



# CONTRA COSTA COUNTY

## AGENDA

### Industrial Safety Ordinance/Comm Warning System Ad Hoc Committee

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Thursday, July 11, 2024

1:00 PM

777 Arnold Drive, Martinez, CA 94553 -  
Paramount Room  
11780 San Pablo Avenue, Suite D  
El Cerrito, CA 94530  
190 East 4th Street, Pittsburg, CA 94565  
Zoom: <https://zoom.us/j/98727602317>  
Phone: 1 (669) 900-6833  
Meeting ID: 987 2760 2317

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*Committee Chair: Supervisor John Gioia; Committee Vice Chair: Supervisor Federal Glover*

Agenda Items: Items may be taken out of order based on the business of the day and preference of the Committee

1. Roll Call and Introductions
2. Public comment on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to two minutes).
3. APPROVE meeting minutes from May 30, 2024 ISO/CWS Ad Hoc Committee Meeting. [24-2104](#)  
**Attachments:** [ISO CWS Ad Hoc Committee Meeting Minutes - May 30, 2024](#)
4. RECEIVE a status report on Safety Culture participation rates for Chevron, Martinez Refining Company and P66 Refinery and PROVIDE direction to staff as necessary. [24-2105](#)  
**Attachments:** [Memo to BOS on SCA - July 11, 2024](#)
5. RECEIVE Bulk Liquid Storage Industrial Safety Ordinance amendments presentation from Contra Costa Health Staff and PROVIDE direction as necessary. [24-2106](#)  
**Attachments:** [Staff Presentation for Proposed ISO Amendments - July 11, 2024](#)  
[CCH Staff Report Regarding Proposed Revisions to ISO - July 11, 2024](#)  
[ISO Ordinance Amendment - draft.redline.7.3.24](#)

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6. RECEIVE an update regarding the Hazardous Materials Programs and associated fee study and PROVIDE direction to staff as necessary. [24-2107](#)

**Attachments:** [CCC Final Report Hazmat 6.3.24](#)  
[Grand Jury Report 2404 - County Petroleum Refineries and Hazardous](#)  
[Materials Releases- Improving the Hazmat Response](#)

7. RECEIVE an update from the Oversight Committee regarding the investigation into the spent catalyst release that occurred on November 24-25, 2022 at the Martinez Refining Company and PROVIDE direction as necessary.
8. RECEIVE an update regarding the fire that occurred on November 19, 2023 at Marathon Martinez Renewable Fuels and PROVIDE direction as necessary.

Adjourn

The Committee will provide reasonable accommodations for persons with disabilities planning to attend the Committee meetings. Contact the staff person listed below at least 72 hours before the meeting. Any disclosable public records related to an open session item on a regular meeting agenda and distributed by the County to a majority of members of the Committee less than 96 hours prior to that meeting are available for public inspection at 1220 Morello Avenue, Suite 200, Martinez, CA 94553, during normal business hours. Staff reports related to items on the agenda are also accessible on line at [www.contracosta.ca.gov](http://www.contracosta.ca.gov). Public comment may be submitted via electronic mail on agenda items at least one full work day prior to the published meeting time.

For Additional Information Contact: Matthew Kaufmann at (925) 957-2668



# CONTRA COSTA COUNTY

1025 ESCOBAR STREET  
MARTINEZ, CA 94553

## Staff Report

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**File #:** 24-2104

**Agenda Date:** 7/11/2024

**Agenda #:** 3.

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Advisory Board: Industrial Safety Ordinance/Community Warning System Ad Hoc Committee

Subject: May 30, 2024 ISO/CWS Ad Hoc Committee Meeting Minutes

Presenter: Nicole Heath, Director of Hazardous Materials Programs

Information: Attached to this agenda item is the May 30, 2024 Industrial Safety Ordinance/Community Warning System Ad Hoc Committee meeting minutes.

Recommendation(s)/Next Step(s): Approve the May 30, 2024 meeting minutes.



# Minutes

## INDUSTRIAL SAFETY ORDINANCE/ COMMUNITY WARNING SYSTEM AD HOC COMMITTEE

May 30, 2024  
9:30 AM

### Meeting Minutes:

#### 1. Roll Call and Introductions

The meeting was called to order at 9:30 AM.

Committee Chair Supervisor John Gioia and Committee Vice Chair Federal Glover were present.

#### 2. Public comment on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to two minutes).

Public Comment: No public comments were received.

#### 3. APPROVE meeting minutes from February 22, 2024 ISO/CWS Ad Hoc Committee Meeting.

The meeting minutes were approved by both committee members.

Public Comment: No public comments were received.

#### 4. RECEIVE a status report regarding proposed modifications to the Contra Costa County Hazardous Materials Incident Notification Policy for Level 1 incident notifications to the public and PROVIDE direction as necessary.

A presentation was provided by Adam Springer, Assistant Director of Hazardous Materials Programs for Contra Costa Health. The committee asked several questions of both Contra Costa Health and Office of the Sheriff – Office of Emergency Services (Community Warning System Administrator) staff.

Public comment: Five (5) public comments were received.

The committee directed staff to implement the proposed changes by December 31, 2024. In addition, the committee asked that staff return with a redline strike-out format of the County's Hazardous Materials Notification Policy Direction at a future meeting.

#### 5. RECEIVE a status report regarding the independent incident investigation into the February 9, 2021 Wharf Oil Spill at the Chevron Richmond Refinery and PROVIDE direction as necessary.

The committee received a presentation from AcuTech – contractor that performed the incident investigation.

Public comment: Three (3) public comments were received.

Contra Costa Health staff will work with the City of Richmond to make a presentation of the incident investigation findings to the City of Richmond Council.

**6. RECEIVE Safety Culture Assessment (SCA) presentations from P66 Refinery, Martinez Refining Company and Chevron Richmond Refinery and PROVIDE direction as necessary.**

The committee received presentations from P66 Refinery, Martinez Refining Company, and Chevron Richmond Refinery regarding recent safety culture assessments at the respective facilities.

Public comment:

Five (5) public comments were received.

The committee requested that Contra Costa Health staff prepare a memo breaking down survey participation by facility. The committee requested a presentation regarding the contents of the memo at the next ISO/CWS Ad Hoc Committee meeting.

**7. RECEIVE an update from the Oversight Committee regarding the investigation into the spent catalyst release that occurred on November 24-25, 2022 at the Martinez Refining Company and PROVIDE direction as necessary.**

Nicole Heath, Director of Hazardous Materials Programs presented the agenda item. The 45-day public comment period on the root cause incident investigation report is has opened. A public meeting was held on April 20, 2024 to receive comments from the community. Due to a number of factors, the Martinez Refining Company Oversight Committee voted to extend the public comment period to June 3, 2024. Due to several questions from the community, Contra Costa Health has posted information regarding mechanical integrity of the slide valves at the Martinez Refining Company.

Public comment:

No public comments were received.

The meeting was adjourned at 11:35 AM.

The following agenda items were continued to the next committee meeting:

- 8. RECEIVE a report regarding potential revisions to the Industrial Safety Ordinance and PROVIDE direction as necessary.**
- 9. RECEIVE an update regarding the Hazardous Materials Programs proposed organizational structure and associated fee study and PROVIDE direction as necessary.**



# CONTRA COSTA COUNTY

1025 ESCOBAR STREET  
MARTINEZ, CA 94553

## Staff Report

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**File #:** 24-2105

**Agenda Date:** 7/11/2024

**Agenda #:** 4.

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**Advisory Board:** Industrial Safety Ordinance/Community Warning System Ad Hoc Committee

**Subject:** Participation Rates for Safety Culture Assessments at Chevron, Martinez Refining Company and P66 Refinery.

**Presenter:** Nicole Heath, Director of Hazardous Materials Programs

**Information:** Attached to this agenda item is a memorandum from Contra Costa Health regarding participation rates during the recent Safety Culture Assessments at Chevron, Martinez Refining Company, and P66 Refinery as presented at the May 30, 2024 ISO/CWS Ad Hoc Committee meeting.

**Recommendation(s)/Next Step(s):** Accept the memorandum from Contra Costa Health and provide direction to staff as necessary.



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ccchazmat@cchealth.org

TO: INDUSTRIAL SAFETY ORDINANCE/COMMUNITY WARNING SYSTEM AD HOC COMMITTEE

FROM: NICOLE HEATH, DIRECTOR OF HAZARDOUS MATERIALS PROGRAMS

SUBJECT: SAFETY CULTURE ASSESSMENT FOLLOW-UP

DATE: JULY 11, 2024

CC: HAZARDOUS MATERIALS COMMISSION

At the previous ISO/CWS Ad Hoc Committee meeting on May 30, 2024, Contra Costa Health (CCH) Hazmat was requested to obtain information on the following related to Safety Culture Assessments (SCA):

- A. SCA Participation rates for MRC, P66, and Chevron
- B. Reporting unsafe conditions
- C. Information to assist in drawing comparisons between facilities.

#### **A. SCA Participation Rates**

The table below summarizes the participation rates targeted and achieved at the three refineries which presented at the previous ISO/CWS Ad Hoc Committee meeting:

Facility	Target Participation Rate <sup>1</sup>	Total Employees	Workgroups				
			Operations	Maintenance	Engineering	Health and Safety	Contractors
Chevron	60%	55%	37%	56%	84%	86%	19%
MRC	70%	71%	61%	69%	72%	71%	44%
P66	70%	81%	72%	84%	94%	71%	66%

Note: 1- Target participation rate is the same for total employees and each individual workgroup

Both Chevron and P66 conducted their SCAs during the Covid-19 pandemic. Chevron conducted its SCA in the fall of 2020 at the height of the pandemic, which resulted in less-than-ideal participation, which under normal circumstances have resulted in an action item from CCH. P66 requested and received a one-year extension from CCH and conducted its SCA in 2021, which resulted in much higher participation rates. During CCH's 2022 audit of Chevron, the refinery was informed that participation rates for future SCAs must have higher participation rates.

CCH reviews the results of each facility's SCA during onsite audits. CCH views low participation rates, in total or in any workgroup, as indicators that aspects of a facility's culture need improvement. Contractor participation rates for all three refineries did not meet targets.

CCH will continue to monitor the participation rates for all future SCAs and will issue action items as warranted.

### **B. Reporting Unsafe Conditions**

Each of the three refineries that summarized their SCA results, have mechanisms for employees and contractors to report unsafe conditions. This can be done anonymously or through a more formal reporting process. Once a situation is reported, each company has its own process to address the issues identified. In addition, each refinery has a Stop Work Authorization process that requires specific steps to be taken if an employee or contractor identifies a safety concern.

County Industrial Safety Ordinance (ISO) does not require an assessment of reporting unsafe conditions within a site's SCA although Program 4 requirements under the California Accidental Release Prevention (CalARP) program does. All three refineries assessed for reporting unsafe conditions within their SCA. In future SCAs P66 would not be required to assess this since it has been reclassified as a renewable fuels refinery (versus a petroleum refinery) and is no longer subject to CalARP Program 4 requirements.

### **C. Comparisons Between Facilities**

As stated in the county SCA guidance, safety culture assessments should be viewed as a facility-specific exercise. Neither county ISO nor CalARP Program 4 contain requirements that promote safety culture comparisons between facilities. ISO facilities are allowed to use different methods to conduct their SCA (i.e., written surveys, interviews, observations, or focus groups). Even though, to date, each ISO facility predominantly has conducted written surveys, there is no regulatory requirement to use the same or similar questions.

Safety culture assessments are the summation of individual opinions provided in a snapshot in time. Each ISO facility attempts to schedule their SCA during neutral periods to minimize external influences. Many times, it is a challenge to land on a neutral period when the safety culture assessment is due every 5 years.

CCH works closely with regulated facilities developing safety culture assessments to ensure they are committed to making good-faith efforts to improve, and to ensure the plans and projects arising from this work align with needs observed by CCH and would meaningfully contribute to improvement.

All of that said, the effectiveness of each facility's process safety culture is best measured by the results of audits and investigation of accidental releases.





# CONTRA COSTA COUNTY

1025 ESCOBAR STREET  
MARTINEZ, CA 94553

## Staff Report

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**File #:** 24-2106

**Agenda Date:** 7/11/2024

**Agenda #:** 5.

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Advisory Board: Industrial Safety Ordinance/Community Warning System Ad Hoc Committee

Subject: Proposed Bulk Liquid Storage Industrial Safety Ordinance Amendments

Presenter: Michael Dossey, Supervising Accidental Release Prevention Engineer

Information: Attached to this agenda item is the proposed amendments to the County's existing Industrial Safety Ordinance to include bulk liquid storage facilities.

Recommendation(s)/Next Step(s): RECEIVE a report from staff regarding proposed amendments to the existing County's Industrial Safety Ordinance and PROVIDE direction as necessary.



[cchealth.org](http://cchealth.org)

# ISO/CWS Ad Hoc Committee Meeting

**Michael Dossey, Supervising  
Accidental Release Prevention  
Engineer**

July 2024

# ISO Amendments Update

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## TANK TERMINALS

- NuStar incident – October 2019
- CCCFPD completed investigation – May 2021
- Developed draft ordinance with stakeholders – February 2023
- Reviewed draft ordinance with county counsel – June 2024



# Applicability

**Has a field erected tank of at least 50,000-gallon shell capacity and contains at least 10,000-pounds of a flammable liquid**

**\*8 facilities identified in initial review**



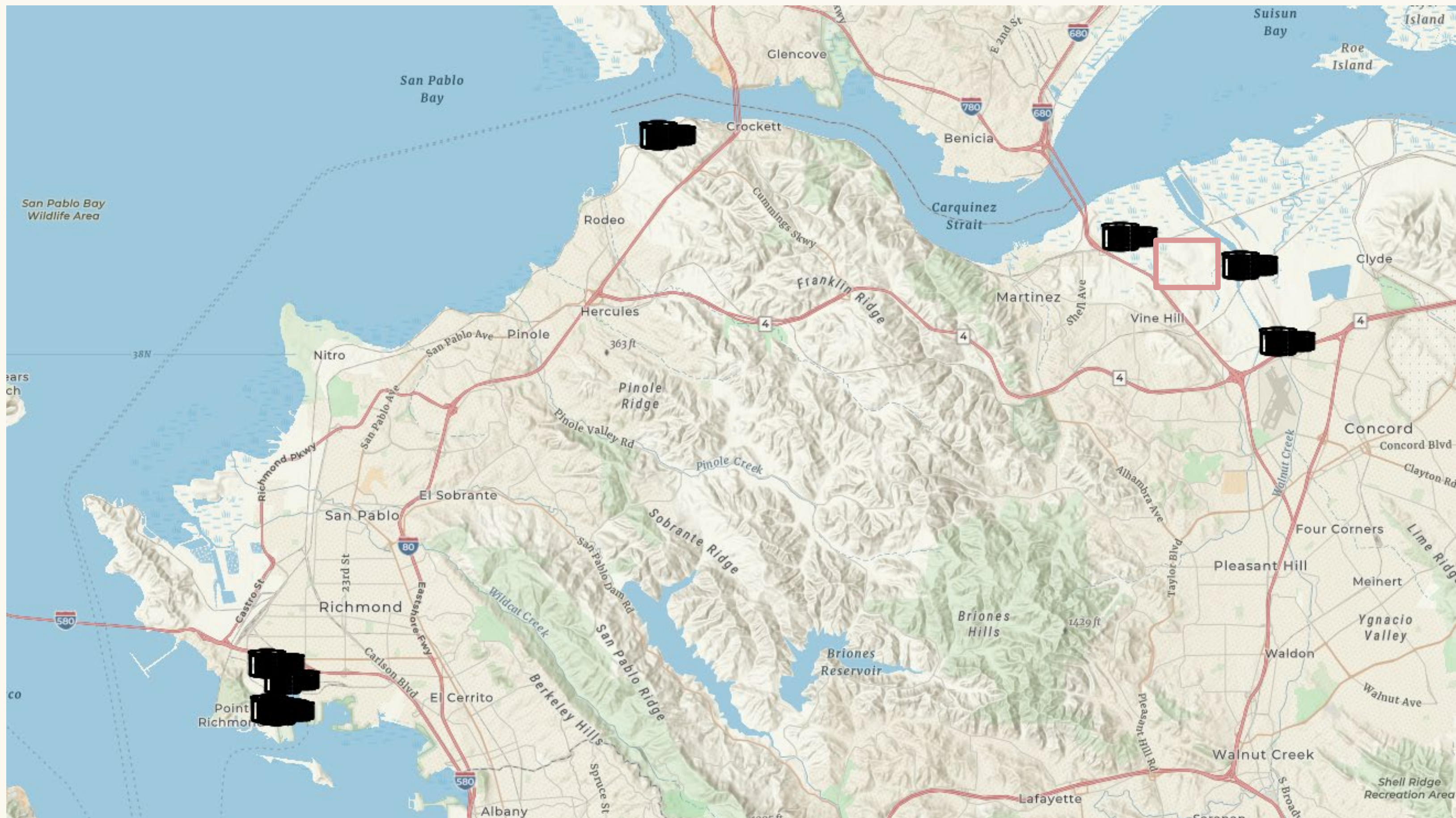
# Safety Programs

#		PROGRAM	BASIS
1	Management Systems	Safety Information	Understanding the hazards
2		Hazard Review	Identifying and understanding risk
3		Operating Procedures	Develop and maintain clear instructions for safely conducting activities
4		Mechanical Integrity	Ensuring equipment is in good working order, published standards are being followed, and training of personnel
5		Management of Change	Managing changes and ensuring Safety Information, procedures, and practices remain up to date
6		Pre-Startup Reviews	Managing changes and ensuring design, documents, and personnel are up to date
7		Incident Investigation	Learning from past incidents
8		Emergency Response	Mitigating consequences





# Proposed Bulk Liquid Storage Stationary Sources





## Next Steps

- Share modified language with stakeholders
- Work with stakeholders to develop guidance
- Attend 9/10/24 BOS meeting (first reading of ordinance)
- Open public comment period
- Attend another BOS meeting (second reading for adoption)
- Publish ordinance in the paper after second reading
- Submittal of Safety Plans from Tank Terminals
- Begin inspections at Tank Terminals





[cchealth.org](http://cchealth.org)

# **Staff Report on Proposed Industrial Safety Ordinance Revisions**

Contra Costa Health  
Hazardous Materials Programs

For the

Industrial Safety Ordinance/Community Warning System Ad Hoc Committee  
July 11, 2024



## **SUMMARY**

On Tuesday October 15, 2019, at approximately 13:48, the NuStar Facility had a fire and explosion involving two ethanol storage tanks. The first tank caught fire at approximately 13:48 and the second tank caught fire shortly thereafter. Prior to the event both tanks were static and contained less than 3,000 barrels of denatured ethanol each. With the exception of routine inspection and monitoring activities by facility personnel and contractors, there was no activity in the tank farm at the time of the fire. The terminal was evacuated. Emergency response vehicles were onsite within minutes and began response by directing water and firefighting foam to mitigate the fire and cool adjacent tanks. A grass fire began on the hillside adjacent to the terminal and was extinguished with the assistance of both fixed and rotary wing aircraft laying down fire suppressant and water.

CCH Hazmat Incident Response team deployed to the scene to perform air monitoring. At 15:11 a Shelter in Place was initiated for the affected community. The fire was abated at approximately 19:00 and the Shelter in Place was lifted at 19:38.

## **BACKGROUND/ANALYSIS:**

After the fire and explosion, a team was put together to investigate the incident. The team was led by Contra Costa Fire Protection District. The investigation in addition to reviewing the details of the NuStar incident also evaluated similar incidents investigated by the US Chemical Safety and Hazards Investigation Board. The aim of the investigation was to identify the contributing factors of the incident.

The incident investigation report identified an electrical fault as the cause of the incident and made the following recommendations:

- All automatic level gauge floats and tapes should be grounded in compliance with API 2003 and manufacturer's recommendations. All gauge devices and transmitters should be grounded in compliance with manufacturer's recommendations.
- Pad the head space in the tanks with an inert gas to mitigate that hazardous atmosphere within the tanks. This should be done in addition to removing all potential ignition sources.
- Overall compliance with all agency requirements and standards, including but not limited to the National Fire Protection Association (NFPA) and American Petroleum Institute (API)
- Tanks should be monitored for LEL conditions.

CCH Hazmat Staff reviewed the incident investigation report conclusions and evaluated the existing Industrial Safety Ordinance (ISO) to identify safety program elements which would be beneficial in accidental release prevention for terminal facilities such as NuStar.

Based upon the conclusions staff recommended to the ISO/CWS Ad Hoc at the May 16, 2022, meeting that a revision be made to the industrial safety ordinance to include terminal facilities (referred to as Tank Terminals). This recommendation included nine safety program elements for inclusion. The table below shows each element and a brief justification for inclusion.

**Table 1. Draft Safety Program Elements**

#		PROGRAM	CAPTURED WITHIN PROGRAM	BASIS	RELATION TO INCIDENT
1	Management Systems	Safety Information		Understanding the hazards	Review of electrical classification areas and design
2		Hazard Review	Seismic Assessments	Identifying and understanding risk	Review of hazard scenarios that could lead to fire/explosion and mitigation of risks of these scenarios
3		Operating Procedures	Safe Work Practices (including Hot Work)	Develop and maintain clear instructions for safely conducting activities	
4		Mechanical Integrity	Contractors	Ensuring equipment is in good working order, published standards are being followed, and training of personnel	Implementation of industry standards via Recognized And Generally Accepted Good Engineering Practices (RAGAGEP)
5		Management of Change		Managing changes and ensuring Safety Information, procedures, and practices remain up to date	Evaluation of safety risks when making changes to design, technology, equipment, process and mitigation of the risk
6		Pre-Startup Reviews		Managing changes and ensuring design, documents, and personnel are up to date	Evaluation of safety risks when making changes to design, technology, equipment, process. Ensuing proper fabrication, construction, and installation of equipment prior to start up after a change.
7		Incident Investigation	Root Cause Analysis	Learning from past incidents	
8		Emergency Response		Mitigating consequences	Requires emergency response coordination (drills) between facility and responding agencies



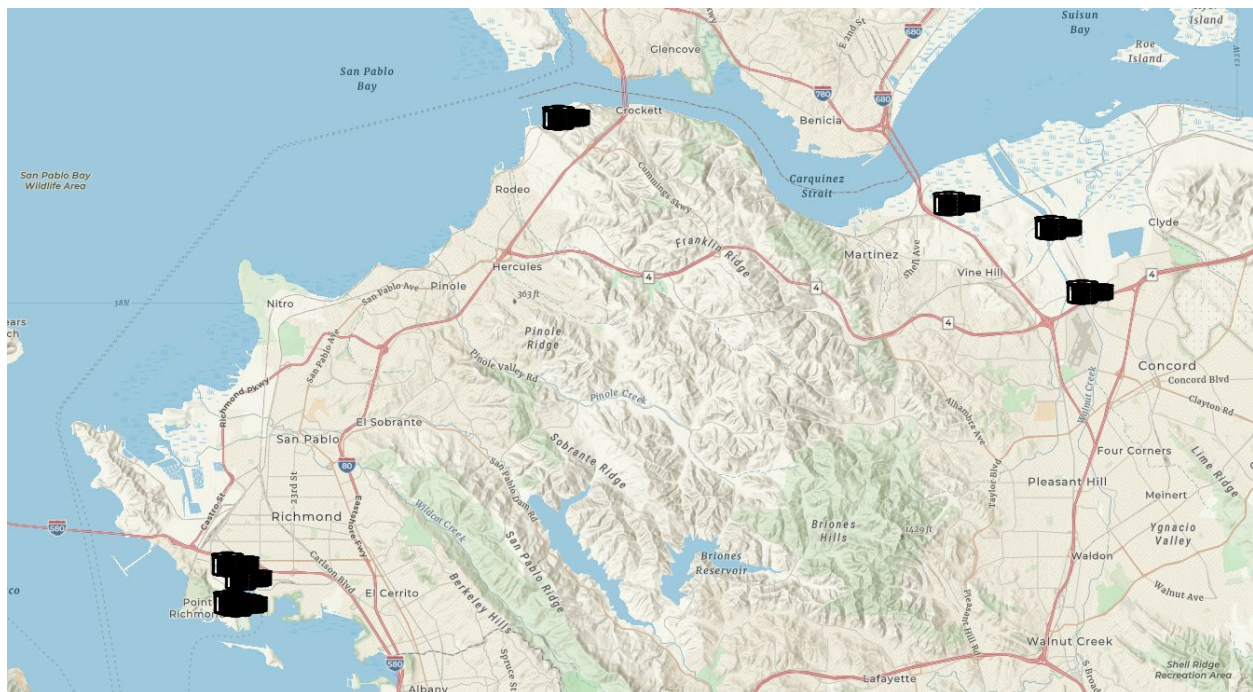
The draft ISO amendment includes the following definitions:

- "Ignitable liquid" means a flammable liquid or combustible liquid.
- "Tank terminal" means at least one field erected tank with a minimum shell capacity of 50,000 gallons that contains a minimum of 10,000 pounds of flammable liquid, or the owner or operator thereof, on one or more contiguous properties.
- "Tank terminal activities" mean any activity at a tank terminal involving an ignitable liquid, including but not limited to using, storing, blending, producing, gathering, refining, transferring, distributing, consuming, handling or moving an ignitable liquid.
- "Tank terminal equipment" means equipment that is at a tank terminal and involved in tank terminal activities, and such equipment is under the control of the tank terminal owner or operator. This equipment includes, but is not limited to, tanks, pumps, piping, valves, and ancillary equipment.

The above definitions address a gap in current Federal, State, and Local accidental release prevention programs by capturing combustible liquids that were not previously captured such as ethanol.

CCH Hazmat has identified 8 facilities that would be subject to the new ISO section for tank terminals. Figure 1 shows the approximate locations of each. There is 1 in the City of Martinez, 3 in unincorporated county, and 4 in the City of Richmond.

**Figure 1: Map of Tank Terminals in Contra Costa County**



**WORKING GROUP:**

A working group was established to draft proposed language for the Industrial Safety Ordinance which would be applicable to terminal facilities that met the proposed criteria. The working group is comprised of members from the community, members from facilities who would be covered by the proposed regulations, a representative from existing ISO facilities, agency representatives, and city representatives. This working group met monthly from September 2022 to January 2023 to develop the draft ISO language. After developing the draft language, it was sent to county counsel.

**STATUS UPDATE:**

In January 2024, stakeholder meetings began to work on developing a guidance document to assist the facilities in complying with the requirements. That same month, CCH Hazmat was contacted by county counsel to review and fine tune the draft ISO language. CCH Hazmat met weekly with county counsel over the next two months to clarify the draft ISO language. Due to the expected changes to the draft ISO language, stakeholder meetings were postponed until revised language was proposed and allowed to be shared. CCH Hazmat concluded working with county counsel in June 2024 to update the draft ISO language.

CCH Hazmat has reached out to stakeholders to share the revised draft ISO language and restart the guidance development process and intends to hold monthly meetings until such guidance is developed.

**NEXT STEPS:**

- Reestablish meetings with stakeholder to develop guidance document
- Attend the September 10, 2024 Board of Supervisors meeting for the first reading of the revised ordinance
- Attend a subsequent Board of Supervisors meeting for the second reading of the revised ordinance
- Issue a public notice for the amended ordinance
- Publish final approved ordinance in the newspaper

## ORDINANCE NO. 2024-\_\_

### (Amendments to Ordinance Code Chapter 450-8 Regarding Industrial Safety)

The Contra Costa County Board of Supervisors ordains as follows (omitting the parenthetical footnotes from the official text of the enacted or amended provisions of the County Ordinance Code):

**SECTION I. SUMMARY.** This ordinance amends specified sections of County Ordinance Code Chapter 450-8 to impose additional measures to improve industrial safety. This ordinance adds section 450-8.017 concerning tank terminal safety requirements, adds new and amends certain existing definitions to section 450-8.014 to apply to tank terminals, amends multiple sections to expand their application to tank terminals, and makes other clarifying, administrative or non-substantive changes. This ordinance also amends County Ordinance Code section 14-8.008 by authorizing the Health Services Director to enforce Chapter 450-8 by issuing infraction citations.

**SECTION II. AUTHORITY.** This ordinance is adopted pursuant to Article 11, section 7 of the California Constitution.

### **SECTION III. FINDINGS.**

On October 15, 2019, an 8.7-million-gallon storage tank containing a small quantity of ethanol exploded at a petroleum tank terminal in the Crockett area of unincorporated Contra Costa County. The tank was one of 23 tanks at the facility, with a collective capacity of more than 3 million barrels. The roof of the tank that exploded blew off and landed on a second tank, which also exploded. A fire erupted at both tanks, and a vegetation fire ignited after the explosions spread over the property, resulting in a large column of smoke that could be seen for miles. Offsite impacts included the closure of Interstate 80, the shelter-in-place of the nearby community, and concerns about air quality in the surrounding area.

This incident, like other high-profile incidents at tank terminals in other states, highlight the risks associated with storage and transfer operations involving ignitable materials, and the importance of emergency response planning. Similarly, these incidents highlights the need for effective safety programs to identify hazards, assess and manage risks, and establish safety protocols to prevent accidents and protect the environment and the surrounding communities. Tank terminals within Contra Costa County are not currently subject to the California Accidental Release Prevention Program, the U.S. Environmental Protection Agency's risk management regulations, or Chapter 450-8 of the County Ordinance Code because tank terminals, and the types of activities that take place there, do not fit the relevant criteria. The lack of adequate safety regulation applicable to tank terminals poses a threat to public health and safety and compel the adoption of the amendments to Chapter 450-8 set forth in this ordinance.

**SECTION IV.** Chapter 450-8 of the County Ordinance Code is amended to read:

**Chapter 450-8 - RISK MANAGEMENT**

**450-8.002 - Background and findings.**

The board of supervisors of Contra Costa County finds as follows:

(a) Recent incidents in Contra Costa County at industrial chemical, petrochemical, and oil industry facilities have prompted the consideration of reviews, inspections, and audits that supplement existing federal and state safety programs and the imposition of additional safety measures to protect public health and safety from accidental releases.

(b) Section 112(r)(7) of the Clean Air Act (42 U.S.C.A. Section 7412(4)) required the United States Environmental Protection Agency ("EPA") to promulgate the rule known as the "Risk Management Program," which is intended to prevent accidental releases of regulated substances, as defined in the federal program, and reduce the severity of those releases that do occur. All facilities subject to this federal regulation must prepare a risk management plan (RMP) based on a risk management program established at the facility, that includes a hazard assessment of the facility, an accidental release prevention program, and an emergency response program (40 CFR Section 68). The facility must submit the Federal RMP to the EPA by June 21, 1999 (40 CFR Section 68-150-68.185). The federal RMP will be available to state and local government and the public.

(c) The California Health and Safety Code Article 2 (Section 25531 et seq.) of Chapter 6.95 was amended effective January 1, 1997, to implement the federal EPA's risk management program rule with certain state-specific amendments. The state's risk management program is known as the California Accidental Release Prevention (CalARP) Program.

(d) The county recognizes that regulatory requirements alone will not guarantee public health and safety, and that the public is a key stakeholder in chemical accident prevention, preparedness, and response at the local level. Preventing accidental releases of regulated substances is the shared responsibility of industry, government and the public. The first steps toward accident prevention are identifying the hazards and assessing the risks. Once information about chemical hazards in the community is openly shared, industry, government, and the community can work together towards reducing the risk to public health and safety.

(e) The success of a safety program is dependent upon the cooperation of industrial chemical, petrochemical, and oil refining facilities within Contra Costa County. The public must be assured that measures necessary to prevent incidents are being implemented, including changes or actions required by the department or the stationary source that are necessary to comply with this chapter.

(Ord. 2024-      , § IV; Ord. 98-48 § 2)

**450-8.004 - Purpose and goals.**

(a) The purpose of this chapter is to impose regulations which improve industrial safety by:

(1) Requiring the conduct of process hazard analyses for covered processes handling hazardous materials not covered by the federal or state accidental release prevention programs;



(2) Requiring the review of action items resulting from process hazard analyses and requiring completion of those action items selected by the stationary source for implementation within a reasonable time frame;

(3) Requiring the review of accidental release prevention efforts of stationary sources and providing for the conduct of investigations and analyses for the determination of the root cause for certain incidents;

(4) Providing review, inspection, auditing and safety requirements that are more stringent than those required in existing law and regulations;

(5) Providing for public input into the safety plan and safety program and public review of any inspection and audit results;

(6) Facilitating cooperation among industry, the county, local fire departments, Cal/OSHA, EPA, other agencies that have oversight of stationary sources or tank terminals, and the public in the prevention and reduction of incidents at these facilities;

(7) Expanding the application of certain provisions of the federal and state accidental release prevention programs to processes not covered by the federal or state accidental release prevention programs;

(8) Verifying that an approved security and vulnerability study is performed, and that the recommendations are addressed within a reasonable time frame;

(9) Requiring the development and implementation of a written human factors program; and

(10) Preventing and reducing the number, frequency, and severity of accidental releases in the county to the greatest extent feasible.

(Ord. No. 2024-\_\_, § IV; 2014-07, § III, 6-17-14; Ord. 2006-22 § 2, Ord. 98-48 § 2)

#### **450-8.006 - Authority.**

The ordinance codified in this chapter is adopted by the county pursuant to its police power for the purposes of protecting public health and safety by prevention of accidental releases of hazardous materials and to assure protection of the environment.

(Ord. 2024-\_\_, § IV; Ord. 98-48 § 2)

#### **450-8.008 - Administration.**

The department is charged with the responsibility of administering and enforcing this chapter.

(Ord. 2024-\_\_, § IV; Ord. 98-48 § 2)

#### **450-8.010 - Applicability.**

(a) This chapter shall apply to stationary sources **and tank terminals except as set forth in subsection (b).**

(b) To the extent that the following are stationary sources, they are exempt from the provisions of this chapter except Sections 450-8.016(c) and (e), and 450-8.018(f) and (g):

(1) Storage tanks containing a nonregulated substance, except for storage tanks that contain a material that has a flashpoint above one hundred forty degrees Fahrenheit and below two

hundred degrees Fahrenheit in accordance with the definition of combustible liquid in 49 CFR Section 173.120(b);

(2) Drum storage of: (A) a nonregulated substance; (B) less than ten thousand pounds of a hazard category B material located such that the drums could reasonably be expected to be involved in a single release; and (C) a hazard category A material, located such that the drums could reasonably be expected to be involved in a single release, at less than the quantity specified as the threshold planning quantity on the extremely hazardous substances list (Appendix A to 40 CFR Chapter I, Subchapter J, Part 355, as amended from time to time) or five hundred pounds, whichever is less;

(3) Activities in process plant laboratories or laboratories that are under the supervision of a technically qualified individual as defined in Section 720.3(ee) of 40 CFR. This exemption does not apply to specialty chemical production; manufacture, processing or use of substances in pilot plant scale operations; and activities conducted outside the laboratory;

(4) Utilities, except for fuel gas and natural gas systems to the battery limits of a process unit; and

(5) Any waste tanks, containers or other devices subject to the federal and state hazardous waste laws, including the Resource Conservation and Recovery Act (RCRA), 40 CFR Chapter I, Subchapter I, commencing with Part 260, the California Hazardous Waste Control Law, California Health and Safety Code, commencing with Section 25100 and the California Code of Regulations, Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste.

(Ord. 2024-      , § IV; Ord. 2006-22 § 3; Ord. 98-48 § 2)

#### **450-8.012 - Inspection.**

The department shall be allowed reasonable access to any part of a stationary source **or tank terminal** subject to requirements in this chapter, and to supporting documentation retained by the stationary source **or tank terminal**, for the purpose of determining compliance with this chapter. (Ord. 2024-      , § IV; Ord. 98-48 § 2)

#### **450-8.014 - Definitions.**

For purposes of this chapter, the definitions set forth in this section shall apply. Words used in this chapter not defined in this section shall have the meanings ascribed to them in the Clean Air Act Regulations (40 CFR Section 68.3) and in California Health and Safety Code Article 2 (Section 25531 et seq.) of Chapter 6.95 of Division 20, unless the context indicates otherwise.

(a) "Covered process" means any process at a stationary source.

(b) "Department" means the county health services director and any director-authorized deputies.

(c) "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

(d) "Hazard category A materials" are substances which meet the hazard category A material definition as set forth in Section 84-63.1016.

(e) "Hazard category B materials" are substances which meet the hazard category B material definition as set forth in Section 84-63.1016.

(f) "Industry codes, standards, and guidelines" means the edition of the codes, standards, and guidelines in effect at the time of original design or construction for the design, construction, alteration, maintenance or repair of process units, industrial equipment, or other industrial facilities, structures or buildings published by, but not limited to, the American Petroleum Institute (API), the American Chemistry Council (ACC), the American Society of Mechanical Engineers (ASME) or the American National Standards Institute (ANSI), and meets recognized and generally accepted good engineering practices (RAGAGEP).

(g) "Inherently safer systems" means "inherently safer design strategies" as discussed in the latest edition of the Center for Chemical Process Safety Publication "Inherently Safer Chemical Processes," and means feasible alternative equipment, processes, materials, lay-outs, and procedures meant to eliminate, minimize, or reduce the risk of a major chemical accident or release by modifying a process rather than adding external layers of protection. Examples include, but are not limited to, substitution of materials with lower vapor pressure, lower flammability, or lower toxicity; isolation of hazardous processes; and use of processes which operate at lower temperatures and/or pressures.

(h) "Major chemical accident or release" means an incident that meets the definition of a level three or level two incident in the community warning system incident level classification system defined in the hazardous materials incident notification policy, as determined by the department; or results in the release of a regulated substance and meets one or more of the following criteria:

- (1) Results in one or more fatalities;
- (2) Results in at least twenty-four hours of hospital treatment of each of at least three persons;
- (3) Causes on- and/or off-site property damage (including clean-up and restoration activities) initially estimated at five hundred thousand dollars or more. On-site estimates shall be performed by the stationary source. Off-site estimates shall be performed by appropriate agencies and compiled by the department;
- (4) Results in a vapor cloud of flammables and/or combustibles that is more than five thousand pounds.

(i) "Regulated substance" means (1) any chemical substance which satisfies the provisions of California Health and Safety Code Section 25532(i), as amended from time to time, or (2) a substance which satisfies the provisions of hazard categories A or B in Section 84-63.1016. Mixtures containing less than one percent of a regulated substance shall not be considered in the determination of the presence of a regulated material.

(j) "Risk management program" means the documentation, development, implementation, and integration of management systems by the facility to comply with the regulations set forth in 40 CFR, Part 68 and the California Health and Safety Code, Article 2 of Chapter 6.95 of Division 20.

(k) "RMP" means the risk management plan required to be submitted pursuant to the requirements of the 40 CFR Section 68.150-68.185 and the California Health and Safety Code Article 2 (Section 25531 et seq.) of Chapter 6.95 of Division 20.

(l) "Root cause" means prime reasons, such as failures of some management systems, that allow faulty design, inadequate training, or improper changes, which lead to an unsafe act or condition, and result in an incident. If root causes were removed, the particular incident would not have occurred.

(m) "Safety plan" means the safety plan required to be submitted to the department pursuant to the requirements of Section 450-8.016 or Section 450-8.017.

(n) "Safety program" means the documentation, development, implementation, and integration of management systems by a stationary source or tank terminal to comply with applicable safety requirements set forth in Section 450-8.016 or Section 450-8.017.

(o) "Stationary source" or "source" means a facility which includes at least one process as defined in 40 CFR Section 68.10 that is subject to federal risk management program level three requirements and whose primary North American Industry Classification System code (NAICS) is three hundred twenty-four (petroleum and coal products manufacturing) or three hundred twenty-five (chemical manufacturing), **or the owner or operator thereof. As used in Section 450-8.018, stationary source will be interpreted to also mean a tank terminal.**

(p) "California accidental release prevention program" means the documentation, development, implementation, and integration of management systems by a facility to comply with the regulations set forth in California Code of Regulations, Title 19, Division 5, Chapter 2.

(q) "Catastrophic release" means a major uncontrolled emission, fire, or explosion, involving one or more highly hazardous chemicals, that presents serious danger to employees in the workplace and/or the public. As used in this section, "highly hazardous chemical" has the meaning ascribed to it in 29 CFR Section 1910.119(b) as of May 21, 2003.

(r) "Human factors" means a discipline concerned with designing machines, operations, and work environments so that they match human capabilities, limitations, and needs. "Human factors" can be further referred to as environmental, organizational, and job factors, and human and individual characteristics that influence behavior at work in a way that can affect health and safety.

(s) "Human systems" means the systems, such as written and unwritten policies, procedures, and practices, in effect to minimize the existence/persistence of latent conditions at the stationary source. It also includes the broad area of safety culture of a stationary source to the extent that it influences the actions of individuals or groups of individuals.

(t) "Layer of protection analysis" (LOPA) means a semi-quantitative analysis of the risk of process hazards and the adequacy of safeguards against those hazards.

(u) "Process hazard analysis" (PHA) means a qualitative, semi-quantitative or quantitative analysis of a process, involving the identification of individual hazards of a process, determination of the mechanisms by which hazards could give rise to undesired events, and evaluation of the consequences of these events on health, property and the environment.

(v) "Process safety performance indicators" are measurements of a stationary source's activities and other events that are used to evaluate the performance of process safety systems.

(w) **"Combustible liquid" means a liquid having a closed cup flash point at or above 100° F (38° C).**

(x) **"Flammable liquid" means a liquid having a closed cup flash point below 100° F (38° C).**

(y) **"Ignitable liquid" means a flammable liquid or combustible liquid.**

(z) **"Field erected tank" means an aboveground container constructed and/or erected on the site where it will be utilized.**

(aa) **"Tank terminal" means at least one field erected tank with a minimum shell capacity of 50,000 gallons that contains a minimum of 10,000 pounds of flammable liquid, or the owner or operator thereof, on one or more contiguous properties.**

(bb) "Tank terminal activities" mean any activity at a tank terminal involving an ignitable liquid, including but not limited to using, storing, blending, producing, gathering, refining, transferring, distributing, consuming, handling or moving an ignitable liquid.

(cc) "Tank terminal equipment" means equipment that is at a tank terminal and involved in tank terminal activities, and such equipment is under the control of the tank terminal owner or operator. This equipment includes, but is not limited to, tanks, pumps, piping, valves, and ancillary equipment.

(Ord. No. 2024-      , § IV; Ord. 2014-07, § IV, 6-17-14; Ord. 2006-22 § 4, Ord. 98-48 § 2)

#### **450-8.016 - Stationary source safety requirements.**

The stationary source shall submit a safety plan to the department within one-year of the effective date of the ordinance codified in this chapter or within three years of the date a facility becomes a stationary source, that complies with the provisions of this section and that includes the safety elements listed in subsection (a). In addition, the stationary source shall comply with the safety requirements set forth in subsections (a) through (e), (i) and (j) and shall include a description of the manner of compliance with these subsections in the safety plan. A new covered process at an existing stationary source shall comply with subsections (a) through (e), (i) and (j) prior to initial startup.

(a) Safety Program Elements. All covered processes shall be subject to the safety program elements listed below. The safety plan shall include a description of the manner in which these safety program elements listed below shall be applied to the covered process. These safety program elements shall be implemented in conformance with the California accidental release prevention program and the safety plan shall follow Chapters 5, 7, 8 and 9 of the county health services department's CalARP program guidance document.

(1) Process Safety Information.

(A) The stationary source shall complete a compilation of written process safety information before conducting any process hazard analysis as required by this chapter. The compilation of written process safety information is to enable the stationary source and the employees involved in operating the covered process to identify and understand the hazards posed by the covered process. This process safety information shall include information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, information pertaining to the equipment in the process, and information pertaining to the hazards of the regulated substances in the process.

(i) This information shall consist of at least the following: toxicity information; permissible exposure limits; physical data; reactivity data; corrosivity data; thermal and chemical stability data; and hazardous effects of inadvertent mixing of different materials that could foreseeably occur.

(ii) Safety data sheets meeting the requirements of Section 5194, Title 8 of California Code of Regulations may be used to comply with this requirement to the extent they contain the information required by this subsection.

(iii) Information pertaining to the technology of the process shall include at least the following: a block flow diagram or simplified process flow diagram; process chemistry; maximum intended inventory; safe upper and lower limits for such items as temperatures,



pressures, flows or compositions; and, an evaluation of the consequences of deviations. Where the original technical information no longer exists, such information may be developed in conjunction with the process hazard analysis in sufficient detail to support the analysis.

(iv) Information pertaining to the equipment in the process shall include: materials of construction; piping and instrument diagrams (P&ID's); electrical classification; relief system design and design basis; ventilation system design; design codes and standards employed; material and energy balances for processes built after the compliance date of the ordinance codified in this chapter; and safety systems (e.g., interlocks, detection or suppression systems).

(B) The stationary source shall document that equipment complies with recognized and generally accepted good engineering practices.

(C) For existing equipment designed and constructed in accordance with codes, standards, or practices that are no longer in general use, the stationary source shall determine and document that the equipment is designed, maintained, inspected, tested, and operating in a safe manner.

(2) Operating Procedures.

(A) The stationary source shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information and shall address at least the following elements:

(i) Steps for each operating phase: initial startup; normal operations; temporary operations; emergency shutdown, including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner; emergency operations; normal shutdown; and, startup following a turnaround, or after an emergency shutdown.

(ii) Operating limits: consequences of deviation; and steps required to correct or avoid deviation.

(B) Safety and Health Considerations. Properties of, and hazards presented by, the chemicals used in the process; precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment; control measures to be taken if physical contact or airborne exposure occurs; quality control for raw materials and control of hazardous chemical inventory levels; and, any special or unique hazards.

(C) Safety systems and their functions.

(D) Operating procedures shall be readily accessible to employees who work in or maintain a process.

(E) The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology, and equipment, and changes to stationary sources. The stationary source shall certify annually that these operating procedures are current and accurate.

(F) The stationary source shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a stationary source by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.

(3) Employee Participation.

(A) The stationary source shall develop a written plan of action regarding the implementation of the employee participation required by this chapter.

(B) The stationary source shall consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of the safety program in this chapter.

(C) The stationary source shall provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under this chapter.

(4) Training. For each employee in such covered process:

(A) Initial Training. Each employee presently involved in operating a covered process, and each employee before being involved in operating a newly assigned covered process, shall be trained in an overview of the process and in the operating procedures as specified in subsection (a)(2)(A). The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the employee's job tasks. In lieu of initial training for those employees already involved in operating a process, an owner or operator may certify in writing that the employee has the required knowledge, skills, and abilities to safely carry out the duties and responsibilities as specified in the operating procedures.

(B) Refresher Training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a covered process to assure that the employee understands and adheres to the current operating procedures of the covered process. The stationary source, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training.

(C) Training Documentation. The stationary source shall ascertain that each employee involved in operating a process has received and understood the training required by this section. The stationary source shall prepare a record which contains the identity of the employee, the date of training, and the means used to verify that the employee understood the training.

(5) Mechanical Integrity, Including the Use of Industry Codes, Standards, and Guidelines.

(A) Application. Subsections (a)(5)(B) through (a)(5)(F) apply to the following process equipment: pressure vessels and storage tanks; piping subsystems (including piping components such as valves); relief and vent systems and devices; emergency shutdown systems; controls (including monitoring devices and sensors, alarms, and interlocks) and pumps.

(B) Written Procedures. The stationary source shall establish and implement written procedures to maintain the on-going integrity of process equipment.

(C) Training for Process Maintenance Activities. The stationary source shall train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

(D) Inspection and Testing.

(1) Inspections and tests shall be performed on process equipment. Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience. The stationary source shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection

or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

(E) Equipment Deficiencies. The stationary source shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in subsection (a)(1)) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

(F) Quality Assurance. In the construction of new plants and equipment, the stationary source shall assure that equipment as it is fabricated is suitable for the process application for which they will be used. Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions. The stationary source shall assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used.

(6) Management of Change.

(A) The stationary source shall establish and implement written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment, and procedures; and changes to stationary sources that affect a covered process.

(B) The procedures shall assure that the following considerations are addressed prior to any change: the technical basis for the proposed change; impact of change on safety and health; modifications to operating procedures; necessary time period for the change; and authorization requirements for the proposed change. The procedures shall also require identification and analysis of inherently safer systems as required by subsection (i).

(C) Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process shall be informed of, and trained in, the change prior to startup of the process or affected part of the process.

(D) If a change covered by this section results in a change in the process safety information required by subsection (a)(1), such information shall be updated accordingly.

(E) If a change covered by this section results in a change in the operating procedures or practices required by subsection (a)(2), such procedures or practices shall be updated accordingly.

(7) Pre-Startup Reviews.

(A) The stationary source shall perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information.

(B) The pre-startup safety review shall confirm that prior to the introduction of regulated substances to a covered process: construction and equipment is in accordance with design specifications; safety, operating, maintenance, and emergency procedures are in place and are adequate; for new covered processes, a process hazard analysis has been performed and recommendations have been resolved or implemented before startup; and modified covered processes meet the requirements contained in management of change, subsection (a)(6); and training of each employee involved in operating a process has been completed.

(8) Compliance Audits.

(A) The stationary source shall certify that they have evaluated compliance with the provisions of this section at least every three years to verify that the procedures and practices developed under this chapter are adequate and are being followed.



(B) The compliance audit shall be conducted by at least one person knowledgeable in the process.

(C) A report of the findings of the audit shall be developed.

(D) The stationary source shall promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected.

(E) The stationary source shall retain the two most recent compliance audit reports.

(9) Incident Investigation.

(A) The stationary source shall investigate each incident which resulted in, or could reasonably have resulted in a catastrophic release of a regulated substance.

(B) An incident investigation shall be initiated as promptly as possible, but not later than forty-eight hours following the incident.

(C) An incident investigation team shall be established and consist of at least one person knowledgeable in the covered process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.

(D) A report shall be prepared at the conclusion of the investigation which includes at a minimum: date of incident; date investigation began; a description of the incident; the factors that contributed to the incident; and recommendations resulting from the investigation. The written summary shall indicate whether the cause of the incident and/or recommendations resulting from the investigation are specific only to the process or equipment involved in the incident, or are applicable to other processes or equipment at the stationary source. The incident investigation report shall be made available to the department upon request.

(E) The stationary source shall establish a system to promptly address and resolve the incident report findings and recommendations. As part of this system, inherently safer systems shall be identified and analyzed as required by subsection (i). Resolutions and corrective actions shall be documented.

(F) The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees where applicable.

(G) Incident investigation reports shall be retained for five years.

(10) Hot Work.

(A) The stationary source shall issue a hot work permit for hot work operations conducted on or near a covered process.

(B) The permit shall document that the fire prevention and protection requirements in Section 5189 of Title 8 of California Code Regulations have been implemented prior to beginning the hot work operations; it shall indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed. The permit shall be kept on file until completion of the hot work operations.

(11) Contractors.

(A) Application. This section applies to contractors performing maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a covered process. It does not apply to contractors providing incidental services which do not influence process safety, such as janitorial work, food and drink services, laundry, delivery or other supply services.

(B) Stationary Source Responsibilities.

- (i) The stationary source, when selecting a contractor, shall obtain and evaluate information regarding the contract owner or operator's safety performance and programs.
- (ii) The stationary source shall inform contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.
- (iii) The stationary source shall explain to the contract owner or operator the applicable provisions of the emergency response program subsection (a)(12).
- (iv) The stationary source shall develop and implement safe work practices consistent with subsection (a)(2) to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas.
- (v) The stationary source shall periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in subsection (a)(11)(C).
- (C) Contract Owner or Operator Responsibilities.
  - (i) The contract owner or operator shall assure that each contract employee is trained in the work practices necessary to safely perform his/her job.
  - (ii) The contract owner or operator shall assure that each contract employee is instructed in the known potential fire, explosion, or toxic release hazards related to his/her job and the process, and the applicable provisions of the emergency action plan.
  - (iii) The contract owner or operator shall document that each contract employee has received and understood the training required by this section. The contract owner or operator shall prepare a record which contains the identity of the contract employee, the date of training, and the means used to verify that the employee understood the training.
  - (iv) The contract owner or operator shall assure that each contract employee follows the safety rules of the stationary source including the safe work practices required by subsection (a)(2).
  - (v) The contract owner or operator shall advise the stationary source of any unique hazards presented by the contract owner or operator's work, or of any hazards found by the contract owner or operator's work.
- (12) Emergency Response Program.
  - (A) The stationary source shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements:
    - (i) An emergency response plan, which shall be maintained at the stationary source and contain at least the following elements: procedures for informing the public and local emergency response agencies about accidental releases, emergency planning, and emergency response; documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and procedures and measures for emergency response after an accidental release of a regulated substance;
    - (ii) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance, including documentation of inspection, testing, and maintenance;
    - (iii) Training for all employees in relevant procedures and the incident command system; and
    - (iv) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes.
  - (B) A written plan that complies with other federal contingency plan regulations or is consistent with the approach in the national response team's integrated contingency plan

guidance ("One Plan") and that, among other matters, includes the elements provided in subsection (a)(12)(A), shall satisfy the requirements of this section if the stationary source also complies with subsection (a)(12)(C).

(C) The emergency response plan developed under this section shall be coordinated with the community emergency response plan developed under 42 U.S.C. Section 11003. Upon request of the local emergency planning committee or emergency response officials, the stationary source shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.

(D) The stationary source whose employees will not respond to accidental releases of regulated substances need not comply with subsections (a)(12)(A) through (a)(12)(C) provided that they meet the following:

(i) For stationary sources with any regulated toxic substance held in a process above the threshold quantity, the stationary source is included in the community emergency response plan developed under Section 11003 of Title 42 of the United States Code (U.S.C.); or

(ii) For stationary sources with only regulated flammable substances held in a process above the threshold quantity the stationary source has coordinated response actions with the local fire department; and

(iii) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response.

(13) Safety Program Management.

(A) The owner or operator of a stationary source subject to this chapter shall develop a management system to oversee the implementation of the safety program elements.

(B) The owner or operator shall assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the safety program elements.

(C) When responsibility for implementing individual requirements of this chapter is assigned to persons other than the person identified under subsection (a)(13)(B), the names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.

(D) Process Safety Performance Indicators.

(i) No later than September 30, 2014, the department shall develop a list of stationary source activities and other events to be measured by each stationary source in order to evaluate the performance of process safety systems. This list is the "event list." Each stationary source shall measure these activities and other events and document the measurements. These documented measurements are "common process safety performance indicators." No later than **September 30** of each year after 2014, each stationary source will report to the department the common process safety performance indicators recorded by the stationary source in the prior calendar year. The department will include these common process safety performance indicators in the annual performance review and evaluation report required by Section 450-8.030.

(ii) The department shall review the event list at least once every three years to determine if it should be revised. If the department determines that a new activity or other event will be added to the event list, stationary sources shall report to the department the new common process safety performance indicator(s) by **September 30** of the next year following the revision of the event list.

(iii) No later than September 30, 2014, each stationary source shall develop a list of site-specific activities and other events that it will measure in order to evaluate the performance of its process safety systems. Each stationary source shall document these site-specific process safety performance indicators and make this documentation available to the department during an audit or inspection and upon request.

(b) Human Factors Program.

(1) Stationary sources shall develop a written human factors program that follows the human factors guidance document developed or adopted by the department. The program shall be developed within one-year following the issuance of the county guidance documents, the effective date of the ordinance codified in this section, or as otherwise allowed by this chapter, whichever is later. The human factors program shall address:

(A) The inclusion of human factors in the process hazards analysis process;

(B) The consideration of human systems as causal factors in the incident investigation process for major chemical accidents or releases or for an incident that could reasonably have resulted in a major chemical accident or release;

(C) The training of employees in the human factors program;

(D) Operating procedures;

(E) Maintenance safe work practice procedures and maintenance procedures for specialized equipment, piping, and instruments, no later than June 30, 2011; and

(F) The requirement to conduct a management of change prior to staffing changes for changes in permanent staffing levels/reorganization in operations, maintenance, health and safety, or emergency response. This requirement shall also apply to stationary sources using contractors in permanent positions in operations and maintenance. Prior to conducting the management of change, the stationary source shall ensure that the job function descriptions are current and accurate for the positions under consideration. Staffing changes that last longer than ninety days are considered permanent. Temporary changes associated with strike preparations shall also be subject to this requirement. Employees and their representatives shall be consulted in the management of change.

(2) Employees and their representatives shall participate in the development of the written human factors program.

(3) The program shall include, but not be limited to, issues such as staffing, shiftwork and overtime.

(4) A description of the human factors program subsections (b)(1) through (b)(3) shall be included in the safety plan prepared by the stationary source.

(c) Root Cause Analysis and Incident Investigation.

(1) Stationary sources shall conduct a root cause analysis for each major chemical accident or release which occurs after the effective date of the ordinance codified in this chapter. Stationary sources shall periodically update the department on facts related to the release or incident, and the status of a root cause analysis conducted pursuant to this section, at meetings scheduled by the department in cooperation with the stationary source. To the maximum extent feasible, the department and the stationary source shall coordinate these meetings with other agencies with jurisdiction over the stationary source. Within thirty days of completing a root cause analysis performed pursuant to this section, the stationary source shall submit to the department a final report containing that analysis, including recommendations to be implemented to mitigate against the release or incident reoccurring, if any, and a schedule for completion of

resulting recommendations. The stationary source shall also comply with subsection (i)(1)(E) if applicable. The department may require the stationary source to submit written, periodic update reports at a frequency not to exceed every thirty days until the final report is submitted. The methodology of the root cause analysis shall be one of the methodologies recognized by the Center for Chemical Process Safety or shall be reviewed by the department to determine substantial equivalency.

(2) The department may elect to do its own independent root cause analysis or incident investigation for a major chemical accident or release. If the department elects to conduct a root cause analysis or incident investigation the stationary source shall cooperate with the department by providing the following access and information in a manner consistent with the safety of department and stationary source personnel and without placing undue burdens on the operation of the stationary source:

(i) Allow the department to investigate the accident site and directly related facilities such as control rooms, physical evidence and where practicable the external and internal inspection of equipment;

(ii) Provide the department with pertinent documentation; and

(iii) Allow the department to conduct independent interviews of stationary source employees, subject to all rights of the stationary source and employees to be represented by legal counsel and/or management and union representatives during such interviews. If in the course of the department's root cause analysis or incident investigation access is required to areas of the stationary source which in the judgment of the stationary source requires personnel entering the area to use protective equipment and/or have specialized training the department shall provide its personnel with such equipment and training. To the maximum extent feasible, the department shall coordinate any root cause analysis or incident investigation it conducts with investigations conducted by other agencies with jurisdiction over the stationary source to minimize the adverse impacts on the stationary source and/or its employees.

(3) No part of the conclusions, findings or recommendations of the root cause analysis conducted by the department or stationary source, or incident investigation conducted by the department, relating to any major chemical accident or release or the investigation thereof shall be admitted as evidence or used in any action or suit for damages arising out of any matter mentioned in such report.

(4) If the department issues a root cause analysis report, the stationary source shall comply with subsection (i)(1)(E) if applicable.

(d) Process Hazard Analysis/Action Items.

(1) Process hazard analyses will be conducted for each of the covered processes according to one of the following methods: What-if, checklist, what-if/checklist, hazard and operability study (HAZOP), failure mode and effects analysis (FMEA), fault tree analysis or an appropriate equivalent methodology approved by the department prior to conducting the process hazard analysis. The PHA shall be appropriate to the complexity of the covered process and shall identify, evaluate, and control the hazards involved in the covered process. The PHA shall address: the hazards of the process; the identification of any previous incident which had a likely potential for catastrophic consequences; engineering and administrative control applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases (acceptable detection methods might include process monitoring and control instrumentation with alarms, and detection hardware such as hydrocarbon



sensors); consequences of failure of engineering and administrative controls; covered process and stationary source siting; human factors; and a qualitative evaluation of a range of the possible safety and health effects of failure of controls. Process hazard analyses should also include consideration of external events except for seismic analyses, which are only required when criteria listed in subsection (d)(2) are satisfied. All process hazard analyses shall be performed by a team with expertise in engineering and process operations, and the team shall include at least one employee who has experience and knowledge specific to the process being evaluated. Also, one member of the team must be knowledgeable in the specific PHA methodology being used.

(2) The process hazard analyses shall be conducted within one-year of the effective date of the ordinance codified in this chapter and no later than the submittal date of the safety plan. Previously completed process hazard analyses that comply with the California Code of Regulations, Title 8, Section 5189, and/or the California Code of Regulations, Title 19, Section 5100.2 are acceptable for the purposes of this chapter. Process hazard analyses shall be updated and revalidated at least once every five years after completion of the initial process hazard analysis. Updated and revalidated process hazard analyses completed to comply with the California Code of Regulations, Title 8, Section 5189, and/or the California Code of Regulations, Title 19, Section 5100 are acceptable for meeting the update and revalidation requirement. Seismic events shall be considered for processes containing a substance defined in the California Code of Regulations, Title 19, Chapter 2, Section 5130.6, if the distance to the nearest public receptor for a worst case release scenario specified by the California Code of Regulations, Title 19, Chapter 2, Section 5080.3 is within the distance to a toxic or flammable endpoint as defined in California Code of Regulations, Title 19, Chapter 2, Section 5080.2(a).

(3) For all covered processes, the stationary source shall document the decision made to implement or not implement all PHA recommended action items and the results of recommendations for additional study. The stationary source shall complete recommended actions from the initial PHA and from PHA revalidations, identified by the process hazard analysis and selected for implementation by the stationary source as follows: all actions not requiring a process shutdown shall be completed within one-year after the completion of the PHA; all actions requiring a process shutdown shall be completed during the first regularly scheduled turnaround of the applicable process subsequent to one-year after the completion of the PHA unless the stationary source demonstrates to the satisfaction of the department that such a schedule is infeasible. For recommended actions not selected for implementation, the stationary source shall include the justification for not implementing the recommended action. For all covered processes, the stationary source shall retain documentation of closure, and any associated justifications, of actions identified by the PHA. The stationary source shall communicate the actions to operating, maintenance, and other employees whose work assignments are in the process and who may be affected by the recommendations or actions.

(e) Accident History.

(1) The stationary source shall include an accident history in the safety plan of all major chemical accidents or releases from June 1, 1992, through the date of safety plan submittal to the department. For each major chemical accident or release the stationary source shall report the following information, to the extent known:

Date, time and approximate duration of the release;  
Chemicals released;

Estimated quantity released in pounds;  
Type of release event and its source;  
Weather conditions at the time of the release;  
On-site impacts;  
Known off-site impacts;  
Initiating event and contributing factors;  
Root cause(s);  
Whether off-site responders were notified; and  
Operational or process changes that resulted from the investigation of the release.

(2) The stationary source shall annually submit a report of the accident history to the department. The first report shall be due two years after the effective date of the ordinance codified in this chapter, and subsequent reports shall be due by **September 30** of each year.

(f) Certification. The owner or operator shall submit in the safety plan a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete.

(g) Security and Vulnerability Assessment. Each stationary source shall perform and document a security and vulnerability assessment as defined in the Contra Costa County CalARP program guidance document, by June 30, 2007, and at least once every five years after the initial assessment, or as prescribed by federal regulation. The stationary source shall document its process for assuring that recommendations are addressed.

(h) Safety Culture Assessment. The stationary source shall conduct a safety culture assessment. The assessment shall be based upon a method listed in the Contra Costa County CalARP program guidance document or shall be reviewed by the department to determine substantial equivalency. The initial assessment shall be performed by one-year following the revisions to the industrial safety ordinance guidance document that addresses the safety culture assessment, and at least once every five years thereafter. The safety culture assessment will be reviewed during the audit and inspection of the stationary source. The department may perform its own safety culture assessment after a major chemical accident or release or the occurrence of any incident that could reasonably have led to a major chemical accident or release, or based on department audit results of the stationary source.

(i) Inherently Safer Systems Analysis.

(1) A stationary source shall conduct an inherently safer systems analysis (ISSA) for each covered process as follows:

(A) The stationary source shall conduct an ISSA on existing covered processes every five years.

(B) The stationary source shall conduct an ISSA in the development and analysis of recommended action items identified in a PHA.

(C) Effective September 30, 2014, whenever a major change is proposed at a facility that could reasonably result in a major chemical accident or release, the stationary source shall conduct an ISSA as part of a management of change review required by subsection (a)(6)(B).

(D) If an incident occurs on or after September 30, 2014, an investigation of the incident is conducted pursuant to subsection (a)(9)(A) and the incident investigation report recommends a major change that could reasonably result in a major chemical accident or release, the stationary source shall commence and complete an ISSA of the recommended major change as soon as administratively practicable after completion of the incident investigation report.

(E) If an incident occurs on or after September 30, 2014, a root cause analysis of the incident is conducted as required by subsections (c)(1) or (c)(2), and the root cause analysis report or an associated incident investigation report recommends a major change that could reasonably result in a major chemical accident or release, the stationary source shall commence and complete an ISSA of the recommended major change as soon as administratively practicable after completion of the root cause analysis report.

(F) The stationary source shall conduct an ISSA during the design of new processes, process units and facilities. Immediately upon completion of the ISSA report referred to in subsection (i)(2), the stationary source shall advise the department of the availability of the ISSA report.

(2) The stationary source shall prepare a written report documenting each ISSA within thirty days of completion of the ISSA and make the report available to the department during an audit or inspection and upon request. The ISSA report must contain, at a minimum, the following information:

- (A) Identification and a description of the inherently safer system(s) analyzed in the ISSA;
- (B) A description of the methodology used to analyze the inherently safer systems(s);
- (C) The conclusions of the analysis;
- (D) The rationale for the conclusions; and
- (E) An action plan, including a timeline to implement the inherently safer system(s) recommended in the ISSA.

(3) The stationary source shall select and implement each inherently safer system identified in an ISSA report to the greatest extent feasible and as soon as administratively practicable. If a stationary source concludes that implementation of an inherently safer system is not feasible, the stationary source shall document the basis for this conclusion in meaningful detail. The documentation shall include sufficient evidence to demonstrate to the department's satisfaction that implementing the inherently safer system is not feasible and the reasons for this conclusion. A claim that implementation of an inherently safer system is not feasible shall not be based solely on evidence of reduced profits or increased costs.

(j) Safeguard Protection Analysis.

(1) Effective September 30, 2014, a stationary source shall conduct a Layer of Protection Analysis or an alternative type of analysis approved by the department that uses a quantitative, qualitative or equivalent semi-quantitative method to determine the effectiveness of existing safeguards and safeguards recommended in a PHA to reduce the probability and/or severity of a catastrophic release. The safeguard protection analysis may be a standalone analysis or incorporated within a PHA.

(2) The stationary source shall complete the safeguard protection analysis no later than June 30, 2019. A safeguard protection analysis that was completed by a stationary source within five years prior to June 30, 2019, in accordance with the standards set forth in subsection (j)(1), will be deemed to comply with this requirement. The stationary source shall update and revalidate the safeguard protection analysis at least once every five years.

(3) All safeguard protection analyses shall be performed by a team with expertise in engineering and process operations. The team shall include at least one employee who has experience and knowledge specific to the safeguards and one member who is knowledgeable about the specific safeguard protection analysis method used.



(4) The stationary source shall prepare a written report that documents the safeguard protection analysis in accordance with the standard of practice applicable to the type of analysis conducted. The stationary source will complete the report within thirty days after the completion of the safeguard protection analysis and make the report available to the department during an audit or inspection and upon request.  
(Ord. No. 2024-    , § IV; 2014-07, § V, 6-17-14; Ords. 2006-22 § 5, 2000-20 § 1, 98-48 § 2)

#### **450-8.017 – Tank terminal safety requirements.**

The tank terminal shall submit to the department a safety plan that includes the safety elements listed in subsection (a), within one and a half years after the effective date of the ordinance adding Section 450-8.017 to this chapter, within one and a half years after the department first issues a safety program guidance document for tank terminals, or within one and a half years after a tank terminal becomes subject to this section, whichever is later. In addition, the tank terminal shall comply with the safety requirements set forth in subsections (a) through (c) and shall include a description of the manner of compliance with the safety program elements in subsection (a) in the safety plan. Any new tank terminal equipment at an existing tank terminal shall comply with subsections (a) through (c) prior to introduction of an ignitable liquid into that equipment.

(a) Safety Program Elements. All tank terminal activities and tank terminal equipment shall be subject to the safety program elements listed below. The safety plan shall include a description of the manner in which these safety program elements listed shall be applied to the tank terminal. These safety program elements shall be implemented in conformance with the department's safety program guidance document for tank terminals.

(1) Safety Information.

(A) The tank terminal shall complete a compilation of written safety information before conducting any hazard review as required by this chapter. The compilation of written safety information enables the tank terminal and the employees involved in tank terminal activities to identify and understand the hazards posed by these activities. This safety information shall include information pertaining to the hazards of the tank terminal activities and information pertaining to the hazards of the ignitable liquids contained in tank terminal equipment.

(i) The safety information required under subsection (a)(1)(A) shall consist of at least the following: Toxicity information; permissible exposure limits; physical data; reactivity data; corrosivity data; thermal and chemical stability data; and hazardous effects of inadvertent mixing of different materials that could foreseeably occur. Safety data sheets meeting the requirements of Section 5194, Title 8 of California Code of Regulations may be used to comply with this requirement to the extent they contain the information required by this subsection.

(ii) Information pertaining to the tank terminal activities shall include at least the following: A block flow diagram or simplified process flow diagram; maximum intended inventory; safe upper and lower limits for such items as temperatures, pressures, flows, levels or compositions; and an evaluation of the consequences of deviations. Where the original technical information no longer exists, such information may be developed in conjunction with the hazard review in sufficient detail to support the analysis.

(iii) Information pertaining to the tank terminal equipment shall include materials of construction; P&ID's; electrical classification; relief system design and design basis; design

codes and standards employed; and safety systems (e.g., interlocks, detection or suppression systems).

(B) The tank terminal shall document that tank terminal equipment complies with recognized and generally accepted good engineering practices.

(C) For existing tank terminal equipment designed and constructed in accordance with codes, standards, or practices that is no longer in general use, the tank terminal shall determine and document that the equipment is designed, maintained, inspected, tested, and operating in a safe manner.

(2) Operating Procedures.

(A) The tank terminal shall develop and implement written operating procedures that provide clear instructions for safely conducting tank terminal activities consistent with the safety information and shall address at least the following elements:

(i) Steps for each operating phase: Initial startup; normal operations; temporary operations; emergency shutdown, including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner; emergency operations; normal shutdown; and startup following a maintenance outage or after an emergency shutdown.

(ii) Operating limits: Consequences of deviation; and steps required to correct or avoid deviation.

(B) Safety and Health Considerations. Properties of, and hazards presented by, the ignitable liquids contained in tank terminal equipment; precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment; control measures to be taken if physical contact or airborne exposure occurs; quality control for raw materials and control of hazardous inventory levels; and, any special or unique hazard.

(C) Operating procedures shall be readily accessible to employees who operate or maintain tank terminal equipment.

(D) Operating procedures shall be reviewed and revised as often as necessary to assure that they reflect current operating practice, including changes that result from changes in ignitable liquids, tank terminal activities or tank terminal equipment, or changes to the tank terminal. The tank terminal shall certify annually that these operating procedures are current and accurate.

(E) The tank terminal shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening tank terminal equipment; and control over access to a tank terminal by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.

(3) Mechanical Integrity, Including the Use of Industry Codes, Standards, and Guidelines.

(A) Application. Subsections (a)(3)(B) through (a)(3)(F) apply to the following tank terminal equipment: Pressure vessels and storage tanks; piping subsystems (including piping components such as valves); relief and vent systems and devices; emergency shutdown systems; controls (including monitoring devices and sensors, alarms, and interlocks) and pumps.

(B) Written Procedures. The tank terminal shall establish and implement written procedures to maintain the ongoing integrity of tank terminal equipment.

(C) Training for Tank Terminal Equipment Maintenance Activities. The tank terminal shall train each employee involved in maintaining the ongoing integrity of tank terminal equipment in hazards of the tank terminal equipment and of the ignitable liquid contained in the equipment, and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

(D) Inspection and Testing. Inspections and tests shall be performed on tank terminal equipment. Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. The frequency of inspections and tests of tank terminal equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience. The tank terminal shall document each inspection and test that has been performed on tank terminal equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

(E) Equipment Deficiencies. The tank terminal shall correct deficiencies in equipment that are outside acceptable limits (defined by the safety information in subsection (a)(1)) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

(F) Quality Assurance. In the construction of new equipment, the tank terminal shall assure that equipment as it is fabricated is suitable for the tank terminal activities for which they will be used. Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions. The tank terminal shall assure that maintenance materials, spare parts and equipment are suitable for the tank terminal activity in which they will be used.

(4) Management of Change.

(A) The tank terminal shall establish and implement written procedures to manage changes (except for "replacements in kind") to ignitable liquids, tank terminal activities, tank terminal equipment, and procedures.

(B) The procedures shall assure that the following considerations are addressed prior to any change: The technical basis for the proposed change; impact of change on safety and health; modifications to operating procedures; necessary time period for the change; and authorization requirements for the proposed change.

(C) Employees involved in operating a tank terminal and maintenance and contract employees whose job tasks will be affected by a change shall be informed of, and trained in, the change prior to operating the tank terminal equipment.

(D) If a change covered by this section results in a change in the safety information required by subsection (a)(1), such information shall be updated accordingly.

(E) If a change covered by this section results in a change in the operating procedures or practices required by subsection (a)(2), or results in a change in written procedures to maintain the ongoing integrity of tank terminal equipment required by subsection (a)(3), such procedures or practices shall be updated accordingly.

(5) Pre-Startup Reviews.

(A) The tank terminal shall perform a pre-startup safety review for new tank terminal equipment and for modified tank terminal equipment when a modification is significant enough

to require a change in the safety information.

(B) The pre-startup safety review shall confirm, separate and in addition to any management of change review, that prior to the introduction of ignitable liquids to tank terminal equipment: Construction and equipment is in accordance with design specifications; safety, operating, maintenance, and emergency procedures are in place and are adequate; modified tank terminal equipment meets the requirements contained in management of change, subsection (a)(4); and training of each employee involved in operating tank terminal equipment has been completed.

(6) Incident Investigation.

(A) The tank terminal shall investigate each incident that resulted in or could reasonably have resulted in a major chemical accident or release (MCAR), uncontrolled ignition of an ignitable liquid, or a threatened release (as defined in Health and Safety Code section 25501(t)) of one or more ignitable liquids.

(B) An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.

(C) An incident investigation team shall be established and consist of at least one person knowledgeable in the tank terminal activities involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.

(D) A report shall be prepared at the conclusion of the investigation which includes at a minimum: Date of incident; date investigation began; a description of the incident; the factors that contributed to the incident; and recommendations resulting from the investigation. The written summary shall indicate whether the cause of the incident and/or recommendations resulting from the investigation are specific only to the tank terminal activities or tank terminal equipment involved in the incident or are applicable to other tank terminal activities or tank terminal equipment at the tank terminal. The incident investigation report shall be made available to the department upon request.

(E) The tank terminal shall establish a system to promptly address and resolve the incident report findings and recommendations. Resolutions and corrective actions shall be documented with completion date(s).

(F) The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings, including contract employees where applicable.

(G) Incident investigation reports shall be retained for five years.

(7) Emergency Response.

(A) The tank terminal shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements:

(i) An emergency response plan, which shall be maintained at the tank terminal and contain at least the following elements: Procedures for informing the public and local emergency response agencies about accidental releases, emergency planning, and emergency response; documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and procedures and measures for emergency response after an accidental release of an ignitable liquid.

(ii) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance, including documentation of inspection, testing, and maintenance.

(iii) Training for all employees in relevant procedures and the incident command system; and

(iv) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the tank terminal and ensure that employees are informed of changes.

(B) A written plan that complies with other federal contingency plan regulations or is consistent with the approach in the national response team's integrated contingency plan guidance ("One Plan") and that, among other matters, includes the elements provided in subsection (a)(7)(A), shall satisfy the requirements of this section if the tank terminal also complies with subsection (a)(7)(C).

(C) The emergency response plan developed under this section shall be coordinated with the community emergency response plan developed under 42 U.S.C. Section 11003. Upon request of the local emergency planning committee or emergency response officials, the tank terminal shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.

(D) The tank terminal whose employees will not respond to an accidental release of an ignitable liquid need not comply with subsections (a)(7)(A) through (a)(7)(C) provided that they meet the following:

(i) The tank terminal has coordinated response actions with the local fire department at least once every-three years; and

(ii) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response.

(8) Safety Program Management.

(A) The tank terminal shall develop a management system to oversee the implementation of the safety program elements.

(B) The tank terminal shall assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of safety program elements.

(C) When responsibility for implementing individual safety program elements is assigned to persons other than the person identified under subsection (a)(8)(B), the names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.

(D) Safety Performance Indicators.

(i) No later than September 30, 2024, the department shall develop a list of tank terminal activities and other events to be measured by each tank terminal in order to evaluate the performance of safety systems. This list is the "event list." Each tank terminal shall measure these activities and other events and document the measurements. These documented measurements are "common safety performance indicators." No later than September 30 of each year after the effective date of the ordinance adding Section 450-8.017 to this chapter, each tank terminal will report to the department the common safety performance indicators recorded by the tank terminal in the prior calendar year. The department will include these common safety performance indicators in the annual performance review and evaluation report required by Section 450-8.030.

(ii) The department shall review the event list at least once every three years to determine if the event list should be revised. If the department determines that a new activity or other event will need to be added to the event list, each tank terminal shall report to the department

the new common safety performance indicator(s) by September 30 of the next year following the revision of the event list.

(iii) No later than September 30, 2024, each tank terminal shall develop a list of site-specific activities and other events that it will measure in order to evaluate the performance of its safety systems. Each shall document these site-specific safety performance indicators and make this documentation available to the department during an audit or inspection and upon request.

(b) Hazard Review/Action Items.

(1) A hazard review (HR) will be conducted on each tank terminal activity according to one of the following methods: What-if, checklist, what-if/checklist, HAZOP, failure mode and effects analysis (FMEA), fault tree analysis, or an appropriate equivalent methodology approved by the department prior to conducting the hazard review. The HA shall be appropriate to the complexity of the tank terminal activity and shall identify, evaluate, and control the hazards involved in the tank terminal activity. The HR shall address: The hazards of the tank terminal activity; the identification of any previous incident which had a likely potential for catastrophic consequences; engineering and administrative control applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases (acceptable detection methods might include monitoring and control instrumentation with alarms, and detection hardware such as hydrocarbon sensors); consequences of failure of engineering and administrative controls; tank terminal equipment and tank terminal siting; human factors; and a qualitative evaluation of a range of the possible safety and health effects of failure of controls. Hazard reviews should also include consideration of external events. All hazard reviews shall be performed by a team with expertise in engineering and tank terminal activities, and the team shall include at least one operating employee who has experience and knowledge specific to the activity being evaluated. Also, one member of the team must be knowledgeable in the specific HR methodology being used.

(2) The hazard review shall be conducted within one year of the effective date of the ordinance adding Section 450-8.017 to this chapter and no later than the submittal date of the safety plan. Hazard reviews shall be updated and revalidated at least once every five years after completion of the initial hazard review. As part of the HR, a tank terminal shall complete a seismic assessment in accordance with good engineering practices as set forth in American Petroleum Institute Standard 650, 13th edition, Appendix A, and a security and vulnerability assessment (SVA) within one year after the effective date of the ordinance adding Section 450-8.017 to this chapter or within one year after the department first issues a safety program guidance document for tank terminals, whichever is later, and at least once every five years after the initial assessment. A tank terminal that demonstrates its compliance with Department of Homeland Security or U.S. Coast Guard SVA requirements to the department is exempt from the requirement to complete an SVA under this subsection. The tank terminal shall document its process for assuring that recommended action items in the HR are addressed.

(3) For all tank terminal activities, the tank terminal shall document the decision made to implement or not implement all HR recommended action items and the results of recommendations for additional study. The tank terminal shall complete recommended actions from the initial HR and from HR revalidations, identified by the hazard review and selected for implementation by the tank terminal within one year after the completion of the HR unless the

tank terminal demonstrates to the satisfaction of the department that such a schedule is infeasible and obtains a written extension from the department, in which case the tank terminal shall complete the recommended actions in accordance with the extension. For recommended actions not selected for implementation, the tank terminal shall include the justification for not implementing the recommended action. For all tank terminal activities, the tank terminal shall retain documentation of closure, and any associated justifications, of actions identified by the HR. The tank terminal shall communicate the actions to operating, maintenance, and other employees whose work assignments relate to tank terminal activities and who may be affected by the recommendations or actions.

(c) Root Cause Analysis and Incident Investigation.

(1) Tank terminals shall conduct a root cause analysis for each major chemical accident or release which occurs after the effective date of the ordinance adding Section 450-8.017 to this chapter. Tank terminals shall periodically update the department on facts related to the release or incident, and the status of a root cause analysis conducted pursuant to this section, at meetings scheduled by the department in cooperation with the tank terminal. To the maximum extent feasible, the department and the tank terminal shall coordinate these meetings with other agencies with jurisdiction over the tank terminal. Within thirty days of completing a root cause analysis performed pursuant to this section, the tank terminal shall submit to the department a final report containing that analysis, including recommendations to be implemented to mitigate against the release or incident reoccurring, if any, and a schedule for completion of resulting recommendations. The department may require the tank terminal to submit written, periodic update reports at a frequency not to exceed every thirty days until the final report is submitted. The methodology of the root cause analysis shall be one of the methodologies recognized by the Center for Chemical Process Safety or shall be reviewed by the department to determine substantial equivalency.

(2) The department may elect to do its own independent root cause analysis or incident investigation for a major chemical accident or release. If the department elects to conduct a root cause analysis or incident investigation, the tank terminal shall cooperate with the department by providing the following access and information in a manner consistent with the safety of department and tank terminal personnel and without placing undue burdens on the operation of the tank terminal:

(A) Allow the department to investigate the accident site and directly related facilities such as control rooms, physical evidence and where practicable the external and internal inspection of equipment.

(B) Provide the department with pertinent documentation; and

(C) Allow the department to conduct independent interviews of tank terminal employees, subject to all rights of the tank terminal and employees to be represented by legal counsel and/or management and union representatives during such interviews. If, in the course of the department's root cause analysis or incident investigation, access is required to areas of the tank terminal which in the judgment of the tank terminal requires personnel entering the area to use protective equipment and/or have specialized training the department shall provide its personnel with such equipment and training. To the maximum extent feasible, the department shall coordinate any root cause analysis or incident investigation it conducts with investigations conducted by other agencies with jurisdiction over the tank terminal to minimize the adverse impacts on the tank terminal and its employees.



(3) No part of the conclusions, findings or recommendations of the root cause analysis conducted by the department or tank terminal, or incident investigation conducted by the department, relating to any major chemical accident or release or the investigation thereof, shall be admitted as evidence or used in any action or suit for damages arising out of any matter mentioned in such report.

(d) Accident History.

(1) The tank terminal shall include an accident history in the safety plan of all major chemical accidents or releases from January 1, 2018, through the date of safety plan submittal to the department. For each major chemical accident or release the tank terminal shall report the following information, to the extent known:

Date, time and approximate duration of the release;

Chemicals released;

Estimated quantity released in pounds;

Type of release event and its source;

Weather conditions at the time of the release;

On-site impacts;

Known off-site impacts;

Initiating event and contributing factors;

Root cause(s);

Whether off-site responders were notified; and

Operational or tank terminal equipment changes that resulted from the investigation of the release.

(2) The tank terminal shall annually submit a report of the accident history to the department. The first report shall be due two years after the effective date of the ordinance adding Section 450-8.017 to this chapter, and subsequent reports shall be due September 30 of each year.

(e) Certification. The tank terminal shall submit in the safety plan a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete.

(Ord. 2024-    , § IV)

#### **450-8.018 - Review, audit and inspection.**

(a) Upon submission of a safety plan under Section 450-8.016 or Section 450-8.017, the department shall review the safety plan to determine if all the required elements are included and complete. The department shall provide to the stationary source a written notice of deficiencies, if any. The stationary source shall have sixty calendar days from receipt of the notice of deficiencies to make any corrections. The stationary source may request, in writing, a one-time thirty-day calendar day extension to correct deficiencies. By the end of the sixty calendar days or any extension period, the stationary source shall resubmit the revised safety plan to the department. After the department determines that the safety plan is complete, the department shall schedule a public meeting on the stationary source's safety plan to explain its contents to the public and take public comments. Public comments on the safety plan shall be taken by the department for a period of forty-five days after the safety plan is made available to the public. The department shall schedule a public meeting on the stationary source's safety plan during the

forty-five-day comment period. The public meetings shall be held in the affected community on evenings or weekends. The department shall respond in writing to all written comments received during the forty-five-day comment period and to all oral comments received and not addressed at the public meeting. The department shall make portions of the safety plan, which are not protected trade secret information, available to the public for the public meeting.

(b)

(1) The department shall, within one year of the submission of the stationary source's safety plan, conduct an initial audit and inspection of the stationary source's safety program to determine compliance with this chapter. Based upon the department's review of the safety plan and the audit and inspection of the stationary source, the department may require modifications or additions to the safety plan submitted by the stationary source, or safety program to bring the safety plan or safety program into compliance with the requirements of this chapter. Any determination that modifications or additions to the safety plan or safety program are required shall be in writing, collectively referred to as the "preliminary determination." The preliminary determination shall explain the basis for the modifications or additions required to bring the safety plan or safety program into compliance with the requirements of this chapter and provide a timetable for resolution of the recommendations. The preliminary determination shall be mailed to the stationary source.

(2) The stationary source shall respond in writing to the preliminary determination issued by the department. The response shall state that the stationary source will incorporate into the safety plan or safety program the revisions contained in the preliminary determination or shall state that the stationary source rejects the revisions; in whole or in part. For each rejected revision, the stationary source shall explain the basis for rejecting such revision. Such explanation may include substitute revisions.

(3) The stationary source's written response to the department's preliminary determination shall be received by the department within ninety days of the issuance of the preliminary determination or such shorter time as the department specifies in the preliminary determination as being necessary to protect public health and safety. Prior to the written response being due and upon written request from the stationary source, the department may provide, in writing, additional time for the response to be received.

(4) After receiving the written response from the stationary source, the department shall issue a public notice pursuant to the department's public participation policy and make portions of the safety plan, the preliminary determination and the stationary source's responses, which are not protected trade secret information, available for public review. Public comments on the safety plan shall be taken by the department for a period of forty-five days after the safety plan, the preliminary determination and the stationary source's responses are made available to the public. The department shall schedule a public meeting on the stationary source's safety plan during the forty-five-day comment period. The public meetings shall be held in the affected community on evenings or weekends. The department shall respond in writing to all written comments received during the forty-five-day comment period and to all oral comments received and not addressed at the public meeting.

(c) Based upon the department's preliminary determination review of the stationary source's responses and review of public comments on the safety plan, the preliminary determination and the stationary source's responses, the department may require modifications or additions to the safety plan submitted by the stationary source or safety program to bring the

safety plan or safety program into compliance with the requirements of this chapter. Any determination that modifications or additions to the safety plan or safety program are required, and any determination that no modifications or additions to the safety plan or safety program are required shall be in writing (collectively referred to as "final determination"), shall be mailed to the stationary source and shall be made available to the public. A copy of the final determination report will be sent to Cal/OSHA, EPA and the local fire department that has oversight of the stationary source. The department may not include in a final determination any requirements to a safety plan or safety program that would cause a violation of, or conflict with, any state or federal law or regulation or a violation of any permit or order issued by any state or federal agency.

(d) Within thirty days of the department's final determination, the stationary source and/or any person may appeal the final determination to the board of supervisors pursuant to Chapter 14-4 by a verified written notice of appeal filed with the clerk of the board of supervisors and payment of the applicable appeal fee. The appeal must be limited to issues raised during the public comment period. The notice shall state the grounds for any such appeal, including (i) the reasoning that the appeal is necessary because the stationary source is in compliance with this chapter, or (ii) the reasoning that the appeal is necessary to bring the stationary source into compliance with this chapter. In acting on the appeal, the board shall have the same authority over the final determination as the department. The board may require modifications or additions to the safety plan or safety program to bring the safety plan or safety program into compliance with the requirements of this chapter. The board may not include in its decision on the final determination any requirements to a safety plan or safety program that would cause a violation of, or conflict with, any state or federal law or regulation or a violation of any permit or order issued by any state or federal agency. The decision of the board of supervisors shall be final with respect to the final determination.

(e) The safety plan shall be valid for a period of three years from the date of receipt by the department and shall be reviewed and updated by the stationary source every three years pursuant to the requirements of this chapter. Any revisions to the safety plan as a result of the review and update shall be submitted to the department and shall be subject to the provisions of this section.

(f) The department may, within thirty days of a major chemical accident or release, initiate a safety inspection to review and audit the stationary source's compliance with the provisions of **Section 450-8.016 or Section 450-8.017**, whichever is applicable. The department shall review and audit the stationary source's compliance with the above provisions at least once every three years. The department may audit the stationary source based upon any of the following criteria: accident history of the stationary source, accident history of other stationary sources in the same industry, quantity of regulated substances present at the stationary source, location of the stationary source and its proximity to the public and environmental receptors, the presence of specific regulated substances, the hazards identified in the safety plan, a plan for providing neutral and random oversight, or a complaint from the stationary source's employee(s) or their representative. The stationary source shall allow the department to conduct these inspections and audits. The department, at its option, may select an outside consultant to assist in conducting such inspection.

(g) Within thirty days of a major chemical accident or release the department may commence an incident safety inspection with respect to the process involved in the incident pursuant to the provisions of Section 450-8.016(c) or Section 450-8.017(c).

(h)

(1) Based upon the department's audit, safety inspection or an incident inspection, the department may require modifications or additions to the safety plan submitted by the stationary source or safety program to bring the safety plan or safety program into compliance with the requirements of this chapter. Any determination by the department shall be in writing and shall be mailed to the stationary source (referred to as the "notice of findings"). The stationary source shall have sixty calendar days from receipt of the notice of findings to make any corrections. The stationary source may request, in writing, a one-time thirty-day calendar day extension to make corrections. The department may not include in its notice of findings requirements to a safety plan or safety program that would cause a violation of, or conflict with, any state or federal law or regulation or a violation of any permit or order issued by any state or federal agency. The notice of findings made by the department will be available to the public.

(2) Within thirty days of the department's notice of findings, the stationary source and/or any person may appeal the notice of findings to the board of supervisors pursuant to Chapter 14-4 by a verified written notice of appeal filed with the clerk of the board of supervisors and payment of the applicable appeal fee. The appeal must state the grounds for any such appeal, including (i) the reasoning that the appeal is necessary because the stationary source is in compliance with this chapter, or (ii) the reasoning that the appeal is necessary to bring the stationary source into compliance with this chapter. In acting on the appeal, the board shall have the same authority over the notice of findings as the department. The board may require modifications or additions to the safety plan or safety program to bring the safety plan or safety program into compliance with the requirements of this chapter. The board may not include in its decision on the notice of findings any requirements to a safety plan or safety program that would cause a violation of, or conflict with, any state or federal law or regulation or a violation of any permit or order issued by any state or federal agency. The decision of the board of supervisors shall be final with respect to the notice of findings.

(i) Nothing in this section shall preclude, limit, or interfere in any way with the authority of the county to exercise its enforcement, investigatory, and information gathering authorities under any other provision of law nor shall anything in the chapter effect or diminish the rights of the stationary source to claim legal privileges such as attorney client privilege and/or work product with respect to information and/or documents required to be submitted to or reviewed by the department.

(Ords. 2024-\_\_\_, § IV; Ord. 2014-07, § VI, 6-17-14; Ord. 2006-22 § 6; Ord. 98-48 § 2)

#### **450-8.020 - Trade secret.**

The disclosure of any trade secret information required by this chapter shall be governed by California Health and Safety Code Section 25538, as amended from time to time, or as otherwise protected or required by law.

(Ord. 2024-\_\_\_, § IV; Ord. 98-48 § 2)

#### **450-8.022 - Hazardous materials ombudsperson.**

The department shall continue to employ an ombudsperson for hazardous materials programs. The ombudsperson will serve as a single point of contact for people who live or work in Contra Costa County regarding environmental health concerns, questions, and complaints about hazardous materials programs. The ombudsperson will be empowered to identify and solve problems and make recommendations to the department. The ombudsperson's role will be one of investigating concerns and complaints, facilitating their resolution and assisting people in gathering information about programs, procedures, or issues. The ombudsperson may retain appropriate technical experts in order to fulfill technical assistance requests from members of the public. The cost of experts may be funded through programs established by the U.S. EPA or other appropriate entities.

(Ord. 2024-\_\_\_, § IV; Ord. 2000-20 § 2, Ord. 98-48 § 2)

#### **450-8.024 - Public information bank.**

The department shall collect and provide ready access, including the use of electronic accessibility as reasonably available, to public documents which are relevant to the goals of this chapter, including at a minimum, business plan inventories and emergency response plans, risk management plans, safety plans, and department incident reports. This section shall not apply to trade secret information or other information protected from disclosure under federal or state law. The public information bank shall be completed by December 31, 2000.

(Ord. 2024-\_\_\_, § IV, Ord. 98-48 § 2)

#### **450-8.026 - Fees.**

The department may, upon a majority vote of the board of supervisors, adopt a schedule of fees to be collected from each stationary source **and tank terminal** subject to the requirements of this chapter. Any review, inspection, audit fee schedule shall be set in an amount sufficient to pay only those costs reasonably necessary to carry out the requirements of this chapter, including costs of staff and/or consultant time or public hearings and administrative overhead. The fee schedule shall include the cost of the ombudsperson position.

(Ord. 2024-\_\_\_, § IV; Ord. 98-48 § 2)

#### **450-8.028 - Penalties.**

Regardless of the availability of other civil or administrative remedies and procedures for enforcing this chapter, every act or condition prohibited or declared unlawful by this chapter, and every knowing or willful failure or omission to act as required herein, is a violation of this code and shall be punishable and/or subject to enforcement pursuant to the provisions of Chapter 14-6 of the County Ordinance Code, specifically including but not limited to Article 14-6.4 (public nuisance abatement); Chapter 14-8 (criminal enforcement), as misdemeanors or infractions; and Chapter 14-12 (administrative penalties).

(Ord. 2024-\_\_\_, § IV; Ord. 98-48 § 2)

#### **450-8.030 - Annual performance review and evaluation.**

(a) The department shall annually: (1) Review its activities to implement this chapter, and (2) evaluate the effectiveness of this chapter in achieving its purpose and goals pursuant to Section 450-8.004.

(b) An annual performance review and evaluation report shall be prepared by the department based upon the previous fiscal year's activities and shall be submitted to the board of supervisors on or before December 31 of each year. The report shall contain:

(1) A brief description of how the department is meeting the requirements of this chapter as follows: (i) Effectiveness of the department's program to ensure stationary source compliance with this chapter; (ii) effectiveness of the procedures for records management; (iii) number and type of audits and inspections conducted by the department pursuant to this chapter; (iv) number of root cause analyses and/or incident investigations conducted by the department; (v) the department's process for public participation; (vi) effectiveness of the public information bank, including status of electronic accessibility; (vii) effectiveness of the hazardous materials ombudsperson; (viii) other required program elements necessary to implement and manage this chapter.

(2) A listing of all stationary sources covered by this chapter **and, commencing on December 31 after the effective date of the ordinance adding Section 450-8.017 to this chapter, all tank terminals covered by this chapter**, including for each: (i) The status of the safety plan and program of each stationary source and tank terminal; (ii) a summary of all safety plan updates and a listing of where the safety plans are publicly available; (iii) the annual accident history report submitted under Section 450-8.016(e)(2) or Section 450-8.017(d)(2); (iv) a summary, including the status, of any root cause analyses conducted or being conducted under this chapter by the stationary source or tank terminal, including the status of implementation of recommendations; (v) a summary, including the status, of any audits, inspections, root cause analyses and/or incident investigations conducted or being conducted by the department pursuant to this chapter, including the status of implementation of recommendations; (vi) description of inherently safer systems implemented by stationary sources; (vii) legal enforcement actions initiated by the department, including administrative, civil, and criminal actions pursuant to this chapter; and (viii) process safety performance indicators reported by the stationary source as required under Section 450-8.016(a)(13)(D)(i) **or safety performance indicator reported by the tank terminal as required under Section 450-8.017(a)(8)(D)(i).**

(3) Total penalties assessed as a result of enforcement of this chapter.

(4) Total fees, service charges, and other assessments collected specifically for the support of this chapter.

(5) Total personnel and personnel years utilized by the jurisdiction to directly implement or administer this chapter.

(6) Comments from interested parties regarding the effectiveness of the local program that raise public safety issues.

(7) The impact of the chapter in improving industrial safety.

(c) The department shall provide a copy of the annual performance audit submission required by Title 19 Chapter 2 Section 5150.5 of the California Code of Regulations to the board of supervisors on or before **December 31** of each year.

(Ord. 2024-    , § IV, Ord. 2014-07, § VII, 6-17-14; Ord. 2006-22 § 7; Ord. 98-48 § 2)



#### **450-8.032 - Construction.**

Notwithstanding any other provision of this code and for the purposes of this chapter wherever it provides that the department shall act, such direction in all instances shall be deemed and is directory, discretionary and permissive and not mandatory.  
(Ord. 2024-\_\_\_, § IV; Ord. 98-48 § 2)

**SECTION V.** Section 14-8.008 (Infraction arrest and citation) of the Ordinance Code is amended to read:

#### **14-8.008 - Infraction arrest and citation.**

(a) The following officers, or their designated subordinates, shall have and are hereby vested with the authority to arrest any person who violates the following provisions of this Code and other codes as indicated, punishable as infractions:

(1) Director of health services: Division 413, Division 445, Chapters 414-4, 414-6, 416-14, 418-2, 418-6, 418-12, 418-16, 420-2, 420-6, 450-6, **450-8**, and Labor Code Section 6404.5;

(2) Director of building inspection: Title 7;

(3) Director of community development: Title 8;

(4) Director of public works: Divisions 1002, 1010, 1014, 1106 and 1110;

(5) Sheriff: Chapter 44-2, Division 54, Chapter 54-2, and Divisions 410 and 1110.

(b) The above-listed officers, or their designated subordinates, may issue citations for infraction violations of the above-listed code provisions.

(c) The county administrator may by written order issue regulations to provide for administration, procedures and policy direction for this section.

(Ord No. 2024-\_\_\_, § V; Ord. No. 2021-19, § III, 6-8-21; Ord. No. 2016-24, § V, 12-20-16; Ord. No. 2012-05, § III, 2-28-12; Ords. 2006-66 § 8, 2004-30 § 2, 2003-01 § 5, 2002-48 § 2, 2001-03 § 1, 98-31 § 1, 98-22 § 2, 96-21 § 2, 95-36 § 1, 90-122 § 2, 86-80 § 2; Penal Code §§ 19.7, 836.5, and 853.6; Labor Code § 6404.5).

**SECTION VI. EFFECTIVE DATE.** This ordinance becomes effective 30 days after passage, and within 15 days after passage shall be published in the East Bay Times, a newspaper published in this County. This ordinance shall be published in a manner satisfying the requirements of Government Code section 25124, with the names of the supervisors voting for and against it.

PASSED on \_\_\_\_\_, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST: Monica Nino, Clerk of the Board  
of Supervisors and County Administrator

By: \_\_\_\_\_  
Deputy

\_\_\_\_\_  
Board Chair

[seal]

LW/SMS



# CONTRA COSTA COUNTY

1025 ESCOBAR STREET  
MARTINEZ, CA 94553

## Staff Report

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**File #:** 24-2107

**Agenda Date:** 7/11/2024

**Agenda #:** 6.

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Advisory Board: Industrial Safety Ordinance/Community Warning System Ad Hoc Committee

Subject: Update Regarding Hazardous Materials Programs and Associated Fee Study

Presenter: Nicole Heath, Director of Hazardous Materials Programs

Information: Attached to this agenda item is the Contra Costa Health Hazardous Materials Programs fee study and associated proposed fee schedule. In addition, the Contra Costa County Civil Grand Jury released report number 2404 dated June 10, 2024 entitled "County Petroleum Refineries and Hazardous Materials Releases".

Recommendation(s)/Next Step(s): RECEIVE a report regarding the status of the Contra Costa Health Hazardous Materials Program and PROVIDE direction to staff as necessary.



# CONTRA COSTA COUNTY HEALTH HAZARDOUS MATERIALS PROGRAMS

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*Report for:*

**Fee Study**

**June 3, 2024**

Prepared by:



Corporate Headquarters  
32605 Temecula Parkway, Suite 100  
Temecula, CA 92592  
Toll free: 800.676.7516

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# 1. EXECUTIVE SUMMARY

NBS performed a Fee Study (Study) for the Contra Costa Health – Hazardous Materials Programs, a Division of the Contra Costa County Health Department. The purpose of this report is to present the findings and recommendations of the various fee analyses performed as part of the Study and provide the County with the information needed to update and establish regulatory fees for service. Throughout the process, the Study afforded much effort to ensure that not only are the fees and charges reasonable and equitable, but that they also meet industry standards and uphold the statutory requirements of the State of California.

A Certified Unified Program Agency (CUPA) may impose regulatory fees for services and activities they provide through provisions set forth in Health and Safety Code section 25404.5(a)(2)(A). Under this legal framework, a single fee system shall be established at a level sufficient to pay the necessary and reasonable costs incurred by the certified unified program agency. For a regulatory fee to qualify as a fee and not a tax, the estimated costs of the regulatory service or regulatory activity must be provided, and the basis for determining the manner in which the costs are apportioned must bear a fair or reasonable relationship to the payor's burdens on, or benefits from, the regulatory activity. Regulatory fees pay for the reasonable regulatory costs associated with operating a regulatory program, including issuing licenses and permits, performing investigations, inspections and audits, as well as other regulatory activities such as associated training, travel and overhead.

The County's main reason for conducting this Study was twofold: (1) first, to ensure that existing fees do not exceed the costs of service, and (2) second, to provide an opportunity for the Board of Supervisors to re-align fee amounts with localized cost recovery policies.

## 1.1 Findings

This Study examined regulatory fees managed by the Contra Costa Health Hazardous Materials Programs (CCHHMP). The Study identified an estimated \$11.8 million in eligible costs for recovery from fees for service compared to approximately \$9.4 million CCHHMP is currently collecting each year from fees. The following table provides a summary of the Study's results:

**Table 1. Report Summary**

Fee Category	Annual Estimated Revenues at Current Fee	Annual Estimated Revenues at Full Cost Recovery Fee	Annual Cost Recovery Surplus/ Deficit	Existing Cost Recovery Percentage
Hazardous Materials	\$9,443,967	\$11,787,986	(\$2,344,019)	80%
<b>Total</b>	<b>\$ 9,443,967</b>	<b>\$ 11,787,986</b>	<b>\$ (2,344,019)</b>	<b>80%</b>

As shown in Table 1 above, the County is recovering approximately 80% of the costs associated with providing regulatory fee-related services. Should the Board adopt fees at 100% of the full cost recovery amounts determined by this Study, an additional \$2.3 million in costs could be recovered.



## 1.2 Report Format

This report documents the analytical methods and data sources used in the Study, presents findings regarding current levels of cost recovery achieved from regulatory fees, and provides a comparative survey of fees to neighboring agencies for similar services. The report is organized into the following sections:

- Section 2 - Outlines the general framework, approach, and methodology of the Fee Study.
- Section 3 - Discusses the results of the cost of service analysis including: (1) fully burdened hourly rate(s); (2) calculation of the costs of providing service; and, (3) the cost recovery performance of each fee category.
- Section 4 - Presents the conclusions of the analysis provided in the preceding sections.
- Appendices to this report - Include additional details of the analysis performed and a comparison of the fees imposed by neighboring agencies for similar services.

## 2. INTRODUCTION AND FUNDAMENTALS

### 2.1 Scope of Study

As a Certified Unified Program Agency (CUPA), the Hazardous Materials Division of the County Health Department, administers the following programs, pursuant to the authorities granted under Section 25404 of the Health and Safety Code:

- Hazardous Waste Generator Program
- Hazardous Materials Business Plan Program
- Underground Storage Tank Program
- California Accidental Release Prevention (CalARP) Program
- Aboveground Petroleum Storage Act Program

In addition to the programs listed above, a limited scope of review was performed to determine the total costs associated with the Community Warning System as well as any specialized costs required for the implementation of the Unified Programs. These costs are intended to be layered on top of fees and only applied to the fee payors who benefit from these services.

The fees examined in this report focus on regulatory fees and other applicable fees for services, and specifically excludes fines and penalties imposed by the County for violations of its requirements or codes.<sup>1</sup>

### 2.2 Methods of Analysis

Three phases of analysis were completed for the Hazardous Materials Programs:



#### 2.2.1 COST OF SERVICE ANALYSIS

This cost of service analysis is a quantitative effort that compiles the full cost of providing governmental services and activities. There are two primary types of costs considered: direct and indirect costs. Direct costs are those that specifically relate to an activity or service, including the real-time provision of the service. Indirect costs are those that support the provision of services in general but cannot be directly or easily assigned to a singular activity or service.

Direct Costs:

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<sup>1</sup> According to the California Constitution Article XIII C § 1 (e) (4) and (5), the County is not limited to the costs of service when imposing fines and penalties.

- **Direct personnel costs** – Salary, wages and benefits expenses for personnel specifically involved in the provision of services and activities to the public.
- **Direct non-personnel costs** – Discrete expenses attributable to a specific service or activity performed, such as contractor costs, third-party charges, and materials used in the service or activity.

#### Indirect Costs:

- **Indirect personnel costs** – Personnel expenses supporting the overall provision of services, including and not limited to line supervision, departmental management, administrative support, and time spent on general training related activities. These support activities cannot be identified to a single fee objective, but rather support the entire fee program as a whole.
- **Indirect non-personnel costs** – Expenses other than labor involved in the provision of services. In most cases, these costs are allocated across all services provided by a department, rather than directly assigned to individual fee/rate categories.
- **Overhead costs** – These are expenses, both labor and non-labor, related to County-wide support services. Support services include general administrative services such as County Administrator, Finance, Human Resources, etc. The amount of costs attributable to CCHHMP included in this Study were sourced from the County Cost Allocation Plan published on the California State Controller Office website and adopted operating budget.

All cost components in this Study use annual (or annualized) figures, representing a twelve-month cycle of expenses incurred by the Division in the provision of all services and activities County-wide.

Nearly all the fees reviewed in this Study require specific actions on the part of County staff to provide the service or conduct the activity. Since labor is the primary underlying factor in these activities, the Study expresses the full cost of service as a fully burdened cost per labor hour. NBS calculated a composite, fully burdened, hourly rate for the Hazardous Materials fee programs. This rate serves as the basis for further quantifying the average full cost of providing individual services and activities. Determining the fully burdened rate requires two data sets: (1) the full costs of service, and (2) the number of staff hours available to perform those services.

The annual cost of providing services was derived from the earlier steps of the cost of service analysis described above. The number of staff hours available was determined through a review of a complete list of the County's Hazardous Materials program staff and/or available service hours of its contracted professionals (where applicable). The County also supplied the total number of paid labor hours for each employee involved in the delivery of services included in this Study. NBS reviewed documentation regarding basic types of leave such as vacation, sick, and holiday time to establish a Net Paid Productive Hours for each position. These "net" available hours represent the amount of time available to provide both fee-recoverable and non-fee recoverable services and activities. Time tracking records for the fee programs studied as part of this analysis, when available, proved useful in identifying time spent providing indirect categories of service (e.g., division administration, plan review, inspection, public information assistance, etc.), versus direct categories of service for individual fee for service activities. The annual full cost of providing fee for service activities divided by the available labor hours attributable to the fee program equals the composite, fully burdened hourly rate.

The fully burdened rate was then applied at the individual fee level through further time data analysis to yield the average total cost of providing each fee for service or activity. NBS received three (3) fiscal years' worth of time tracking data that was used to establish an average amount of time spent per year on each individual fee for service activity. This data was analyzed and then reviewed and revised carefully by the Division's staff and managers. Based on the results of this review, the County reconsidered its time estimates until all parties were comfortable that the fee models reasonably reflected the average service level provided. Where needed, NBS also assisted the County in estimating the average amount of staff time required for services that did not have tracked time data to rely upon or where the tracked time data did not reflect the reasonable level of effort required to perform the service.

It should be noted that the development of these time estimates was not a one-step process but required careful review by both NBS and Division managers to assess the reasonableness of such estimates.

### 2.2.2 FEE ESTABLISHMENT

The fee establishment process includes a range of considerations, including the following:

- **Addition to and deletion of fees** – The Study provided the opportunity to propose additions and deletions to the current fee schedule, as well as to re-name, re-organize, and clarify fee names and categories as needed. Many of these fee revisions allow for better adherence to current practices, as well as for improvement in the calculation, application, and collection of the fees when administered by staff.
- **Revision to the structure of fees** – In most cases, the focus was to re-align the fee amount to match the costs of service and leave the current structure of fees unchanged. However, in several cases, fee categories and fee names had to be simplified or re-structured to increase the likelihood of full cost recovery or to enhance the fairness of how the fee is applied to the various types of fee payers.
- **Documentation of the tools used to calculate special cost recovery** – CCHHMP's fee schedule should include the fully burdened rate developed by the Study. Documenting that rate in the fee schedule provides an opportunity for the Board of Supervisors to approve a rate for cost recovery under a "time and materials" approach, when needed. It also provides clear publication of the rate so that all fee payers can readily reference the basis of any fee amounts. The fee schedule should provide language that supports special forms of cost recovery for activities and services not included in the adopted master fee schedule. In these rare instances, the published hourly rate is used to estimate a flat fee or bill on an hourly basis, at the director's discretion.

### 2.2.3 COST RECOVERY EVALUATION

The NBS fee model compares the existing fee for each service or activity to the average total cost of service quantified through this analysis. Possible and typical outcomes of the fee analysis include:

- Cost recovery rate of 0% - This signifies that there is currently no current recovery of costs from fee revenues (or insufficient information available for evaluation).
- Cost recovery rate of 100% - This means that the fee currently recovers the full cost of service.

- Cost recovery rate between 0% and 100% - This indicates partial recovery of the full cost of service through fees.
- Cost recovery rate greater than 100% - This means that the fee exceeds the full cost of service. Regulatory fees should not exceed the full cost of service.

In all cases, the cost recovery rate achieved by a fee should not be greater than 100%. In most cases, imposing a fee above this threshold could change the definition of the charge from a cost of service based fee to a tax which requires voter approval to implement. The purpose of any fee study is to establish the necessary and reasonable cost of providing regulatory services. For any fee showing a greater than 100% cost recovery outcome, the fee must be reset to no more than 100% of the calculated cost of service as shown in the report appendix.

From here, the County can decide upon the “recommended” or “target” level of cost recovery for each fee, established at either 100% or any amount less than the calculated full cost of service. Targets and recommendations reflect discretion on the part of the agency based on a variety of factors, such as existing County policies and County-wide or departmental revenue objectives, economic goals, community values, market conditions, level of demand, and others.

#### **2.2.4 COMPARATIVE FEE SURVEY**

Policy makers often request a comparison fees to those of surrounding or similar communities. The purpose of a comparison is to provide a sense of market pricing for services, and to use that information to gauge the impact of recommendations for fee adjustments.

NBS worked with CCHHMP to choose five comparative agencies – Alameda County, Sacramento County, San Mateo County, Santa Clara County and Sonoma County. The results of the comparison are summarized in Section 3 of this report and detailed in Appendix C.

It is important to keep the following in mind when interpreting the general approach to, and use of, comparative survey data:

- Comparative surveys do not provide information about cost recovery policies or procedures inherent in each comparison agency.
- A “comparison-based” decision to price services below the full cost of service calculation is the same as deciding to subsidize that service.
- Comparative agencies may or may not base their fee amounts on the estimated and reasonable cost of providing services. NBS did not perform the same level of analysis of the comparative agencies’ fees.
- The results of comparative fee surveys are often non-conclusive for many fee categories. CCHHMP is a unique regulatory environment that regulates more hazardous materials per year than any other CUPA in the surrounding area. Contra Costa County is also the only jurisdiction that regulates refineries or bulk storage facilities, therefore the results of the comparative analysis may be skewed by the additional scope of services provided.

NBS made every reasonable attempt to source each comparison agency’s fee schedule from their respective websites and compile a comparison of fee categories and amounts for the most readily comparable fee items that match the County’s existing fee structure.

### 2.2.5 DATA SOURCES

The following data sources were used to support the cost of service analysis and fee establishment phases of this Study:

- The Adopted Budget for Fiscal Year 2022-23
- A complete list of all CCHHMP personnel, salary/wage rates, regular hours, paid benefits, and paid leave amounts provided by the Finance Department
- Prevailing adopted fee schedules
- Annual workload data for Fiscal Year 2019, 2020, and 2021 (number of permits processed/services performed)

The adopted budget serves as an important source of information that affects the cost of service results. NBS did not audit or validate the County's financial documents and budget practices, nor was the cost information adjusted to reflect different levels of service or any specific, targeted performance benchmarks. This Study accepts the County's budget as a legislatively adopted directive describing the most appropriate and reasonable level of County spending. NBS consultants accept the Board of Supervisors' deliberative process and the County's budget plan and further assert that through this legislative process, the County has yielded a reasonable and valid expenditure plan to use in setting cost-based fees.

### 3. HAZARDOUS MATERIALS FEE PROGRAMS

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The mission of the Contra Costa Health Hazardous Materials Programs (CCHHMP) is to protect human health and the environment by promoting pollution prevention, increasing process safety knowledge and environmental awareness, responding to incidents, and implementing consistent regulatory compliance and enforcement programs.

CCHHMP is organized into various programs, summarized as follows:

- **Hazardous Waste Generator Program** – This program ensures the safe and legal handling, treatment, storage, and disposal of hazardous waste. Activities to obtain this objective include regular inspections, business education activities and the issuance of hazardous waste generator permits.
- **Hazardous Materials Business Plan Program** – This program’s purpose is to prevent or minimize damage to public health, safety, and the environment, from a release or threatened release of hazardous materials. It also satisfies community right-to-know laws. This is accomplished by requiring businesses that handle hazardous materials in reportable quantities to submit an annual hazardous materials business plan to the local Certified Unified Program Agency (CUPA) as well as prepare a site map, develop an emergency response plan, and implement a training program for employees. Contra Costa Health - Hazardous Materials Programs (CCHHMP) is the CUPA for all businesses within Contra Costa County.
- **Underground Storage Tank Program** – Underground Storage Tanks (USTs) are used for the storage of many substances that may be considered hazardous. This program’s purpose is to protect the public health from exposure to hazardous materials stored in the USTs, including the protection of groundwater from contamination. Activities to obtain these objectives include annual inspections and the issuance of operating permits. Construction permits are also issued for UST system installation, removals, upgrades and repairs.
- **California Accidental Release Prevention Program** – This program administers the California Accidental Release Prevention Program (CalARP). This includes reviewing Risk Management Plans, auditing facilities, and following up with recommended action items.
- **Industrial Safety Ordinance** – This program administers the Industrial Safety Ordinances (ISO) for Contra Costa County and the City of Richmond. This includes reviewing safety plans, auditing facilities and following up with recommended action items, reviewing Major Chemical Accidents or Releases (MCAR), assisting with incident investigations, and performing hazard scoring for development projects associated with land use applications.
- **Aboveground Petroleum Storage Act Program (APSA)** – This program regulates tank facilities that are subject to the federal SPCC rule or tank facilities with an aggregate storage capacity of 1,320 gallons or more of petroleum in aboveground storage containers or tanks with a shell capacity equal to or greater than 55 gallons. APSA also regulates tank facilities with less than 1,320 gallons of petroleum if they have one or more stationary tanks in an underground area (TIGUA) with a shell capacity of 55 gallons or more of petroleum.



- **Incident Response Team** - Unified program agencies are authorized to respond to hazardous material releases or threats of a release, as outlined in Chapter 6.95 of the Health and Safety Code. Even facilities not covered under this chapter must comply with release reporting requirements. To fulfill this responsibility, the Unified Program has established a Hazardous Materials Incident Response Team (IR Team) that promptly responds to reported hazardous material incidents. The IR Team works closely with the Community Warning System, which uses a fully integrated alert system to issue warnings to the public regarding hazardous material releases. This system, in conjunction with the IR team, helps to efficiently implement appropriate response efforts and provide direction and advice to emergency responders and the public on avoiding exposure. (Health & Saf. Code, § 25510, 25270.8, 25180.7, 42301.7)
- **Community Warning System (CWS)** – The Community Warning System (CWS) is a fully integrated, web-based alert mass notification system that is designed to provide critical emergency information to CCC residents. Utilizing a variety of communication tools, including outdoor safety sirens, industrial facility CWS terminals, emergency responder pages, text messages, and emails to CWS registered users, phone calls, Wireless Emergency Alerts (WEA), the Emergency Alert System (EAS), NOAA weather radios via the National Weather Service (NWS), and social media posts, the CWS ensures timely dissemination of information during crises. Additionally, emergency information, including a map of the area where protective actions have been issued, is automatically posted to the [www.CWSAlerts.com](http://www.CWSAlerts.com) website. The CWS was developed through the efforts of the Contra Costa County Community Awareness and Emergency Response (“CAER”) Group working cooperatively with CCHHMP, representatives from local industry, the community, and other regulatory agencies to provide local residents with timely notification of emergencies, including hazardous materials releases.

### 3.1 Cost of Service Analysis

NBS developed a composite, fully burdened, hourly rate for CCHHMP as shown in Table 2 on the next page:

**Table 2. Fully Burdened Hourly Rate**

Expenditure Type	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities	Total
Labor	\$ 538,537	\$ 125,293	\$ 4,005,601	\$ 4,669,431
Recurring Non-Labor	981,312	14,732	470,990	1,467,035
Overhead	25,528	6,145	196,454	228,126
Allocated Common Activities	-	212,104	6,780,923	6,993,027
<b>Division Subtotal</b>	<b>\$ 1,545,377</b>	<b>\$ 358,275</b>	<b>\$ 11,453,968</b>	<b>\$ 13,357,619</b>
Other Funding Sources				
Grants / Misc Funding			\$ (524,418)	\$ (524,418)
R9200 - License/Permit/Franchises			(150,000)	(150,000)
R9300 - Fines/Forfeits/Penalties			(485,000)	(485,000)
R9800 - Miscellaneous Revenue			(53,000)	(53,000)
<b>Other Funding Source Subtotal</b>			<b>\$ (1,212,418)</b>	<b>\$ (1,212,418)</b>
<b>Division Total</b>	<b>\$ 1,545,377</b>	<b>\$ 358,275</b>	<b>\$ 10,241,550</b>	<b>\$ 12,145,201</b>
<b>Cost per Direct Hour Recoverable from Fees for Service</b>	<b>n/a</b>	<b>n/a</b>	<b>\$ 365</b>	
<i>Reference: Direct Hours Only</i>	n/a	n/a	28,092	

CCHHMP incurs a total annual cost of approximately \$13.4 million, of which approximately \$11.5 million is eligible for recovery from fees for service. These costs are first offset by revenue from alternate funding sources such as grants, fines and penalties. Approximately \$10.2 million remains targeted for recovery from fees for service. All subsequent cost of service calculations at the individual fee level assume a fully burdened hourly rate of **\$365**.

In addition to the costs for the direct services and activities described in the previous paragraph, CCHHMP also incurs costs for a variety of expenses arising from the Community Warning System and specialized training required for the CalARP program. These costs are intended to be layered on top of fees and only applied to the fee payors who benefit from these services. CCHHMP will continue to assess an additional fee based on their existing methodology for these two services. For informational purposes only, Appendix D and E of this report show the existing calculation methodology currently used by County staff to calculate these additional fees.

## 3.2 Fee Establishment

The following is a summary of the overall changes to the CCHHMP fee schedule:

- All CUPA programs require varying levels of staff training, depending on the complexity of the environmental regulations related to the regulated activity. To ensure that staff maintain core competencies within all regulatory programs, costs associated with training time specific to each program have been included in the permit fee.
- Deletion of fees that are no longer used or needed, such as Unannounced Inspection Program under the CalARP Program, and the 5 billion pounds of materials designation under the Hazardous Material Business Plan program.

- Reorganization of fee categories or clarification of fee names to create a more user-friendly fee structure such as:
  - Hazardous Material Business Plan Program – Changed the tiering from number of employees to number of chemical’s stored at the facility for facilities with greater than 10,000 pounds of material.
  - Community Warning System – The use of the Community Warning System (CWS) varies based on the complexity of the facility. The CWS cost is part of the Hazardous Materials Business Plan fee and is distributed among facilities based on complexity, therefore an additional fee will be assessed by the Hazardous Materials Business Plan Program facilities on top of the annual regulatory inspection fee. See Appendix E for more information.
  - Underground Storage Tank Program – Fees were restructured to reflect the services provided by CCHHMP. The categories of base fee, installation, and closure are now simply based on 1<sup>st</sup> tank and each additional tank. Modifications have been structured to reflect minor, moderate and major modifications.
  - CalARP – Changed the Annual Permit fee to reflect a baseline level of regulatory effort provided based on each facility’s pre-determined Program level. The amount of time spent annually auditing and inspecting a facility varies based on the facilities calculated risk factor, therefore an additional fee will be assessed on top of the annual regulatory inspection fee to recover the costs associated with staff’s training efforts through the CalARP risk factor analysis. Risk factors will continue to be determined using Source Modified Chemical Exposure Indexes (SMCEI). See Appendix D to this report for more information on how the SMCEI is used to calculate hazard potential of facilities in the County. As mentioned above, the Unannounced Inspection Program category has been deleted.
  - ISO – The Industrial Safety Ordinance program has been modified to reflect a new category for bulk liquid storage (new facility type). The remaining existing ISO facility fees were changed to reflect a baseline level of regulatory effort provided based on each facility’s pre-determined Program level. The amount of time spent annually auditing and inspecting a facility varies based on the facilities calculated risk factor, therefore an additional fee will be assessed on top of the annual regulatory inspection fee to recover staff’s training efforts.
- Addition of new fee categories, notated as “New” in the Current Fee column of Appendix A<sup>2</sup> such as Very Small Quantity Generator not including RCRA waste Generation under the Hazardous Waste Generator Program.

### 3.3 Cost Recovery Evaluation

Appendix A presents the results of the detailed cost recovery analysis of fees for the County’s Hazardous Materials Program. In the Appendix, the “Cost of Service per Activity” column establishes the maximum adoptable fee amount for the corresponding service identified in the “Fee Description” list.

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<sup>2</sup> Refer to Section 2.2, *Methods of Analysis*, for additional discussion on the Study’s approach to adding, deleting, and revising fee categories.

Currently, CCHHMP is recovering approximately 80% of the total cost of providing services from fees. As Table 3 shows, CCHHMP collects approximately \$9.4 million per year in revenue at the current fee amounts. At full cost recovery and the same demand level for these services, approximately \$11.8 million would be recovered.

**Table 3. Cost Recovery Outcomes**

Fee Category	Annual Estimated Revenues at Current Fee	Annual Estimated Revenues at Full Cost Recovery Fee	Annual Cost Recovery Surplus/ Deficit	Existing Cost Recovery Percentage
Hazardous Materials Fee Program	\$9,443,967	\$9,884,334	(\$440,367)	
CalARP/ISO Risk Factor Analysis	<i>included above</i>	\$358,275	(\$358,275)	
Community Warning System		\$1,545,377	(\$1,545,377)	
<b>Total</b>	<b>\$ 9,443,967</b>	<b>\$ 11,787,986</b>	<b>\$ (2,344,019)</b>	<b>80%</b>

NBS provided a full cost of service evaluation and the framework for considering fees, while CCHHMP staff determined the appropriate cost recovery levels at or below full cost amounts.

### 3.4 Comparison Survey

As discussed in section 2.2.4, Comparative Fee Survey, NBS compared the County's current list of fees to those of 5 comparison agencies selected by CCHHMP. While the results of the comparative fee surveys are often non-conclusive for many fee categories, NBS made every reasonable attempt to source each comparison agencies fee schedule. It is important to remember that CCHHMP is a unique regulatory environment that regulates more hazardous materials per year than any other CUPA in the surrounding area. Contra Costa County is also the only jurisdiction that regulates refineries or bulk storage facilities, therefore the results of the comparative analysis may be skewed by the additional scope of services provided.

Below is an analysis of CCHHMP's fees by program:

- Hazardous Waste Generator – The fee programs for San Mateo and Santa Clara County match closest to Contra Costa's. For these agencies, CCHHMP's current fees and full cost recovery fees are lower for most tiers. Current and full cost recovery fees would be higher for the other agencies surveyed.
- Hazardous Materials Business Plan – As a newly structured fee program, the current fees shows in Appendix A are averages of current fees charged making the outcomes more difficult to compare. Alameda County uses the most similar fee structure and all fees fall in line with the comparison agency except for the current fee for 1 billion+ lbs with includes oil refineries. At full cost recovery, this particular fee would be adjusted and would fall in line with Alameda County. The other agencies surveyed did not yield any useable results.
- Underground Storage Tank Program – San Mateo, Santa Clara and Sonoma County fees most closely match CCHHMP's proposed fee structure. Current base fees are lower than the agencies surveyed, and at full cost recovery fall in line with those agencies. Current and full cost recovery fees would be higher than these agencies, but would be lower than Alameda County. Closures and modifications are in line with other agencies surveyed.

- California Accidental Release Prevention Program – As a newly structured fee program, the current fees shown in Appendix A are averages of current fees charged making the outcomes more difficult to compare. CCHHMP's fees would be higher for both current and full cost, however, it is difficult to determine what the other agencies fees include, therefore this category is inconclusive.
- Aboveground Petroleum Storage Act Program – CCHHMP's fees are the highest of all agencies surveyed for current and full cost fee amounts.
- Miscellaneous Fees (hourly rates) – CCHHMP's current hourly rate is higher than most agencies surveyed. Santa Clara County is the only agency with an hourly rate higher than CCHHMP's current hourly rate, and in line with the fully-burdened hourly rate.

## 4. CONCLUSION

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Based on the outcomes of the Cost of Service Analysis, Fee Establishment, and Cost Recovery Evaluation presented in this Study, the proposed Fee Schedule has been prepared by CCHHMP staff for implementation and included in the Division's Staff Report to the Board of Supervisors.

The adopted Fee Schedule should become a living document, but handled with care. The following are recommended best management practices for the County's consideration:

- A fundamental purpose of the fee schedule is to provide clarity and transparency to the public and to staff regarding fees imposed by the County. Once adopted by the Board of Supervisors, the fee schedule is the final word on the amount and method in which fees should be charged and supersedes all previous fee schedules. If it is discovered that the master document is missing certain fees, those fees will eventually need to be added to the master fee schedule and should not exist outside the consolidated, master framework.
- A comprehensive review and analysis to the extent presented in this report is recommended on a periodic basis, approximately every three to five years in alignment with the County MOU frequency. Conducting a comprehensive fee study is not an annual requirement, and only becomes worthwhile over time as shifts in organization, local practices, legislative values, or legal requirements result in significant change. In between comprehensive fee program reviews, CCHHMP could consider adjusting these fees on an annual basis to keep pace with agreed upon labor adjustments as set in the divisions MOU.

As discussed throughout this report, the intent of the proposed fee schedule is to improve the County's recovery of costs incurred to provide individual services, as well as adjust fees where the fees charged exceed the average costs incurred. Predicting the amount to which any adopted fee increases will affect County revenues is difficult to quantify. For the near-term, CCHHMP should not count on increased revenues to meet any specific expenditure plan. Experience with the revised fee amounts should be gained first before revenue projections are revised. However, unless there is some significant, long-term change in activity levels, proposed fee amendments should enhance cost recovery performance over time, providing it the ability to stretch other resources further for the benefit of the public at-large.

*Disclaimer: In preparing this report and the opinions and recommendations included herein, NBS has relied on a number of principal assumptions and considerations with regard to financial matters, conditions and events that may occur in the future. This information and assumptions, including the County's budgets, time estimate data, and workload information from County staff, were provided by sources we believe to be reliable; however, NBS has not independently verified such information and assumptions. While we believe NBS' use of such information and assumptions is reasonable for the purpose of this report, some assumptions will invariably not materialize as stated herein and may vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by us or provided to us by others.*

## ***APPENDIX A***

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### ***Cost of Service Analysis – Hazardous Materials Programs***



				Activity Service Cost Analysis				Cost Recovery Analysis			Annual Estimated Revenue Analysis		
No.	Fee Description	Fee Unit Type	Notes	Estimated Average Labor Time Per Activity (hours)			Cost of Service Per Activity	Current Fee	Routine Inspection Frequency (years)	Existing Cost Recovery %	Estimated Volume of Activity	Annual Estimated Revenues	
				Hazmat	Training	Total						Current Fee	Full Cost Recovery
				\$ 365	\$ 365								
HAZARDOUS MATERIALS													
7100	Hazardous Waste Generator Program												
	Annual Permit Fee												
7110/7140	Very Small Quantity Generator not including RCRA waste Generation (Less than 1.3 tons)	flat		0.42	0.13	0.55	\$ 200	NEW	5	0%	1218	\$ -	\$ 244,089
7101/7131	Less than 5 tons/year	flat		1.16	0.13	1.28	\$ 468	\$ 485	2	104%	982	\$ 476,270	\$ 459,936
7102/7132	5 tons or more but less than 12 tons/year	flat		1.31	0.13	1.44	\$ 526	\$ 658	2	125%	166	\$ 109,228	\$ 87,281
7103/7133	12 tons or more but less than 25 tons/year	flat		2.10	0.69	2.79	\$ 1,017	\$ 986	2	97%	85	\$ 83,810	\$ 86,450
7104/7134	25 tons or more but less than 50 tons/year	flat		5.25	0.69	5.94	\$ 2,165	\$ 1,516	2	70%	55	\$ 83,380	\$ 119,101
7105/7135	50 tons or more but less than 250 tons/year	flat		10.50	0.69	11.19	\$ 4,080	\$ 3,188	2	78%	67	\$ 213,596	\$ 273,327
7106/7136	250 tons or more but less than 500 tons/year	flat		31.50	2.10	33.60	\$ 12,250	\$ 10,559	1	86%	6	\$ 63,354	\$ 73,499
7107/7137	500 tons or more but less than 1,000 tons/year	flat		42.00	5.25	47.25	\$ 17,226	\$ 16,517	1	96%	5	\$ 82,585	\$ 86,132
7108/7138	1,000 tons or more but less than 2,000 tons/year	flat		52.50	15.75	68.25	\$ 24,882	\$ 26,897	1	108%	1	\$ 26,897	\$ 24,882
7109/7139	2,000 tons or more/year	flat		84.00	26.25	110.25	\$ 40,195	\$ 57,409	1	143%	6	\$ 344,454	\$ 241,168
	Onsite Treatment		[3]										
7182/7186	Permit by Rule (Fixed Units)	per instance		12.60	4.67	17.27	\$ 6,295	\$ 3,068	1	49%	9	\$ 27,612	\$ 56,655
7180	Conditional Authorization	per instance		9.45	4.67	14.12	\$ 5,147	\$ 3,068	2	60%	13	\$ 39,884	\$ 66,906
7111/7181	Conditional Exemption	per instance		2.10	4.67	6.77	\$ 2,467	\$ 614	2	25%	8	\$ 4,912	\$ 19,736
	Service Fees - Application Review												
7184/7187/7188	During Normal Business Hours	per hour		1.00	0.00	1.00	\$ 365	\$ 257	1	70%	5	\$ 1,285	\$ 1,823
	After Normal Business Hours	per hour		1.00	0.00	1.00	\$ 404	\$ 280	1	69%	0	\$ -	\$ -

				Activity Service Cost Analysis				Cost Recovery Analysis			Annual Estimated Revenue Analysis		
No.	Fee Description	Fee Unit Type	Notes	Estimated Average Labor Time Per Activity (hours)			Cost of Service Per Activity	Current Fee	Routine Inspection Frequency (years)	Existing Cost Recovery %	Estimated Volume of Activity	Annual Estimated Revenues	
				Hazmat	Training	Total						Current Fee	Full Cost Recovery
				\$ 365	\$ 365								
7200	Hazardous Materials Business Plan Program												
	Annual Permit Fee												
7201	Less than 1,000	flat		1.05	0.11	1.16	\$ 421	\$ 254	2	60%	615	\$ 156,210	\$ 258,969
7202/7203	1,000 or more but less than 10,000	flat		1.35	0.11	1.46	\$ 531	\$ 672	2	127%	1450	\$ 974,400	\$ 770,160
7204/7205	10,000 or more but less than 100,000												
	1-15 chemicals	flat		1.51	1.05	2.56	\$ 935	\$ 1,051	2	112%	429	\$ 450,879	\$ 401,036
	16-50 chemicals	flat		1.62	2.10	3.72	\$ 1,357	\$ 1,051	2	77%	77	\$ 80,927	\$ 104,493
	51+ chemicals	flat		1.95	2.10	4.05	\$ 1,475	\$ 1,051	2	71%	3	\$ 3,153	\$ 4,426
7206/7207	100,000 or more but less than 250,000												
	1-15 chemicals	flat		2.16	1.05	3.21	\$ 1,171	\$ 1,905	2	163%	245	\$ 466,725	\$ 286,991
	16-50 chemicals	flat		2.43	2.10	4.53	\$ 1,653	\$ 1,905	2	115%	40	\$ 76,200	\$ 66,111
	51+ chemicals	flat		2.70	2.10	4.80	\$ 1,751	\$ 1,905	2	109%	5	\$ 9,525	\$ 8,757
7208/7209	250,000 or more but less than 500,000												
	1-15 chemicals	flat		3.31	2.10	5.41	\$ 1,971	\$ 3,522	2	179%	92	\$ 324,024	\$ 181,374
	16-50 chemicals	flat		3.86	2.10	5.96	\$ 2,172	\$ 3,522	2	162%	20	\$ 70,440	\$ 43,449
	51+ chemicals	flat		4.13	2.10	6.23	\$ 2,273	\$ 3,522	2	155%	7	\$ 24,654	\$ 15,910
7210	500,000 or more but less than 2.5 million												
	1-15 chemicals	flat		4.41	16.50	20.91	\$ 7,623	\$ 7,427	2	97%	14	\$ 103,978	\$ 106,727
	16-50 chemicals	flat		4.41	16.50	20.91	\$ 7,623	\$ 7,427	2	97%	27	\$ 200,529	\$ 205,830
	51+ chemicals	flat		4.41	16.50	20.91	\$ 7,623	\$ 7,427	2	97%	13	\$ 96,551	\$ 99,103
	Community Warning System Fee	flat	[6]				\$ 3,744						
7211	2.5 million or more but less than 10 million												
	1-15 chemicals	flat		6.62	16.50	23.12	\$ 8,427	\$ 11,898	2	141%	2	\$ 23,796	\$ 16,854
	16-50 chemicals	flat		6.62	16.50	23.12	\$ 8,427	\$ 11,898	2	141%	5	\$ 59,490	\$ 42,136
	51+ chemicals	flat		6.62	16.50	23.12	\$ 8,427	\$ 11,898	2	141%	6	\$ 71,388	\$ 50,563
	Community Warning System Fee	flat	[6]				\$ 6,823						
7212	10 million or more but less than 100 million												
	1-15 chemicals	flat		8.82	44.00	52.82	\$ 19,257	\$ 19,441	2	101%	1	\$ 19,441	\$ 19,257
	16-50 chemicals	flat		8.82	44.00	52.82	\$ 19,257	\$ 19,441	2	101%	7	\$ 136,087	\$ 134,799
	51+ chemicals	flat		8.82	44.00	52.82	\$ 19,257	\$ 19,441	2	101%	4	\$ 77,764	\$ 77,028
	Community Warning System Fee	flat	[6]				\$ 12,247						
7213	100 million or more but less than 1 billion	flat		33.08	66.00	99.08	\$ 36,121	\$ 34,242	2	95%	6	\$ 205,452	\$ 216,724
	Community Warning System Fee	flat	[6]				\$ 23,787						
7214/7216	1 billion+ including Refinery	flat		66.15	110.00	176.15	\$ 64,220	\$ 70,389	1	110%	5	\$ 351,945	\$ 321,102
	Community Warning System Fee	flat	[6]				\$ 52,953						
7217	Conditionally Exempt	flat		0.13	0.00	0.13	\$ 48	No Charge	1	0%	8	\$ -	\$ 383
	Service Fees		[2]										
	Exemption Application Review	per hour		1.00	0.00	1.00	\$ 365	\$ 257	1	70%	8	\$ 2,056	\$ 2,917

				Activity Service Cost Analysis				Cost Recovery Analysis			Annual Estimated Revenue Analysis		
No.	Fee Description	Fee Unit Type	Notes	Estimated Average Labor Time Per Activity (hours)			Cost of Service Per Activity	Current Fee	Routine Inspection Frequency (years)	Existing Cost Recovery %	Estimated Volume of Activity	Annual Estimated Revenues	
				Hazmat	Training	Total						Current Fee	Full Cost Recovery
				\$ 365	\$ 365								
7300	Underground Storage Tank Program												
7302	UST Base Fee (1st Tank)	flat		6.50	0.40	6.90	\$ 2,515	\$ 480	1	19%	381	\$ 182,880	\$ 958,376
7304	Each Additional Tank	per tank		1.58	0.00	1.58	\$ 574	\$ 720	1	125%	933	\$ 671,760	\$ 535,739
7314	UST Installation (1st Tank)	flat		19.95	0.00	19.95	\$ 7,273	\$ 4,753	1	65%	3	\$ 14,259	\$ 21,820
7314	Each Additional Tank	per tank		2.10	0.00	2.10	\$ 766	\$ 514	1	67%	9	\$ 4,626	\$ 6,891
7316	UST Closure (1st Tank)	flat		7.35	0.00	7.35	\$ 2,680	\$ 1,798	1	67%	8	\$ 14,384	\$ 21,437
7316	Each Additional Tank	per tank		1.58	0.00	1.58	\$ 574	\$ 385	1	67%	8	\$ 3,080	\$ 4,594
	UST Modification												
7324	Minor	flat		3.68	0.00	3.68	\$ 1,340	\$ 938	1	70%	60	\$ 56,280	\$ 80,389
7323	Moderate	flat		8.40	0.00	8.40	\$ 3,062	\$ 2,698	1	88%	30	\$ 80,940	\$ 91,874
7321	Major	flat		14.18	0.00	14.18	\$ 5,168	\$ 4,753	1	92%	10	\$ 47,530	\$ 51,679
7500	California Accidental Release Prevention (CalARP) Program												
7503	Industrial Safety Ordinance												
	Bulk Liquid Storage	flat		183.75	0.00	183.75	\$ 66,991	NEW	3	0%	0	\$ -	\$ -
	Program 3/ISO Facility (ISO only fee)	flat		168.84	0.00	168.84	\$ 61,555	\$ 15,331	1	25%	4	\$ 61,324	\$ 246,222
	Program 4/ISO Facility (ISO only fee)	flat		162.96	0.00	162.96	\$ 59,412	\$ 141,792	1	239%	3	\$ 425,375	\$ 178,235
7505	CalARP Program Annual Regulatory Inspection		[5]										
	Program 1	flat		19.95	0.00	19.95	\$ 7,273	\$ 5,113	3	70%	8	\$ 40,900	\$ 58,187
	Program 2	flat		113.40	0.00	113.40	\$ 41,343	\$ 15,530	3	38%	12	\$ 186,359	\$ 496,118
	Program 3	flat		183.75	0.00	183.75	\$ 66,991	\$ 68,522	3	102%	12	\$ 822,261	\$ 803,895
	Program 3/ISO Facility (CUPA only fee)	flat		112.56	0.00	112.56	\$ 41,037	\$ 33,698	3	82%	4	\$ 134,792	\$ 164,148
	Program 4/ISO Facility (CUPA only fee)	flat		244.44	0.00	244.44	\$ 89,118	\$ 233,748	3	262%	3	\$ 701,244	\$ 267,353
	CalARP Risk Factor Analysis Fee	flat		To be calculated using existing MCEI				Included above					
7600	Aboveground Petroleum Storage Act Program												
7601	Less than 10,000 gallons	flat		1.05	0.01	1.06	\$ 386	\$ 536	3	139%	256	\$ 137,216	\$ 98,921
7602	10,000 gallons or more but less than 100,000 gallons	flat		2.63	0.10	2.72	\$ 992	\$ 1,206	2	122%	66	\$ 79,596	\$ 65,469
7603	100,000 gallons or more but less than 1 million gallons	flat		8.40	3.42	11.82	\$ 4,308	\$ 4,822	2	112%	9	\$ 43,398	\$ 38,770
7604	1 million gallons or more but less than 10 million gallons	flat		13.65	13.93	27.58	\$ 10,054	\$ 6,429	2	64%	5	\$ 32,145	\$ 50,272
7605	10 million gallons or more but less than 100 million gallons	flat		21.00	17.47	38.47	\$ 14,025	\$ 9,644	2	69%	5	\$ 48,220	\$ 70,127
7606	100 million gallons ore more	flat		84.00	32.67	116.67	\$ 42,534	\$ 16,074	1	38%	7	\$ 112,518	\$ 297,736

				Activity Service Cost Analysis			Cost Recovery Analysis			Annual Estimated Revenue Analysis			
No.	Fee Description	Fee Unit Type	Notes	Estimated Average Labor Time Per Activity (hours)			Cost of Service Per Activity	Current Fee	Routine Inspection Frequency (years)	Existing Cost Recovery %	Estimated Volume of Activity	Annual Estimated Revenues	
				Hazmat	Training	Total						Current Fee	Full Cost Recovery
				\$ 365	\$ 365								
1	Miscellaneous Fees												
	Incident Response Fee		[4]										
	During Business Hours	per hour		1.00	0.00	1.00	\$ 365	\$ 257	1	70%	0	\$ -	\$ -
	After Business Hours	per hour		1.00	0.00	1.00	\$ 404	\$ 280	1	69%	0	\$ -	\$ -
	Re-Inspection Fee	per hour		1.00	0.00	1.00	\$ 365	\$ 257	1	70%	0	\$ -	\$ -
	Audit Verification Fee	per hour		1.00	0.00	1.00	\$ 365	\$ 151	1	41%	0	\$ -	\$ -
	Initial Permit Processing Fee	flat		0.26	0.00	0.26	\$ 96	\$ 60	1	63%	0	\$ -	\$ -
2	For services requested, which have no fee listed in this fee schedule												
	During Normal Business Hours	per hour		1.00	0.00	1.00	\$ 365	\$ 257	1	70%	0	\$ -	\$ -
	After Normal Business Hours	per hour		1.00	0.00	1.00	\$ 404	\$ 280	1	69%	0	\$ -	\$ -
TOTAL HAZARDOUS MATERIALS												\$ 9,443,967	\$ 9,884,334

Notes

[1] Sourced from: "fee-exhibits.pdf" provided by the County

[2] Per unstaffed remote facility

[3] Permit to be charged for each instance at the facility, rather than one fee for the entire facility regardless of the number of treatment units.

[4] First incident response of \$3,000 or less to a regulated facility in the HMBP Program exempt from billing.

[5] Additional program training costs will be charged to each individual facility based on facility risk index level calculated and maintained by County.

[6] Proportional CWS costs calculated by County. NBS did not evaluate. See Appendix E for calculation details.

## ***APPENDIX B***

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### ***Fully-Burdened Hourly Rate – Hazardous Materials Programs***

LABOR EXPENDITURES AND STATISTICS

				Allocated or Direct Assignment of Cost to Functional Activity			
Expenditure or Statistic	2022-23 Adopted Budget	Adjustments	Net Divisional Expenditures to be Considered	General Support Activities	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
Labor Hours Allocation Percentage - All			100%	55.23%	5.01%	1.21%	38.55%
Labor Hours Allocation Percentage - Hazmat			100%	58.14%	0.00%	1.27%	40.59%
Labor Hours Allocation Percentage - CWS			100%	0.00%	100.00%	0.00%	0.00%
<b>Hazmat</b>							
1011 Permanent Salaries	\$ 5,350,989	462,384	\$ 5,813,373	\$ 3,380,057	\$ -	\$ 73,804	\$ 2,359,512
1013 Temporary Salaries	100,000	(100,000)	-	-	-	-	-
1014 Permanent Overtime	150,000	-	150,000	87,214	-	1,904	60,881
1015 Deferred Comp	57,832	-	57,832	33,625	-	734	23,473
1019-1070 Benefits	3,525,576	322,232	3,847,808	2,237,223	-	48,850	1,561,735
<b>Subtotal Hazmat</b>	<b>\$ 9,184,396</b>	<b>\$ 684,617</b>	<b>\$ 9,869,013</b>	<b>\$ 5,738,119</b>	<b>\$ -</b>	<b>\$ 125,293</b>	<b>\$ 4,005,601</b>
<b>Community Warning System</b>							
Salaries & Benefits	\$ 538,537	-	\$ 538,537	\$ -	\$ 538,537	\$ -	\$ -
<b>Subtotal Community Warning System</b>	<b>\$ 538,537</b>	<b>\$ -</b>	<b>\$ 538,537</b>	<b>\$ -</b>	<b>\$ 538,537</b>	<b>\$ -</b>	<b>\$ -</b>
<b>TOTAL LABOR</b>	<b>\$ 9,722,933</b>	<b>\$ 684,617</b>	<b>\$ 10,407,550</b>	<b>\$ 5,738,119</b>	<b>\$ 538,537</b>	<b>\$ 125,293</b>	<b>\$ 4,005,601</b>
Functional "Productive" Labor Hours			74,660	40,655	4,983	930	28,092

RECURRING NON-LABOR EXPENDITURES

				Allocated or Direct Assignment of Cost to Functional Activity			
Operating Expenditures By Budget Unit	2022-23 Adopted Budget	Adjustments	Net Divisional Expenditures to be Considered	General Support Activities	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
<b>Hazmat</b>							
2100 OFFICE EXPENSE	\$ 65,000	\$ -	\$ 65,000	\$ 37,793	\$ -	\$ 825	\$ 26,382
2102 BOOKS,PERIODICALS,SUBSCR	5,000	-	5,000	2,907	-	63	2,029
2103 POSTAGE	20,000	-	20,000	11,629	-	254	8,118
2110 COMMUNICATIONS	100,000	-	100,000	58,143	-	1,270	40,588
2111 TELEPHONE EXCHANGE	12,500	-	12,500	7,268	-	159	5,073
2130 SMALL TOOLS & INSTRUMENTS	5,000	-	5,000	2,907	-	63	2,029
2131, MINOR EQUIPMENT	50,000	-	50,000	29,071	-	635	20,294
2140 MEDICAL & LAB SUPPLIES	15,000	-	15,000	8,721	-	190	6,088
2150 FOOD	9,000	-	9,000	5,233	-	114	3,653
2160 CLOTHING & PERSONAL SUP	22,500	-	22,500	13,082	-	286	9,132
2170 HOUSEHOLD EXPENSE	500	-	500	291	-	6	203
2190 PUB & LEGAL NOTICES	2,500	-	2,500	1,454	-	32	1,015
2200 MEMBERSHIPS	15,000	-	15,000	8,721	-	190	6,088
2250, RENTS & LEASES-EQUIPMENT	15,000	-	15,000	8,721	-	190	6,088
2251 COMPUTER SOFTWARE COST	10,000	-	10,000	5,814	-	127	4,059
2262, BLDG OCCUPANCY COSTS	452,928	-	452,928	263,345	-	5,750	183,833
2270 MAINTENANCE - EQUIPMENT	12,500	-	12,500	7,268	-	159	5,073
2276 MNTN RADIO-ELECTRON EQUIP	10,000	-	10,000	5,814	-	127	4,059
2284, REQUESTED MAINTENANCE	50,000	-	50,000	29,071	-	635	20,294
2301 AUTO MILEAGE - EMPLOYEES	80,000	-	80,000	46,514	-	1,016	32,470
2303 OTHER TRAVEL - EMPLOYEES	1,000	-	1,000	581	-	13	406
2310 PROFESSIONAL/SPEC SVCS	277,278	-	277,278	277,278	-	-	-
2314 CONTRACTED SERVICES	20,000	-	20,000	20,000	-	-	-
2315 DATA PROCESSING SVCS	7,500	-	7,500	4,361	-	95	3,044
2320 OUTSIDE MEDICAL SERVICES	500	-	500	291	-	6	203
2326 Information Security charges	10,000	-	10,000	5,814	-	127	4,059
2328 ADMINISTRATION	337,886	(337,886)	-	-	-	-	-
2331 GSD Courier Svc.	4,000	-	4,000	2,326	-	51	1,624
2335 Other Telecom Charges	50,000	-	50,000	29,071	-	635	20,294
2000 OTHER INTRDPTMNTL CHARGES	10,000	-	10,000	5,814	-	127	4,059
2467, ED SUPPLIES & COURSES	20,000	-	20,000	11,629	-	254	8,118
2479 OTHER SPECIAL DEPT EXP	100,000	-	100,000	58,143	-	1,270	40,588
2490 MISC SERVICES & SUPPLIES	5,000	-	5,000	2,907	-	63	2,029
3000 Other charges	1,500	-	1,500	1,500	-	-	-
4000 FIXED ASSETS	100,000	(100,000)	-	-	-	-	-
5000 EXPENDITURE TRANSFERS	119,419	(119,419)	-	-	-	-	-
<b>Subtotal Hazmat</b>	<b>\$ 2,016,511</b>	<b>\$ (557,305)</b>	<b>\$ 1,459,206</b>	<b>\$ 973,483</b>	<b>\$ -</b>	<b>\$ 14,732</b>	<b>\$ 470,990</b>



RECURRING NON-LABOR EXPENDITURES

Operating Expenditures By Budget Unit	2022-23 Adopted Budget	Adjustments	Net Divisional Expenditures to be Considered	Allocated or Direct Assignment of Cost to Functional Activity			
				General Support Activities	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
<b>Community Warning System</b>							
2100 OFFICE EXPENSE	\$ 5,000	\$ -	\$ 5,000	\$ -	\$ 5,000	\$ -	\$ -
2103 POSTAGE	200	-	200	-	200	-	-
2110 COMMUNICATIONS	6,400	-	6,400	-	6,400	-	-
2111 TELEPHONE EXCHANGE	400	-	400	-	400	-	-
2131 MINOR FURNITURE/EQUIPMENT	1,000	-	1,000	-	1,000	-	-
2132 MINOR COMPUTER EQUIPMENT	5,000	-	5,000	-	5,000	-	-
2200 MEMBERSHIPS	700	-	700	-	700	-	-
2260 RENTS & LEASES - REAL ESTATE	65,700	-	65,700	-	65,700	-	-
2270 MAINTENANCE - EQUIPMENT	-	-	-	-	-	-	-
2284 REQUESTED MAINTENANCE	1,000	-	1,000	-	1,000	-	-
2301 AUTO MILEAGE - EMPLOYEES	200	-	200	-	200	-	-
2303 OTHER TRAVEL - EMPLOYEES	3,000	-	3,000	-	3,000	-	-
2310 PROFESSIONAL/SPEC SVCS	805,712	-	805,712	-	805,712	-	-
2467 ED SUPPLIES & COURSES	5,000	-	5,000	-	5,000	-	-
2473 SPECIALIZED PRINTING	10,000	-	10,000	-	10,000	-	-
4952 MISC EQUIPMENT	60,000	-	60,000	-	60,000	-	-
5011 REIMBURSEMENTS GOV/GOV	12,000	-	12,000	-	12,000	-	-
<b>Subtotal Community Warning System</b>	<b>\$ 981,312</b>	<b>\$ -</b>	<b>\$ 981,312</b>	<b>\$ -</b>	<b>\$ 981,312</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Non-Labor</b>	<b>\$ 2,997,823</b>	<b>\$ (557,305)</b>	<b>\$ 2,440,518</b>	<b>\$ 973,483</b>	<b>\$ 981,312</b>	<b>\$ 14,732</b>	<b>\$ 470,990</b>

OVERHEAD COSTS

				Allocated or Direct Assignment of Cost to Functional Activity			
Allocated Indirect/Support Services	Overhead Cost	Adjustments	Net Divisional Expenditures to be Considered	General Support Activities	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
Department Administration	\$ 337,886	\$ -	\$ 337,886	\$ 186,614	\$ 16,927	\$ 4,075	\$ 130,270
Countywide Overhead	171,666	-	171,666	94,811	8,600	2,070	66,184
<b>TOTAL OVERHEAD COSTS</b>	<b>\$ 509,552</b>	<b>\$ -</b>	<b>\$ 509,552</b>	<b>\$ 281,425</b>	<b>\$ 25,528</b>	<b>\$ 6,145</b>	<b>\$ 196,454</b>

SUMMARY OF LABOR, NON-LABOR, & OVERHEAD COSTS

		Allocated or Direct Assignment of Cost to Functional Activity			
Cost Element	Established Cost	General Support Activities	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
Labor	\$ 10,407,550	\$ 5,738,119	\$ 538,537	\$ 125,293	\$ 4,005,601
Recurring Non-Labor	2,440,518	973,483	981,312	14,732	470,990
Overhead	509,552	281,425	25,528	6,145	196,454
<b>TOTAL LABOR, NON-LABOR, &amp; OVERHEAD COST</b>	<b>\$ 13,357,619</b>	<b>\$ 6,993,027</b>	<b>\$ 1,545,377</b>	<b>\$ 146,171</b>	<b>\$ 4,673,045</b>

ALLOCATION OF COMMON ACTIVITIES

		Allocated or Direct Assignment of Cost to Functional Activity		
Cost Layer	Established Cost	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities
General Support Activities	\$ 6,993,027	\$ -	\$ 212,104	\$ 6,780,923
<b>Total</b>	<b>\$ 6,993,027</b>	<b>\$ -</b>	<b>\$ 212,104</b>	<b>\$ 6,780,923</b>

FULLY-BURDENED HOURLY BILLING RATE FOR RECOVERY IN FEES

Expenditure Type	Functional Activities / Cost Pools			Total
	Community Warning System	CalARP Risk Factor Analysis	Direct Services and Activities	
Labor	\$ 538,537	\$ 125,293	\$ 4,005,601	\$ 4,669,431
Recurring Non-Labor	981,312	14,732	470,990	1,467,035
Overhead	25,528	6,145	196,454	228,126
Allocated Common Activities	-	212,104	6,780,923	6,993,027
<b>Division Subtotal</b>	<b>\$ 1,545,377</b>	<b>\$ 358,275</b>	<b>\$ 11,453,968</b>	<b>\$ 13,357,619</b>
Other Funding Sources				
Grants / Misc Funding			\$ (524,418)	\$ (524,418)
R9200 - License/Permit/Franchises			(150,000)	(150,000)
R9300 - Fines/Forfeits/Penalties			(485,000)	(485,000)
R9800 - Miscellaneous Revenue			(53,000)	(53,000)
<b>Other Funding Source Subtotal</b>			<b>\$ (1,212,418)</b>	<b>\$ (1,212,418)</b>
<b>Division Total</b>	<b>\$ 1,545,377</b>	<b>\$ 358,275</b>	<b>\$ 10,241,550</b>	<b>\$ 12,145,201</b>
<b>Cost per Direct Hour Recoverable from Fees for Service</b>	<b>n/a</b>	<b>n/a</b>	<b>\$ 365</b>	
<i>Reference: Direct Hours Only</i>	n/a	n/a	28,092	

Notes

- [1] Sourced from: "FY 2022-2023 Budget Comparison.xlsx" provided by County
- [2] Reclass budgeted Administration costs
- [3] Budget adjustment to add (3) Supervising Hazardous Materials Specialists and remove (1) Assistant Director. Adjustment also includes increase in salary & benefit for Assistant Director and Director as a result of the reorganization.
- [4] Source: "ccap\_apv\_fy2223\_07.pdf" found on SCO website. Shared 50% to Hazmat based on budget allocation methodology.
- [5] Not currently utilizing County temporary support
- [6] Sourced from: "FY22-23 Approved Budget (1).pdf" provided by County
- [7] Capital expenditures and transfers excluded from calculation

## ***APPENDIX C***

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### ***Comparative Fee Survey – Hazardous Materials Programs***

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Contra Costa County					Comparison Agencies				
No.	Fee Description	Fee Unit Type	Current Fee	Full Cost Recovery	Alameda County	Sacramento County	San Mateo County	Santa Clara County	Sonoma County
7200	Hazardous Materials Business Plan Program								
	Annual Permit Fee								
7201	Less than 1,000	flat	\$ 254	\$ 421	1 Type HM Category 1 \$506				
7202/7203	1,000 or more but less than 10,000	flat	\$ 672	\$ 531	1-5 Types HM Category 1 \$762 Category 2 \$794 Category 3 \$823 Category 4 \$900 Category 5 \$946 Category 6 \$998 Category 7 \$1,055 Category 8 \$1,118			Hazmat Storage Facility-Minimal Storage Site: \$300	
7204/7205	10,000 or more but less than 100,000								
	1-15 chemicals	flat	\$ 1,051	\$ 935					
	16-50 chemicals	flat	\$ 1,051	\$ 1,357					
	51+ chemicals	flat	\$ 1,051	\$ 1,475					
7206/7207	100,000 or more but less than 250,000							Hazmat Storage Facility-Unstaffed Remote Site: \$300	
	1-15 chemicals	flat	\$ 1,905	\$ 1,171					
	16-50 chemicals	flat	\$ 1,905	\$ 1,653	6-10 Types HM Category 1 \$1,032 Category 2 \$1,067 Category 3 \$1,108 Category 4 \$1,149 Category 5 \$1,195 Category 6 \$1,241 Category 7 \$1,293 Category 8 \$1,344			HMBP Facility, 1-3 Chemicals: \$386	
	51+ chemicals	flat	\$ 1,905	\$ 1,751					
7208/7209	250,000 or more but less than 500,000					Hazardous Materials Land Use Fee - \$213/hr	Stores Mv Fuels, Waste Only: \$234	HMBP Facility, 4-6 Chemicals: \$590	
	1-15 chemicals	flat	\$ 3,522	\$ 1,971			Stores < 219 Gal, 1,999 Lbs, 879Cf: \$464	HMBP Facility, 7-9 Chemicals: \$737	Range 1: \$124
	16-50 chemicals	flat	\$ 3,522	\$ 2,172		Hazardous Materials Low Risk Annual Fee \$201			Range 2: \$578
	51+ chemicals	flat	\$ 3,522	\$ 2,273			Stores < 1,199 Gal, 9,999 Lbs, 4,799 Cf: \$693	HMBP Facility, 10-15 Chemicals: \$1,094	Range 3: \$841
7210	500,000 or more but less than 2.5 million				11-20 Types HM Category 1 \$1,260 Category 2 \$1,298 Category 3 \$1,341 Category 4 \$1,385 Category 5 \$1,434 Category 6 \$1,482 Category 7 \$1,537 Category 8 \$1,591	Hazardous Materials Disclosure Fee 1-3 Materials \$580	Stores < 3,499 Gal, 27,999 Lbs, 13,999 Cf: \$1,039	HMBP Facility, 16-21 Chemicals: \$1,288	Range 4: \$1,324
	1-15 chemicals	flat	\$ 7,427	\$ 7,623					Range 5: \$1,727
	16-50 chemicals	flat	\$ 7,427	\$ 7,623		Hazardous Materials Disclosure Fee 4-6 Materials \$764	Stores Radioactive Materials: \$447	HMBP Facility, Each Additional 6 Chemicals: \$155	Range 6: \$155
	51+ chemicals	flat	\$ 7,427	\$ 7,623		Hazardous Materials Disclosure Fee 7-9 Materials \$954	Stores < 6,999 Gal, 55,999Lbs, 27,999 Cf: \$1,616		Range 7: \$249
	Community Warning System Fee	flat	\$ 3,744					Hazmat Storage & HMBP Facility, 1-3: \$406	
7211	2.5 million or more but less than 10 million					Hazardous Materials Disclosure Fee 10-15 Materials \$1,420	Stores < 15,999 Gal, 111,999Lbs, 55,999 Cf: \$2,006	Hazmat Storage & HMBP Facility, 4-6 Chemicals: \$625	Remote Unstaffed Sites one-time fee: \$309
	1-15 chemicals	flat	\$ 11,898	\$ 8,427	21-100 Types HM Category 1 \$2,237 Category 2 \$2,340 Category 3 \$2,460 Category 4 \$2,544 Category 5 \$2,646 Category 6 \$2,749 Category 7 \$2,911 Category 8 \$3,013	Each Additional 5 Materials \$169	Stores < 31,999 Gal, 223,999 Lbs, 111999 Cf: \$3,059	Hazmat Storage & HMBP Facility, 7-9 Chemicals: \$845	Restaurants greater than 1000 cubic feet of Carbon Dioxide: \$388
	16-50 chemicals	flat	\$ 11,898	\$ 8,427					
	51+ chemicals	flat	\$ 11,898	\$ 8,427		Hazardous Materials in Reportable Qty - Waste Only \$79			
	Community Warning System Fee	flat	\$ 6,823						
7212	10 million or more but less than 100 million						Stores > 32,000 Gal, 224,000 Lbs, 112000 Cf: \$4,108	Hazmat Storage & HMBP Fac, 10-15 Chemicals: \$1,173	
	1-15 chemicals	flat	\$ 19,441	\$ 19,257					
	16-50 chemicals	flat	\$ 19,441	\$ 19,257					
	51+ chemicals	flat	\$ 19,441	\$ 19,257				Hazmat Storage & HMBP Fac, 16-21 Chemicals: \$1,611	
	Community Warning System Fee	flat	\$ 12,247		>100 Types HM Category 1 \$2,598 Category 2 \$2,700 Category 3 \$2,803 Category 4 \$2,905 Category 5 \$3,007 Category 6 \$3,109 Category 7 \$3,212 Category 8 \$3,314 Category 19 \$17,893 Category 20 \$22,666 Category 21 \$27,436 Category 22 \$32,209				
7213	100 million or more but less than 1 billion		\$ 34,242	\$ 36,121				Hazmat Storage & HMBP Facility, 22+ Chemicals: \$2,049	
	Community Warning System Fee	flat	\$ 23,787						
7214/7216	1 billion+ including Refinery	flat	\$ 70,389	\$ 64,220					
	Community Warning System Fee	flat	\$ 52,953						
7217	Conditionally Exempt	flat	No Charge	\$ 48					
	Service Fees								
	Exemption Application Review	per hour	\$ 257	\$ 365					

Contra Costa County					Comparison Agencies				
No.	Fee Description	Fee Unit Type	Current Fee	Full Cost Recovery	Alameda County	Sacramento County	San Mateo County	Santa Clara County	Sonoma County
7300	Underground Storage Tank Program								
7302	UST Base Fee (1st Tank)	flat	\$ 480	\$ 2,515	1 Container: \$2,146 2 Containers: \$2,428 3 Containers: \$2,551 4 Containers: \$2,892 5 Containers: \$3,015 6 Containers: \$3,391 7 Containers: \$3,514 8 Containers: \$3,638 9 Containers: \$3,761 10 Containers: \$3,885 UST 11: \$2,689	Operating Permit: 1 Tank: \$1,193 2 Tanks: \$1,387 3 Tanks: \$1,565 4 Tanks: \$1,75 5 Tanks: \$1,987 6 Tanks: \$2,205 7 Tanks: \$2,439 8 Tanks: \$2,651 9 Tanks: \$2,810 10 Tanks: \$2,959 Each Additional Tank: \$211	\$ 828	\$ 1,130	\$ 1,637
7304	Each Additional Tank	per tank	\$ 720	\$ 574	Over 10 Containers: \$123/tank	Installation: 1 Tank: \$4,309 2 Tanks: \$4,657 3 Tanks: \$5,011 4 Tanks: \$5,357 5 Tanks: \$5,737 Each Additional: \$642	\$ 263	\$ 470	\$ 956
7314	UST Installation (1st Tank)	flat	\$ 4,753	\$ 7,273	\$ 8,768	Upgrade to Existing UST System, Including Piping: 1 Tank: \$2,769 2 Tanks: \$3,195 3 Tanks: \$3,621 4 Tanks: \$4,047 5 Tanks: \$4,473 Each Additional Tank: \$1,228	\$ 3,320	\$ 3,869	\$ 1,878
7314	Each Additional Tank	per tank	\$ 514	\$ 766	\$ 840	Upgrade to Existing UST system, Without Piping: 1 Tank: \$1,704 2 Tanks: \$2,130 3 Tanks: \$2,556 4 Tanks: \$2,982 5 Tanks: \$3,408 Each Additional Tank: \$707	No comparison available		\$ 263
					Plan Check - UST 1 - System Install: \$719 Plan Check - UST 2 - System Install: \$1,069 Plan Check - UST 3 - System Install: \$1,418 Plan Check - UST 4 - System Install: \$1,778 Plan Check - UST 6 - System Install: \$2,452 Plan Check - UST 8 - System Install: \$3,092 Plan Check - UST 14 - System Install: \$4,872 Plan Check - UST Per Tank Over 20 - System Install: \$289				
7316	UST Closure (1st Tank)	flat	\$ 1,798	\$ 2,680	\$ 3,161	Underground Storage Tank Repair: Tank, Piping or Monitoring System: \$1,209	Abandonment/Removal Fee: \$2,117	\$ 2,660	\$ 1,419
7316	Each Additional Tank	per tank	\$ 385	\$ 574	\$ 123	Underground Storage Tank Repair: Spill Containment: \$817	\$ 453	\$ 1,060	\$ 443
	UST Modification					Tank Removal and Permanent Closure In Place: 1 Tank: \$1,495 2 Tanks: \$1,704 3 Tanks: \$1,917 4 Tanks: \$2,130 5 Tanks: \$2,343 Each Additional Tank: \$247			
7324	Minor	flat	\$ 938	\$ 1,340	Minor: \$1,324 UST 2 - Modification: \$1,069 UST 3 - Modification: \$1,418 UST 4 - Modification: \$1,778 UST 9 - Modification: \$3,410 Major: \$2,741	Underground Storage Tank Temporary Closure - 1 Year: \$828	\$ 793	\$ 706	Repair Permit: \$625
7323	Moderate	flat	\$ 2,698	\$ 3,062			No comparison available		
7321	Major	flat	\$ 4,753	\$ 5,168					

Contra Costa County					Comparison Agencies								
No.	Fee Description	Fee Unit Type	Current Fee	Full Cost Recovery	Alameda County	Sacramento County	San Mateo County	Santa Clara County	Sonoma County				
7500	California Accidental Release Prevention (CalARP) Program												
7503	Industrial Safety Ordinance												
	Bulk Liquid Storage	flat	NEW	\$ 66,991	no comparison available	no comparison available	no comparison available	no comparison available	no comparison available				
	Program 3/ISO Facility (ISO only fee)	flat	\$ 15,331	\$ 61,555	CalARP DEH Review (hourly): \$174	Plan Review: Program Level 1 - \$2,313 Program Level 2 or 3 - \$5,074 Update/Revision - \$213	No comparison available	No comparison available	\$ 841				
	Program 4/ISO Facility (ISO only fee)	flat	\$ 141,792	\$ 59,412									
	Tier 3: 21-30 processes	flat	\$ 210,948	\$ -									
	Tier 4: 31+ processes	flat	\$ 125,565	\$ -									
7505	CalARP Program Annual Regulatory Inspection						CalARP Outside Consultant Review: \$141.50	Annual Activity: Program Level 1 - \$1,303 Program Level 2 - \$2,338 Program Level 3 - \$2,893 First Additional NCWS - \$217		\$ 583	\$ 1,328		
	Program 1	flat	\$ 5,113	\$ 7,273						\$ 777	\$ 1,558		
	Program 2	flat	\$ 15,530	\$ 41,343	\$ 971	\$ 1,558							
	Program 3		\$ 68,522	\$ 66,991	No comparison available	No comparison available							
	Program 3/ISO Facility	flat	\$ 33,698	\$ 41,037									
	Program 4/ISO Facility	flat	\$ 233,748	\$ 89,118									
	CalARP Risk Factor Analysis Fee	flat	Included above	To be calculated using existing MCEI	CalARP State Surcharge: \$270	Additional Covered Process \$767	No comparison available	No comparison available					
7600	Aboveground Petroleum Storage Act Program												
7601	Less than 10,000 gallons	flat	\$ 536	\$ 386					Exempt Farms, Nursery, Construction Site: \$523 SPCC 1,320 - 5,000 gal: \$841 SPCC 5,001-10k gal: \$890 SPCC >10k gal: \$1,683 State Surcharge: \$26 Tank in Underground: \$841	\$ 122	Tank Storage Capacity = >1,320 And <5k Gal: \$300 = >5k And <10k Gal: \$300 = >10k And <100k Gal: \$334 = >100k And <1 mil Gal: \$400 = >1 mil And <10 mil Gal: \$466 = >10 mil And <100 mil Gal: \$600 = >100 mil Gal: \$733	APSA Facility - SPCC Exempt: \$117  APSA Facility-SPCC Template (<10,000 Gal Cap): \$353  APSA Facility-10,000 To <50,000 Gal Capacity: \$824  APSA Facility-50,000+ Gal Capacity: \$1,413	Tier 1: \$258  Tier 2: \$518  Tier 3: 1,036  Tank Closure: \$485  Ea. Add'l: \$124
7602	10,000 gallons or more but less than 100,000 gallons	flat	\$ 1,206	\$ 992						\$ 575			
7603	100,000 gallons or more but less than 1 million gallons	flat	\$ 4,822	\$ 4,308						\$ 679			
7604	1 million gallons or more but less than 10 million gallons	flat	\$ 6,429	\$ 10,054	\$ 1,184								
7605	10 million gallons or more but less than 100 million gallons	flat	\$ 9,644	\$ 14,025	\$ 1,341								
7606	100 million gallons ore more	flat	\$ 16,074	\$ 42,534	\$ 1,341								
1	Miscellaneous Fees												
	Incident Response Fee												
	During Business Hours	per hour	\$ 257	\$ 365	\$ 174	\$ 213	No comparison available	No comparison available	\$ 124				
	After Business Hours	per hour	\$ 280	\$ 404					\$ 185				
	Re-Inspection Fee	per hour	\$ 257	\$ 365	\$ 174	213			No comparison available	No comparison available	\$ 170		
	Audit Verification Fee	per hour	\$ 151	\$ 365									
	Community Warning System Fee	per hour	\$ 101	\$ -	No comparison available	No comparison available					No comparison available		
	Initial Permit Processing Fee	flat	\$ 60	\$ 96									
2	For services requested, which have no fee listed in this fee schedule												
	During Normal Business Hours	per hour	\$ 257	\$ 365	\$ 174	\$ 213	\$ 198	\$ 353	\$ 124				
	After Normal Business Hours	per hour	\$ 280	\$ 404					\$ 185				

## **APPENDIX D**

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### ***Modified Chemical Exposure Index***

**CONTRA COSTA COUNTY HEALTH DEPARTMENT  
CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM  
RELATIVE RISK DETERMINATION METHODOLOGY**

**I. INTRODUCTION.** The Contra Costa County Health Department uses the Chemical Exposure Index (CEI)<sup>1</sup>, as modified, to rank the relative potential of acute health hazard to people from possible chemical release incidents. The Modified CEI (MCEI) is used by the Department for the purpose of assessing stationary source fees. The MCEI formula is intended to provide a relatively simple method for comparing relative chemical toxic hazards, resulting in fees that fairly reflect the hazard potential of the facilities in the County.

The MCEI accounts for the following six factors that could influence the magnitude of a potential regulated substance exposure:

1. The potential health hazard posed by the regulated substance measured by the toxic endpoint and the vapor pressure (volatilization driving force) of the material.
2. The vapor quantity available for dispersion based on the largest single container of the regulated substance.
3. The distance to the nearest receptor.
4. The degree of dispersivity and vapor density as related to the molecular weight of the substance.
5. The number of processes using regulated substances at a stationary source.
6. Accident history.

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<sup>1</sup>For information regarding the Chemical Exposure Index, see *Dow Chemical's Chemical Exposure Guide*, published by the Center for Chemical Process Safety, American Institute of Chemical Engineers, 1994, New York, New York.

## II. MODIFIED CHEMICAL EXPOSURE INDEX (MCEI) DETERMINATION METHODOLOGY.

### A. Regulated Substance MCEI.

A Regulated Substance MCEI is determined for each regulated substance handled at a stationary source in quantities above the threshold quantities established by the regulations for the California Accidental Release Prevention Program. The MCEI for a Regulated Substance is determined by multiplying the applicable scale numbers for the various risk factors (Subsection B), as follows:

$$\begin{array}{ccccccccc}
 1. & & 2. & & 3. & & 4. & & 5. \\
 \text{Regulated} & & \text{Largest} & & \text{Distance} & & \text{Molecular} & & \text{Modified} \\
 \text{Substance} & & \text{Single} & & \text{Scale No.} & & \text{Weight} & & \text{Chemical Exposure} \\
 \text{Scale No.} & \times & \text{Container} & \times & & \times & \text{Scale No.} & = & \text{Index} \\
 & & \text{Scale No.} & & & & & & 
 \end{array}$$

### B. Determination of Risk Factor Scale Numbers.

**1. Regulated Substance Scale Number.** Both the concentration at which a material is acutely toxic and the vapor/partial pressure that creates the driving force to volatilize and maintain the material in the atmosphere affect this scale number. For purposes of this scale number, the toxic endpoints, in parts per million, are used as the toxicity measurement. Volatility is measured by the vapor/partial pressure in mm Hg @ 25°C (millimeters of Mercury at 25 degrees Centigrade), up to a maximum of 760 mm Hg.

The Regulated Substance Scale factor is determined by multiplying the toxic endpoint concentration by 760, and dividing that number by the vapor/partial pressure in mm Hg. The Regulated Substance Scale factors are assigned the following Regulated Substance Scale Numbers.

Regulated Substance Scale Factor	Regulated Substance Scale Number
0 - .99	5
1.0 - 9.9	4
10.0 - 99.0	3
100 - 999	2
1,000 - 1000,000	1
>100,000	0

For **flammable substances and sulfuric acid** in a mixture with a flash point < 73°F the Regulated Substances Scale Number is two (2). For solids, the Regulated Substances Scale Number of two (2) or three (3) is assigned. Solids that are considered extremely hazardous, such as vanadium pentoxide and acrylamide (Note 3 from Table 3 in Section 2770.5), are assigned Scale Number 2. Solids that are considered extremely hazardous substances that are reactive solids such as sodium cyanide, phosphorus, and potassium cyanide (Note 4 from Table 3 in Section 2770.5), are assigned Scale Number 3.



**2. Largest Single Container Scale Number.** The Scale Number for the largest single container is determined by taking the  $\text{Log}_{10}$  of the maximum amount of regulated substance, in pounds, stored in a single container at the stationary source.

**3. Distance Scale Number.** This factor quantifies the distance between the point of release and the public or environmental receptor. The term public receptor means offsite residences, institutions (e.g., schools, hospitals), industrial, commercial and office buildings, parks or recreational areas inhabited or occupied by the public at any time without restriction by the stationary source where members of the public could be exposed to toxic concentrations, radiant heat or overpressure, as a result of an accidental release. (See Title 19 Cal. Code Regs. Division 2 Chapter 4.5.) The term environmental receptor means natural areas such as national or state parks, forests, or monuments, officially designated wildlife sanctuaries, preserves, refuges or areas, and federal wilderness areas, that could be exposed at any time to toxic concentrations, radiant heat, or overpressure greater than or equal to the endpoints, as a result of an accidental release and that can be identified on local U.S. Geological Survey maps. (See Title 19 Cal. Code Regs. Division 2 Chapter 4.5.)

Distance	Scale Number
<1,000 ft.	4
1,000 - 5,279 ft.	3
1 mile - 5 miles	2
>5 miles - 15 miles	1
>15 miles	0

**4. Molecular Weight Scale Number.** The density of the vapor is directly related to the molecular weight and inversely affects the rate of dispersion. Therefore, regulated substances have been assigned the following scale numbers based upon their molecular weight.

Molecular Weight	Scale Number
>45	4
34 - 45	3
23 - 33	2
15-22	1
<15	0

**Exceptions.** The above formula does not apply to substances such as ammonia and hydrogen fluoride, which form heavier-than-air vapor clouds due to the formation of aerosols (ammonia) and strong intermolecular forces (hydrogen fluoride). These regulated substances are assigned Scale Number 4. Solids that are considered extremely hazardous (Note 3 from Table 3 in Section 2770.5) are assigned a Scale Number of 2.

**C. Stationary Source MCEI or Risk Ranking Factor (RF).** A stationary source's MCEI and RF is obtained by adding the Regulated Substance MCEI for each regulated substance handled at the stationary source, and multiplying that number by Process Scale Number for the stationary source. If there has been a level-three accident (as defined by the Community Warning System) in the last three years, the MCEI and RF will be increased by a factor of 10% for each level-three accident in this time period.

**1. Process Scale Number.** The relative risk for an accidental release from a stationary source is directly related to the amount of handling of regulated substances at the source. A stationary source's MCEI uses the number of California Accidental Release Prevention Program covered processes at a stationary source as a determination of this factor.

Number of Processes	Scale Number
>10	4
6 - 10	3
3 - 5	2
0 - 2	1

**2. Accident History Scale Factor.** A factor of 1.1 will be used for each level-three incident occurring in a rolling three-year period. The first accident in this time period will have a factor of 1.1. If there have been two level three accidents, the factor will be 1.2, etc.

Date: April 22, 2010

## ***APPENDIX E***

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### ***Community Warning System Fee Calculation***

## Contra Costa County Community Warning System Fee

Contra Costa Health (CCH) conducted a review of notification data from 2011 to 2023 associated with the Contra Costa County Hazardous Materials Incident Notification Policy. Contra Costa County regulated facilities made 2,825 notifications to CCH during this period as required by the Incident Notification Policy. The average number of notifications in relation to the number of regulated facilities revealed 88% were from refineries, while less than 12% were associated with facilities that store between 2.5 million and 5 billion pounds of hazardous materials. Facilities that store less than 2.5 million pounds made up the remaining notifications and were not statistically significant.

CCH has developed a dynamic billing structure for the Community Warning System (CWS) budget (currently \$1,545,377). Based on reported usage, as described above, the structure will have a breakdown of fees for the facility categories, as indicated in Table 1 below. Some facilities, such as chemical plants or refineries, are considered high-risk and are required to submit a Risk Management Plan to the U.S. Environmental Protection Agency and CCH. These facilities must have at least one Federal Program 3 process. The high-risk facilities will receive a base fee for core CWS system costs relating to messaging and notification, as indicated in Table 1. Every year, CWS will submit a new budget, and the costs will be redistributed based on the proposed distribution.

This billing structure is further supported by California Health and Safety Code section 25510 as well as AB 1646, which amended California Health and Safety Code (section 25536.6 et seq.). CCH administers the California Accidental Release Prevention (CalARP) Program, and this mandate requires a "local implementing agency" (LIA) to develop an integrated Alert and Warning system in coordination with local emergency management agencies, Unified Program Agencies, local first response agencies, petroleum refineries, and the public. This system will be used to notify the community surrounding a petroleum refinery in the event of an incident at the refinery that warrants the use of the notification system.

**Table 1. CWS Fee Structure (based on number of notifications per regulated facility)**

Community Warning System (CWS) Fee Structure		
Base fee for high-risk facilities*		\$ 28,071.00
Facility Status	Old Fee	New Fee, not including base fee
HMBP: OIL REFINERIES	\$ 52,952.75	\$ 252,145.09
HMBP: >100M-1B LBS	\$ 23,786.50	\$ 4,357.47
HMBP: >10M-100M LBS	\$ 12,247.23	\$ 4,357.47
HMBP: >2.5M-10M LBS	\$ 6,823.09	\$ 4,357.47

**Grand Jury**

**Contra  
Costa  
County**

725 Court Street  
P.O. Box 431  
Martinez, CA 94553-0091



June 11, 2024

Monica Nino  
Contra Costa County  
1025 Escobar Street  
Martinez, CA 94553

Dear Monica Nino:

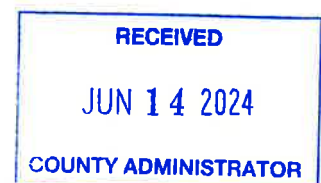
Attached is a copy of Grand Jury Report No. 2404, "County Petroleum Refineries and Hazardous Material Releases: Improving the Hazmat Response" by the 2023-2024 Contra Costa County Grand Jury

Sincerely,

A handwritten signature in blue ink that reads "Joanne Sarmento".

Joanne Sarmento, Foreperson  
2023-2024 Contra Costa County Civil Grand Jury

Enclosure



# **A Report of The 2023 – 2024 Contra Costa County Civil Grand Jury**

**Report 2404  
June 10, 2024**

## **County Petroleum Refineries And Hazardous Material Releases**

**Improving The Hazmat Response**



Civil Grand Jury reports are posted at: <https://www.cc-courts.org/civil/grand-Jury-reports.aspx>




# **A Report of The 2023 – 2024 Contra Costa County Civil Grand Jury**

**Report 2404  
June 10, 2024**

## **County Petroleum Refineries And Hazardous Material Releases**

**Improving The HazMat Response**

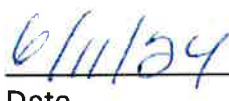
APPROVED BY THE GRAND JURY

  
\_\_\_\_\_  
JOANNE SARMENTO  
GRAND JURY FOREPERSON

  
\_\_\_\_\_  
Date

APPROVED FOR FILING

  
\_\_\_\_\_  
Hon. TERRI MOCKLER  
JUDGE OF THE SUPERIOR COURT

  
\_\_\_\_\_  
Date

Civil Grand Jury reports are posted at: <https://www.cc-courts.org/civil/grand-Jury-reports.aspx>

## SUMMARY

Contra Costa County is home to four petroleum refineries. Petroleum refineries store and utilize hazardous materials that pose a potential health risk to the surrounding community. To "promote prompt and accurate reporting of releases or threatened releases of hazardous materials that may result in injury or damage to the community and/or the environment" the Contra Costa Health Services Hazardous Materials Program (HazMat) administers the Hazardous Materials Incident Notification Policy (HMINP), approved by the Board of Supervisors in 1991.<sup>1</sup> As part of HMINP, HazMat can activate the Community Warning System (CWS) to alert surrounding communities to the release of hazardous materials. CWS is a web-based alert and notifications system that is designed to be activated by the petroleum refinery, preferably using a computer terminal at its facility connected to a similar computer terminal at HazMat.<sup>2</sup> HMINP includes specific guidelines to be used by the petroleum refinery to advise HazMat whether a particular release or threatened release poses a health hazard to the community, and to assess and report to HazMat the severity of the risk created by that particular release.

As noted in HMINP Attachment A-1, the Community Warning System does not provide any direct notification to the public of any hazardous materials release that is not expected to have off-site health consequences, defined in HMINP as Level One releases. Our investigation confirms that CWS could be modified to provide direct notification to the public through phone calls, text messages and emails even for Level One releases, and we have concluded that this change to HMINP should be considered by the Board of Supervisors.

Currently, CWS is an "opt-in" system. Residents must register their cell phones to receive notifications on those phones of reported releases or threatened releases of hazardous materials. We recommend that the county continue to acquire all available cell phone contact data for county residents, and that the Board of Supervisors develop a plan to provide for a system in which all cell phone numbers of county residents are automatically added to CWS to include an option for the resident to "opt-out" of the system should they choose to do so.

As a separate matter, the current staffing structure used by HazMat to respond to hazardous material releases is, according to HazMat, not as effective as it should be, and to address this deficiency three new supervisory positions should be added to the staff. In addition, HazMat should place a toxicologist on retainer. This may reduce the current delay in the public's understanding of the health impacts of a hazardous release incident. These four positions can be added at no additional cost to the county and these staff changes should be considered by the Board of Supervisors.

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<sup>1</sup> Relevant portions of the Hazardous Materials Incident Notification Policy can be found at: <https://www.cchealth.org/home/showpublisheddocument/719/638240012037070000>

<sup>2</sup> The refineries, Marathon Petroleum, Martinez Renewable Fuels, the Chevron Richmond Refinery, Martinez Refining (PBF Energy), the Phillips 66 Refinery in Rodeo, and four other industrial plants in the county that use hazardous chemicals (Chemtrade Logistics, Richmond, EcoServices, Inc. Martinez, Corteva Agrisciences, LLC, Pittsburg and K2Pure Solutions, Pittsburg) have and can use the computer terminal at their facility, which is the preferred method, or use an emergency response pager or telephone to notify HazMat.

## BACKGROUND

Contra Costa County is home to at least nine industrial chemical processing facilities; four of Northern California's five petroleum refineries are located in the county. The petroleum refineries have released potentially dangerous compounds into the air and ground, endangering county residents' health. It is the responsibility of HazMat to monitor the compliance of the petroleum refineries and other responsible businesses<sup>3</sup> with existing safety regulations regarding their use of hazardous materials, to respond to hazardous materials release incidents, and to report and provide warnings to the public regarding releases of hazardous materials.

### The HMINP Notification System for CWS

HMINP authorizes notices to be provided by phone calls to landline telephones, and to cell phones with text messages and emails to individuals who have registered their cell phones with CWS, as well as for postings to social media such as Facebook and X (formerly known as Twitter), and information banners posted on the website maintained by HazMat. Landline phone numbers are automatically available to CWS using the reverse 911 directory.

HMINP defines releases or threatened releases as follows:

- A Level One release is not expected to have off-site health consequences.
- A Level Two release is expected to go off-site and may have adverse health consequences for sensitive individuals including those with lung or heart disease, the elderly, and the very young.
- A Level Three release is expected to go off-site and may have adverse health consequences for the general public.

For a reported Level Two or Level Three release, HMINP provides notifications for members of the public who have registered their cell phones to receive messages from the system.<sup>4</sup>

CWS is used by the county to provide notifications to residents for all potential life-safety hazards, not just hazardous materials releases, but also for fires, earthquakes, floods, and law enforcement activities. CWS is maintained and operated within the county's Office of the

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<sup>3</sup> Defined in HMINP, Section III, as "facilities and other entities that have custody of the hazardous material at the time it is accidentally released or the facility where the release occurs."

<sup>4</sup> Until May 2023, HMINP did not require text messages and emails be sent to registered cellphones for a Level Two release. As with Level One, only postings on social media and on the HazMat website were provided to the public. That policy was amended to provide for direct notifications for a Level Two release, and HazMat is to be commended for adding this important modification to HMINP.

Sheriff's Emergency Services Division. Residents must affirmatively register their cell phones with CWS directly to receive notifications on those devices.<sup>5</sup>

Every responsible business in the county, including the petroleum refineries, is legally required to immediately notify HazMat of any release of hazardous materials. This requires that the business set the initial classification level of the release. The county relies on the responsible businesses to comply with this HMINP policy so HazMat can provide accurate notifications to the affected communities.

Releases reported to HazMat occur frequently. As shown in Appendix One, in the thirteen months following November 2022, the four petroleum refineries in the county notified HazMat of 247 releases. These included flares, fires, and spills. This report focuses specifically on the petroleum refineries, but the findings can apply to all regulated responsible businesses in the county.

### **Development of an Opt-Out Registration for CWS**

About 30% of county residents have registered with CWS with the result that the 70% of residents who have not registered may not receive any alerts or notifications. With an opt-out system, additional residents' cell phones would automatically be added to CWS to be used for any emergency or informational notification, and more residents would likely receive notices concerning hazardous material releases. The resident would then have the option to remove the cell phone number from the system. CWS is permitted by state law to obtain the necessary information from cell phone providers to compile the necessary data.<sup>6</sup>

When an incident occurs HazMat must be notified by the refinery, preferably from the remote computer terminal maintained at the refinery facility, or by emergency response pager or telephone. HazMat then consults with the refinery and may send 5 or 6 staff technicians to investigate and assess the incident on site. A refinery may categorize a hazardous release as only a Level One when it should have a higher classification. HMINP allows HazMat to change a Level One notification to a Level Two or Level Three, and this authority was used for a sulfur release from Martinez Refining Company (MRC) on December 15, 2023, due to noxious odors emitted from the facility as reported by the public.<sup>7</sup> However, if an incident is not reported by a petroleum refinery to HazMat, it can be too late to activate CWS. The recent example is the unreported Thanksgiving 2022 release from MRC of an estimated 20 tons of spent catalyst used in their refining process. The release began on November 24 and continued into the early hours of November 25. HazMat learned of the release only from media accounts two days after it had

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<sup>5</sup> Notices can in very specific circumstances be automatically sent to unregistered cell phones directly from cell towers to phones within range of a tower or towers under the federal Wireless Emergency Alert System.

<sup>6</sup> Government Code Section 8593.4 provides in relevant part: "(a) A local government may enter into an agreement to access the contact information of resident accountholders through the records of a public utility for the sole purpose of enrolling residents of that local government in a city-operated, county-operated, or city- and county-operated public emergency warning system."

<sup>7</sup> <https://www.eastbaytimes.com/2023/12/15/health-advisory-goes-out-to-martinez-residents-after-suspected-flaring-at-refinery>

begun. Spent catalyst ash was found in the neighborhood surrounding MRC on cars and other outside surfaces. When HazMat learned of the release, the substance was no longer airborne and CWS was not activated. As analyzed by county and state investigators, including technicians from HazMat, and confirmed by lab reports, the release contained aluminum, barium, chromium, nickel, vanadium, and zinc. HazMat ultimately designated this release as a Level Two or higher. In January and March of 2023, HazMat advised residents on its website and through press releases not to eat produce from home gardens due to the release. A toxicology report was not commenced until May and not completed until June 8, 2023, approximately 6 months after the release. HazMat then issued an “all clear” notice for the home gardens. The release incident was classified under Section H. 3 of HMINP as a Major Chemical Accident or Release (MCAR), which accordingly authorized the establishment of an ad hoc Oversight Committee to provide an independent root cause analysis, incident investigation, and community exposure/risk assessment of this release by MRC.<sup>8</sup>

### **Notifications for Level One Incidents**

There is recent evidence that members of the public who have registered their cell phones want more information from CWS regarding hazardous material releases than is currently provided. A survey was conducted by Contra Costa Health Services from December 15, 2023 to January 19, 2024 that received 560 responses from 61 zip codes, primarily in Martinez, Pittsburg, and Richmond. Approximately 87% of the survey respondents indicated they would like to receive direct information regarding CWS Level One incidents.<sup>9</sup>

On May 30, 2024, Contra Costa Health Services proposed to the ISO/CWS committee a modification to HMINP to provide for community awareness messaging for Level One incidents that include odor, audible impact, flaring lasting longer than 20 minutes or visible plumes off site. The proposal is currently under further review by HazMat as well as by the Office of the Sheriff’s Emergency Services Division. HazMat is also to be commended for this initiative.<sup>10</sup>

### **Improvement of Staffing at HazMat**

Concerning staffing, we have confirmed from public records that the Contra Costa Health agency which operates HazMat is approved by the Board of Supervisors to assess annual permit fees to

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<sup>8</sup> On January 5, 2023, HazMat asked the Contra Costa County District Attorney to take legal action against MRC for this unreported incident. On or about November 16, 2023, the District Attorney announced the commencement of a Joint Civil Enforcement Action against MRC. The conduct of MRC from November 2022 to December 2023, as listed in Appendix One, is not further addressed in this report which focuses on the resources and response capabilities of HazMat, HMINP, and CWS.

<sup>9</sup> A Summary of Survey Results is attached as Appendix Two.

<sup>10</sup> The proposal includes a new Level Zero notification policy posted solely on the Contra Costa Health Services website for hazardous material releases with no off-site impact of any kind.

the responsible businesses pursuant to the Contra Costa County Certified Unified Program Agency (CUPA) to cover the costs of administering the HazMat program, including HMINP.<sup>11</sup>

CUPA fees have not been modified since 2012 and Contra Costa Health Services has hired an outside contractor to perform a CUPA fee study which is in draft status and currently not available for inclusion in this report. We have learned that the purpose of the new CUPA fee study is to support the request from Contra Costa Health Services for a change in its organizational structure to establish the job classification of Supervising Hazardous Materials Specialist and add three such positions to report directly to the Assistant Director of HazMat.

On February 22, Contra Costa Health Services made a detailed report to the Industrial Safety Ordinance/Community Warning System (ISO/CWS) committee of the Board of Supervisors describing the proposed new organizational structure. Contra Costa Health Services has provided the ISO/CWS committee with its assessment of the improvements the proposed new organizational structure and new staff positions would provide.

## **METHODOLOGY**

We have reviewed documents provided by Contra Costa Health Services, materials posted on the websites maintained by HazMat, the Martinez City Council, the Board of Supervisors, and comments from the public made at open meetings of government officials. We have reviewed HMINP and interviewed both personnel from various county departments and an outside industry expert.

## **DISCUSSION**

### **Development of an Opt-Out Registration System for CWS**

Currently CWS is an opt-in system in which residents must affirmatively register their cell phones to receive notifications on those devices of reported releases or threatened releases of hazardous materials, a system that presently includes only about 30% of county residents. We have concluded that an opt-out system in which all cell phone numbers of county residents are automatically added to CWS can be implemented by acquiring from public and private agencies, as permitted by state law, cell phone contact data for county residents, and that the Board of Supervisors should use this data to develop a plan to provide for a system in which all cell phone numbers of county residents are automatically added to CWS. The plan would include an option for residents to opt out of the system should they choose to do so.

### **Notification of Level One Releases**

In addition, and whether or not an opt-out system is adopted, the survey evidence now available supports a finding that members of the public who have already registered their cell phones want to receive information from CWS on Level One releases. Residents should be given the option to receive this additional information.

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<sup>11</sup> HazMat also administers under CUPA, the California Accidental Release Prevention Program, the Underground Storage Tank Program, and the Aboveground Petroleum Storage Act Program pursuant to Health and Safety Code Section 25404.



## Improvement of Staffing for HazMat

As reported to the ad hoc ISO/CWS committee of the Board of Supervisors, Contra Costa Health Services proposes adding three new Supervising Hazardous Materials Specialists. Under the current structure just one Supervisor, the Assistant Director of HazMat, oversees twenty (20) staff-level Hazard Materialist Specialists, making oversight difficult and hampering field operations if more than once incident occurs at the same time.

The proposed Supervising Hazardous Materials Specialists would respond and supervise 5 staff-level Hazardous Materials Specialists from among the 20 who are assigned to respond to a specific hazardous materials incident. The Supervising Hazardous Materials Specialists would have the authority to make binding decisions on what action to take in the field in response to a particular incident. The proposed specialists would report to the Assistant Director of HazMat, providing that Assistant Director with increased capacity to complete administrative tasks such as reviewing contracts for engaging third party services, such as a retained toxicologist, in lieu of supervising responses to hazardous materials incidents in the field.

## Putting a Toxicologist on Retainer

Had a toxicologist been on retainer to HazMat, the impact of the Thanksgiving MRC release on home garden produce could have been resolved sooner. The estimate from HazMat is that having a toxicologist on retainer would have saved as much as three weeks' time to complete a report assessment of the health consequences to home garden produce as compared to the current system which includes no retained toxicologist.

## Funding

Funding to change the process for collecting residents' contact data, the cost to modify HMINP, the cost to implement an opt-out registration system, and the retention of a toxicologist could be included in the new CUPA fee structure and/or be funded from Measure X revenue. Measure X is the countywide, 20-year, ½ cent sales tax approved by voters on November 3, 2020. The ballot measure language stated that the intent of Measure X is “to keep Contra Costa’s regional hospital open and staffed; fund community health centers, **emergency response**; support crucial safety-net services; invest in early childhood services; protect vulnerable populations; and for other essential county services.” (Bold added.) Modification to the CWS registrations system, HMINP, and retaining a toxicologist, would accordingly be an appropriate use of Measure X funds.

## **FINDINGS**

- F1. An opt-out rather than an opt-in system for all cell phone numbers of county residents should increase the percentage of residents receiving accurate and timely information regarding hazardous material releases.
- F2. A Level One incident that may include flaring, fire/smoke/plume, odors, or other conditions that can be observed or sensed by the public off site is not presently reported by CWS to landline telephones or registered cell phones, and the system can be modified to do so.
- F3. Contra Costa Health Services has hired an outside contractor to perform a CUPA fee study which is in draft status and currently not available for inclusion in this report.
- F4. One purpose of the new CUPA fee study is to support the request from Contra Costa Health Services for a change in its organizational structure to establish the job classification of Supervising Hazardous Materials Specialist.
- F5. Contra Costa Health Services is in the process of receiving approval from the Board of Supervisors to add three Supervising Hazardous Materials Specialists to its staff.
- F6. Placing a toxicologist on retainer would enable Contra Costa Health Services to obtain a toxicology report needed for some hazardous material release incidents without the delay of the current procedure.

## **RECOMMENDATIONS**

- R1. By March 31, 2025, the Board of Supervisors should develop a plan to modify CWS so that it automatically registers all available contact data for all county residents and businesses into CWS and provides a mechanism for residents and businesses to opt out of the automatic registration process.
- R2. By December 31, 2025, the Board of Supervisors should complete the implementation of the plan to modify CWS so that it automatically registers all available contact data for all county residents and businesses into CWS and provides a mechanism for residents and businesses to opt out of the automatic registration process.
- R3. By December 31, 2024, the Board of Supervisors should approve a modification to HMINP giving residents the option to receive awareness messaging from CWS for Level One incidents that can be observed or sensed by the public off site.
- R4. By December 31, 2024, the Board of Supervisors should consider approval of the request from Contra Costa Health Services to establish the job classification of Supervising Hazardous Materials Specialist.
- R5. By December 31, 2024, the Board of Supervisors should consider approval of the request from Contra Costa Health Services to add three Supervising Hazardous Materials Specialists to the staff at HazMat.
- R6. By December 31, 2024, the Board of Supervisor should consider approval of the retention on retainer of a toxicologist by Contra Costa Health Services.

R7.By December 31, 2024, the Board of Supervisor should consider approval of the new CUPA permit fee schedule proposed by Contra Costa Health Services

**REQUEST FOR RESPONSES**

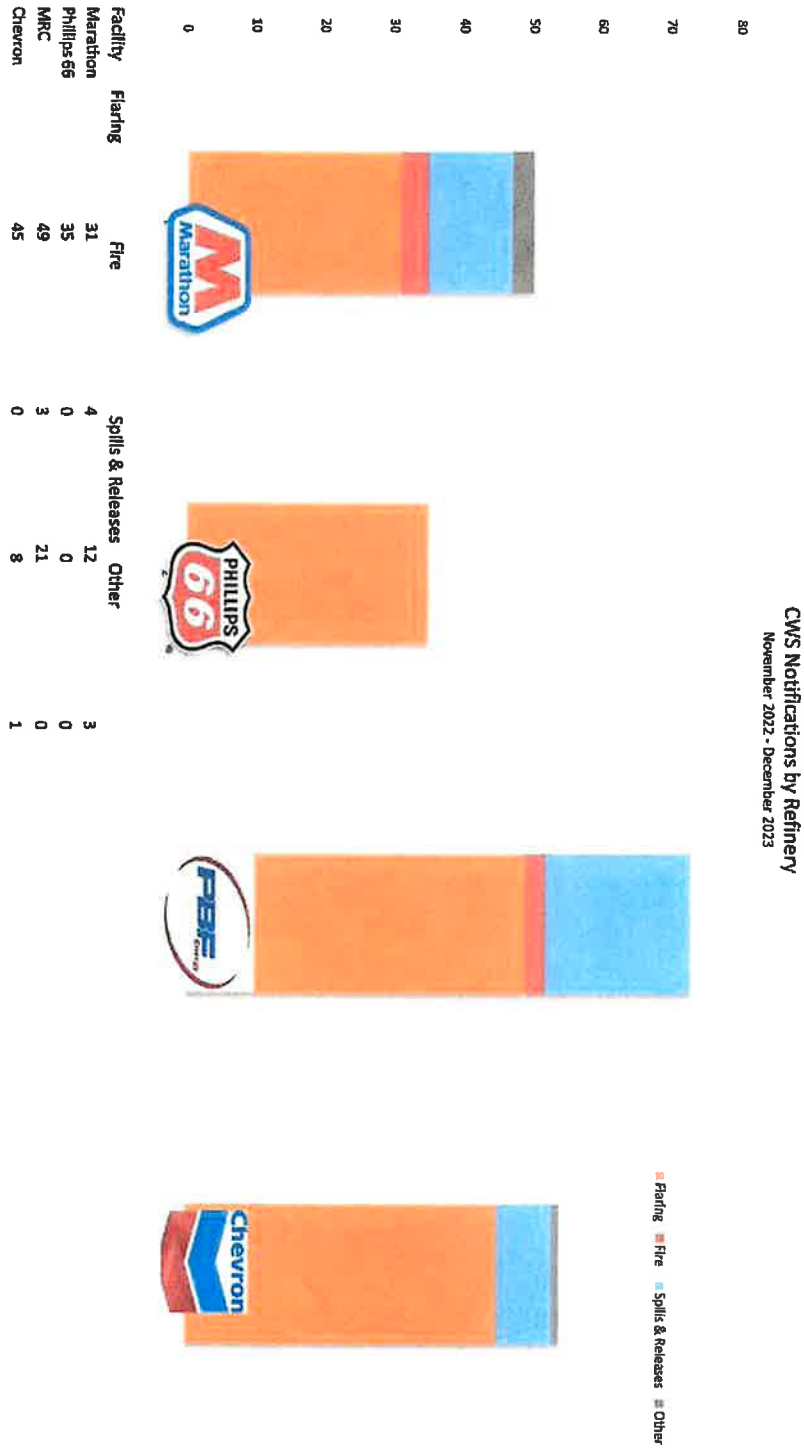
Pursuant to California Penal Code § 933(b) et seq. and California Penal Code § 933.05, the 2023-2024 Contra Costa County Civil Grand Jury requests responses from the following governing bodies:

Responding Agency	Findings	Recommendations
Board of Supervisors	F3, F4, F5, F6	R3, R4, R5, R6
Office of the Sheriff	F1, F2	R1, R2

These responses must be provided in the format and by the date set forth in the cover letter that accompanies this report. An electronic copy of these responses in the form of a Word document should be sent by e-mail to [ctadmin@contracosta.courts.ca.gov](mailto:ctadmin@contracosta.courts.ca.gov) and a hard (paper) copy should be sent to:

Civil Grand Jury – Foreperson  
725 Court Street  
P.O. Box 431  
Martinez, CA 94553-0091

# APPENDIX ONE





## Summary of Survey Results

- 86.7% of respondents indicated they would like to receive information regarding CWS Level 1 incidents – Question 8.
- 72.5% of respondent would be interested in receiving text messages; 33.9% would be interested in receiving emails – Question 9.
- 79.5% of respondents indicated they would like the ability to select how they are notified for each type of incidents (e.g., fires, chemical spills, smoke, leaks, odors, and flaring) – Question 10.
- 75.1% of respondents indicated they would like the ability to select how they are notified for each level of incident – Question 11.
- Opportunities exist for increasing public awareness and education as it pertains to the CWS.

## APPENDIX TWO