

INDUSTRIAL SAFETY ORDINANCE/ COMMUNITY WARNING SYSTEM AD HOC COMMITTEE

May 16, 2022 10:00 AM

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Supervisor John Gioia 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. Call to Order and Introductions
- 2. Public comment on any item under the jurisdiction of the Committee and not on this agenda (speakers may be limited to three minutes).

DISCUSSION

- 3. Process Safety Culture Presentations from Chevron Richmond Refinery, Phillips 66 Rodeo Refinery, and Martinez Refining Company
- 4. Staff update on potential regulatory amendments to address gaps in regulatory oversight of bulk storage facilities such as the NuStar facility in Selby
- 5. Future items to be scheduled to present to the Committee
- The ISO/CWS Ad Hoc Committee will provide reasonable accommodations for persons with disabilities planning to attend 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 ISO/CWS Ad Hoc Committee less than 96 hours prior to that meeting are available for public inspection at 651 Pine Street, 10th floor, during normal business hours.
- Dublic 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:

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Randy.Sawyer@cchealth.org

Glossary of Acronyms, Abbreviations, and other Terms (in alphabetical order):

Contra Costa County has a policy of making limited use of acronyms, abbreviations, and industry-specific language in its Board of Supervisors meetings and written materials. Following is a list of commonly used language that may appear in oral presentations and written materials associated with Board meetings:

AD	A a a complete Dill	HCD	(State Dent of) Housing & Community Development
AB ABAG	Assembly Bill	HCD	(State Dept of) Housing & Community Development
	Association of Bay Area Governments	HHS	Department of Health and Human Services
ACA	Assembly Constitutional Amendment	HIPAA	Health Insurance Portability and Accountability Act
ADA	Americans with Disabilities Act of 1990	HIV	Human Immunodeficiency Syndrome
AFSCME	American Federation of State County and Municipal	HOV	High Occupancy Vehicle
ALOD.	Employees	HR	Human Resources
AICP	American Institute of Certified Planners	HUD	United States Department of Housing and Urban
AIDS	Acquired Immunodeficiency Syndrome		Development
ALUC	Airport Land Use Commission	Inc.	Incorporated
AOD	Alcohol and Other Drugs	IOC	Internal Operations Committee
BAAQMD	Bay Area Air Quality Management District	ISO	Industrial Safety Ordinance
BART	Bay Area Rapid Transit District	JPA	Joint (exercise of) Powers Authority or Agreement
BCDC	Bay Conservation & Development Commission	Lamorinda	Lafayette-Moraga-Orinda Area
BGO	Better Government Ordinance	LAFCo	Local Agency Formation Commission
BOS	Board of Supervisors	LLC	Limited Liability Company
CALTRANS	California Department of Transportation	LLP	Limited Liability Partnership
CalWIN	California Works Information Network	Local 1	Public Employees Union Local 1
CalWORKS	California Work Opportunity and Responsibility	LVN	Licensed Vocational Nurse
	to Kids	MAC	Municipal Advisory Council
CAER	Community Awareness Emergency Response	MBE	Minority Business Enterprise
CAO	County Administrative Officer or Office	M.D.	Medical Doctor
CCHP	Contra Costa Health Plan	M.F.T.	Marriage and Family Therapist
CCTA	Contra Costa Transportation Authority	MIS	Management Information System
CDBG	Community Development Block Grant	MOE	Maintenance of Effort
CEQA	California Environmental Quality Act	MOU	Memorandum of Understanding
CIO	Chief Information Officer	MTC	Metropolitan Transportation Commission
COLA	Cost of living adjustment	NACo	National Association of Counties
ConFire	Contra Costa Consolidated Fire District	OB-GYN	Obstetrics and Gynecology
CPA	Certified Public Accountant	O.D.	Doctor of Optometry
CPI	Consumer Price Index	OES-EOC	Office of Emergency Services-Emergency
CSA	County Service Area		Operations Center
CSAC	California State Association of Counties	OSHA	Occupational Safety and Health Administration
CTC	California Transportation Commission	Psy.D.	Doctor of Psychology
dba	doing business as	RDA	Redevelopment Agency
EBMUD	East Bay Municipal Utility District	RFI	Request For Information
EIR	Environmental Impact Report	RFP	Request For Proposal
EIS	Environmental Impact Statement	RFQ	Request For Qualifications
EMCC	Emergency Medical Care Committee	RN	Registered Nurse
EMS	Emergency Medical Services	SB	Senate Bill
EPSDT	State Early Periodic Screening, Diagnosis and	SBE	Small Business Enterprise
LIODI	Treatment Program (Mental Health)	SWAT	Southwest Area Transportation Committee
et al.	et al (and others)	TRANSPAC	Transportation Partnership & Cooperation (Central)
FAA	Federal Aviation Administration		Transportation Planning Committee (East County)
FEMA	Federal Emergency Management Agency	TRE or TTE	Trustee
F&HS	Family and Human Services Committee	TWIC	Transportation, Water and Infrastructure Committee
First 5	First Five Children and Families Commission	VA	·
าแอเฮ			Department of Veterans Affairs
СТС	(Proposition 10)	VS.	versus (against)
FTE	Full Time Equivalent	WAN	Woman Business Enterprise
FY	Fiscal Year	WBE	Women Business Enterprise
GHAD	Geologic Hazard Abatement District	WCCTAC	West Contra Costa Transportation Advisory
GIS	Geographic Information System		Committee

SAFETY CULTURE ASSESSMENT Contra Costa County

Nicole A. Heath

Supervising Accidental Release Prevention Engineer

SAFETY CULTURE ASSESSMENT ISO Amendment included performing SCA

No

July 2006

U.S. Chemical Safety Board (CSB) recommendation in the Chevron Refinery fire interim report (August 2012) adopted by BOS in 2014.

Nov. 2009

Aug. 2017

Aug. 2012

Safety Culture Assessment Guidance Document issued in November 2009 Guidance on SCA revised and published in August 2017.

- SCA summary results in ISO annual report
- Public process: Hazardous Materials Commission

May 16, 2022

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	SAFETY CULTURE ASSESSMENT (SCA) STATUS
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FACILITY	DATE OF SCA	WORKFORCE COMMUNICATE
Air Liquide Large Industries	Oct-19	Nov-16
At a Danada and Chall	Aug 10	۸ ۱۲

Apr-16

Dec-18

Phillip-66 Refinery

Shell Martinez Refinery

Air Products Shell	Aug-19	Apr-15	*Not Required	Written Survey
Chemtrade Richmond	Aug-18	Sep-18	*Not Required	Written Survey
Chevron	Oct-20	Jul-21	N/A	Written

Jun-16

Apr-19

MID CYCLE

SCA

*Not

Required

Nov-19

N/A

METHOD

Written Survey

Survey

Written Survey

Written Survey

the human human energy company

Richmond Refinery Safety Culture Assessment

Laura LeedsPSM Manager, Richmond Refinery

May 16, 2022



Safety Culture Assessment - Overview

- Last Safety Culture Assessment: October 2020
 - Survey Method: Online Survey
- Results, milestones, and action plans were reported to workforce and management: July 2021
 - Action plans and metrics are tracked through Chevron systems of records
 - Employees and their representatives were involved in review of survey data, development of improvement recommendations, and final action plan milestones and metrics.

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Mid-Cycle Progress Evaluation: Expected May 2024



Observations and Recommendations

Observations:

- Employees are comfortable reporting hazards and know how to do so (88%)
- Individuals have a strong knowledge of what process safety means (86%)
- Employees are comfortable using Stop Work Authority (85%)
- Employees are comfortable communicating safety concerns (83%) and challenging decisions if there are process safety concerns (83%)

Continual improvement recommendations:

 Improve ways to make navigating work instructions easier through simplification and training.

^{© 2022} chevretmprove methods to **keep procedures current** through simplification of work processes and training.

- Improve transparency on staffing plans.
- Explore ways to improve how critical spare equipment is prioritized for maintenance work.





PROVIDING ENERGY. IMPROVING LIVES.



Rodeo Refinery -

Process Safety Culture Assessment





Phillips 66 Rodeo Refinery - Process Safety Culture Assessment

<u>Last Process Safety Culture Assessment was completed</u>: 4/15/2016

Survey Method: Written Survey

Date Results Communicated: Workforce: 6/24/2016

Management: 4/15/2016

Areas of improvements being addressed:

No areas were identified as scoring significantly below normal values

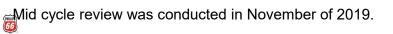
- Improvements require too many reviews/approvals
- · Employees are reluctant to reveal problems or errors
- · Having enough qualified people to do the work in their area

Action Plan made progress on the Identified areas for improvement?

Yes

If Yes, did the improvements meet the goals and if not, was the action plan amended to address what is being done to meet the goals?

Yes – progress was made, and improvements observed in the subsequent SCA. Improvement opportunities were identified in the most recent SCA and recommendations identified.



Phillips 66 Rodeo Refinery - Process Safety Culture Assessment

Have milestones and metrics been developed to determine how the Safety Culture Assessment actions are being implemented?:

Yes. Specific improvements were identified by a management & union team and implemented.

<u>Describe the process in place that includes employees and their representatives that will determine if</u> the action items effectively changed the expected culture items:

A mid-cycle team review was done to evaluate the effects of the actions on the safety culture. The evaluation included management and union representatives per policy.

Date of the mid-cycle progress evaluation:

November 1, 2019

Did the action plan make progress on the identified areas of improvement?

Yes

If a mid-cycle progress evaluation was performed during this reporting year, describe the process that included participation of employess or their representatives that determined whether the action items effectively changed the expected culture items:

By policy, our process includes management and union representatives to review the results and develop modified recommendations as appropriate. Each action was discussed and compared to site performance indicators to determine if improvement was made. The Mid-Cycle Review was conducted on November 1, 2019 by the Process Safety Director, USW PSM Representative, and Senior H&S Consultant.



Safety Culture Assessment Presentation

Martinez Refining Company

May 16, 2022

Ken Axe

Process Safety & Assurance Manager



Most Recent SCA

- Date of most recent SCA: December 2018
 - Follow-up survey in February 2019 directed toward non-respondents (see next slide)
 - Focus group convened February 28, 2019
 - Further examined lowest and highest scores
 - Clarified understanding of questions, particularly where there was low response rate
- Date results communicated to workforce: April 10-22, 2019
- Methodology: anonymous survey (online and paper)
 - Not all contractors (especially turnaround contractors) have online access
- Date of mid-cycle SCA: no mid-cycle SCA

Is Non-response Negative?

- Follow-up survey in February 2019 directed toward non-respondents (see image below)
- Very little difference between the mean (8.4 versus 8.5), range (1.67 versus 1.68), and standard deviation (0.47 versus 0.37)
- We did not detect a negative shift among non-respondents

PLEASE COMPLETE THIS ONLY IF YOU DID NOT COMPLETE THE 2018 CULTURE SURVEY Martinez Refinery HSSE and Process Safety Culture Assessment Your Anonymous Opinion on our Safety, Health, Environmental (HSSE) and Process Safety Culture Why I Didn't Complete the Survey Back in 2018 (check the box or write in details please): □no time □wasn't aware of it □my opinion doesn't matter □company doesn't care □everything's good Or: Circle or mark the number closest to your opinion; 1 = 'never', 10 = 'always'. Circle or Mark the Number for Your Answer Answer "NA" if the question doesn't apply or you don't understand the question. NEVER ... SOMETIMES ... MOSTLY ... ALWAYS I feel that I am working in a safe workplace. 2 I believe good Health, Safety, Environmental (HSSE) and Process Safety performance is my responsibility, and I take 1 2 3 4 5 6 7 8 9 10 NA that responsibility seriously. 3 I believe this refinery Process Safety work processes are

May 2022

Areas for Improvement, and Progress

- Analysis of the survey results identified the following areas for improvement:
 - Hazard reporting, and response to reports of hazards
 - Ensure that incentive programs don't have the unintended consequence of discouraging the reporting of hazards
- Improved hazard reporting tool has been developed and implemented
- Targets for response timing have been established and are driving faster resolution
- A team (represented employees and staff) has been established to identify hazard reports for recognition (incentive); the team reviews the impact this program and others have on hazard reporting, with emphasis on unintended disincentives to reporting
- Progress evaluated (internally) February 9, 2021
 - Reviewed with CCHS during audit being conducted at the time
 - Actions redirected based on review: milestones and metrics adjusted
 - Team of represented employees and staff convened to adjust actions, milestones, and metrics

May 2022

Milestones and Metrics

- Established milestones included:
 - FOCUS program design and governance (governance team includes represented employees and staff)
 - Coding and testing
 - Program rollout
- Metrics include:
 - Number of hazards reported (measured monthly)
 - Overdue responses (measured monthly)



NuStar Working Group Recommendations May 16, 2022



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

— Contra Costa County ISO, Section 450-8.004 (10)

INTRODUCTION

NuStar working group was developed to evaluate the Root Cause Analysis report from the 2019 incident

Our mission

To identify regulatory gaps that would address the Root Cause Analysis (RCA) findings, including evaluating the Industrial Safety Ordinance (ISO) to determine a need for applicability

Who was involved

This was a multiagency working group comprised of members from Con Fire, Crockett-Carquinez Fire, Department of Conservation Development, and Contra Costa Health Hazardous Materials Program.

What were our conclusions?

Background

Contra Costa County and Richmond ISO

"Origin"

Implemented in 2000 as a result of multiple Major Chemical Accidents or Releases (MCAR) in the county from the early to late 1990s

"Evolution"

It has continually been evaluated and amended to incorporate new process safety elements to strengthen the existing programs.

"Impact"

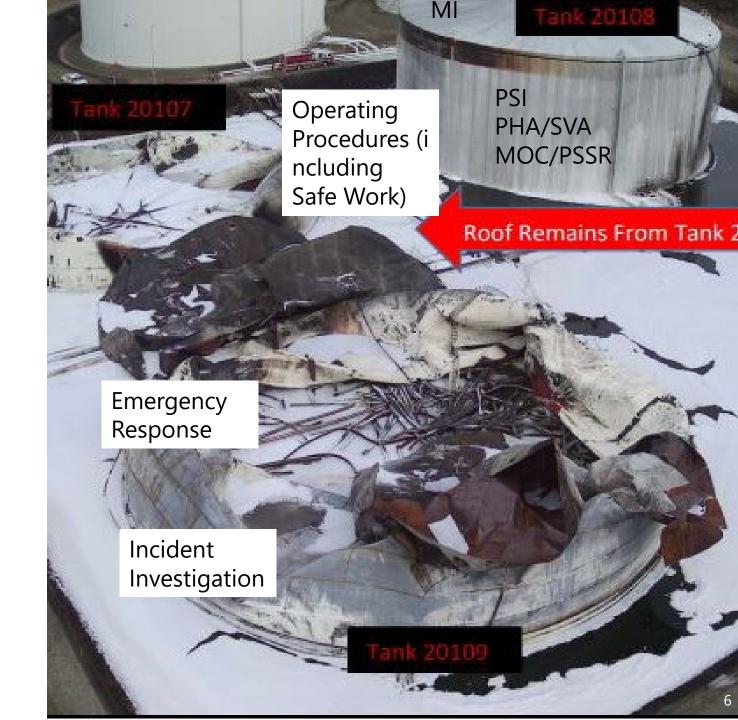
Over the last 20+ years, there has been a major reduction in the number of MCARS in the county.

CCHSHMP Recommendations

[To ISO or not to ISO]

Review of RCA

ISO Safety Elements



#		_	Captured within		
		Program	program	Basis	Relation to Incident
1		PSI		Understanding the hazards	Review of electrical classification
	1 F31			Onderstanding the nazaras	areas and design
2	PHA	Inherently Safer	Identifying and understanding	Review of hazard scenarios that	
		FIIA	Systems	risk	could lead to fire/explosion
3	St	ОР	Training/Human Factors/Safe Work Practices	Prevent inadvertent mixing and spills; also includes elements from HF and training.	
4	Systen	MI	Contractors		Implementation of industry standards via RAGAGEP
5	Management Systems	МОС	Inherently	Managing the risk and ensuring PSI is up to date	Evaluation of safety risks when making changes to design, technology, equipment, process
6	Mai	PSSR		Managing the risk and ensuring PSI is up to date	Evaluation of safety risks when making changes to design, technology, equipment, process
7		II		Learning from past experiences	
8		ER		Mitigating Consequences	Requires emergency response coordination (drills) between facility and responding agencies

Basis for Recommended Safety Elements

Understand the hazards of the process

Identify and understand the risk the process

Identify and understand the risk the process

Identify and understand the risk experiences and near misses

Develop management systems to maintain programs



We must learn from the experience of others rather than learn the hard way

—Trevor Kletz



Incidents Reviewed

Caribbean Petroleum Refining Tank Explosion and Fire (2009)

Intercontinental Terminal Company (ITC) Tank Fire

Barton Solvents Flammable Liquid Explosion and Fire

Third Coast Industries Petroleum Products Facility Fire

Barton Solvents Explosions and Fire

Conclusion

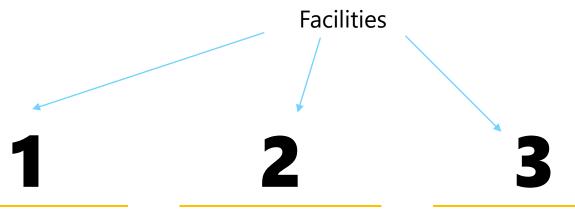
Applicability Review

Facilities Impacted: Bulk Storage Facilities which contain combustible liquids (8 facilities identified in initial review)



<u>This Photo</u> by Unknown Author is licensed under <u>CC BY-NC-ND</u>

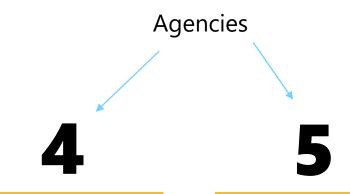
Responsibilities



Implement
Management
System and
identify
responsibility for
programs

Submittal of Safety Plan and Annual Metrics Develop, Implement and Maintain Programs:

- Process Safety Information
- Process Hazard Analysis
- Management of Change/ Pre-Start Up Safety Review
- Emergency Response
- Incident Investigation
- Mechanical Integrity
- Operating Procedures



3-year audit cycle

Interagency coordination including coinspection authority



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

— Contra Costa County ISO, Section 450-8.004 (10)

Questions THANK YOU