OCTOBER 2025

CONTRA COSTA HEALTH

MARTINEZ REFINING COMPANY FIRE
AFTER-ACTION REPORT AND IMPROVEMENT PLAN (AAR/IP)

Contra Costa County
Fire Protection District

This work was sponsored by Contra Costa County Fire Protection District, in partnership with Contra Costa County Health HazMat Division. The research was conducted by IEM, incorporating data provided by Contra Costa County Fire Protection District and Contra Costa County HazMat Division.

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1 Incident Overview

Table 1: Incident Overview

Incident Name:	Martinez Refining Company Fire
Incident Date	Saturday, February 1, 2025
Scope	This AAR/IP applies to Contra Costa County agencies and focuses on strengths and areas for improvement regarding processes, procedures, and capabilities relating to public-sector agencies' response to the Martinez Refining Company Fire.
Mission Area(s)	Response
Capabilities	Planning, Operational Coordination, Operational Communication, Public Information and Warning, Situational Assessment, and Environmental Response/Health and Safety
Objectives	• Maintain situational awareness of all Martinez Refining Company Fire–related threats and response requirements throughout Contra Costa County. • Provide resource support to county departments and offices/agencies that have personnel and assets deployed to provide public safety. • Coordinate county departments and assist response agencies in effectively mitigating known public safety issues. • Communicate risks to response partners and the public swiftly and effectively. • Be poised to immediately initiate coordinated actions for managing consequences of the incident • Protect surrounding property and promote safe operating practices for all preparedness, response, and recovery efforts.
Threat or Hazard	Hazardous Materials - Oil Refinery Fire
Scenario	Two-Alarm Fire with Hazardous Materials Release
Sponsor	Contra Costa County Fire Protection District
Participating Organizations	See Appendix D
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2 Introduction

The Contra Costa County Fire Protection District, in partnership with Contra Costa County Health HazMat Division, conducted this AAR/IP to evaluate the coordination between the public and private sectors, public information, operational communications, and air quality monitoring. The data collected was used to identify strengths and opportunities to improve future preparedness planning, operational coordination, and public information and warning.

2.1 Contra Costa County Response to Martinez Refining Company Fire

On February 1, 2025, Contra Costa County Fire Protection District and additional local agencies responded to a fire at the Martinez Refining Company (MRC), owned by PBF Energy, in the City of Martinez. During preparation for planned maintenance on a process unit, an isolation valve was mistakenly opened, which resulted in a release and ignition of hydrocarbon material. Figure 1 is a photo of the incident provided by the Contra Costa County Fire Protection District Deputy Chief - Operations Section.

Figure 1: Fire at Martinez Refining Company

MRC Fire crews responded, began fire suppression efforts, and requested mutual aid support through the Petrochemical Mutual Aid Organization (PMAO), which included fire crews from surrounding refineries

that provided several pieces of apparatus and six refinery chiefs with expertise and tactical knowledge in industrial firefighting. Contra Costa County Fire Protection District units were dispatched shortly after, following a commercial fire and hazardous materials (HazMat) dispatching plan.

Following the release, MRC pushed a Level 2 Alert through the Community Warning System (CWS). The Level 2 Alert indicated the incident could affect sensitive populations in the vicinity of the refinery. Through the Level 2 Alert push by MRC, Contra Costa Health (CCH) was notified of the incident and CCH HazMat personnel deployed to the scene.

UC was established at MRC's initial Command Post and included personnel from MRC, Contra Costa County Fire Protection District, and the City of Martinez Police Department. The Command Post was later moved to MRC's Emergency Operations Center (EOC) as a result of a change in weather conditions. The Contra Costa County Fire Protection District and CCH HazMat Response Teams conducted perimeter air monitoring and plume modeling. Based on the HazMat Teams' visual observations, air monitoring, plume modeling, and scientific standards, UC, in coordination with CCH, upgraded the CWS alert to Level 3 for areas north of the refinery, with the Level 2 in effect for the areas that were notified and identified earlier.

Contra Costa County did not activate the county EOC. Personnel from Contra Costa County Fire Protection District, CCH, CCH HazMat, and county elected officials were present in the MRC EOC. Public information was provided through multiple alert and warning system notifications and joint press conferences, which were led by MRC Community Relations rather than the incident command structure.

MRC and PMAO fire crews used industrial fire suppression tactics to shut off the fire's fuel source. Once the fire was under control, Contra Costa County Fire Protection District crews were released, UC was demobilized, the CWS Level was decreased to Level 2, and the incident was returned to the MRC Incident Commander (IC).

2.2 After-Action Review

This After-Action Report (AAR) reviews the response to and coordination of the Martinez Refining Company Fire that occurred on February 1, 2025. It also reviews incident documentation and pertinent information to develop a baseline of expected emergency response and support procedures. Individual interviews, an after-action debriefing with all stakeholders, and function-focused group meetings provided additional information regarding response actions. The analysis is separated into three topic areas: planning and incident readiness, operational coordination, and public information and warning.

Figure 2: After-Action Review: Analysis

The AAR may guide future planning, prioritization, and formalization of planning processes and identify gaps to be addressed by public- and private-sector stakeholders in Contra Costa County. The AAR is supported by an Improvement Plan (IP) to identify the next steps and recommendations to address the areas for improvement.

2.2.1 Primary Strengths

The major strengths identified for Contra Costa County's response to the Martinez Refinery Company Fire are:

1. **Pre-Existing Relationships, Interagency Coordination, and Available Resources:** Pre-existing working relationships and interagency collaboration between public- and private-sector organizations allowed for effective coordination during the incident.
2. **Internal Coordination and Resource Tracking:** Effective internal coordination and resource tracking were achieved through the use of available tools to assign tasks and monitor resources on site.
3. **Public Information Officers (PIOs):** Public Information Officers employed by the county and Contra Costa County Fire Protection District have extensive training and are trusted by county leadership to handle an incident.

2.2.2 Primary Areas for Improvement

The key areas for improvement identified for Contra Costa County's response are:

1. **Response Plan Development:** Emergency response agencies in the county do not have joint response plans with area refineries, which led to delayed coordination. Currently, Petrochemical Mutual Aid Organization (PMAO) have pre-established response plans that identify partner roles and responsibilities during an incident.
2. **Terminology/Integrated Processes and Unified Command Structure:** Variations in how agencies integrated terminology, defined roles, and implemented command structures led to operational inconsistencies. These differences created confusion within UC, particularly regarding the involvement of essential partners, such as public health agencies, and ultimately delayed effective decision-making.
3. **Public Information Lead:** During the response, press conferences and dissemination of public information were led by MRC Public Relations. Given the public's distrust of refinery operators in the region, messaging would be best received with a public-sector agency leading the messaging.

Table 2: Summary of Strengths and Areas for Improvement

Topic	Strengths	Areas for Improvement
Planning and Incident Readiness	Pre-Existing Relationships, Interagency Collaboration, and Resource Availability	Response Plan Development
Planning and Incident Readiness	Hazardous Materials Resources and Capabilities	Communication Plans and Equipment
Planning and Incident Readiness	Hazardous Materials Resources and Capabilities	Interagency Training and Exercise
Planning and Incident Readiness	Hazardous Materials Resources and Capabilities	Mitigate Potential Loss of PMAO Partners

Topic	Strengths	Areas for Improvement
Operational Coordination	Internal Coordination and Resource Tracking	Multi-Agency Resource Tracking and Personnel Utilization
Operational Coordination	Internal Coordination and Resource Tracking	Implementation of Terminology, Integrated Processes, and Unified Command Structure
Operational Coordination	Internal Coordination and Resource Tracking	On-site Integration into the Command Staff
Operational Coordination	Internal Coordination and Resource Tracking	Identification of Hazardous Materials at Industrial Facilities
Public Information and Warning	Public Information Officers	Alert and Warning Systems Education
Public Information and Warning	Public Education Outreach Initiatives	Determining Appropriate CWS Level
Public Information and Warning	Public Education Outreach Initiatives	Identification of Public Information Lead
Public Information and Warning	Public Education Outreach Initiatives	Notify and Incorporate Jurisdictional PIOs

3 Capability Analysis

The analysis section reviews the major strengths and areas for improvement identified throughout the AAR process. Each observation is presented as strengths or areas for improvement based on observations documented through the data-collection process, identifies associated core capabilities, and, if appropriate, presents specific and actionable recommendations. The observations are presented in the following subsections:

- Planning/Incident Readiness
- Operational Coordination
- Public Information and Warning

3.1 Planning/Incident Readiness

3.1.1 Strength: Pre-Existing Relationships, Interagency Collaboration, and Resource Availability

OBSERVATION: The incident highlighted the positive impact of pre-existing working relationships and interagency collaboration between Contra Costa County Fire Protection District, MRC, allied agencies, and county supervisors. Despite some initial challenges in communication and resource integration, these relationships facilitated smooth interactions and coordination.

CORE CAPABILITIES: Operational Coordination, Operational Communication

ANALYSIS: The departments involved in this response have regular interactions and joint training exercises, such as PMAO's quarterly meetings and refinery tours with county supervisors and Community Advisory Panel. During the incident, the presence of tenured personnel who work for Contra Costa County Fire Protection District, MRC, and CCH facilitated collaboration among the departments. Despite initial communication challenges due to high noise levels and incompatible radio systems, the established relationships allowed for adaptive problem-solving and coordination. The incident demonstrated the strength of existing working relationships in enhancing operational coordination and incident readiness. Agencies can further enhance their collective response capabilities in future incidents by nurturing current relationships to address identified gaps.

Resources were available from Contra Costa County Fire Protection District, CCH, PMAO, law enforcement agencies, and additional agencies from the region. This incident required high-volume pumps for industrial fire suppression and the deployment of HazMat teams for decontamination, air monitoring, and situational assessment with the use of drones. The capabilities of PMAO partners to provide high-volume pump resources and support from Contra Costa County Fire Protection District and CCH HazMat teams proved to be beneficial in supporting the incident. As the number of PMAO partner organizations may decrease in the future, it would be valuable for the county to mitigate the losses of PMAO partners, as described in Section Area for Improvement: Mitigate Potential Loss of Petrochemical Mutual Aid (PMAO) Partners.

3.1.2 Strength: HazMat Resources and Capabilities

OBSERVATION: The Contra Costa County Fire Protection District and CCH HazMat teams were rapidly deployed and highly equipped to perform HazMat operations to decontaminate exposed patients, conduct air monitoring, and gain situational awareness using appropriate data and available technologies.

CORE CAPABILITIES: Environmental Response/Health and Safety; Situational Assessment

ANALYSIS: Through the CWS notification process and calls from the community to the dispatch

centers, the Contra Costa County Fire Protection District and CCH HazMat teams were notified and arrived on scene within a short amount of time to begin HazMat operations. Refinery personnel who were exposed to chemicals not immediately known were decontaminated by the Contra Costa County Fire Protection District HazMat Team using best practices and methods based on the known location of the incident and the types of petroleum-based products typically present at the facility.

The CCH HazMat team, in coordination with the Bay Area Air District, was equipped with air monitoring capabilities and conducted air monitoring downwind and along the perimeter of the smoke plume to notify impacted businesses to take appropriate actions. Further, the teams used available data, Environmental Protection Agency standards, and visual observations to provide information to UC and the county Health Officer in determining whether to upgrade the CWS alert level from Level 2 to Level 3. The Contra Costa County Fire Protection District HazMat team deployed infrared drones to gain situational awareness of the fire's point of origin.

NOTE: Prior to the development of this report, the Contra Costa County Board of Commissioners voted to merge CCH's HazMat Division to Contra Costa County Fire Protection District.

3.1.3 Area for Improvement: Response Plan Development

OBSERVATION: Contra Costa County emergency response agencies do not have integrated response plans with MRC or the other area refineries, leading to delayed coordination. Currently, MRC and Petrochemical Mutual Aid Organization (PMAO) have pre-established plans, where PMAO partners have an understanding of their roles and responsibilities.

CORE CAPABILITIES: Planning, Operational Coordination

ANALYSIS: Discussion during the after-action debrief meeting highlighted the need to develop pre-incident response plans in coordination with area refineries. Responding units from PMAO were requested quickly, understood their roles in assisting the facility operator's fire brigade, and were provided tasks on arrival.

Local agencies were notified of the incident through the activation of the CWS or their dispatch centers. Once local and county agencies arrived, there was no immediate communication with the facility operator, and specialized operations (HazMat and air monitoring) were performed within local responding agencies' standard operating procedures, not in coordination with MRC. The responding Contra Costa County Fire

Protection District units remained in a staging area without direct communication to the facility operator and without an assignment to support the incident.

RECOMMENDATION:

a. Develop pre-incident response plans with refinery facilities in the county. These plans should identify when 911 dispatch should be notified of an incident, the facility's gate of entry, and the communication channels to be used. Roles of responding agencies should also be defined for fires, hazardous materials incidents, medical emergencies, and rescue operations. All planning should align with National Fire Protection Association (NFPA) 1620 standards and Contra Costa County Ordinance Chapter 450-2 – HazMat Release Response Plans and Inventories.[1]

3.1.4 Area for Improvement: Communications Plans and Equipment

OBSERVATION: During the incident, MRC Fire Brigade personnel did not have their East Bay Regional Interoperable Communications System (EBRICS) radios with them, resulting in a communication gap between them and the responding Contra Costa County Fire Protection units.

CORE CAPABILITIES: Operational Coordination, Operational Communications, Situational Assessment

ANALYSIS: During day-to-day operations, MRC personnel use plant radios on an internal system that is separate from EBRICS radios, which are used by the Contra Costa County Fire Protection District. However, MRC has purchased a limited number of its own EBRICS radios that can be used to communicate with responding emergency units on a designated talk group. During this incident, MRC Fire Brigade personnel were committed to the incident and were unable to bring their EBRICS radios, resulting in communication issues that persisted after UC was established.

[1] Contra Costa County Code, Chapter 450-2 - Hazardous Materials Release Response Plans and Inventories, https://library.municode.com/ca/contra_costa_county/codes/ordinance_code?nodeId=TIT4HESA_DIV450HAMAWA_CH450-2HAMAREREPLIN

RECOMMENDATIONS:

a. Implement a policy requiring the use of the PMAO communication plan for MRC and Contra Costa County Fire Protection District when responding to refinery incidents, allowing for direct communication channels between agencies.

b. Request that MRC Fire Brigade personnel and the refinery team leader carry EBRICS radios with them during their day-to-day operations.

c. Request that MRC procure additional EBRICS radios to increase their inventory of EBRICS radios.

d. Establish a quarterly schedule with refineries to perform radio communications tests with PMAO agencies using EBRICS radios on the designated talk group.

3.1.5 Area for Improvement: Interagency Training and Exercise

OBSERVATION: Joint training and exercises involving public- and private-sector partners can help address the coordination and response gaps revealed by the incident, particularly those related to planning and incident readiness.

CORE CAPABILITIES: Planning, Operational Coordination

ANALYSIS: The county lacks regular joint training and exercises between public- and private-sector partners, such as MRC and PMAO, which contributed to challenges in integrating command functions and aligning operational strategies during the incident. This preparedness gap resulted in initial confusion over roles and responsibilities, as well as a fragmented command structure, which affected the overall efficiency of the response. In the past, Contra Costa County Fire Protection District and MRC personnel participated in joint trainings, such as the Texas Oil Fire School; however, the number of personnel from Contra Costa County Fire Protection District attending those trainings has recently decreased. Through discussion, participants agreed that Contra Costa County Fire Protection District Battalion Chiefs and decision-makers would be the most appropriate personnel to attend future joint trainings with MRC personnel. It would be beneficial for Contra Costa County Fire Protection District, MRC, and other refining companies in the county to train together in simulated scenarios. These exercises would increase public and private entities' familiarity with each other's capabilities, resources, and operational procedures—in addition to building trust and effective collaboration strategies.

RECOMMENDATIONS:

a. Prioritize establishing and participating in robust training and exercise programs that include both public- and private-sector partners, with a focus on integrated command functions, standardized communication protocols, and coordinated resource management.

b. Engage in industry-led exercises and locally host Texas A&M Engineering Extension Services (TEEX) Oil Fire School training, if possible, funded by MRC. Regular participation shall include decision-makers, such as Battalion Chiefs, and debriefing sessions to ensure lessons learned are incorporated into planning and operational coordination.

c. Coordinate with MRC to establish a Contra Costa County Fire Protection District–MRC Joint Task Force, following the example of successful collaborations such as the City of Richmond–Chevron partnership. This task force will serve as a dedicated body for planning and executing joint exercises, developing shared response protocols, and facilitating continuous improvement in emergency management practices.

3.1.6 Area for Improvement: Mitigate Potential Loss of Petrochemical Mutual Aid (PMAO) Partners

OBSERVATION: The anticipated closures of refineries and industries in the San Francisco Bay Area could lead to the loss of PMAO partners, which could impact resource availability and operational support in future incidents. Recently, the Valero Refinery in Benicia notified the California Energy Commission of its scheduled closure for April 2026. [2]

CORE CAPABILITIES: Planning, Community Resilience

ANALYSIS: The anticipated closures of refineries in the San Francisco Bay Area present a significant challenge to the current emergency response framework, particularly concerning the availability and integration of industrial firefighting resources. These closures could lead to the loss of key PMAO partners, who traditionally provide specialized equipment, expertise, and personnel necessary for effective

[2] Jao, Nicole, et al., "Exclusive: In rare move, California steps in to find buyer for Valero refinery to avoid closure, sources say," Reuters, July 23, 2025, https://www.reuters.com/sustainability/climate-energy/rare-move-california-steps-find-buyer-valero-refinery-avoid-closure-sources-say-2025-07-23/

incident response in industrial settings. The loss of PMAO partners would likely reduce the frequency and effectiveness of joint training exercises and preparedness activities. Industrial partners have traditionally hosted and/or funded training and exercises that enhance the readiness of public-sector responders to handle industrial incidents, as mentioned in Section 3.1.5. Currently, there is insufficient preparation to mitigate the anticipated loss of industrial firefighting resources and expertise. This gap in planning and preparedness poses a risk to the overall readiness and effectiveness of incident management and response efforts in industrial scenarios.

RECOMMENDATIONS:

a. Strengthen relationships with PMAO partners by initiating strategic planning sessions dedicated to addressing the potential impact of refinery closures. These sessions should involve key stakeholders, including public-sector emergency responders, remaining industrial partners, and local government representatives, to develop a comprehensive response strategy.

b. Invest in training and equipment for public-sector responders to bolster their ability to handle industrial incidents independently.

c. Expand the scope and frequency of interagency exercises to enhance coordination and communication among all stakeholders. These exercises should also simulate scenarios reflecting the absence of PMAO partners, allowing agencies to test and refine response strategies.

3.2 Operational Coordination

3.2.1 Strength: Internal Coordination and Resource Tracking

OBSERVATION: Contra Costa County Fire Protection District demonstrated strong internal coordination and operational efficiency during the incident, effectively managing complex tasks and tracking their personnel and resources.

CORE CAPABILITY: Operational Coordination

ANALYSIS: Contra Costa County Fire Protection District crews demonstrated high levels of organization by exemplifying effective internal coordination that supported their broader incident response efforts. With the use of resource-tracking systems like Tablet Command. Contra Costa County Fire Protection District was able to achieve real-time tracking and management of personnel and resources, facilitating a streamlined approach to accountability and resource allocation. Their internal structure and communication ensured operational continuity and adaptability despite external challenges, allowing Contra Costa County Fire Protection District to determine task responsibilities and resource allocation. This enabled them to provide specialized resources and expertise, such as conducting air monitoring, plume modeling, and exposure protection outside of MRC's boundaries.

3.2.2 Area for Improvement: Multi-Agency Resource Tracking and Personnel Utilization

OBSERVATION: While Contra Costa County Fire Protection District, MRC, and PMAO resources were efficiently tracked within their internal systems, other resources, including CCH, U.S. Coast Guard, and California Occupational Safety and Health Administration, were not effectively accounted for. This resulted in fragmentation of resource management and challenges in integrating all entities into the response.

CORE CAPABILITY: Operational Coordination

ANALYSIS: The incident revealed gaps in the integration and utilization of resources from all responding agencies. While Contra Costa County Fire Protection District, MRC, and PMAO used internal systems to track personnel and resources at the scene, the Contra Costa County Fire Protection District Incident Command (IC) had to manually enter additional public agency resources into the resource tracking program, which caused inefficiencies and delays. Furthermore, the lack of applicable additional incident command positions and other support personnel for Contra Costa County Fire Protection District's IC to support the incident's span of control hindered comprehensive situational awareness and accountability. The use of multiple tracking systems by various agencies delayed the collective management of resources and weakened the overall coordination and effectiveness of the response, highlighting the need for improved interoperability and shared information systems.

RECOMMENDATIONS:

a. Expand the incident command structure, as appropriate to the incident, to allow for better span of control and improve incident management.

b. Organize joint exercises involving all relevant agencies to simulate integrated resource tracking scenarios. Ensure key personnel, such as ICs and appointed support personnel, are proficient in using these systems to optimize resource deployment.

c. Explore current capabilities within Tablet Command or staffing software to manually input external resources to maintain accountability of resources on scene at the UC location.

3.2.3 Area for Improvement: Implementation of Terminology, Integrated Processes, and Unified Command Structure

OBSERVATION: During the incident, there were variations in the integration of terminology, roles, and implementation of the command structure between the Contra Costa County Fire Protection District IC and the MRC IC. These inconsistencies disrupted clarity and cohesion within UC, particularly regarding the inclusion of essential partners such as public health agencies and ultimately delayed effective decision-making.

CORE CAPABILITIES: Operational Coordination, Operational Communications

ANALYSIS: During the incident at MRC, personnel established the initial IC at the fire scene, referred to as the field IC. Upon the arrival of Contra Costa County Fire Protection District crews, the senior fire officer designated themselves as the Contra Costa County Fire Protection District IC and proceeded to the MRC Command Post to establish UC with the Chief of the Martinez Police Department and another MRC representative, who was also designated as the IC for MRC. Additionally, the Contra Costa County Fire Protection District representative within UC appointed a battalion chief to serve as Operations Chief at the MRC entrance, where they oversaw tracking of incoming Contra Costa County Fire Protection District resources. Although a public health officer was present in the MRC EOC, they were not actively engaged with UC.

INCIDENT COMMAND SYSTEM (ICS)

Best practices suggest that Contra Costa County Fire Protection District, being the Authority Having Jurisdiction (AHJ) for fire suppression within the Contra Costa County Fire District, would serve as the lead agency in UC, with representatives from other AHJs, such as Martinez Police Department and CCH represented. Other agencies and organizations, such as MRC, U.S. Coast Guard, Bay Area Air District, and additional PMAO agencies, would serve as cooperating agencies to support the incident. ICS best practices would suggest the MRC Fire Brigade initial IC would work in cooperation with the Contra Costa County Fire Protection District Battalion Chief, who would be designated as the Operations Section Chief and Deputy Operations Section Chief.

MRC activated its EOC to support the incident and designated an EOC Operations Liaison Officer to address the operational needs of fire suppression in the field, while maintaining direct communication with the field IC. Due to changing weather conditions, the UC Post in the field determined it necessary to relocate to the EOC, which resulted in some overlap in command structures.

The use of identical titles for different locations during the incident contributed to overlapping command declarations and a fragmented approach to incident management. Adhering to ICS best practices and standardized command structures is crucial to enhancing clarity and effectiveness in future responses. By implementing these measures, agencies can ensure a more cohesive and effective response, thereby reducing confusion and improving overall incident management and coordination.

RECOMMENDATIONS:

a. Offer training opportunities for fire district personnel, county personnel, local law enforcement, and private-sector partners to enhance understanding of operational coordination, standardized terminology, and the establishment of a robust UC structure. These trainings should provide comprehensive guidance on the principles and practices of UC, with emphasis on integration between public- and private-sector partners. These trainings include:
    i. MGT-314: Enhanced All-Hazards Incident Management/Unified Command Course, offered by TEEX
    ii. ICS-300: Intermediate ICS for Expanding Incidents and G-191: Incident Command System/Emergency Operations Center Interface, offered by the California Governor's Office of Emergency Services
b. Establish a standardized framework that clearly delineates the roles and responsibilities of the MRC EOC, UC, operations personnel, and other participating agencies (such as CCH) during an incident. This framework should be aligned with National Incident Management System (NIMS) principles to ensure consistency and interoperability.
c. Develop a robust training and exercise program to integrate a comprehensive UC framework into pre-incident planning and preparedness activities.
d. Establish communication protocols to facilitate coordination between the EOC and IC/UC, enabling seamless information sharing and decision-making.

3.2.4 Area for Improvement: On-Site Integration into the Command Staff

OBSERVATION: The increased use of virtual technologies following the COVID-19 pandemic has been useful in numerous capacities; however, on-scene collaboration of PIOs is paramount for efficient coordination and collaboration. This is particularly important during multi-agency coordination when a UC structure is established during an incident and PIOs from different organizations are integrated into the PIO-function of the Command Staff.

CORE CAPABILITIES: Public Information and Warning, Operational Coordination

ANALYSIS: Public information during an emergency response needs to be validated as details change, and the dissemination of updated information occurs frequently. When numerous agencies—in this incident, Contra Costa County Fire Protection District, CCH, MRC, and CWS—are informing information being disseminated, on-site coordination among all PIOs is essential to ensure consistency in the information presented to UC for approval, and prior to dissemination of information to the public. Although three of the four PIOs were present at the facility, collaboration was hindered by the need to confirm details with a PIO who was participating virtually.

RECOMMENDATIONS:

a. Develop public information plans that include clearly defined reporting requirements and expectations.
b. Train PIOs on reporting requirements expected during emergency responses.
c. Update on-call status to include on-scene reporting and identify backup on-call measures.

3.2.5 Area for Improvement: Identification of Hazardous Materials at Industrial Facilities

OBSERVATION: Quick identification of hazardous materials during a HazMat incident is vital to life safety. During the response, it appeared that a list of chemicals involved was not provided to outside responding agencies upon their arrival, and this limited their ability to support HazMat operations, decontamination of patients, and public information and warning efforts.

CORE CAPABILITIES: Public Health, Healthcare and Emergency Medical Services, Environmental Response/Health and Safety

ANALYSIS: During incidents involving hazardous materials, timely identification of hazardous materials is critical for HazMat response. To better assist Contra Costa County Fire Protection District and CCH HazMat teams and to ensure proper decontamination of patients, aid in smoke plume modeling with the verified names of chemicals involved in the incident, and inform the public with detailed and accurate information relating to the effects of identified hazardous materials on public health, a list of chemicals involved must be provided in accordance with Chapter 450-2 – Hazardous Materials Release Response Plans and Inventories. It is imperative to ensure that responding agencies have accurate information regarding hazardous materials that have been verified by the operator, which can improve HazMat team response and mitigation efforts.

RECOMMENDATIONS:

a. Coordinate with refinery operators in advance, to develop a list of hazardous materials likely to be involved in a release scenario. This list should be based on the facility's inventory and provided to responding fire resources upon their arrival, in accordance with the Emergency Planning and Community Right-to-Know Act.

b. Coordinate with industry operators to identify an emergency response liaison to support emergency response in accordance with the NFPA 400, Hazardous Materials Code, Chapter 6.1.4.3. Emergency Response Liaison, to streamline the identification of hazardous materials involved in the incident and improve overall coordination between responding agencies.

3.3 Public Information and Warning

3.3.1 Strength: Public Information Officers

OBSERVATION: Contra Costa County and Contra Costa County Fire Protection District employs an adequate number of PIOs with extensive training. Additionally, county leadership trusts PIOs to appropriately handle an incident and does not interfere with their responsibilities.

CORE CAPABILITY: Public Information and Warning

ANALYSIS: From notification through demobilization, county and Contra Costa County Fire Protection District PIOs were granted the appropriate level of trust to respond to the incident. County leadership understands that the PIOs and agency heads will follow the response protocol and escalate resources as needed. The county did not need to activate the emergency operations center or the county joint information center, as responding personnel were able to manage the incident appropriately.

3.3.2 Strength: Public Education Outreach Initiatives

OBSERVATION: The county agencies have enhanced their success with proactive public education

programs and coordinating messaging related to the Community Warning System (CWS) and notifications.

CORE CAPABILITY: Public Information and Warning

ANALYSIS: City and county agencies prioritize educating the public on the various alert and warning systems in Contra Costa County, to ensure the public receives critical information and their preferred level of communication. CWS partnered with local refineries to include informative CWS magnet inserts in mailers. This campaign resulted in a noticeable increase in new CWS subscriptions. Additionally, CWS has worked with Comcast for television public service announcements, published information in English and Spanish, and shared updates regularly on social media. The City of Martinez markets Martinez Alerts via city newsletters, social media, and posters. A mailer campaign using water bills is also in development. Contra Costa County participates in numerous public events and markets its alert system frequently.

Currently, Contra Costa County agencies, including CCH, Contra Costa County Fire Protection District, and the Sheriff's Department, partner with area refineries to conduct public outreach and information sessions through Community Awareness Emergency Response (CAER) Group, Inc. This nonprofit provides the community with valuable resources and information regarding CWS and individual preparedness.

3.3.3 Area for Improvement: Alert and Warning Systems Education

OBSERVATION: Despite the public outreach initiatives, the public remains confused about the various alert and warning systems in Contra Costa County.

CORE CAPABILITY: Public Information and Warning

ANALYSIS: Although various jurisdictions have invested significant time and resources into marketing the various alert and warning systems, the public is unaware of each system's purpose. CWS only disseminates alerts when a *protective action* must be taken by the public. It does not continue to send updates regarding an incident's status. The city and/or county alert and warning systems should be

utilized to provide steady incident updates. It is important to continue public outreach initiatives that include information on the multiple alert and warning systems that are available, as opposed to marketing individual systems.

RECOMMENDATIONS:

a. Develop a one-page information flyer detailing the various alert and warning systems available in Contra Costa County, along with clear instructions for how to sign up.

b. Distribute the flyer in partnership with individual agency outreach initiatives to ensure the widest possible cross-section of the public is informed.

3.3.4 Area for Improvement: Determining Appropriate CWS Level

OBSERVATION: Refineries can determine the CWS alert levels and distribute alerts to the community. However, public confidence in future alerts is determined by the public's confidence in the initial alert.

CORE CAPABILITY: Public Information and Warning

ANALYSIS: MRC distributed the initial CWS alert as Level 2, which means the release "may have adverse health consequences for sensitive individuals, including those with lung or heart disease, the elderly, or the very young."[3] Later, due to a change in weather conditions, the CWS level was upgraded to a Level 3, meaning the release "may cause offsite adverse health consequences for the general public"[4] and required sirens to sound every 30 minutes. The size and color of the plume, in combination with existing public distrust stemming from prior refinery incidents, led the public to question the accuracy of the initial Level 2 alert and reinforced the public's existing distrust in subsequent information releases. As stated in the CCH Hazardous Materials Programs Incident Notification Policy, when in doubt, CWS activation levels should always default to the higher level of activation.

[3] Contra Costa Health Hazardous Materials Programs: Hazardous Materials Incident Notification Policy, Effective January 15, 2025

[4] Contra Costa Health Hazardous Materials Programs: Hazardous Materials Incident Notification Policy, Effective January 15, 2025

RECOMMENDATIONS:

a. Provide training to area refineries on the CCH Hazardous Materials Programs Incident Notification Policy.

b. Conduct exercises with area refineries to evaluate their ability to issue the appropriate CWS alert level following a release.

3.3.5 Area for Improvement: Identification of Public Information Lead

OBSERVATION: During the response, MRC Community Relations served as the public information lead and led the press conferences. Given the public's distrust of refinery operators, the messaging would be best received with a public-sector agency leading public information efforts.

CORE CAPABILITY: Public Information and Warning, Operational Coordination

ANALYSIS: During coordinated responses between public- and private-sector agencies, the Authority Having Jurisdiction (AHJ) should serve as the lead agency for public information to establish trust and credibility with the community. MRC is a privately owned company, while the AHJ is a public-sector agency whose primary responsibility is life safety and security of community members. AAR participants believe information disseminated about a refinery incident is more likely to be trusted when released from a public-sector agency than from the refining company. MRC PIOs should continue to participate in the dissemination of public information and press conferences as industry subject matter experts, but the AHJ should serve as the lead and primary point of contact for public messaging.

RECOMMENDATIONS:

a. Identify a qualified representative from the AHJ as the public information lead in all incidents, regardless of the incident location.

b. Train and exercise on public information response roles with MRC Community Relations.

3.3.6 Area for Improvement: Notify and Incorporate Jurisdictional PIOs

OBSERVATION: The county agency PIOs were effectively incorporated into the response, but the City of Martinez, the jurisdiction in which the impacted population resided, was not as effectively integrated in the messaging efforts.

CORE CAPABILITY: Public Information and Warning, Operational Coordination

ANALYSIS: Public information during an emergency response is challenging and time sensitive. Crisis communication skills must be developed through training and regular exercises, to ensure PIOs are comfortable with the fast-paced environment and frequently changing scenarios. Contra Costa County employs numerous well-trained PIOs, but other jurisdictions within the county designate PIOs from other full-time roles, with public information being an "other duties as assigned" responsibility. The fire was going to impact the City of Martinez; therefore, the city should be included in the dissemination of public information and alert and warning. The City of Martinez does not have a dedicated PIO responsible for these activities. An executive assistant is tasked with both executive assistant duties and PIO duties, managing both roles during a crisis. In addition, the City of Martinez Police Department does not have a PIO and, despite being included in UC, did not bring the City of Martinez PIO into the onsite Joint Information Center until after the second press conference.

RECOMMENDATIONS:

a. Develop a joint SOP outlining how the lead agency assesses all potentially impacted jurisdictions, notifies those jurisdictions, and requests PIO support.

b. Provide local PIOs with training and exercise opportunities to enhance their capabilities and experience. Suggested training should include core Incident Command System courses, National Disaster & Emergency Management University PIO Program, and Bay Area Urban Area Security Initiative training offerings.

c. Incorporate all area public- and private-sector PIOs into training and exercises.

4 Conclusion

This AAR/IP documents the strengths and opportunities to improve overall response to refinery incidents between public- and private-sector agencies operating in Contra Costa County. The results of this report are intended to further enhance agencies' abilities to effectively plan, coordinate, and communicate across the public and private sectors.

During the Martinez Refining Company Fire, public- and private-sector agencies demonstrated their ability to effectively respond to a complex incident by using internal and mutual aid resources. This incident highlighted the capabilities available to the public- and private-sector agencies in Contra Costa County. There is an opportunity to improve the coordination of these resources through the development of incident response plans that include public and private stakeholders. It is important to highlight that Contra Costa County Fire Protection District is the AHJ for fire suppression within the Contra Costa County Fire District. CCH and the City of Martinez Police Department were additional authorities having jurisdiction for public health and law enforcement during the incident. MRC, the U.S. Coast Guard, Bay Area Air District, and responding PMAO agencies played a pivotal role in the response as cooperating agencies.

It is equally important that the public trust the information they receive. Information should come from a trusted source, such as authorities having jurisdiction, that prioritizes public safety and be provided to the public by the authorities having jurisdiction to address resident concerns regarding an incident. Public information and warning in Contra Costa County are available to residents through multiple platforms, including the County's Community Warning System, for protective measure communications and the municipality-operated mass notification tools, like Martinez Alert. The joint efforts for public education have proven effective; however, emergency communication platforms vary in capability: some provide only an initial alert, while others offer consistent messaging—including recommended actions for the public—throughout an incident.

Coordination between private- and public-sector agencies resulted in the successful extinguishment of the fire at MRC. This incident highlighted the need to improve planning and coordination between public- and private-sector agencies, as well as improve how information is disseminated. In addition, a joint training and exercise program will provide participating agencies with the ability to test and validate response plans across the public- and private-sector agencies. It is inevitable that incidents will occur, and it is in the public's best interest that both public- and private-sector agencies work together to improve how they plan for, coordinate with, and respond to similar incidents in the future.

Appendix A: Improvement Plan

Appendix A: Improvement Plan

The Improvement Plan (IP) was developed for the county during the after-action review process. Lead agencies and priorities were identified through a collaborative planning effort with key stakeholders. Each recommendation is assigned to an element of Planning, Organization, Equipment, Training, or Exercise (POETE) and a priority level. The priority levels are based on expected timeframe to complete the recommendation and are defined as High (within 12 months), Medium (12–24 months), and Low (24+ months).

Table 3: Improvement Plan

Reference	POETE	Area for Improvement	Recommended Action(s)	Lead Agency	Agency POC	Priority Level
3.1.3.a	Planning	Response Plan Development	Develop pre-incident response plans with refinery facilities in the county. These plans should identify when 911 dispatch should be notified of an incident, the facility's gate of entry, and the communication channels to be used. Roles of responding agencies should also be defined for fires, hazardous materials incidents, medical emergencies, and rescue operations. All planning should align with National Fire Protection Association (NFPA) 1620 standards and Contra Costa County Ordinance Chapter 450-2 – HazMat Release Response Plans and Inventories.	CCCFPD	Deputy Chief Stark	High
3.1.4.a	Planning	Communications Plans and Equipment	Implement a policy requiring the use of the PMAO communication plan for MRC and Contra Costa County Fire Protection District when responding to refinery incidents, allowing for direct communication channels between agencies.	CCCFPD	Deputy Chief Stark	Medium

Reference	POETE	Area for Improvement	Recommended Action(s)	Lead Agency	Agency POC	Priority Level
3.1.4.b	Planning	Communications Plans and Equipment	Request that MRC Fire Brigade personnel and the refinery team leader carry EBRICS radios with them during their day-to-day operations.	CCCFPD	Deputy Chief Stark	High
3.1.4.c	Equipment	Communications Plans and Equipment	Request that MRC procure additional EBRICS radios to increase their inventory of EBRICS radios.	CCCFPD	Deputy Chief Stark	Medium
3.1.4.d	Exercise	Communications Plans and Equipment	Establish a quarterly schedule with refineries to perform radio communications tests with PMAO agencies using EBRICS radios on the designated talk group.	CCCFPD	Deputy Chief Stark	Medium
3.1.5.a	Training Exercise	Interagency Training and Exercise	Prioritize establishing and participating in robust training and exercise programs that include both public- and private-sector partners, with a focus on integrated command functions, standardized communication protocols, and coordinated resource management.	CCCFPD	Deputy Chief Stark	High
3.1.5.b	Training	Interagency Training and Exercise	Engage in industry-led exercises and locally host Texas A&M Engineering Extension Services (TEEX) Oil Fire School training, if possible, funded by MRC. Regular participation shall include decision-makers, such as Battalion Chiefs, and debriefing sessions to ensure lessons learned are incorporated into planning and operational coordination	CCCFPD	Deputy Chief Stark	Medium

Reference	POETE	Area for Improvement	Recommended Action(s)	Lead Agency	Agency POC	Priority Level
3.1.5.c	Organization	Interagency Training and Exercise	Coordinate with MRC to establish a Contra Costa County Fire Protection District–MRC Joint Task Force, following the example of successful collaborations such as the City of Richmond–Chevron partnership. This task force will serve as a dedicated body for planning and executing joint exercises, developing shared response protocols, and facilitating continuous improvement in emergency management practices.	CCCFPD	Deputy Chief Stark	High
3.1.6.a	Planning	Mitigate Potential Loss of Petrochemical Mutual Aid (PMAO) Partners	Strengthen relationships with PMAO partners by initiating strategic planning sessions dedicated to addressing the potential impact of refinery closures. These sessions should involve key stakeholders, including public-sector emergency responders, remaining industrial partners, and local government representatives, to develop a comprehensive response strategy.	CCCFPD	Deputy Chief Stark	Medium/Low
3.1.6.b	Training	Mitigate Potential Loss of Petrochemical Mutual Aid (PMAO) Partners	Invest in training and equipment for public-sector responders to bolster their ability to handle industrial incidents independently.	CCCFPD	Deputy Chief Stark	Medium/Low
3.1.6.c	Exercise	Mitigate Potential Loss of Petrochemical Mutual Aid (PMAO) Partners	Expand the scope and frequency of interagency exercises to enhance coordination and communication among all stakeholders. These exercises should also simulate scenarios reflecting the absence of PMAO partners, allowing agencies to test and refine response strategies.	CCCFPD	Deputy Chief Stark	High

Reference	POETE	Area for Improvement	Recommended Action(s)	Lead Agency	Agency POC	Priority Level
3.2.2.a	Organization	Multi-Agency Resource Tracking and Personnel Utilization	Expand the incident command structure, as appropriate to the incident, to allow for better span of control and improve incident management.	CCCFPD	Deputy Chief Stark	High
3.2.2.b	Exercise	Multi-Agency Resource Tracking and Personnel Utilization	Organize joint exercises involving all relevant agencies to simulate integrated resource tracking scenarios. Ensure key personnel, such as ICs and appointed support personnel, are proficient in using these systems to optimize resource deployment.	CCCFPD	Deputy Chief Stark	High/Medium
3.2.2.c	Equipment	Multi-Agency Resource Tracking and Personnel Utilization	Explore current capabilities within Tablet Command or staffing software to manually input external resources to maintain accountability of resources on scene at the UC location.	CCCFPD	Deputy Chief Stark	Medium

Reference	POETE	Area for Improvement	Recommended Action(s)	Lead Agency	Agency POC	Priority Level
3.2.3.a	Training	Implementation of Terminology, Integrated Processes, and Unified Command Structure	Offer training opportunities for fire district personnel, county personnel, local law enforcement, and private-sector partners to enhance understanding of operational coordination, standardized terminology, and the establishment of a robust UC structure. These trainings should provide comprehensive guidance on the principles and practices of UC, with emphasis on integration between public- and private-sector partners. These trainings include: MGT-314: Enhanced All-Hazards Incident Management/Unified Command Course, offered by TEEX ICS-300: Intermediate ICS for Expanding Incidents and G-191: Incident Command System/Emergency Operations Center Interface, offered by the California Governor's Office of Emergency Services	CCCFPD	Deputy Chief Stark	Medium
3.2.3.b	Planning	Implementation of Terminology, Integrated Processes, and Unified Command Structure	Establish a standardized framework that clearly delineates the roles and responsibilities of the MRC EOC, UC, operations personnel, and other participating agencies (such as CCH) during an incident. This framework should be aligned with National Incident Management System (NIMS) principles to ensure consistency and interoperability.	CCCFPD	Deputy Chief Stark	High

Reference	POETE	Area for Improvement	Recommended Action(s)	Lead Agency	Agency POC	Priority Level
3.2.3.c	Training	Implementation of Terminology, Integrated Processes, and Unified Command Structure	Develop a robust training and exercise program to integrate a comprehensive UC framework into pre-incident planning and preparedness activities.	CCCFPD	Deputy Chief Stark	Medium
3.2.3.d	Planning	Implementation of Terminology, Integrated Processes, and Unified Command Structure	Establish communication protocols to facilitate coordination between the EOC and IC/UC, enabling seamless information sharing and decision-making.	CCCFPD	Deputy Chief Stark	High
3.2.4.a	Planning	On-Site Integration into the Command Staff	Develop public information plans that include clearly defined reporting requirements and expectations.	CCH	Matt Kaufmann	High
3.2.4.b	Training	On-Site Integration into the Command Staff	Train PIOs on reporting requirements expected during emergency responses.	CCCFPD	Deputy Chief Stark	Medium
3.2.4.c	Organization	On-Site Integration into the Command Staff	Update on-call status to include on-scene reporting and identify backup on-call measures	CCH	Matt Kaufmann	High
3.2.5.a	Planning	Identification of Hazardous Materials at Industrial Facilities	Coordinate with refinery operators in advance, to develop a list of hazardous materials likely to be involved in a release scenario. This list should be based on the facility's inventory and provided to responding fire resources upon their arrival, in accordance with the Emergency Planning and Community Right-to-Know Act.	CCCFPD	Deputy Chief Stark	High

Reference	POETE	Area for Improvement	Recommended Action(s)	Lead Agency	Agency POC	Priority Level
3.2.5.b	Organization	Identification of Hazardous Materials at Industrial Facilities	Coordinate with industry operators to identify an emergency response liaison to support emergency response in accordance with the NFPA 400, Hazardous Materials Code, Chapter 6.1.4.3. Emergency Response Liaison, to streamline the identification of hazardous materials involved in the incident and improve overall coordination between responding agencies.	CCCFPD	Deputy Chief Stark	High
3.3.3.a	Planning	Alert and Warning Systems Education	Develop a one-page information flyer detailing the various alert and warning systems available in Contra Costa County, along with clear instructions for how to sign up.	Contra Costa County Sheriff's Office – Office of Emergency Services	Jose Beltran	High
3.3.3.b	Planning	Alert and Warning Systems Education	Distribute the flyer in partnership with individual agency outreach initiatives to ensure the widest possible cross-section of the public is informed.	Contra Costa County Sheriff's Office – Office of Emergency Services	Jose Beltran	High
3.3.4.a	Training	Determining Appropriate CWS Level	Provide training to area refineries on the CCH Hazardous Materials Programs Incident Notification Policy.	CCH HazMat	Matt Kaufmann	High
3.3.4.b	Exercise	Determining Appropriate CWS Level	Conduct exercises with area refineries to evaluate their ability to issue the appropriate CWS alert level following a release.	CCH HazMat	Matt Kaufmann	High

Reference	POETE	Area for Improvement	Recommended Action(s)	Lead Agency	Agency POC	Priority Level
3.3.5.a	Organization	Identification of Public Information Lead	Identify a qualified representative from the AHJ as the public information lead in all incidents, regardless of the incident location.	CCCFPD	Deputy Chief Stark	High
3.3.5.b	Training Exercise	Identification of Public Information Lead	Train and exercise on public information response roles with MRC Community Relations.	CCCFPD	Deputy Chief Stark	High
3.3.6.a	Planning	Notify and Incorporate Jurisdictional PIOs	Develop a joint SOP outlining how the lead agency assesses all potentially impacted jurisdictions, notifies those jurisdictions, and requests PIO support.	CCH	Matt Kaufmann	High
3.3.6.b	Training Exercise	Notify and Incorporate Jurisdictional PIOs	Provide local PIOs with training and exercise opportunities to enhance their capabilities and experience. Suggested training should include core Incident Command System courses, National Disaster & Emergency Management University PIO Program, and Bay Area Urban Area Security Initiative training offerings.	Contra Costa County Sheriff's Office – Office of Emergency Services	Jose Beltran	High
3.3.6.c	Training Exercise	Notify and Incorporate Jurisdictional PIOs	Incorporate all area public- and private-sector PIOs into training and exercises.	CCCFPD	Deputy Chief Stark	Medium

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Appendix B: After-Action Review Methods

Appendix B: After-Action Review Methods

This After-Action Report (AAR) uses a multi-step process including documentation review, data collection via individual interviews and group meetings, and Poll Everywhere survey technology. The following overview notes the implementation of the approach.

Step 1: Incident Document Collection and Interviews

The AAR document review process consisted of reviewing incident documentation. In addition to document review, IEM staff conducted individual interviews with key stakeholders to identify concerns, concepts, and discussion topics for the large group meeting.

Based on a list provided by Contra Costa County Fire Protection District and CCH, key stakeholders were given an opportunity to discuss the overall response, strengths, and areas of improvement. Ten participants were interviewed individually. These individuals were identified as members of UC, command staff, general staff, or key personnel involved in the incident.

Interview Representation	Number
Public-Sector Stakeholders	7
Private-Sector Stakeholders	3
Total	**10**

The individual interview questions related to the Martinez Refining Company Fire Incident were:

1. What was your job during the incident?
2. How many real-world responses have you experienced? What were they?
3. Were you notified of the need to begin response operations promptly? How were you contacted regarding this incident?
4. Were there any concerns you had during the incident that were not immediately addressed?
5. Did anything hinder response and/or coordination activities during the incident?
6. Did anything help with response and/or coordination activities during the incident?
7. Did you have the necessary tools and resources to accomplish your tasks effectively?
8. In your opinion, what went well during the incident?
9. In your opinion, what areas need to be improved upon?
10. Is there anything specific that should be included in the After-Action Report (AAR)?
11. Is there any training you feel would improve your knowledge of response operations or your role in these operations?

Step 2: Large Group Meeting and Breakout Groups

An after-action meeting was organized with all public- and private-sector agencies that responded to the incident. A large group debriefing was facilitated in the morning, and three breakout groups met in the afternoon.

The large group meeting consisted of an overview and timeline of the incident, followed by a high-level discussion with a list of Poll Everywhere questions for participants to respond to and engage in further discussion. The questions presented during the large group meeting were:

1. How was your agency notified of the need to begin response operations, or to contribute to the continued response?
2. How effective was the initial response to the fire for your agency?
3. What were the main challenges your agency faced during this incident?
4. Were any challenges you or your agency/organization faced not immediately addressed?
5. In your opinion, how do you feel the coordination between agencies went during the incident?
6. Of the potential responses provided, did anything of these hinder response and/or coordination activities during the incident?
7. Of the responses provided, what aided in the response and/or coordination activities during the incident?
8. Reflecting on the incident, what additional resources or forms of support services, departments, or agencies could have contributed to improving the response's overall effectiveness (e.g., County EOC activation, VOADs, etc.)?
9. Is there anything specific that you feel should be included in the after-action report?
10. What can you or your agency/organization do next time if a similar incident happens again?

In the afternoon session, participants were grouped into three breakout groups to have in-depth discussions on the following topics.

- Incident Command and Operations
- Crisis Communications
- Hazardous Materials

Discussion items were tailored for each breakout group according to the topic area.

Step 3: Data Analysis

Findings from the data collection process were analyzed to identify strengths and areas for improvement. These findings were then used to group key observations and document corresponding core capabilities under each priority focus area.

Step 4: Establishing the Improvement Plan

Key observations and associated recommended actions were presented in the AAR and the appended IP. In addition, the IP prioritizes areas for improvement, indicates the agency or organization assigned to lead a response to each identified sustainment opportunity and area for improvement, and establishes a timeline (start and completion dates) for completing associated actions. Key stakeholders met on September 16, 2025, to assign responsibilities in the improvement plan.

Step 5: Implementing the Improvement Plan

The IP remains a living tool to help guide the process of addressing areas for improvement and will be used at follow-up meetings to check the status of outstanding areas for improvement and corresponding activities. Contra Costa County will continue to guide the improvement process, but responsible agencies and organizations will implement corrective actions related to their assigned areas for improvement. Contra Costa County will establish an accountability process that will involve quarterly meetings to assess progress with appropriate stakeholders.

Appendix C: Acronyms

Appendix C: Acronyms

Acronym	Definition
AAR/IP	After-Action Report/Improvement Plan
AHJ	Authority Having Jurisdiction
CCCFPD	Contra Costa County Fire Protection District
CCH	Contra Costa Health
CWS	Community Warning System
EBRICS	East Bay Regional Interoperable Communications System
EOC	Emergency Operations Center
HazMat	Hazardous Materials
IC	Incident Command; Incident Commander
ICS	Incident Command System
MRC	Martinez Refining Company
NIMS	National Incident Management System
PIO	Public Information Officer
PMAO	Petrochemical Mutual Aid Organization
POETE	Planning, Organization, Equipment, Training, or Exercise
TEEX	Texas A&M Engineering Extension Service
UC	Unified Command
VOAD	Voluntary Organizations Active in Disaster

Appendix D: Participating Organizations

Appendix D: Participating Organizations

Contra Costa County

- Community Warning System
- Contra Costa County Communications
- Contra Costa County Fire Protection District
- Contra Costa County Health Department
- Contra Costa County Office of Emergency Services
- Contra Costa County Sheriff's Office

Local Agencies

- Bay Area Air District
- City of Martinez
- City of Martinez Police Department

Private-Sector Partners

- Martinez Refining Company
- Petrochemical Mutual Aid Organization Members
- State Agencies
- California Highway Patrol
- California OSHA

Federal Partners

- U. S. Coast Guard

Appendix E: Incident Timeline

INCIDENT TIMELINE

Saturday, February 1, 2025

1:35 PM:
Hydrocarbon materials leak at Martinez Refining Company (MRC) and catch fire during planned maintenance.

1:39 PM:
Contra Costa Fire Protection District responds to a fire at MRC, 2000 Marina Vista Avenue, Martinez, California.

1:49 PM:
MRC issues a Level 2 alert through the Community Warning System (CWS), notifying Contra Costa Health (CCH) of the incident.

1:53 PM:
First Contra Costa Fire Protection District unit arrives on scene.

2:09 PM:
Contra Costa Fire Protection District HazMat Unit arrives on scene.

2:32 PM:
CCH expands the health advisory area to include all of Martinez, parts of Pacheco, and Clyde.

3:33 PM:
Petro-Chemical Mutual Aid Organization (PMAO) units arrive.

3:37 PM:
UC is established with Contra Costa Fire Protection District , MRC, and the Martinez Police Department.

4:45 PM:
First press conference is held.

4:48 PM:
CCH increases the CWS alert to Level 3 for specific zones near the refinery. The alert includes a shelter-in-place order. CWS sirens activate every 30 minutes.

4:58 PM:
CCH updates its website and social media, alerting the public to the shelter-in-place order.

6:45 PM:
Second press conference is held.

8:30 PM:
The fire is suppressed to the point that MRC can manage incident response. UC is dissolved.

8:30 PM:
Third press conference is held.

9:12 PM:
The shelter-in-place order is lifted, and the incident is moved to a Level 2 CWS alert. The health advisory remains in effect.

Sunday, February 2, 2025

2:17 AM:
Last Contra Costa Fire Protection District unit is cleared.

1:00 PM:
CCH issues a media release reporting that the health advisory will remain in effect until the fire at MRC is extinguished.

Tuesday, February 4, 2025

6:45 AM:
MRC and PMAO fire crews fully extinguish the fire.

3:00 PM:
Health advisory is lifted.