CalARP audit.

4. Summarize Safety Plan updates (i.e., brief explanation of update and corresponding date) (450-8.030(B)(2)(ii)): SMR’s Safety Plan was last updated in September 2007, incorporating updates addressing findings from the October/November 2006 ISO/CalARP audit.

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)(iii)): CCHS Office, 4333 Pacheco Boulevard; 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)(iv)) (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 and evaluation submittal (12-month history). There were no MCAR’s in the current reporting period (from July 1, 2007 to June 30, 2008), 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)(v)): There were no MCAR’s in the current reporting period (from July 1, 2007 to June 30, 2008), and therefore no updates to the Accident History.

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)): 76 of the 82 action items arising from the October/November 2006 ISO/CalARP audit have been implemented. None of the remaining 6 action items are overdue. No action items are anticipated as a result of the Unannounced Inspection conducted by CCHS on June 19 and 20, 2008. 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 list in Attachment 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)): None.

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

12. Summarize the total fees, service charges, and other assessments collected specifically for the support of the ISO (450-8.030(B)(4)): CalARP Program fees for these eight facilities are - $524,244, the Risk Management Chapter of the Industrial Safety Ordinance fees are - $382,393.

13. Summarize total personnel and personnel years utilized by the jurisdiction to directly implement or administer this Chapter (450-8.030(B)(5)): 4000 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 list in Attachment 1.

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 (from July 1, 2007 to June 30, 2008).

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 develop 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 3 points, and Severity Level I 1 point. Below is a graph of this weighted scoring.

Major Chemical Accidents and Releases Weighted Score

Legal Enforcement Actions Initiated by Health Services

As part of the enforcement of the Industrial Safety Ordinance and the CalARP Program, Health Services issues Notice 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 1 shows the action that has been taken by Health Services. Health Services 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 Ombudsman, 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 2008-09 are $524,244.
Major Chemical Accidents or Releases

Health Services has analyzed the Major Chemical Accidents or Releases (MCAR) that have 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 onsite and/or offsite 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 were 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 September 2008 for all stationary sources in Contra Costa County, the MCARs that have occurred at the County’s Industrial Safety Ordinance stationary sources, 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 I, II and III MCARs for this period. NOTE: The charts do not include any transportation MCARs that have occurred.

<table>
<thead>
<tr>
<th>ISS Item Number</th>
<th>ISS Type</th>
<th>Source/Study</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>M20063127-001</td>
<td>Passive</td>
<td>Project</td>
<td>Upgraded metallurgy of heat exchanger tube bundle to resist corrosion.</td>
</tr>
<tr>
<td>M20063614-001</td>
<td>Passive</td>
<td>Project</td>
<td>Upgraded metallurgy of furnace tubes to minimize corrosion.</td>
</tr>
<tr>
<td>M20072672-001</td>
<td>Passive</td>
<td>Project</td>
<td>Replaced Reactor with new vessel incorporating upgraded metallurgy.</td>
</tr>
<tr>
<td>M20072417-001</td>
<td>Inherent</td>
<td>Project</td>
<td>Eliminated gauge glass from transfer pump.</td>
</tr>
</tbody>
</table>
Annual Performance Review and Evaluation Submittal
June 30, 2008

*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):
   Alan Savage at (925) 335-3490 or Sabiha Goken at (925) 370-3620.

3. Summarize the status of the Stationary Source’s Safety Plan and Program (450-8.030(B)(2)(ii)):
   An updated Safety Plan was submitted to Contra Costa Health Services on June 22, 2007. Contra Costa Health Services has completed four audits of 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. A CalARP/ISO audit was in August, 2003. The most recent CalARP/ISO audit was in November-December, 2005. All safety program elements required by the ISO have been developed and are being 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. An updated Safety Plan will be submitted this year along with an updated RMP. 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 June 22, 2007.

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, 4333 Pacheco Boulevard, Martinez library.

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 1 or 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. Off-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 Health Services 30 days after the root cause analysis is complete. The record of the major chemical accidents or releases that have occurred within the last year and the status of each of these incidents investigations are included in Table IV.

<table>
<thead>
<tr>
<th>Regulated Source</th>
<th>Date MCAR Occurred</th>
<th>MCAR Description</th>
<th>Onsite Impact</th>
<th>Offsite Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reacts Products</td>
<td>5/5/2008</td>
<td>A brass valve was removed from a bottom of a storage tank partially filled with toluene. The removal looked to be a theft of the valve over a weekend when no one was at the facility. Over 3,000 gallons of toluene was released. The spill went offsite into a ditch that ran through the wetlands between Parchester Village and the Bay. The release was found on Monday morning and the US Coast Guard responded and requested that a shelter-in-place be called. The Parchester siren was sounded and information went out over the media to notify the residents of the shelter-in-place.</td>
<td>The loss of over 3,000 gallons of toluene.</td>
<td>Toluene went offsite into the wetlands. The toluene was in a ditch that runs along the border of Parchester Village. Toluene odors were noticeable in the Parchester Village. Siren was sounded and the residents of Parchester Village were requested to shelter-in-place.</td>
</tr>
</tbody>
</table>

When Health Services Hazardous Materials Response Team arrived onsite and took measurements of the amount of toluene in the air, the shelter-in-place was lifted. Health Hazardous Materials Programs is classifying this incident as a Community Warning System Level II and a Major Chemical Accident or Release Severity Level II, because if the toluene ignited the damage and consequences of the incident would be major.
Table III
Inherently Safer Systems

<table>
<thead>
<tr>
<th>Regulated Stationary Source</th>
<th>Inherently Safer System Implemented</th>
<th>Design Strategy</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Products at Shell Martinez Refinery</td>
<td>Reduced the frequency of the hazard by changing design features (once)</td>
<td>Passive</td>
<td>Moderate</td>
</tr>
<tr>
<td>Air Products at Tesoro</td>
<td>Implemented risk reduction strategies (active) no new inherently safer systems implemented</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ConocoPhillips-Rodeo Refinery</td>
<td>Reduction of inventory by removing piping/equipment from the process (four times)</td>
<td>Inherent</td>
<td>Minimization</td>
</tr>
<tr>
<td></td>
<td>Use a less hazardous chemical (once)</td>
<td>Passive</td>
<td>Substitution</td>
</tr>
<tr>
<td></td>
<td>Revised equipment metallurgy, design features (Nineteen times)</td>
<td></td>
<td>Simplify</td>
</tr>
<tr>
<td></td>
<td>Reduced the potential of a hazard by moving to an alternate location (four times)</td>
<td>Passive</td>
<td>Moderate</td>
</tr>
<tr>
<td>General Chemical West Bay Point Works</td>
<td>Reduced the frequency of the hazard by changing design features (Three times)</td>
<td>Passive</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>Minimize exposure to the hazard by changing design features and frequency of operation (Twice)</td>
<td>Passive</td>
<td>Minimize</td>
</tr>
<tr>
<td>Shell Martinez Refinery</td>
<td>Elimination of glass gauge to eliminate exposure to hazard (once)</td>
<td>Inherent</td>
<td>Simplify</td>
</tr>
<tr>
<td></td>
<td>Upgrade tubing and equipment metallurgy to reduce potential of a hazard or the frequency (three times)</td>
<td>Passive</td>
<td>Simplify</td>
</tr>
<tr>
<td>Tesoro Golden Eagle Refinery</td>
<td>Remove out of service piping and utility connections (two times)</td>
<td>Inherent</td>
<td>Simplify</td>
</tr>
<tr>
<td></td>
<td>Elimination of atmospheric PSVs (once)</td>
<td>Inherent</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>Remove process storage (once)</td>
<td>Inherent</td>
<td>Minimization</td>
</tr>
<tr>
<td></td>
<td>Reduced the frequency of the hazard by changing design features (nine times)</td>
<td>Passive</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td>Reduced potential of a hazard or the frequency by changing design features (two times)</td>
<td>Passive</td>
<td>Simplify</td>
</tr>
</tbody>
</table>

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 no accidents meeting the major chemical accident or release criteria during his reporting period.

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:**

   All investigation recommendations from root cause analyses submitted to CCHS are closed except as noted below.

   **For the March 24, 2006 #2HDS fire investigation, four recommendations remain open.** One recommendation is a long-term updating of the P&IDs to include metallurgy on the P&IDs. Two of the recommendations are regarding development of gasket material standards and training personnel on these standards. The last open recommendation is regarding issuance of an expectation that maintenance personnel consult with ME&I prior to purchasing/replacing ring joint gaskets.

   **For the October 26, 2005 power outage investigation, one recommendation remains open.** This recommendation is to review procedures with operators on taking timely action when units are out of environmental compliance limits.

   **For the October 14, 2004 naphtha pump fire investigation, one recommendation remains open.** The open recommendation involves development of refinery-wide guidelines on pump startups.

   **For the September 16, 2004 Spent Acid tank fire investigation, three recommendations remain open.** The first is to review all gas blanketing regulators for chemical storage tanks in flammable service to verify that all their documentation is correct and maintenance tracked. The remaining two recommendations are involving operating procedures – revision of tank operating procedures to include step on checking for positive pressure on the
gas blanket system and developing an operating procedure for operating a single spent acid tank.

For the February 20, 2004 power failure investigation, one recommendation remains open. This recommendation is to clearly establish parties responsible for load shedding procedure review.

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 and November/December, 2005. There are no RCA or Incident Investigations that have been conducted by the Department.

   Facility status of audit recommendations:

   Two recommendations regarding maintenance training and procedures remain open from the 2003 CCHS audit.

   Eight (8) recommendations remain open from the 2005 CCHS audit. One recommendation is development of a system to track qualifications of operators cross-qualified in multiple jobs – this is on target for completion later this year. Two recommendations remain open on MOC that require site-wide training to close completely. Site MOC training will commence later this year after a comprehensive change to the MOC program per new corporate guidelines that have been recently developed. Two recommendations remain open on latent condition review and are on target for completion later this year. One recommendation on contractor qualification is on target for completion in the next few months. One recommendation regarding updating all policies and procedures is nearly complete. One recommendation regarding maintenance procedures and training remains open.

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)):

**Table II**

<table>
<thead>
<tr>
<th>Regulated Stationary Source</th>
<th>Location 1</th>
<th>Location 2</th>
<th>Location 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Products at Shell</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
</tr>
<tr>
<td>Air Products at Tesoro</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
</tr>
<tr>
<td>Shell Refining – Martinez</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
</tr>
<tr>
<td>General Chemical West Bay Point Works</td>
<td>Bay Point Public Library</td>
<td>Bay Point Public Library</td>
<td></td>
</tr>
<tr>
<td>ConocoPhillips Rodeo Refinery</td>
<td>Rodeo Public Library</td>
<td>Rodeo Public Library</td>
<td>Crockett Public Library</td>
</tr>
<tr>
<td>Tesoro Golden Eagle Refinery</td>
<td>Martinez Public Library</td>
<td>Martinez Public Library</td>
<td></td>
</tr>
</tbody>
</table>
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 Contra Costa Health Services. The Industrial Safety Ordinance expands on this program. Stationary sources are required to submit a Risk Management Plan to Health Services that is similar to the Safety Plans that are submitted. Health Services reviews these Risk Management Plans and performs the CalARP Program audit simultaneously with the Industrial Safety Ordinance audit.

Health Services performs Unannounced Inspections of the 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 that are regulated by the Industrial Safety Ordinance were required to submit their Safety Plans to Health Services 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 Health Services
- 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 its Safety Plan to Health Services 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 4333 Pacheco Blvd., Martinez. When Health Services determines that the Safety Plan is complete and prior to going out for a 45-day public comment period, Health Services will place the plan in the library(ies) closest to the regulated stationary source. Below in Table II is a listing of the regulated stationary sources with the location of each of their Safety Plans.

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 any 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”: CalARP program fees for these eight facilities are $524,244. The Risk Management Chapter of the Industrial Safety Ordinance fees are $382,393.

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”: 4000 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.
Table I
Industrial Safety Ordinance Stationary Source Status

<table>
<thead>
<tr>
<th>Business Name</th>
<th>Safety Plan (SP) Received</th>
<th>Notice of Deficiencies Issued-SP</th>
<th>Safety Plan Complete</th>
<th>SP Public Meeting Date</th>
<th>Audit/Inspection Date</th>
<th>Audit Public Meeting Date</th>
<th>NOD Issued - HF</th>
<th>HF-SP Determined Complete</th>
<th>HF Audit/Inspection Date</th>
<th>HF Audit Public Meeting Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Products – Shell &amp; Tesoro</td>
<td>01/14/00</td>
<td>06/15/00</td>
<td>08/30/00</td>
<td>09/15/00</td>
<td>11/22/00</td>
<td>05/08/03</td>
<td>05/10/00</td>
<td>06/19/01</td>
<td>05/03/02</td>
<td>05/08/03</td>
</tr>
<tr>
<td>General</td>
<td>01/14/00</td>
<td>06/12/00</td>
<td>12/20/00</td>
<td>01/02/01</td>
<td>08/11/00</td>
<td>01/01/01</td>
<td>01/15/01</td>
<td>07/24/06</td>
<td>09/20/06</td>
<td>05/01/03</td>
</tr>
<tr>
<td>Chemical/ Bay Pt. Works</td>
<td>10/09/07</td>
<td>07/28/03</td>
<td>03/17/04</td>
<td>11/16/05</td>
<td>08/29/05</td>
<td>01/31/06</td>
<td>11/04/08*</td>
<td>01/02/07</td>
<td>09/24/06</td>
<td>05/01/03</td>
</tr>
<tr>
<td>ConocoPhillips - Rodeo</td>
<td>01/15/00</td>
<td>03/14/00</td>
<td>05/30/00</td>
<td>06/15/00</td>
<td>06/30/00</td>
<td>04/09/02</td>
<td>01/12/01</td>
<td>09/10/01</td>
<td>03/18/02</td>
<td>11/05/01</td>
</tr>
<tr>
<td>Shell Martinez</td>
<td>07/22/02</td>
<td>03/21/03</td>
<td>09/15/03</td>
<td>09/24/06</td>
<td>11/26/04</td>
<td>09/24/06</td>
<td>01/16/01</td>
<td>11/09/01</td>
<td>01/03/02</td>
<td>04/29/02</td>
</tr>
<tr>
<td>Tesoro Golden Eagle Refinery</td>
<td>06/21/02</td>
<td>07/30/07</td>
<td>06/23/07</td>
<td>09/23/07</td>
<td>09/08/03</td>
<td>09/24/06</td>
<td>01/12/01</td>
<td>09/18/01</td>
<td>12/14/01</td>
<td>12/03/01</td>
</tr>
<tr>
<td>Eagle Refinery</td>
<td>06/22/07</td>
<td>11/05/07</td>
<td>08/18/08</td>
<td>08/18/08</td>
<td>08/18/08</td>
<td>08/18/08</td>
<td>08/18/08</td>
<td>08/18/08</td>
<td>08/18/08</td>
<td>08/18/08</td>
</tr>
</tbody>
</table>

*Safety Plan and audit will be final after end of public notice period.
• 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 ConocoPhillips Fenceline Monitors

• Hazardous Materials Program Incident Search
  » Online search of the hazardous materials incident database for incidents that have occurred from 1993 to current year by entering a date range, address, city, and/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 list summaries of major accidents from industrial facilities in Contra Costa County from 1992 to most recent

• Additional resource links for more information

Effectiveness of the Hazardous Materials Ombudsman

The Board of Supervisors created the Hazardous Materials Ombudsman position in 1997. This position was filled in April 1998. The Board believed that the ombudsman 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 Ombudsman on the effectiveness of the position.

Analysis findings and recommendations for MCARe listed in the response under question 6.

17. Summarize the emergency response activities conducted at the source (e.g., CWS or CAN 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.
Number of Root Cause Analyses and/or Incident Investigations Conducted by Health Services

Health Services has not performed any incident investigations, including a root cause analysis, within the last year. Reaction Products submitted a root cause analyses report to Health Services as part of its 30-day report. A listing of the Major Chemical Accidents or Releases can be found on the Health Services website at the following address: www.cchealth.org/groups/hazmat/accident_history.php This list includes accidents that occurred prior to the adoption of the Industrial Safety Ordinance.

Health Services’ Process for Public Participation

Health Services, 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 Health Services look at existing venues that are attended by the public that the Health Services’ can present and receive comments on Preliminary Audit Findings and the stationary source’s Safety Plans. Health Services plans to present Audit Findings for General Chemical Bay Point Works as an agenda item to the Municipal Advisory Council in Bay Point on November 4, 2008.

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 Health Services. 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
The paper files for the stationary sources are kept in a central location. The Accidental Release Prevention Programs staff has files set up on the Health Services Network where the files for each of the different stationary sources are found and are accessible to each of the Accidental Release Prevention Programs Engineers, Supervisor, and Hazardous Materials Programs Director. The Accidental Release Prevention Programs files also 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 two different Health Services locations: the Hazardous Materials Program Offices and the Accidental Release Prevention Program Offices.

Number and Type of Audits and Inspections Conducted

Health Services was required to audit and inspect all seven (currently six) regulated stationary sources that were required to comply with the Industrial Safety Ordinance within one year after the initial submittal of their Safety Plans. Health Services reviewed all of the Safety Plans and audited/inspected all of the stationary sources’ Safety Programs within that year (2000). Health Services 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). Health Services 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 fall 2005, which was completed in the spring of 2007. The beginning of the fourth round of audits began January 2008.

When Health Services reviews a Safety Plan, a Notice of Deficiencies is produced that documents what changes to their Safety Plan a stationary source are required to make before Health Services 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, Health Services will review the response. Health Services will either determine that the Safety Plan is complete or will work with the stationary source until the Safety Plan is determined to be complete. When the Safety Plan is deemed complete, Health Services will open a public comment period on the Safety Plan and will present the plan in a public meeting or venue. Health Services will respond to all written comments in writing and when appropriate use the comments in the audit/inspection of the regulated stationary sources.

Health Services will issue Preliminary Audit Findings after an audit/inspection is complete. The stationary source will have 90 days to respond to these findings. Health Services 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, Health Services will issue the Preliminary Audit Findings for public comment and will present the findings in a public meeting or venue. Health Services 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, Health Services will issue the Final Audit Findings and will respond in writing to any written public comments received. Table I lists the status of Health Services review of the different stationary sources’ Safety Plans and audit and inspections of their Safety Programs.
Comments from interested parties regarding the effectiveness of the local program that raise public safety issues

The impact of the ordinance in improving industrial safety

Effectiveness of Contra Costa Health Services’ Implementation of the Industrial Safety Ordinance

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

- Audit/Inspections Policy
- Risk Management Plan Completeness Review Questionnaires
- Safety Plan Completeness Review Questionnaires
- Conducting Audit/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

Health Services has developed the Contra Costa County CalARP Program Guidance Document and the Contra Costa County Safety Program Guidance Document. These documents give guidance to the stationary sources for complying with the Industrial Safety Ordinance. The policies, procedures, protocols, and questionnaires are available through Health Services. The guidance documents can be downloaded through Health Services’ website: www.cchealth.org/groups/hazmat/california_accidental_release_prevention_guidance_document.php and www.cchealth.org/groups/hazmat/industrial_safety_ordinance_guidance.php

Effectiveness of the Procedures for Records Management

Health Services has set up hard copy and computer files for each of the stationary sources. The files include the following folders:

- Annual status reports
- Audits & Inspections
- Communications
Contra Costa Health Services completed and issued the 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. Health Services is working with the stationary sources to develop the Safety Culture Assessment Guidance, which should be completed by June 2009.

Contra Costa Health Services has reviewed all of the Safety Plans submitted to the department and has started the fourth round of audits of the stationary sources, as required by the ordinance. In addition, Contra Costa Health Services has performed a specialized audit for all the stationary sources for their Human Factors programs and for Inherently Safer Systems completed in 2002. The status of the reviews and audits are discussed 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 Health Services is meeting the requirements of the ordinance as follows:
  a. Effectiveness of the Department’s program to ensure stationary source’s compliance with the ordinance
  b. Effectiveness of the procedures for records management
  c. Number and type of audits and inspections conducted by Health Services as required by the ordinance
  d. Number of root cause analyses and/or incident investigations conducted by Health Services
  e. Health Services’ process for public participation
  f. Effectiveness of the Public Information Bank
  g. Effectiveness of the Hazardous Materials Ombudsman
  h. Other required program elements necessary to implement and manage the ordinance

- A listing of stationary sources covered by the ordinance, including for each:
  a. The status of the stationary source’s Safety Plan and Program
  b. A summary of all stationary sources’ Safety Plan updates and a listing of where the Safety Plans are publicly available
  c. The annual accident history report submitted by the regulated stationary sources and required by the ordinance
  d. 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
  e. A summary, including the status, of any audits, inspections, root cause analyses and/or incident investigations conducted by Health Services, including the status for implementing the recommendations
  f. Description of inherently safer systems implemented by the regulated stationary source
  g. Legal enforcement actions initiated by Health Services, 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
Tony Simenza explains how the schools are trained and how they participate in the Community Warning System.

Q: Is the transit system notified?
A: No, that is a problem we are working on.

Q: How do we know that when the siren sounds, it is not a test?
A: When it is a test, it is short. When it is not a test, the sirens keep going and there are announcements on both radio and TV, along with phone calls to homes in immediate areas of danger.

Q: Is it legal to store chemicals and how much?
A: Yes it is legal and you would need to check with the City of Richmond on the business zoning.

Q: What are the long-term effects?
A: There are no long-term effects, only short-term effects.

Q: Where is the City of Richmond?
A: The phone number was posted.

Q: How long to clean up?
A: DTSC (Dept of Toxic Substance Control) will follow up.

Q: Did chemical enter backyard (house backs up to facility)
A: Went into canal, under railroad tracks, out to Bay
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. The audits that were completed this year are:

- General Chemical Bay Point Works—January 2008
- Tesoro Golden Eagle Refinery—September 2008
- ConocoPhillips Rodeo Refinery—October 2008

Major Chemical Accidents or Releases
Another measure of the effectiveness of the Industrial Safety Ordinance is by the number and severity of the Major Chemical Accidents or Releases that have occurred. Since the last report to the Board there has been no Major Chemical Accidents or Releases at a business regulated by the County or City of Richmond Industrial Safety Ordinance or the California Accidental Release Prevention Program. As mentioned earlier, this is the first year that this has occurred. One Major Chemical Accident or Release did occur at Reaction Products that is located in Parchester Village.

Conclusion
The number and severity of the Major Chemical Accidents or Releases have been decreasing since the implementation of Industrial Safety Ordinance. The implementation of the Industrial Safety Ordinance has improved and, in most cases, is being done as required by the ordinance. It is believed that by continuing implementation of the Industrial Safety Ordinance and strengthening the requirements of the Ordinance that the possibility of accidents that could impact the community has decreased.
Executive Summary

The public and the Board of Supervisors were concerned about the number of Major Chemical Accidents and Releases and the severity of the incidents that were occurring throughout the 1990s. The Board of Supervisors took action and adopted the County's Industrial Safety Ordinance. The main goal of the Industrial Safety Ordinance is to prevent chemical accidents from occurring that could have a detrimental impact to the community surrounding chemical facilities and petroleum refineries. This is accomplished by requiring the regulated facilities to implement a safety program that is designed to be the most stringent in the United States, if not the world. The Industrial Safety Ordinance is designed to include participation from all of the stakeholders, including industry, agencies, elected officials, and the public.

This is the first year, since the Board of Supervisors passed the County's Industrial Safety Ordinance that there has not been a Major Chemical Accident or Release at a facility that is regulated under the County's or the City of Richmond's Industrial Safety Ordinances or the California Accidental Release Prevention Program. One Major Chemical Accident or Release did occur at Reaction Products in Parchester Village when over 3,000 gallons of toluene were spilled into the wetlands. The trend has been less and less Major Chemical Accidents or Releases each year. This is an indication of the success of the County's Industrial Safety Ordinance, the regulated facilities implementation of the requirements and the oversight from the Accidental Release Prevention Programs Engineers.

The Accidental Release Prevention Programs Engineers are continuing to develop ways to improve the overall implementation of the Industrial Safety Ordinance. The Hazardous Materials Programs Staff participated with the Center for Chemical Process Safety in writing the second edition of the book “Inherently Safer Chemical Processes,” which will be coming out this autumn. The staff has also been working with the Contra Costa County regulated businesses, as well as the Center for Chemical Process Safety in developing process safety metrics for lagging and leading indicators.

The U.S. Chemical Safety and Hazard Investigation Board has recognized the efforts of Contra Costa County ensuring that the process safety requirements are being implemented by the regulated businesses in its DVD Anatomy of a Disaster: Explosion at BP Texas City Refinery.

Public Participation

The Hazardous Materials Programs has a very strong public outreach process and is constantly looking at ways to improve this process. The following items have been implemented based on recommendations from interested stakeholders and the actions taken this year:

- Public meetings to be held at existing venues
  - A public meeting was held after the Reaction Products spill. Approximately 100 people attended this meeting. A summary of the meeting is included in Attachment C.
- General Chemical Audit Findings Presentation at the Bay Point Municipal Advisory Council
- Most recent audit findings summarized in easily read format in both 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

Randall Sawyer explains the Business Plan program and Aboveground Tank reporting and inspections.

Michael Kent explains that the City of Richmond is looking at future zoning of the Community.
Tony Simenza explains how the schools are trained and how they participate in the Community Warning System.

Q: Is the transit system notified?
A: No, that is a problem we are working on.

Q: How do we know that when the siren sounds, it is not a test?
A: When it is a test, it is short. When it is not a test, the sirens keep going and there are announcements on both radio and TV, along with phone calls to homes in immediate areas of danger.

Q: Is it legal to store chemicals and how much?
A: Yes it is legal and you would need to check with the City of Richmond on the business zoning.

Q: What are the long-term effects?
A: There are no long-term effects, only short-term effects.

Q: Where is the City of Richmond?
A: The phone number was posted.

Q: How long to clean up?
A: DTSC (Dept of Toxic Substance Control) will follow up.

Q: Did chemical enter backyard (house backs up to facility)
A: Went into canal, under railroad tracks, out to Bay
Introduction

The Board of Supervisors passed the Industrial Safety Ordinance because of accidents that occurred at the 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, which 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 Health Services stating how the stationary source is complying with the ordinance, except the Human Factors portion (completed January 15, 2000)
- Contra Costa Health Services 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 Health Services (completed January 15, 2000)
- 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 Health Services 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 Health Services will review all of the submitted Safety Plans and audit/inspect all of the stationary source's Safety Programs within one year of the receipt of the Safety Plans (completed January 15, 2000) and every three years after the initial audit/inspection (ongoing)
- Contra Costa Health Services will give an annual performance review and evaluation report to the Board of Supervisors

The 2006 amendments to the Industrial Safety Ordinance requires or expands the following:

- Expands the Human Factors to include Maintenance and all of Health and Safety
- Requires the stationary sources to perform Safety Culture Assessments one year after the Hazardous Materials Programs develops guidance on performing a Safety Culture Assessment
- Perform Security Vulnerability Analysis

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

- Air Products at the Shell Martinez Refining Company
- Air Products at the Tesoro Golden Eagle Refinery
- Shell Martinez Refining Company
- General Chemical West in Bay Point
- ConocoPhillips Rodeo Refinery
- Tesoro Golden Eagle Refinery