

**Contra Costa Health Hazardous Materials Programs (CCHHMP)**  
**Final Findings from December 2023 Unannounced Inspection at PBF Martinez**  
**Refining Company**  
**Full Report**  
**February 26 2024**

**Overview:**

CCHHMP (Contra Costa Health Hazardous Materials Program) conducted an Unannounced Inspection (UI) at PBF Martinez Refining Company (MRC) from December 26, 2023 through January 29, 2024. The goal of this inspection was to evaluate the refinery's compliance with select process safety programs due to process safety concerns from incidents over the last year and anonymous complaints. As a result, CCHHMP decided to conduct the UI in advance of the triennial California Accidental Release Prevention (CalARP) Program and county Industrial Safety Ordinance (ISO) audit scheduled to start in January 2024. The programs being reviewed during the UI include Mechanical Integrity, Management of Change, Pre-Startup Safety Review, Incident Investigations, and Stop Work Authority (Management Systems). The five safety programs were chosen as the subject of the unannounced inspection because of their relation to the frequency and type of incidents that had occurred at the refinery over the previous year. These programs represent only 5 of the 24 process safety programs required by the California Accidental Release Prevention Program and the County's Industrial Safety Ordinance, a full review of these process safety programs will occur during the triennial audit. The UI review of the 5 safety programs did not identify any areas needing immediate or short-term action. The full review of all 24 programs will take place during the normal triennial audit.

CCHHMP's UI team was comprised of 4 Accidental Release Prevention Engineers full time for the duration of the UI with 1 Hazardous Materials Specialist involved on an as needed basis.

CCHHMP conducted interviews with 15 Subject Matter Experts (SMEs), 12 Operators, 4 Contractors, and 2 Maintenance employees. CCHHMP interviewed 4 members of the refinery leadership team. CCHHMP interviewed Operators covering all four shifts at various control rooms and field shelters at the refinery. Additional interviews took place during field walks with Operators, Contractors, and Maintenance personnel. Although union representation was available for all interviews, many operators declined to be interviewed. The hesitancy of

operators to engage in interviews can be partly attributed to their experiences and observations from interactions with different agencies during inquiries related to the November 2022 spent catalyst release. It is not a regulatory requirement for operators to speak to CCHHMP during audits or inspections, however, CCHHMP was not able to hit the targeted number of interviews due to this barrier.

During the course of the UI, CCHHMP performed field walks of equipment, conducted interviews, and reviewed various policies, procedures, technical reports, and databases related to the identified process safety programs. The following sections describe the Unannounced Inspection (UI) at PBF Martinez Refining Company (MRC) conducted by CCHHMP from December 26, 2023 through January 29, 2024.

### **Mechanical Integrity:**

The review of the mechanical integrity program consisted of a review of the refinery's policies, interviews with management and subject matter experts, interviews with contractors and maintenance employees, attending maintenance planning meetings, reviewing documentation, and field observations of maintenance work. CCHHMP requested documentation on all "deferred maintenance" activities as of January 2, 2024, and received documentation for review during the onsite unannounced inspection. Additionally, CCHHMP examined several databases that track tasks with revised completion dates. This analysis is critical to our assessment, as it helps us understand the timeline adjustments for specific tasks. CCHHMP reviewed key performance indicator (KPI) reports generated for management related to any overdue inspections of equipment currently in use.

CCHHMP observed the refinery's daily maintenance planning meetings to gain insight into their work planning and execution processes. Several field visits were also conducted, including a tour of the machine shop, observations of ongoing fieldwork directly, and interviews with management and the workforce.

### **Mechanical Integrity Inspections and Testing**

CalARP section 2762.5 - Mechanical Integrity (b)(2) states, "The frequency of inspections and tests of process equipment shall be consistent with (1) the applicable manufacturers' recommendations, (2) RAGAGEP, or (3) internal practices that are more protective than (1) or (2). Inspections and tests shall be conducted more frequently if necessary, based on the operating experience with the process equipment."

Contra Costa Industrial Safety Ordinance 450-8.016 (a)(5)(D) states, "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."

According to interviews with Subject Matter Experts (SMEs), the refinery modified its Preventative Maintenance Plan to reflect operational changes made in 2020. These interviews also revealed that the refinery had eliminated certain preventative maintenance (PM) tasks on equipment that were either idled or had changing operating demands. In the context of equipment that is not in use, PM activities are generally not conducted. Conversely, for equipment experiencing decreased demand, there may be a reduction in the frequency of PM tasks, particularly for those that are time-based or contingent on the equipment's condition. Per interview with Subject Matter Experts (SMEs) indicated that the reduction in production rates was due to a combination of factors. Firstly, the COVID-19 pandemic led to a significant decrease in demand for products, including refined petroleum and petrochemicals. Additionally, personnel concerns related to the pandemic played a role. The scale-back of the Preventative Maintenance Plan was partly a response to these concerns, promoting social distancing and limiting on-site staff to essential personnel only.

CCHHMP reviewed a listing of the PM plans that were initially deferred and confirmed they had been re-implemented or reassigned to operators to complete. CCHHMP identified PMs that were removed from the system, but only on equipment that was no longer in service. CCHHMP reviewed a listing that consists of 1055 mechanical PMs and 1185 electrical PMs.

CCHHMP reviewed the 'Routine Maintenance Metrics', a monthly report used to monitor the balance between emergency work and regular maintenance tasks, alongside metrics such as schedule adherence and backlog hours. The reports also detailed overdue preventive maintenance (PM) tasks, broken down by specific trade. Notably, Analyzer PM tasks had the largest number of overdue items when compared to PM tasks for other equipment. However, the facility's completion rate for Analyzer PMs is generally considered adequate, at approximately 97%. CCHHMP examined various aspects related to the preventative maintenance tasks specifically those missed on Critical Safety Equipment (CSE). In our review, we identified four PMs directly related CSE, the tasks overlooked were primarily related to data collection and analysis which occur every two weeks. A technician familiar with the CSE informed us that the equipment includes onboard self-diagnostic capabilities. Additionally, operators can independently monitor any deviations in real time, a crucial feature for identifying issues with the equipment. It was also confirmed that all monthly preventative maintenance and functional tests have been carried out as scheduled.

#### Mechanical Integrity Inspections and Testing – Safety Instrumented Systems

ANSI/ISA-84.00.01 (IEC 61511 Mod), is a standard for safety instrumented systems in the process industries, focusing on reducing risks and ensuring safe operations. The standard outlines guidelines for risk assessment, determining safety integrity levels (SIL), and designing and implementing safety instrumented functions (SIFs). The standard encompasses the entire lifecycle of safety systems, including design, operation, maintenance, and decommissioning. It also emphasizes functional safety management and the verification and validation of system

performance to meet safety requirements. The interval of inspecting the safety instrumented systems is defined in the standard and should not be exceeded.

The refinery uses third-party software to calculate the inspection interval in order to obtain the necessary risk reductions. Per interviews with maintenance personnel, the inspection intervals are then implemented in their computerized maintenance management system (CMMS). Per an interview with Subject Matter Experts (SME), they also perform monthly meetings with a 180-day look ahead to confirm that proof testing of SIFs is completed on time. CCHHMP notes that there is no SIF validation testing that is currently past due.

In 2022, a Safety Instrumented Function (SIF) was tested one day beyond its scheduled due date, leading to it being reported as overdue to the State of California, in compliance with CalARP Program 4 regulatory requirements. CCHHMP examined the situation surrounding this SIF. Interviews with SMEs on Safety Instrumented Systems revealed that the refinery initially established a 12-month inspection interval based on initial calculations. However, on the day the inspection was due, a review concluded that an 18-month interval was sufficient to maintain a Safety Integrity Level 1. Despite this, internal protocols led the refinery to classify the inspection as delayed. CCHHMP also noted that this particular SIF is not associated with a Layer of Protection Analysis (LOPA). The SIF's narrative clarifies that while the health, safety, and environmental risks do not necessitate a Safety Integrity Level (SIL) rated Independent Protection Layer (IPL), the economic risks require mitigation at a SIL 1 level.

#### Mechanical Integrity Inspections and Testing – Deferral Process

The refinery has an established process for tracking deferred inspections via their D(A)-9 form titled Request for Scheduled Inspection of CAIR (Corrective Action Inspection Request) Due Date Extensions. At CCHHMP's request, the refinery provided a listing of all deferrals open as of January 2, 2024. CCHHMP reviewed select D(A)-9 forms and found the deferral process to be adequate. See the "Corrective Maintenance – Piping Repairs" section for a discussion related to modifying the D(A)-9 form to track both the *repair date* and the next *review date*.

#### Mechanical Integrity Corrective Maintenance

CalARP section 2762.5 - Mechanical Integrity (c) states, "Equipment deficiencies. The owner or operator shall correct deficiencies to ensure safe operation of process equipment. Repair methodologies shall be consistent with RAGAGEP or more protective internal practices."

Contra Costa Industrial Safety Ordinance 450-8.016 (a)(5)(E) states, "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."

## Corrective Maintenance – Piping Repairs

For piping repairs, the following documents serve as the primary basis for *Recognized And Generally Accepted Good Engineering Practices*:

1. American Petroleum Institute Recommended Practice 570 Piping Inspection Code: Inspection, Repair, Alteration, & Rerating of In-Service Piping Systems;
2. American Society of Mechanical Engineers (ASME) Post Construction Code (PCC) - 2 Repair of Pressure Equipment and Piping; and
3. ASME B31.3 Process Piping.

The refinery has developed a Corrective Action Inspection Report policy [D(F)-26, rev 3, dated 2/19/2020] – the purpose of this policy is to define a process by which equipment integrity repair recommendations can be implemented within MRC maintenance. Additionally, there is also policy D(F)-10, Record of Temporary Repair (TR) Approval & Documentation (revision 12), to document temporary repairs. D(F)-10 is a form that includes the description of the repair location, planned removal date, process parameters, and approval signoff. CCHHMP was provided a list of all active temporary repairs and reviewed copies of a few completed D(F)-10 records including any technical basis and inspection records. CCHHMP found that the technical basis for the temporary repairs appeared to align with ASME PCC-2 requirements.

CCHHMP determined that in certain circumstances the “Planned Removal Date” listed on the D(F)-10 form serves as the next reassessment date. CCHHMP recommends that the date used for the “planned Removal Date” reflect the refinery’s actual planned removal opportunity. In addition, CCHHMP recommends that the refinery also document the design life of the temporary repair, and lastly include the next review date.

Summary of regulatory issues found under the Mechanical Integrity program:

Regulatory Deficiencies:

- None found

Best Practice Recommendation:

- “Planned Removal Date” listed on the D(F)-10 form should reflect the refinery’s actual planned removal opportunity.
- Document the design life of the temporary repair and the next review date on the D(F)-10 form.

## **Management of Change:**

CCHHMP verified that MRC has a Management of Change (MOC) policy [C(A)-15, rev 16, revised March 2023], which is required under section 2762.6 of the CalARP regulations and section 450-

8.016(a)(6) of County ISO requirements. The policy applies to MRC employees and contractors, as required under CalARP.

The CalARP regulatory requirements on MOC became effective in 1999 and were slightly modified at the beginning of 2018 under the Program 4 standard and include the following:

- The technical basis for the proposed change;
- Potential process safety impacts of the change;
- Modifications to operating and maintenance procedures or development of new operating and maintenance procedures;
- The time period required for the change;
- Authorization requirements for the proposed change; and
- Employee participation (per section 2762.10 of the CalARP regulations) in MOCs.

The MOC requirements listed under the county ISO are very similar to CalARP. There are also requirements to include qualified personnel in the management of change evaluation and to inform employees whose job tasks will be affected by a change and contractors as appropriate.

CCHHMP reviewed the plant policy for MOC which describes the use of MOCs whenever implementing process changes, equipment changes, updates to Process Safety Information (PSI), temporary operating conditions or equipment modifications, emergency changes, and urgent changes.

CCHHMP reviewed fourteen (14) process safety related MOCs that included temporary modifications to equipment, metallurgical upgrades of equipment, engineered cooling mechanisms on process vessels, changes to alarm setpoints, and other process equipment changes. Most of the MOCs from the past 6 months involved minor changes or changes that were not process safety related. CCHHMP did a field walk of 6 different process related MOCs to verify the changes that had been implemented. One MOC reviewed for the Flexicoker Unit (FXU) was ongoing at the time of the audit. This MOC involved replacing a section of deteriorated pipe. However, the facility discovered that the replacement pipe was too long. As a result, it was sent back to the maintenance shop to be cut down to the correct size and had yet to be installed.

Two other MOCs were reviewed in the field: one that required removing insulation from piping that did not require insulation; and another for a temporary heating coil that was used to help start a piece of equipment after it had been down for turnaround. CCHHMP found that the equipment had been started up so the heating coil had been removed. For the insulation removal, the section of piping was in the alkylation unit and found to be free of insulation.

All MOCs reviewed, including the field inspections, met the regulatory requirements, including necessary reviews, authorizations, documentation, and team composition.

Summary of regulatory issues found under the Management of Change program:

Regulatory Deficiencies: • None found

Best Practice • None found

Recommendation:

### **Pre-Startup Safety Review:**

CCHHMP also reviewed the Pre-Startup Safety Review (PSSR) policy [C(A)-14, rev 15, revised July 2022], which is required under section 2762.7 of the CalARP regulations and section 450-8.016(a)(7) of County ISO requirements. PSSRs are completed before starting up new or modified equipment to independently verify that the modifications have been executed as defined in the MOC. The CalARP regulation requires the following for PSSRs:

- Construction, maintenance, and repair work has been performed in accordance with design specifications;
- Process equipment has been maintained and is operable in accordance with design specifications;
- Effective safety, operating, maintenance, and emergency procedures are in place;
- For new process units, a Process Hazard Analysis, Hierarchy of Hazard Control Analysis, Damage Mechanism Review and Safeguard Protection Analysis have each been performed as applicable pursuant to this Article, and recommendations have been implemented or resolved before start-up. For new or modified processes, all changes have been implemented in accordance with the requirements contained in the Management of Change, section 2762.6;
- Training of each operating employee and maintenance employee affected by the change has been completed; and
- Employee participation (per section 2762.10 of the CalARP regulations) in PSSRs.

The PSSR requirements listed under the county ISO are similar to CalARP. The refinery PSSR policy describes the process that is performed once the MOC has been completed and final checks are made to verify the process is ready to start back up. Once the PSSR is complete, the refinery can start up the process.

CCHHMP reviewed documentation (including training records and updated procedures) for fourteen (14) completed PSSRs during the inspection. These PSSRs were related to the MOCs reviewed. In addition, for each of the reviewed PSSRs CCHHMP reviewed a document titled “PSSR Employee Participation” that was signed by an operations representative who currently works in the unit involving the change and stated that they are aware of the PSSR items and agreed that they have been completed. CCHHMP also completed field verification (with operators) of equipment changes for 6 of the 14 PSSRs reviewed.

All the PSSRs reviewed during the inspection met regulatory requirements and were appropriately documented

Summary of regulatory issues found under the Pre-Startup Safety Review program:

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|---------------------------------|--------------|
| <u>Regulatory Deficiencies:</u> | • None found |
| <u>Best Practice</u>            | • None found |
| <u>Recommendation:</u>          |              |

### **Incident Investigations:**

CCHMP verified that MRC has policies for Incident Reporting [I(A)-18, rev 12, revised March 2023] and for conducting Incident Investigations [I(A)-6, rev 18, revised March 2023]. These policies include the reporting and investigation of incidents as identified in section 2762.9 of the CalARP regulations. The CalARP regulatory requirements associated with Incident Investigation became effective in 1999 and were slightly modified at the beginning of 2018 under the Program 4 standard and include the following:

- Promptly investigate and report any incident that results in or could reasonably have resulted in a major incident.
- Establish a team to investigate the incident.
- Conduct a root cause analysis of the incident to determine the underlying causes of the incident.
- Summarize the investigation within a written report.
- Develop recommendations to address the findings of the investigation.
- Resolve the investigation team’s recommendations, determining action items for implementation, tracking to completion, and documentation of closeout.
- A “major incident” is defined as an event within or affecting a process that causes a fire, explosion or release of a highly hazardous material, and has the potential to result in death or serious physical harm (as defined in Labor Code Section 6432(e)), or results in an officially declared public shelter-in-place, or evacuation order.

CCHMP found that the refinery’s policies & procedures and practices are to report and investigate a wider range of incidents than required under the CalARP regulations. While the CalARP regulation is focused on investigating major incidents or those that could reasonably have resulted in a major incident, the refinery’s practice is to report and investigate these as well as much smaller incidents (e.g., release of liquid or vapor of any quantity to any surface).

CCHMP reviewed process safety incidents at the refinery that have occurred within the last 6 months or since July 1, 2023. Out of the approximately 85 process safety incidents reported, none appeared to meet the CalARP definition of a major incident.



CCHHMP also reviewed the refinery’s compliance with reporting and investigation of incidents as it relates to Contra Costa County’s Industrial Safety Ordinance (ISO), sections 450-8.016(a)(9) and 450-8.016(c). Within the period reviewed, there was one incident that qualified as a Major Chemical Accident or Release (MCAR). This incident took place on December 15, 2023, when the refinery experienced a power and steam loss event that resulted in flaring and significant sulfur odors within the Martinez community. The initial indication was a voltage loss on a primary and secondary system resulted in the shutdown of a steam turbine generator. Almost at the same time, equipment powered through the same panel tripped resulting in a shutdown of a separate gas turbine generator. Other redundant equipment was already down for maintenance resulting in significant power and steam curtailment at the site, which resulted in multiple process unit shutdowns. MRC properly reported this incident using the County’s Community Warning System (CWS). This incident is still under investigation.

CCHHMP found that MRC uses a variety of incident investigation techniques depending on many factors related to an incident. Those incidents meeting regulatory criteria are investigated using a formal analysis that promotes uncovering the root causes of the incident.

CCHHMP reviewed the status of 11 incident investigations at the refinery associated with issues involving coking operations. The purpose of reviewing these incidents was because some of them resulted in coke dust emissions seen by the community. Of the 11 coking incidents reviewed, three resulted in flaring and eight resulted in coke dust emissions. Most of the incidents that resulted in coke dust emissions were small leaks that did not leave the immediate area (e.g., pinhole or ~1 cubic foot coke pile on the ground). None of these 11 incidents were required to be investigated under the CalARP or ISO programs.

<b>Coke Incident</b>	<b>Date</b>	<b>Type of Issue</b>	<b>CWS Level</b>
Delayed Coker Upset	7/10/2023	upset	none
Coke Release From Coke Pit	7/11/2023	coke dust	CWS Level 1
Coke Release From Coke Pit	7/22/2023	coke dust	CWS Level 1
Flexigas Relief Valve Failure	9/16/2023	flaring	CWS Level 1
Coke Release While Opening Manway	10/6/2023	coke dust	CWS Level 1
Coke Line Leak	10/20/2023	coke dust	none
Coke Release from Chimney	11/12/2023	coke dust	none
Coke Line Leak	11/15/2023	coke dust	none
Flexicoker Transport Link Leak	11/19/2023	coke dust	none
Coke Line Leak	11/25/2023	coke dust	none
Flexigas Relief Valve Failure	12/7/2023	flaring	CWS Level 1

CCHHMP confirmed that each of the above incidents was investigated or remains under investigation at the time of this Unannounced Inspection. In reviewing investigations that were complete, CCHHMP found that each was documented, immediate actions were identified, follow-up actions were identified, and actions were assigned to responsible parties along with

target dates for completion. Investigations remain open for incidents dated 7/11/23, 10/6/23, and 12/7/23. None of these three incidents triggered any regulatory requirement (e.g., none were an MCAR or Major Incident, or near miss of either). As such, there is not a stipulated timeframe to complete the investigations. Based on SME interviews, the investigations for the 7/11/23 and 10/6/23 incidents are close to completion. The 7/10/23 incident did not result in any coke release or flaring.

Per SME interviews and file review, CCHHMP found that feed composition likely led to the formation of transition coke that resulted in the incidents on 7/11/23 and 7/22/23. Transition coke can contain a measurable amount of very small coke particle sizes that can easily become airborne. As a result of these incidents, operational modifications took place to eliminate or minimize the formation of transition coke in the future.

Per SME interviews on the ongoing 10/6/23 incident investigation, coke fines were released after opening a hatch during maintenance operations. In the future, the refinery intends to open a hatch at a different location to allow visual confirmation that there are no pockets of coke fines near the maintenance access hatch.

In reviewing the remaining smaller coking incidents, CCHHMP noted that piping and relief valve components have been upgraded many times over the years to minimize the constant erosion to which they are exposed. Equipment vendors have been queried. Many of the locations of these erosion points do not follow a pattern based on the turbulent nature of the process stream making identification challenging during inspections. CCHHMP confirmed the refinery continues to increase the number of inspection points, modify inspection strategies, and upgrade equipment.

Summary of regulatory issues found under the Incident Investigation program:

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|---------------------------------|--------------|
| <u>Regulatory Deficiencies:</u> | • None found |
| <u>Best Practice</u>            | • None found |
| <u>Recommendation:</u>          |              |

### **Stop Work Authority and Reporting of Hazards:**

CCHHMP verified that MRC has a Stop Work Authority policy [I(A)-70, rev 3, revised Oct 2023], which is required under section 2762.16(f)(1) of the CalARP regulations. There is no corresponding requirement under the Risk Management Chapter 450-8 of the county ISO. The policy applies to MRC employees and contractors, as required under CalARP. The CalARP regulatory requirements on Stop Work Authority became effective roughly at the beginning of 2018 and include the following:

- Allow all employees and contractors to refuse to perform work where doing so could reasonably result in death or serious physical harm.
- Grants the authority of all employees, including employees of contractors, to recommend to the operator in charge of a unit that an operation or process be partially or completely shut down, based on a process safety hazard.
- The qualified operator in charge of a process unit has the authority to partially or completely shut down an operation or process, based on a process safety hazard.
- A “process safety hazard” means a characteristic of a process that, if unmitigated, has the potential to cause a fire, explosion, or release of a highly hazardous material which could result in death or serious physical harm or a major incident.

CCHHMP confirmed that the refinery’s Stop Work policy is consistent with the CalARP requirements. The policy also outlines a practice in which work may be paused to discuss a situation that may be perceived as a safety concern. If the discussion reveals there is not a safety concern and work continues, then the issue is determined not to be applicable to Stop Work Authority. If after such discussions an employee or contractor still declines to perform the work although other employees or contractors agree to do the work after being fully briefed on the concerns, then the refinery is required to document that someone invoked their Stop Work Authority. This language is consistent with the regulatory requirements. This is only for situations that could reasonably result in death or serious physical harm or when there is a process safety hazard.

CCHHMP found that the refinery has a Goal Zero program that indirectly complements its Stop Work policy. Under the Goal Zero program, all refinery employees as well as contractors conducting work at the refinery are expected to have a responsibility to say something if they see something of concern. The Goal Zero program encourages all employees and contractors to pay attention to their surroundings and watch out for each other. All contractors conducting work at the refinery are required to go through Goal Zero training annually. CCHHMP conducted interviews with select onsite contractors and confirmed that this training is an annual requirement. All refinery employees will be trained in the program although this has not taken place yet. It should be noted that it is not a CalARP requirement to implement a program such as the Goal Zero program. The guidance document developed to assist regulated stationary sources in complying with the County ISO encourages facilities to develop systems to promote a safety-first approach.

CCHHMP was informed that the refinery has a FOCUS reporting system that is related to the Goal Zero program that allows refinery employees and contractors to report concerns that fall below the threshold of stop work. The FOCUS program allows employees or contractors to report minor issues or concerns or to anonymously report hazards. The FOCUS reporting system is primarily for contractors as refinery operators typically use a different process to report hazards and can directly write tickets to get work assigned to address issues. The refinery assigned gatekeepers from the local United Steel Workers (USW) labor representatives

to monitor the FOCUS system. Per interviews with these gatekeepers, the system is checked each week to review new entries, as well as to enter data written down by contractors on paper cards. The gatekeepers assign action items to individuals to follow up with items listed in FOCUS. Individuals assigned action items are expected to follow up with their assigned items within 30 days. Section 2762.16(f)(2) of the CalARP regulations requires that the refinery respond in writing within 30 calendar days to written hazards submitted by employees, employee representatives, contractors, employees of contractors, and contractor employee representatives. Similar to stop work, the CalARP regulation is focused on reporting and responding to those hazards that present the potential for death or serious physical harm. During this Unannounced Inspection, CCHHMP did not find any reporting of hazards under the refinery's FOCUS program that met the CalARP requirements.

CCHHMP reviewed refinery records on Stop Work Authority since it became a CalARP regulatory requirement in 2018 and found two instances where it was documented as used. Both of these instances took place under MRC management. CCHHMP found no occurrences documented under Shell management although the regulatory requirement only existed for the last two years Shell had ownership of the refinery. The discussion of Stop Work Authority was mostly positive during operator interviews as several described situations when work would be paused so workers could fully understand the activity before continuing. Several operator interviews expressed concern that newer operators might be pressured to perform a job instead of using their Stop Work Authority although no specific situations were identified nor were suggestions provided on whom to request to interview to obtain more details.

- In March 2020, a console operator began pumping diesel-type material between two storage tanks and the flow began moving the wrong way. The operator stopped the job and reported the situation to management. There was no material released. The concern identified was the possibility of having off-spec products introduced into a storage tank. This situation was identified as the use of Stop Work Authority although it did not meet the regulatory definition.
- In December 2023, a Trans Mix dual tanker truck containing approximately 7,000 gallons of a mixture of gasoline and diesel was connected to be offloaded. It was lined up to offload the hydrocarbon mixture to the water-side portion of the Gross Oil process instead of the oil-side (lined up to go to a water tank instead of an oil tank). Another worker saw the truck and the connection and intervened before pumping started. The offload piping was corrected and offloaded to the proper location. This item was entered as a Goal Zero card and the contractor who filled it out wrote Stop Work Authority on the form. CCHHMP was informed that the refinery recognized this situation did not meet the Stop Work Authority criteria but tracked it as such since it wants to encourage reporting. This situation did not meet the regulatory definition of stop work as the work was paused to correct something before continuing without mishap. The incident was also flagged as a near miss.

Summary of regulatory issues found under the Stop Work Program:

- |                                      |              |
|--------------------------------------|--------------|
| <u>Regulatory Deficiencies:</u>      | • None found |
| <u>Best Practice Recommendation:</u> | • None found |

**Next Steps:**

The Unannounced Inspection (UI) has concluded. CCHHMP began the California Accidental Release Prevention (CalARP) Program and County Industrial Safety Ordinance (ISO) audit on January 30, 2024, which will last approximately 5 weeks. This audit will review all 24 process safety program elements required by CalARP and ISO and will review the status of action items from the 2021 CCHHMP CalARP/ISO audit. Once the final audit report is complete it will be posted on [www.cchealth.org/hazmat](http://www.cchealth.org/hazmat) and there will be a 45-day public comment period and meeting held. CCHHMP continues work with the Oversight Committee, information can be found at [www.cchealth.org/hazmat/mrc](http://www.cchealth.org/hazmat/mrc).