PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

December 11, 2025

Joseph K. Shephard
Plant Manager
Tracy Combined Cycle Power Plant
Tracy, CA 95377

SUBJECT: **General Order (GO) 167-C Audit of Tracy Combined Cycle Power Plant, Audit Number GA2025-09TR**

Dear Mr. Shephard,

On behalf of the Electric Safety and Reliability Branch (ESRB) of the California Public Utilities Commission (CPUC), Christopher Villalobos, Ryan Hart, and Ian Rawnsley of ESRB staff conducted a Generation Audit of Tracy Combined Cycle Power Plant from August 25 through August 29, 2025.

During the audit, ESRB observed plant operations, inspected equipment, reviewed data, interviewed plant staff, and identified potential violations of General Order (GO) 167-C. A copy of the audit findings itemizing the violations is attached. Please advise me by email no later than January 16, 2025, by providing an electronic copy of all corrective actions and preventive measures taken and/or planned to be taken to resolve the violations.

Your response should include a Corrective Action Plan with a description and completion date of each action and measure completed. For any violations not corrected, please provide the projected completion dates to correct the violations and achieve full compliance with GO 167-C.

Please submit your response to Christopher Villalobos at Christopher.Villalobos@cpuc.ca.gov. Please note that although Tracy Combined Cycle Power Plant has been given 30 days to respond, it has a continuing obligation to comply with all applicable GO 167-C requirements; therefore, the response period does not alter this continuing duty.

The CPUC intends to publish the audit report of Tracy Combined Cycle Power Plant on the CPUC website. If you wish to make a claim of confidentiality covering any of the information in the report, you may submit a confidentiality request pursuant to Section 14.4 of GO 167-C, using the heading "General Order 167-C Confidentiality Claim" along with such redactions. The request and redacted version of the audit report should be sent to Christopher Villalobos with a copy to me and the GO 167 inbox GO167@cpuc.ca.gov by January 16, 2025.

Please note that ESRB will also post Tracy Combined Cycle Power Plant audit report response on the CPUC website. If there is any information in your response that you would like us to consider as confidential, we request that in addition to your confidential response, you provide us with a redacted version of your audit response that can be posted on the CPUC website.

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Thank you for your courtesy and cooperation throughout the audit process. If you have any questions concerning this audit, please contact Christopher Villalobos at Christopher.Villalobos@cpuc.ca.gov or (916) 268-7732.

Sincerely,

Banu Acimis, P.E.
Program and Project Supervisor
Electric Safety and Reliability Branch
Safety and Enforcement Division
California Public Utilities Commission

Attachment: CPUC Generation Audit Findings

Cc: Lee Palmer, Deputy Executive Director, Safety Enforcement, Safety Policy, and Water, CPUC
Eric Wu, Program Manager, ESRB, Safety and Enforcement Division (SED), CPUC
Stephen Hur, Program and Project Supervisor, ESRB, SED, CPUC
Ryan Hart, Senior Utilities Engineer (Specialist), ESRB, SED, CPUC
Christopher Villalobos, Utilities Engineer, ESRB, SED, CPUC
Ian Rawnsley, Utilities Engineer, ESRB, SED, CPUC

CPUC Audit Findings of
Tracy Combined Cycle Power Plant
August 25-29, 2025

I. Findings Requiring Corrective Action

Finding 1: Tracy does not submit outage reports to the California Public Utilities Commission's (CPUC) Power Plant Outage Report (PPOR).

General Order (GO) 167-C, Section 9.1 Provision of Information states in part:

> *"Upon SED's request, a GA or ESS Owner shall provide information in writing concerning (a) a GA or ESS; (b) the operation or maintenance of the GA or ESS; (c) the Initial Certification, Recertification, Corrective Plan, or Notice of Material Change pertaining to the GA or ESS; (d) any Maintenance, Operation, or Corrective Plans pertaining to the GA or ESS; (e) the design, performance, or history of a GA or ESS; (f) event or outage data concerning a GA or ESS including, but not limited to, unavailability reports or outage cause reports; (g) accounts, books, contracts, memoranda, papers, records, inspection reports of government agencies or other persons; and (h) any other documents or materials."*

Power Plant Outage Report (PPOR) Reporting Instructions[1] states in part:

> *"The PPOR replaces Form SED-11-110 to report to the Safety and Enforcement Division (SED) forced and planned outages at fossil fuel and renewable generating assets:*
>
> 1. *Full and partial (derate) forced outages, that are 50 MWs or greater, which are 24 hours or longer in duration;*
> 2. *Planned outages, that are 50 MWs or greater, which are 72 hours or longer in duration.*
>
> *For each outage of 50 MWs or greater, submit an Initial Report and, if applicable, Updated Reports and/or a Final Report based on the requirements as described below."*

Electric Safey and Reliability Branch (ESRB) requires generating assets, including power plants, and energy storage systems to report forced and planned outages that meet the outage reporting criteria to the CPUC's Power Plant Outage Report (PPOR). Plants must report forced and planned outages that are greater than 50 MWs if the duration exceeds a set number of hours depending on the time of year. Table 1 summarizes the reporting thresholds for both derate (MWs) and duration (hours). Prior to the site visit, ESRB Inspectors reviewed Tracy Combined Cycle Power Plant's (Plant) outage history in the PPOR, determining no outages have been reported since March of 2023 for the Plant's spring outage. ESRB compared outages in California Independent State Operator's (CAISO) Outage Management System (OMS) and determined the site had outages that met the PPOR criteria but were not reported. CAISO OMS Outage #15013674 due to boiler issues is an example of an outage that should have been

[1] Electric Generation Safety and Reliability Power Plant Outage Report

reported to the PPOR. The outage was a full derate, 336 MWs, and lasted from January 8, through January 11, 2024. More examples of outages that occurred but were not reported to PPOR are shown in Table 2. Submitting outage reports to PPOR is required because OMS and PPOR each have distinct purposes. PPOR records information such as the Plant's reported outage(s), their cause(s)and corrective action(s) which aids CPUC in the tracking of recurring issues.

Outage Type	Derated Capacity	Standard Reporting Requirement	Summer Reporting Requirement
Forced Outage (Full or Partial Derate)	50 MWs or Greater	24 hours or longer	2 hours or longer
Planned Outage		72 hours or longer	24 hours or longer

Table 1: PPOR Requirements

Outage Number	Outage Type	Start Time	End Time	Derate [MWs]	Description
15013674	Forced	01/08/2024 08:54	01/11/2024 16:30	336.04	Trouble with boiler feedwater pump
15164090	Planned	04/19/2024 00:01	04/30/2024 23:59	336.04	Annual Maintenance for Gas Turbines and Balance of Plant
16353041	Forced	08/10/2024 18:43	08/10/2024 21:55	336.04	High Emissions
17972019	Forced	05/20/2025 17:00	05/22/2025 07:00	336.04	Replace STG Motor and Gearbox/Repair Hydraulic leak on LP Stop valve
16968633	Planned	02/01/2025 00:01	02/15/2025 23:59	336.04	Annual Maintenance for Gas Turbines and Balance of Plant

Table 2: Tracy Combined Cycle Power Plant Outages

Finding 2: The Plant must improve emergency preparation related to aqueous ammonia.

GO 167-C, Appendix D, Operation Standard (OS) 1: Safety states:

> *"The protection of life and limb for the work force is paramount. GAOs and ESSOs have a comprehensive safety program in place at each site. The company's behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment and the policies and procedures foster such a safety culture, and the attitudes and behaviors of personnel are consistent with the policies and procedures."*

GO 167-C, Appendix D, OS 20: Preparedness for On-Site and Off-Site Emergencies states:

"The GAO or ESSO plans for, prepares for, and responds to reasonably anticipated emergencies on and off the plant site, primarily to protect facility personnel and the public, and secondarily to minimize damage to maintain the reliability and availability of the facility. Among other things, the GAO or ESSO:

a) *Plans for the continuity of management and communications during emergencies, both within and outside the facility;*
b) *Trains personnel in the emergency plan periodically;*
c) *Ensures provision of emergency information and materials to personnel;*
d) *In developing any emergency plans, the GAO and ESSO will coordinate with local emergency management agencies, unified program agencies, and local first response agencies; and*
e) *The owner or operator of each ESS facility shall develop and submit an emergency response and emergency action plan for the ESS that complies with Public Utilities Code, Section 761.3, subdivision (g). The owner or operator of the ESS facility shall submit the emergency response and emergency action plan to the county, local emergency management agencies, local first response agencies, and if applicable, the Authority Holding Jurisdiction (AHJ) and the city where the facility is located."*

National Fire Protection Association (NFPA) 704 Hazardous Material Identification Chapter 4 - General *states in part:*

"4.2 Assignment of Ratings

4.2.3.3 Where more than one chemical is present in a building or specific area, professional judgment shall be exercised to indicate ratings using the following methods:

(1) *Composite Method. Where many chemicals are present, a single sign shall summarize the maximum ratings contributed by the material(s) in each category and the special hazard category for the building and/or the area.*
(2) *Individual Method. Where only a few chemicals are present or where only a few chemicals are of concern to emergency responders (taking into account factors including physical form, hazard rating, and quantity), individual signs shall be displayed. The chemical name shall be displayed below each sign.*
(3) *Composite–Individual Combined Method. A single sign shall be used to summarize the ratings via the Composite Method for buildings or other areas containing numerous chemicals. Signs based on the Individual Method shall be used for rooms or smaller areas within the building containing small numbers of chemicals."*

The Plant has a 29% aqueous ammonia solution stored in a large tank onsite used for the emissions control system. Typically, windsocks are strategically placed around the site and used in the event of an ammonia release to determine wind direction to avoid exposure. The site has a

windsock placed close to the ammonia tank that had limited visibility from around the Plant. In the event of an ammonia release, a person would need to approach the release from the areas of the Plant where the singular windsock is not visible to identify the wind direction. The Plant must place strategically place additional windsocks around the Plant to facilitate evacuation.

Additionally, the flammability hazard on the NFPA 704 placard is inaccurate. The flammability rating on the placard is zero, while 29% aqueous ammonia solution has a flammability rating of 1. The NFPA 704 placard must be corrected.

Figure 1: Ammonia tank with windsock and inaccurate NFPA 704 placard

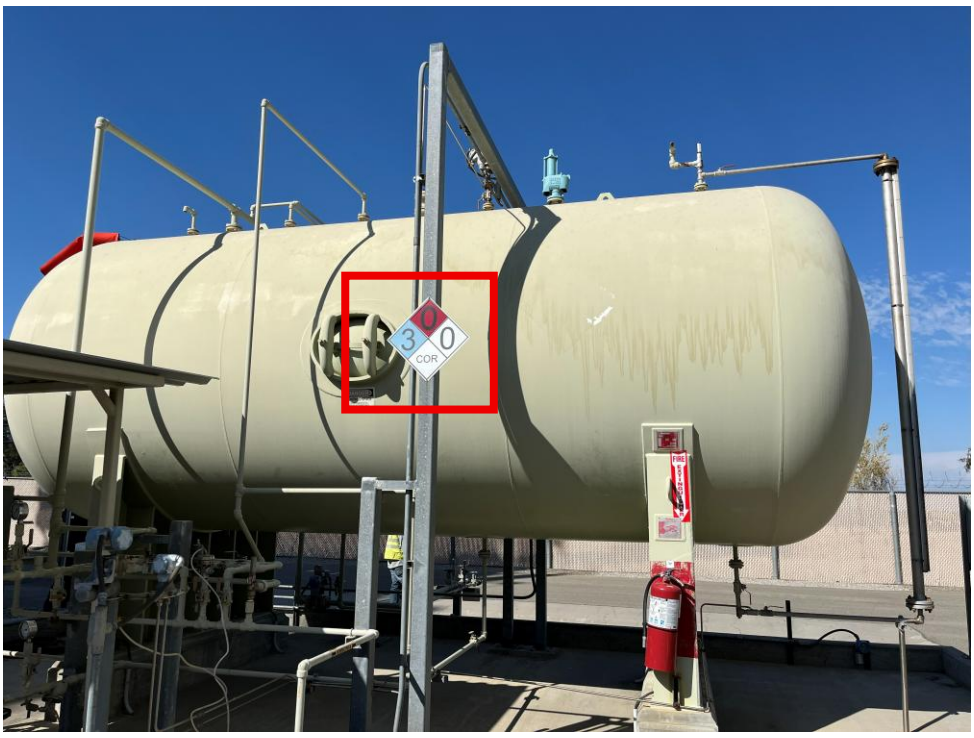


Figure 2: Inaccurate NFPA 704 Placard

Finding 3: General improvement of work order program

GO 167-C, Appendix A, Generating Asset and Energy Storage System Logbook Standards, III. Logbook Requirements states in part:

> *"Exceptions:*
>
> *3. In lieu of logging outstanding maintenance activities, a work order management system or electronic database system may be utilized at the discretion of the GAO or ESSO to track maintenance activities and status. This method of recordkeeping is intended to keep track of maintenance records according to maintenance requirements of original equipment manufacturers or industry best practices."*

GO 167-C, Appendix C, Maintenance Standard (MS) 2: Organizational Structure and Responsibilities states:

> *"The organization with responsibility and accountability for establishing and implementing a maintenance strategy to support company objectives for reliable facility operation is clearly defined, communicated, understood, and is effectively implemented. Reporting relationships, control of resources, and individual authorities support and are clearly defined and commensurate with responsibilities."*

GO 167-C, Appendix C, MS 3: Maintenance Management and Leadership states:

> *"Maintenance managers establish high standards of performance and align the maintenance organization to effectively implement and control maintenance activities."*

GO 167-C, Appendix D, OS 16: Participation by Operations Personnel in Work Orders states:

> *"Operations personnel identify potential system and equipment problems and initiate work orders necessary to correct system or equipment problems that may inhibit or prevent facility operations. Operations personnel monitor the progress of work orders affecting operations to ensure timely completion and closeout of the work orders, so that the components and systems are returned to service. Among other things:*
>
> *a) Operations personnel identify problems requiring work orders, and initiate work orders to correct those problems.*
>
> *b) The operations manager or other appropriate operating personnel periodically review work orders that affect operations to ensure timely completion and closeout of the work orders, so that components and systems are returned to service.*
>
> *c) Personnel responsible for prioritizing work orders consult operations personnel to assure that work orders affecting the operations of the plant are properly prioritized.*
>
> *d) Appropriate personnel are trained in and follow procedures applicable to work orders."*

ESRB Inspectors reviewed the Plant's computer-based work order management system and how the Plant uses it to track inspection and maintenance activities. During the audit, ESRB Inspectors reviewed open and completed work orders and identified a pattern of the Plant not routinely logging notes within the work orders. Work order notes are an industry standard that must be used to track the status or completion of the work, track any issues encountered that were resolved or resulted in corrective maintenance (CM) work orders, and track any metrics associated with the equipment.

One instance identified by ESRB involved a completed preventative maintenance (PM) work order for the Plant's compressors. As a part of the work order, the Plant must log the equipment run hours. Upon review of several instances of that PM, ESRB inspectors found that the hours were not tracked. By logging the run hours in the work order, the Plant can trend the data to determine the required intervals for maintenance based on run time and track the equipment history. Additionally, if the technician performing the task encountered an issue with the equipment but was able to resolve it, the issue and corrective action must be tracked within the notes. The Plant must review the expectations for completing work orders and logging pertinent information with Plant staff to ensure inspection and maintenance activities are sufficiently tracked and closed out as expected.

Finding 4: The Emergency Response Plan is not site specific.

GO 167-C, Appendix D, OS 2: Organizational Structure and Responsibilities states:

> *"The organization with responsibility and accountability for establishing and implementing an operation strategy to support company objectives for reliable facility operation is clearly defined, communicated, understood, and is effectively implemented. Reporting relationships, control of resources, and individual authorities support, are clearly defined, and commensurate with responsibilities."*

GO 167-C, Appendix D, OS 20: Preparedness for On-Site and Off-Site Emergencies states:

> *"The GAO or ESSO plans for, prepares for, and responds to reasonably anticipated emergencies on and off the plant site, primarily to protect facility personnel and the public, and secondarily to minimize damage to maintain the reliability and availability of the facility. Among other things, the GAO or ESSO:*
>
> *a) Plans for the continuity of management and communications during emergencies, both within and outside the facility;*
> *b) Trains personnel in the emergency plan periodically;*
> *c) Ensures provision of emergency information and materials to personnel;*
> *d) In developing any emergency plans, the GAO and ESSO will coordinate with local emergency management agencies, unified program agencies, and local first response agencies; and*
> *e) The owner or operator of each ESS facility shall develop and submit an emergency response and emergency action plan for the ESS that complies with*

Public Utilities Code, Section 761.3, subdivision (g). The owner or operator of the ESS facility shall submit the emergency response and emergency action plan to the county, local emergency management agencies, local first response agencies, and if applicable, the Authority Holding Jurisdiction (AHJ) and the city where the facility is located."

Upon review of the Plant's Emergency Response Plan (ERP), ESRB Inspectors identified that the ERP is not unique to Tracy and includes information from other facilities in the asset owners' fleet, including peaker plants and battery energy storage systems (BESS). The sites in the combined ERP are operated out of the Tracy Control Room by the Plant's operators. It is practical to consolidate all the ERPs under the control rooms purview, so a control room operator will have access to all facility ERPs available in one binder. ESRB determined that combining information within one binder and having information intermixed from various sites can create confusion and make it difficult to quickly locate site-specific information. The Plant must make site specific information more accessible by creating separate sections or appendices within the ERP for each facility. This will result in the binder being segmented by site, so if an emergency were to occur at the site, the operator will only be required to look at that site's particular section.

Finding 5: Signage identifying hazards is inadequate.

GO 167-C, Appendix D, OS 1: Safety states:

"The protection of life and limb for the work force is paramount. GAOs and ESSOs have a comprehensive safety program in place at each site. The company's behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment and the policies and procedures foster such a safety culture, and the attitudes and behaviors of personnel are consistent with the policies and procedures."

NFPA 704 Hazardous Material Identification Chapter 4 - General *states in part:*

"4.2 Assignment of Ratings

4.2.3.3 Where more than one chemical is present in a building or specific area, professional judgment shall be exercised to indicate ratings using the following methods:

(4) Composite Method. Where many chemicals are present, a single sign shall summarize the maximum ratings contributed by the material(s) in each category and the special hazard category for the building and/or the area.

(5) Individual Method. Where only a few chemicals are present or where only a few chemicals are of concern to emergency responders (taking into account factors including physical form, hazard rating, and quantity), individual signs shall be displayed. The chemical name shall be displayed below each sign.

(6) Composite–Individual Combined Method. A single sign shall be used to summarize the ratings via the Composite Method for buildings or other areas containing numerous chemicals. Signs based on the Individual Method shall be

used for rooms or smaller areas within the building containing small numbers of chemicals."

"4.3 Location of Signs

Signs shall be in locations approved by the authority having jurisdiction and as a minimum shall be posted at the following locations:

(1) Two exterior walls or enclosures containing a means of access to a building or facility
(2) Each access to a room or area
(3) Each principal means of access to an exterior storage area"

NFPA 70E Chapter 1 Safety Related Work Practices Article 130.5 Arc Flash Risk Assessment states in part:

"(G)The incident energy exposure level shall be based on the working distance of the employee's face and chest areas from a prospective arc source for the specific task to be performed. Arc-rated clothing and other PPE shall be used by the employee based on the incident energy exposure associated with the specific task. Recognizing that incident energy increases as the distance from the arc flash decreases, additional PPE shall be used for any parts of the body that are closer than the working distance at which the incident energy was determined.

The incident energy analysis shall take into consideration the characteristics of the overcurrent protective device and its fault clearing time, including its condition of maintenance.

The incident energy analysis shall be updated when changes occur in the electrical distribution system that could affect the results of the analysis. The incident energy analysis shall also be reviewed for accuracy at intervals not to exceed 5 years."

ESRB Inspectors identified deficiencies in the signage used to communicate various types of hazards at the Plant. Signage throughout the site was damaged, illegible, insufficient, or missing. The site must correct the issues identified below by repairing or replacing the signage.

A. The sign identifying the area designated for hazardous waste is inadequate. The sign is too small and a person must be in close proximity to the area to identify the hazards in the area.

Figure 3: Small “Hazardous Waste” sign

B. ESRB Inspectors identified several hazardous chemical storage lockers are missing NFPA 704 placards. These lockers contain flammable material and must be identified with an NFPA 704 placard on the locker or on the entrance to the area containing the storage locker.

Figure 4: Flammable Storage Lockers in Hazardous Waste area

Figure 5: Flammable Storage Locker under steam turbine

C. Safety signage, including danger signs, NFPA 704 placards, and confined space labels are damaged and degraded. Several instances ESRB Inspectors observed are shown below, but the Plant must conduct a site wide inspection to identify safety signage issues that require repair. The Plant must routinely monitor the condition of signage around the Plant and replace it as necessary to ensure visibility and availability for the Plant staff, contractors, first responders, and other visitors.

Figure 6: Faded Sign: “Danger High Pressure Gas Line”

Figure 7: Faded NFPA 704 placard

Figure 8: Faded and deteriorated NFPA 704 placards

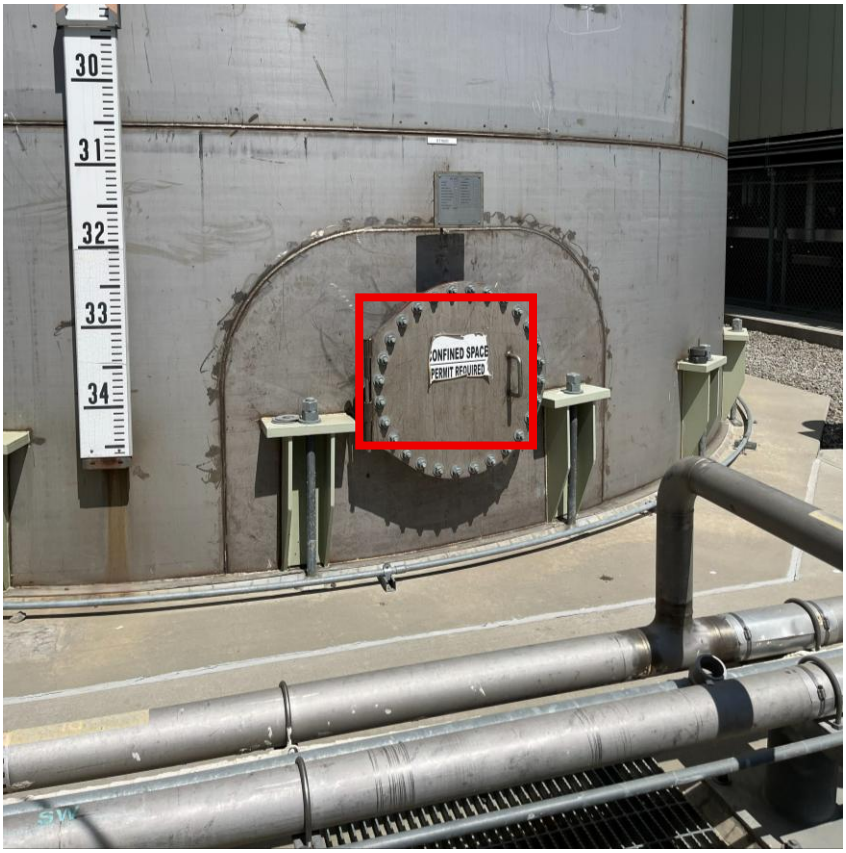


Figure 9: Deteriorated Confined Space label on water tank

Figure 10: Deteriorated confined space label

D. Several electrical cabinets at the Plant display outdated arc flash labels and have not been updated with the 2021 Arc Flash Analysis. Examples of outdated labels referencing a 2012 analysis are shown below. The Plant must determine if the equipment with the outdated labels were included in the 2021 analysis and update the labels as appropriate. If the equipment with the 2012 labels was not included in the 2021 study, the Plant must conduct a new study including all necessary areas of the Plant.

Figure 11: MMC-4 Arc flash label with date from 2012

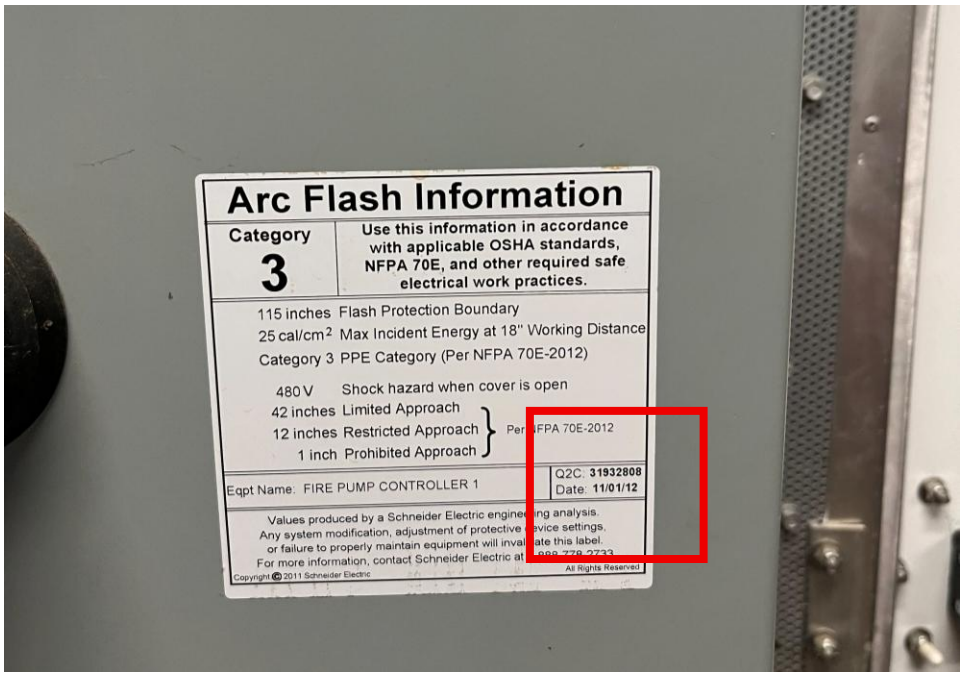


Figure 12: Fire Pump Controller 1 arc flash label from 2012

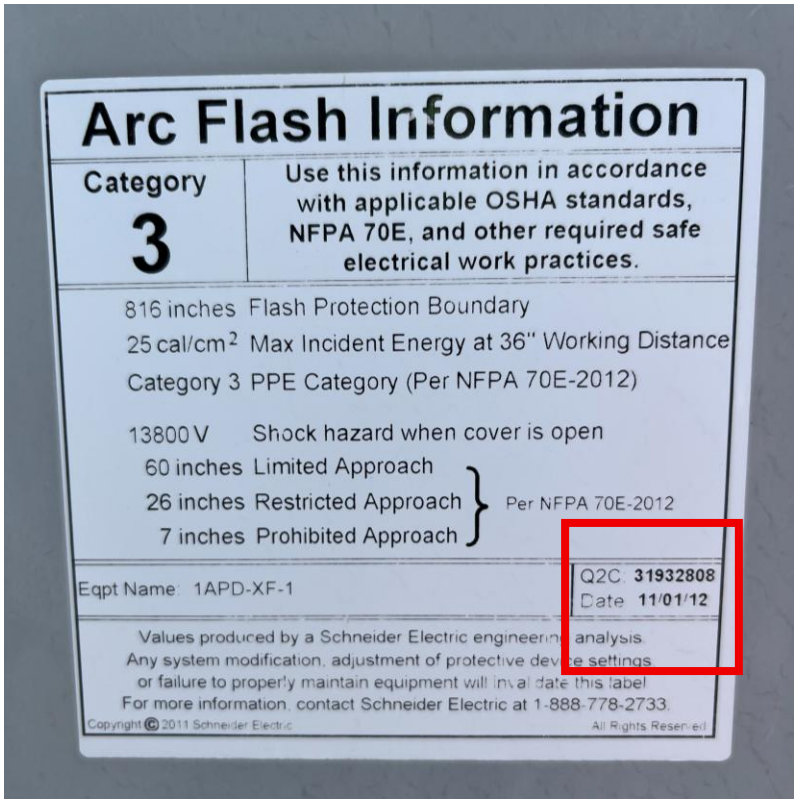


Figure 13: 1APD-XF-1 Equipment - Arc flash label from 2012

Finding 6: Various safety hazards are present at the Plant and must be corrected.

GO 167-C, Appendix D, OS 1: Safety states:

> *"The protection of life and limb for the work force is paramount. GAOs and ESSOs have a comprehensive safety program in place at each site. The company's behavior ensures that personnel at all levels of the organization consider safety as the overriding priority. This is manifested in decisions and actions based on this priority. The work environment and the policies and procedures foster such a safety culture, and the attitudes and behaviors of personnel are consistent with the policies and procedures."*

GO 167-C, Appendix C, MS 11: Facility Status and Configuration states:

> *"Station activities are effectively managed, so facility status and configuration are maintained to support safe, reliable, and efficient operation."*

California Code of Regulations (CCR) Title 8, California Occupational Safety and Health Administration (Cal OSHA) Section 3308, Hot Pipes and Surfaces states:

> *"Pipes or other exposed surfaces having an external surface temperature of 140 degrees F (60 degrees C) or higher and located within 7 feet measured vertically from floor or working level or within 15 inches measured horizontally from stairways, ramps or fixed ladders shall be covered with a thermal insulating material or otherwise guarded against contact. This order does not apply to operations where the nature of the work or the size of the parts makes guarding or insulating impracticable."*

CCR Title 8, Cal OSHA, Section 5551 Housekeeping, states in part:

> *"(c) Combustible waste material and residues in a building or unit operating area shall be kept to a minimum, stored in covered metal receptacles and disposed of daily."*

ESRB Inspectors identified several safety hazards that pose a risk to the Plant and the staff. The hazards are listed below. The Plant must make all required corrective actions to ensure the safety of the Plant, contractors and visitors.

A. Hot spots on the Plant's combustion turbine and generator enclosures exceed OSHA regulations. These hot spots are adjacent to walking platforms and a door, meaning that incidental contact is plausible. Figure 14 identifies the location of the hot spots that exceed the OSHA threshold of 140° F. Figure 15 shows examples of the Plant blocking high temperature areas around the combustion turbine.

Figure 14: Hot spot near generator access point. Thermal camera (Right image) showing 600° F at generator door

Figure 15: Examples of physical barrier preventing incidental contact with a hot surface

B. ESRB Inspectors identified oily rags in a hazardous material waste container that were not disposed of in a timely manner. Oily rags must be removed from small buckets in the storage area daily because accumulated oily rags have the potential to spontaneously combust. Upon inspection, the canister had accumulated several oily rags, and the Plant was unsure of when accumulation started. The Plant must remove the oily rags immediately and monitor the oily waste accumulation daily.

Figure 16: Accumulated oily rags

C. ESRB inspected the Plant's hazardous waste area. Within the perimeter, there is a storage locker that is labeled "Nonflammable Storage Only" that contained combustible material. The Plant must correct the discrepancy and ensure the storage lockers label accurately reflects the stored material.

Figure 17: Flammable Storage locker labeled as nonflammable storage

D. Electrical cabinets with arc flash labels are open. Open electrical cabinets create a severe electrical hazard in the immediate vicinity. The Plant must close the cabinet, communicate the importance of arc flash safety, and evaluate if refresher training is required for NFPA 70E, Standard for Electrical Safety in the Workplace.

Figure 18: Arc flash category 2 label

Figure 19: Open electrical cabinet with arc flash category 2 label

E. ESRB identified several swing gates located at elevated surfaces that do not automatically close. The Plant must maintain automatically closing gates to block fall hazards on elevated work areas and permanently constructed ladders.

Figure 20: Swing gate ajar at an elevated surface

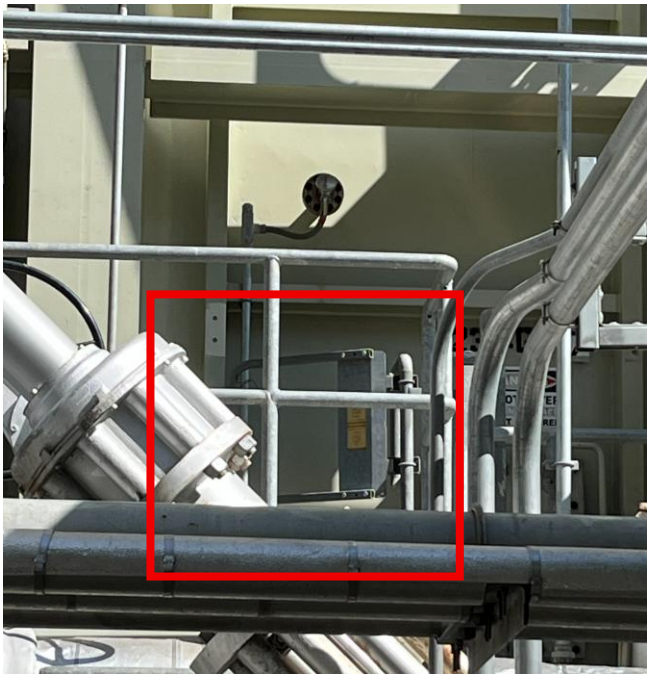


Figure 21: Swing gate ajar at elevated surface

F. A refrigerator in the Plant's water chemistry lab designated for chemical storage contained personal beverages. The Plant removed the beverages immediately.

Figure 22: Chemistry room refrigerator with beverages and chemicals

Finding 7: Fire Pump starter batteries have an unacceptable temporary solution.

GO 167-C, Appendix C, MS 4: Problem Resolution and Continuing Improvement states:

> *"The company values and fosters an environment of continuous improvement, timely and effective problem resolution, and problem prevention. This can be accomplished by applying industry best practices, lessons learned, and proven safety measures for the safety and reliability of both the GA and ESS."*

GO 167-C, Appendix C, MS 11: Facility Status and Configuration states:

> *"Station activities are effectively managed, so facility status and configuration are maintained to support safe, reliable, and efficient operation."*

ESRB Inspectors found an improper temporary repair at the Plant's diesel fire pump. The Plant's temporary repair is inadequate and must be replaced with a permanent approved solution. The diesel fire pump's sealed lead acid (SLA) battery is braced to a bolt on the fire pump using wood blocks and a strap. The Plant must install a permanent fixture for the SLA battery that is not braced to operating equipment. If temporary repairs are necessary, the Plant must document this as a part of the replacement plan that leads to a permanent solution.

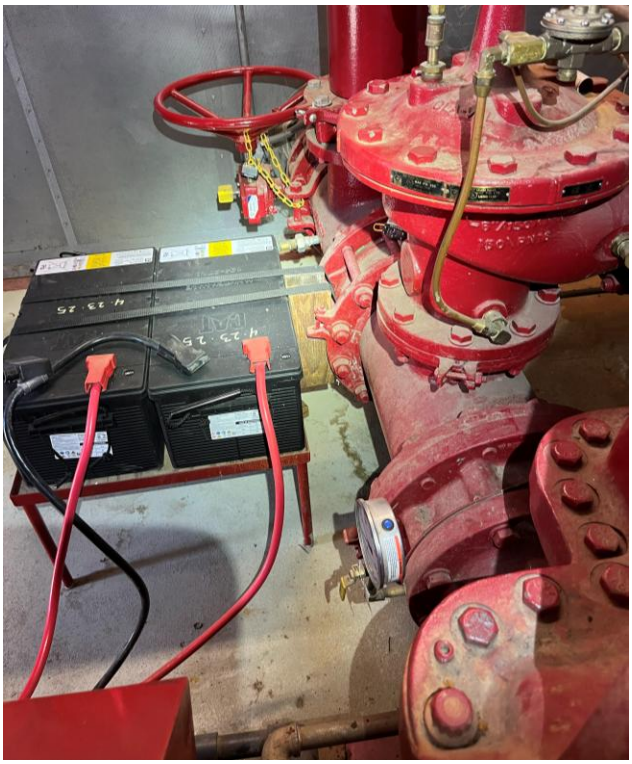


Figure 23: SLA Battery attached to fire pump

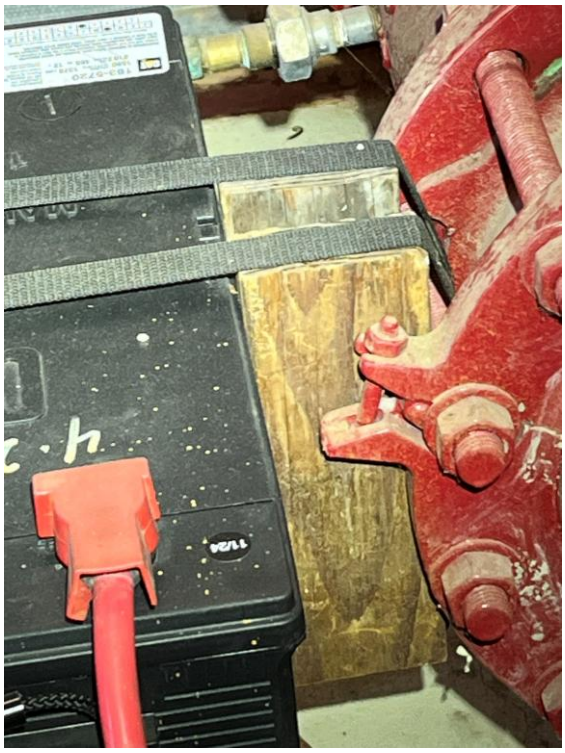


Figure 24: SLA Battery attached to fire pump

Finding 8: Multiple equipment leaks identified.

GO 167-C, Appendix C, MS 4: Problem Resolution and Continuing Improvement states:

> *"The company values and fosters an environment of continuous improvement, timely and effective problem resolution, and problem prevention. This can be accomplished by applying industry best practices, lessons learned, and proven safety measures for the safety and reliability of both the GA and ESS."*

GO 167-C, Appendix C, MS 9: Conduct of Maintenance states:

> *"Maintenance is conducted in an effective and efficient manner, so equipment performance and material condition effectively support reliable facility operation."*

GO 167-C, Appendix C, MS 11: Facility Status and Configuration states:

> *"Station activities are effectively managed, so facility status and configuration are maintained to support safe, reliable, and efficient operation."*

ESRB Inspectors identified equipment leaks at the site. The Plant must address the leaks and proactively clean the affected areas. The two specific leaks include one at the fire pump and the second at a transformer. The leak at the fire pump is located under the fire pump packing gland and drip tray. The stain on the floor appears dark and does not seem to be water from the packing gland. The Plant must document, investigate, and correct the leak. The Plant had previously identified the transformer leak shown in Figure 26 and 27. At the time of ESRB's site visit, the Plant was working with a contactor to correct the issue.

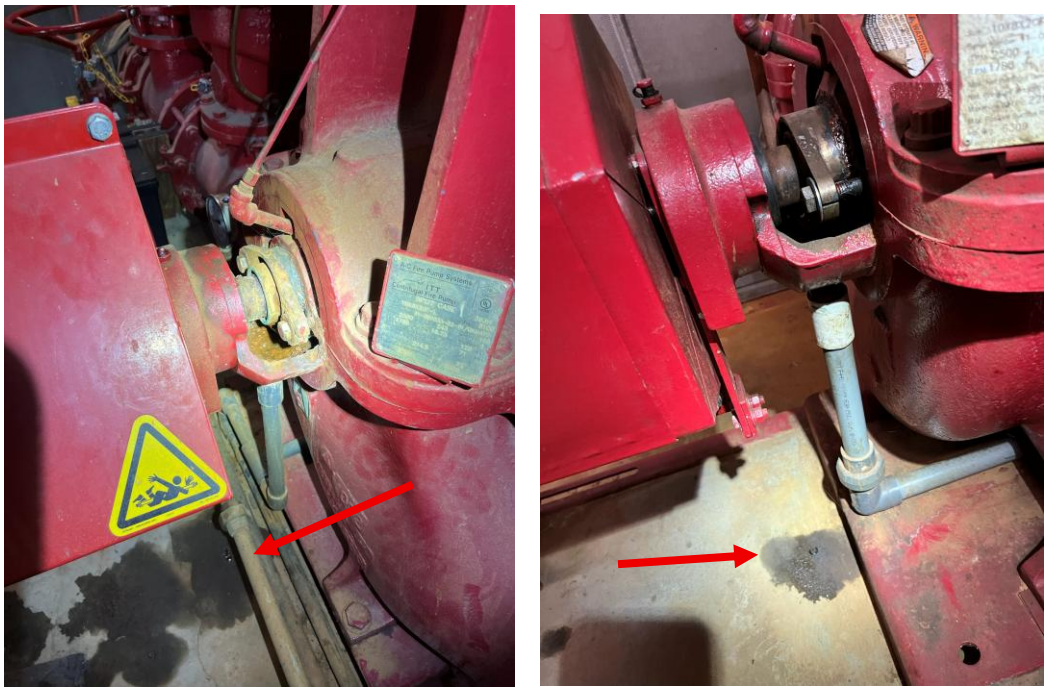


Figure 25: Pump packing leak

Figure 26: Transformer oil leak

Figure 27: Transformer oil leak

Finding 9: Water chemistry rounds must be updated.

GO 167-C, Appendix C, MS 8: Maintenance Procedures and Documentation states:

> *"Maintenance procedures and documents are clear and technically accurate, provide appropriate directions, and are used to support safe and reliable facility operation. Procedures must be current to the actual methods being employed to accomplish the task and are comprehensive to ensure reliable energy delivery to the transmission grid."*

GO 167-C, Appendix C, MS 9: Conduct of Maintenance states:

> *"Maintenance is conducted in an effective and efficient manner, so equipment performance and material condition effectively support reliable facility operation."*

GO 167-C, Appendix C, MS 15: Chemistry Control states:

> *"Chemistry controls optimize chemical conditions during all phases of facility operation and system non-operational periods."*

The Plant is only partially completing water chemistry inspections, with certain fields consistently left blank. The Plant explained that these omissions are intentional, as certain measurements listed on the form are not applicable depending on whether the Plant is running or not. Due to the differing expectations on the water chemistry rounds based on the Plant's operational status, the Plant must update the round sheet to indicate whether the Plant is running at the time of the inspection. Additionally, if the Plant is not required to record certain metrics under specific operating conditions, the Plant must clearly identify the relevant measurements for each operating condition to ensure only appropriate measurements are taken during each round.

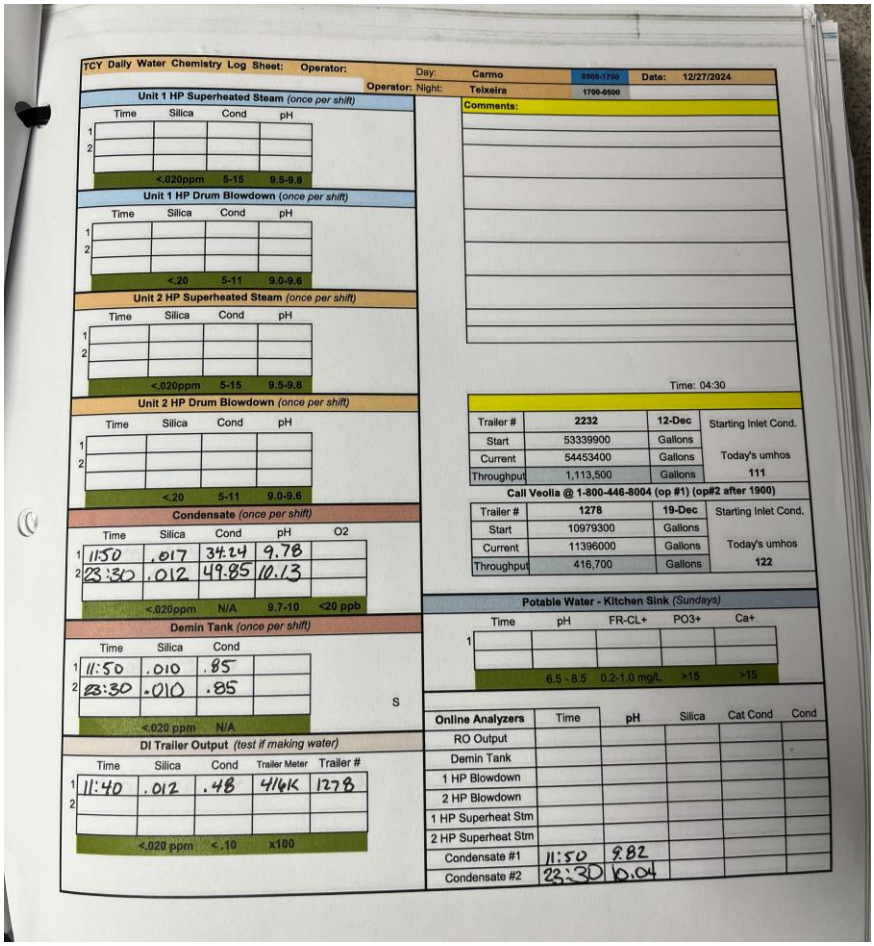


Figure 28: Example of a Water Chemistry Round Sheet

Finding 10: Spill Prevention Control and Countermeasure Plan (SPCC) spill kit inventory forms are not completed.

GO 167-C, Appendix C, MS 9: Conduct of Maintenance states:

> *"Maintenance is conducted in an effective and efficient manner, so equipment performance and material condition effectively support reliable facility operation."*

GO 167-C, Appendix D, OS 13: Routine Inspections states:

> *"Routine inspections by facility personnel ensure that all areas and critical parameters of facility operations are continually monitored, equipment is operating normally, and that routine maintenance is being performed. Results of data collection and monitoring of parameters during routine inspections are utilized to identify and resolve problems, to improve facility operations, and to identify the need for maintenance. All personnel are trained in the routine inspection procedures relevant to their responsibilities. Among other things, each GAO or ESSO creates, maintains, and implements routine inspections by:*

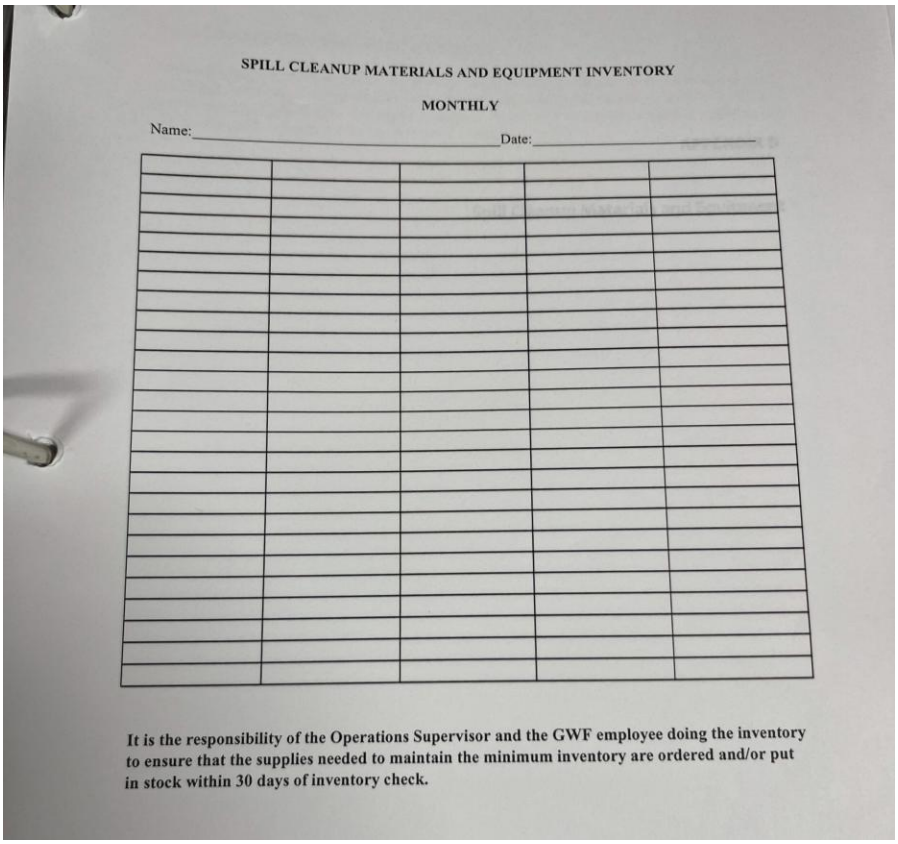
a) Identifying systems and components critical to system operation such as, but not limited to, those listed in the guidelines to Operating Standard 28.

b) Establishing procedures for routine inspections that define critical parameters of these systems, describe how those parameters are monitored, and delineate what action is taken when parameters meet alert or action levels.

c) Training personnel to conduct routine inspections.

d) Monitoring and conducting trend analysis from routine inspections."

The Plant's SPCC plan has an inventory form in Appendix D for spill kits that is required to be completed monthly. The Plant did not have records of completed monthly inventory forms for the spill kits around the facility. The Plant must inspect spill kits around the site to ensure the spill kits are adequately stocked to respond to any spills that may occur. As a part of the inspection, the Plant must complete the spill kit inventory form monthly.



SPILL CLEANUP MATERIALS AND EQUIPMENT INVENTORY

MONTHLY

Name:_____ Date:_____

It is the responsibility of the Operations Supervisor and the GWF employee doing the inventory to ensure that the supplies needed to maintain the minimum inventory are ordered and/or put in stock within 30 days of inventory check.

Figure 29: Spill Cleanup material equipment inventory sheet

Finding 11: Equipment and pipe identification labels are in poor condition.

GO 167-C, Appendix D, OS 8: Plant Status and Configuration states:

> *"Facility activities are effectively managed, so the facility status and configuration are maintained to support safe, reliable, and efficient operation."*

Guideline for Standard 8: Plant Status and Configuration states in part:

> *"A. Plant Status Control*
>
> *10. "Procedures are implemented to control the placement of caution, warning, information and other similar tags on plant equipment and operator aids in the plant."*

ESRB Inspectors observed multiple equipment identification and piping labels that are peeling off or had become faded. The failure to replace damaged or missing equipment labels compromises the visibility and effectiveness of these safety indicators. The Plant must routinely monitor the condition of equipment and pipe identification labels and proactively replace peeling, fading, or otherwise failing labels.

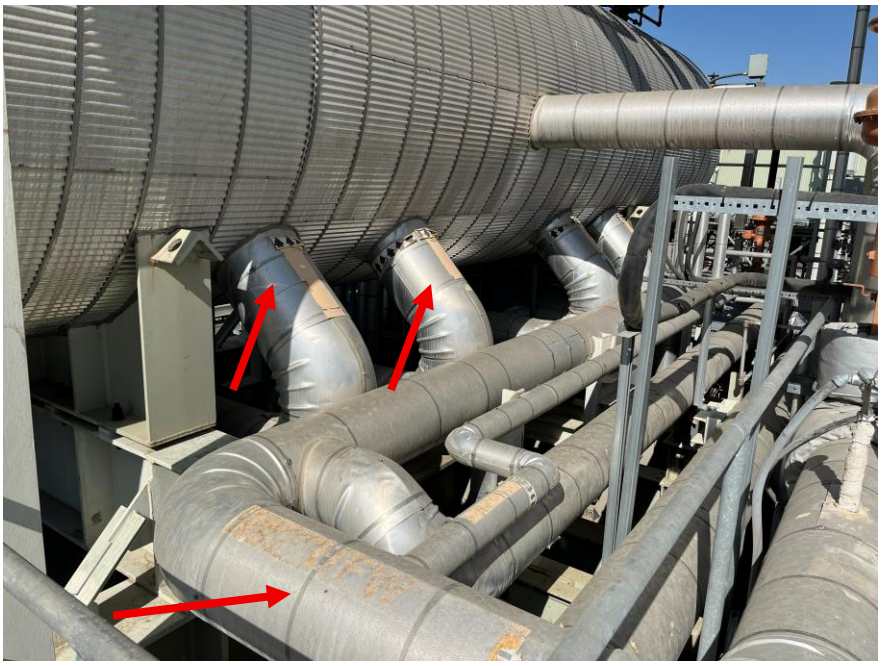


Figure 30: Steam piping on top the Heat Recovery Steam Generator

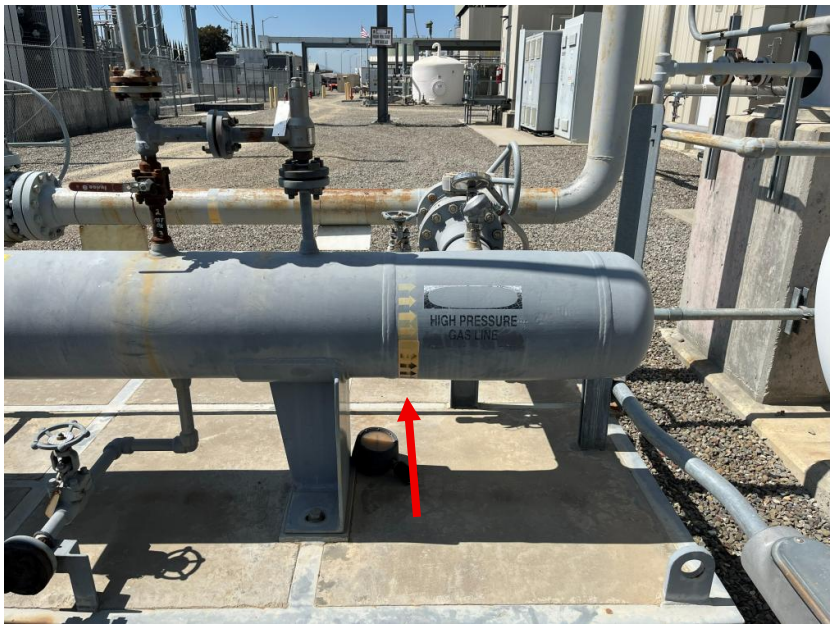


Figure 31: Fuel Gas supply directional flow arrows

Figure 32: Faded piping identification

Figure 33: Faded piping identification

Figure 34: Faded piping identification

II. List of Documents Reviewed

Category	Reference #	CPUC-Requested Documents
Safety	1	Orientation Program for Visitors and Contractors (Onsite)**
	2	Evacuation Procedure
	3	Evacuation Map and Plant Layout
	4	Evacuation Drill Report & Critique (last 3 years)
	5	Hazmat Handling Procedure
	6	SDS for All Hazardous Chemicals**
	7	Injury & Illness Prevention Plan (IIPP)
	8	OSHA Form 300 (Injury Log) in last 4 years
	9	OSHA Form 301 (Incident Report) in last 4 years
	10	List of all CPUC Reportable Incidents (last 5 years)
	11	All Root Cause Analyses (last 5 years)
	12	Fire Protection System Test Report and Inspection Record (last 3years)***
	13	Insurance Report / Loss Prevention / Risk Survey (last 3 years)
	14	Lockout / Tagout Procedure
	15	Arc Flash Analysis
	16	Confined Space Entry Procedure
	17	Plant Physical Security and Cyber Security Procedures
	18	5-year Water Based Fire Protection System Inspection Record***
Management	19	Employee Performance Review Procedures and Verifications
	20	Organizational Chart
Training	21	Safety Training Records*
	22	Skill-related Training Records*
	23	Certifications for Welders, Forklift & Crane Operators*
	24	Hazmat Training and Records*
Contractor	25	Latest list of Qualified Contractors*
	26	Contractor Selection / Qualification Procedure
	27	Contractor Certification Records
	28	Contractor Monitoring Program
Regulatory	29	Daily CEMS Calibration Records (Onsite)**
	30	Air Permit
	31	Water Permit
	32	Spill Prevention Control Plan (SPCC)
	33	CalARP Risk Management Plan (RMP)
O&M	34	Daily Round Sheets / Checklists (Onsite)**
	35	Feedwater Grab-sample Test Records (Onsite)**

	36	Water Chemistry Manual
	37	Logbook (Onsite)**
	38	List of Open/Backlogged Work Orders*
	39	List of Closed/Retired Work Orders*
	40	Work Order Management Procedure
	41	Computerized Maintenance Management System (Demonstration Onsite)**
Gas Turbine	42	Maintenance & Inspection Procedures for CTG, STG, Generator, HRSG, Condenser & Transformer
	43	Borescope Inspection Reports (last 2 years)
	44	Hot Gas Path Inspection Reports
	45	Combustors Inspection Reports
	46	Intercooler Inspection Reports (if applicable)
	47	Overspeed Trip Test Records
	48	Bearing Lube Oil Analysis Reports
	49	DC Lube Oil Pump Test Records
Main Plant Air Compressors	50	Inspection Procedures and Records
HRSG	51	Tube Analysis Report
	52	Tube Clean Records (Internal and/or external)
	53	Safety Valve Test Records
	54	Hot Spots / IR Inspection Reports
	55	Structural Integrity Assessment
HEP	56	FAC Inspection Procedure & Measurements
	57	Pipe Hangers / Support Calibration Records
Steam Turbine	58	NDE Reports
	59	Borescope Inspection Records
	60	Most recent major STG inspection report
	61	STG inspection reports
	62	Overspeed Trip Test Records
	63	Bearing Lube Oil Analysis Reports
	64	DC Lube Oil Pump Test Records
	65	Emergency Stop Valve Test Records on Main Steam Line
	66	Steam Turbine Water Induction Prevention Procedures
Generator (Combustion and Steam Turbine Generators)	67	Bearing Lube Oil Analysis
	68	Maintenance & Inspection Procedures (or related documents)
	69	Electrical Test Records (Reactive power verification, excitation control modeling, polarization, etc.)
Transformers	70	Hot Spots / IR Inspection Reports

	71	Oil Analysis Reports
Cathodic Protection	72	Procedures and Inspection Records
Condenser System	73	Fans & Motors Inspection Records
	74	Structural Integrity and Fin Assessment
	75	Circulating Water Pumps Maintenance Records
Instrumentation	76	Instrument Calibration Procedures and Records
Test Equipment	77	Calibration Procedures and Records
Emission Control Equipment	78	Maintenance & Inspection Procedures and Records
Document	79	P&IDs*
	80	Vendor Manuals (Onsite)**
Spare Parts	81	Spare Parts Inventory List
	82	Shelf-life Assessment Procedures and Reports
Internal Audit	83	Internal Audit Procedures and all Records