

**CPUC AUDIT FINDINGS OF CALPINE  
GEYSERS POWER COMPANY LLC  
SONOMA (U3), RIDGELINE (U7&8), AND SOCRATES (U18)  
June 26-30, 2023**

**I. Operation and Maintenance Findings Requiring Corrective Action**

**Finding 1: The Plant needs to list the CPUC and California Energy Commission (CEC) in its emergency response call down list.**

**GO 167, Operation Standard (OS) 20: Preparedness for On-Site and Off-Site Emergencies**

states in part:

*“The GAO plans for, prepares for, and responds to reasonably anticipated emergencies on and off the plant site, primarily to protect plant personnel and the public, and secondarily to minimize damage to maintain the reliability and availability of the plant.”*

ESRB noted that the Geysers Emergency Response Plan – Part 2 does not list the CPUC and CEC in the call down list. The Plant must include all applicable regulatory agencies in its Emergency Response Plan to ensure that all reportable outages and/or incidents are reported to the appropriate agencies.

**Finding 2: The Plant needs to address backlogged work orders created from 2018 through 2021.**

**GO 167, Maintenance Standard (MS) 10: Work Management** states:

*“Work is identified and selected based on value to maintaining reliable plant operation. Work is planned, scheduled, coordinated, controlled, and supported with resources for safe, timely, and effective completion.”*

**GO 167, OS 16: Participation by Operations Personnel in Work Orders** states in part:

*“Operations personnel identify potential system and equipment problems and initiate work orders necessary to correct system or equipment problems that may inhibit or prevent plant 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.”*

ESRB noted various backlogged open work orders from 2018 through 2021 for [REDACTED] as shown in Tables 1 to 3. The Plant must complete open work orders in a timely manner to ensure its facilities operate safely, reliably, and efficiently.

Table 1: [REDACTED]

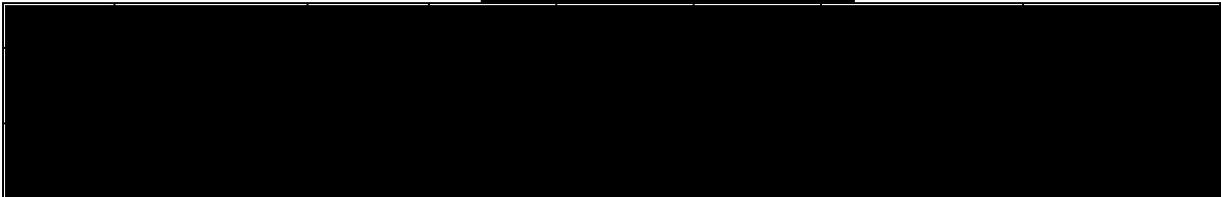


Table 2: [Redacted]

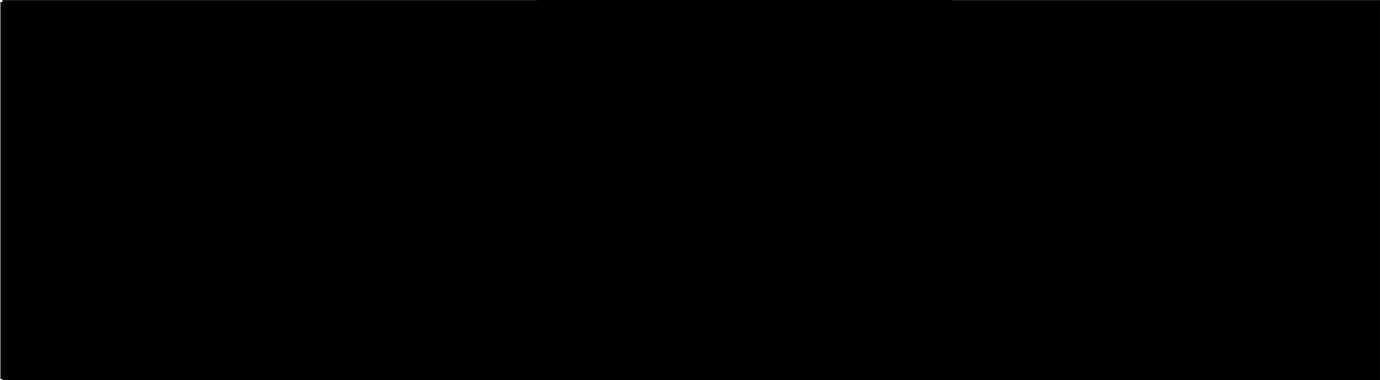
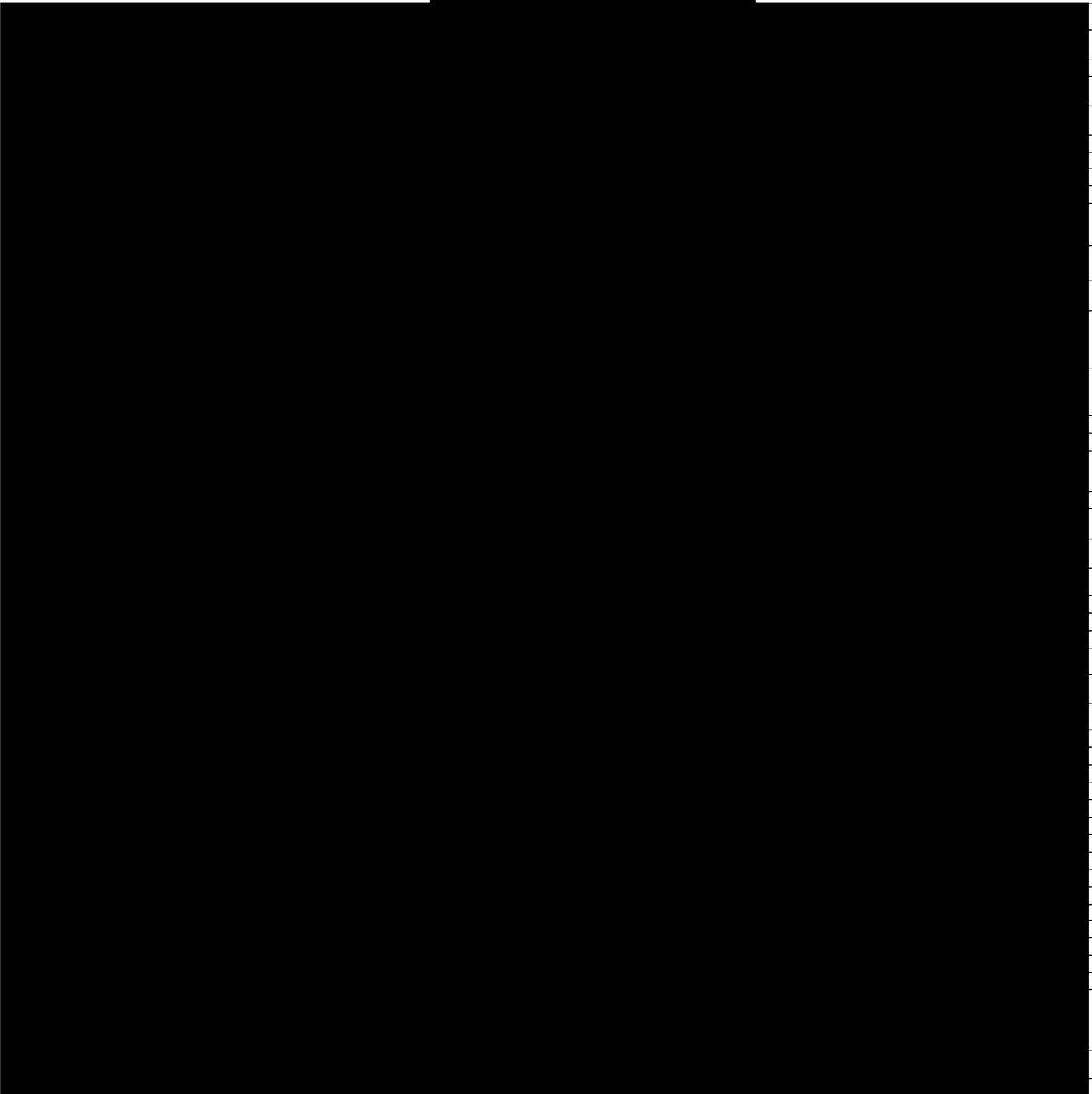
A large black rectangular redaction box covering the entire content of Table 2.

Table 3: [Redacted]

A large black rectangular redaction box covering the entire content of Table 3.

**Finding 3: The Plant needs to keep up with Fire [REDACTED] Reports.**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

**GO 167, OS 20: Preparedness for On-Site and Off-Site Emergencies** states in part:

*“The GAO plans for, prepares for, and responds to reasonably anticipated emergencies on and off the plant site, primarily to protect plant personnel and the public, and secondarily to minimize damage to maintain the reliability and availability of the plant.”*

ESRB noted that the Plant did not provide the March 2023 Fire [REDACTED] reports [REDACTED]. The [REDACTED] had failed on various categories (see list below). The Plant must promptly correct all identified failures on Fire [REDACTED] Reports. The Plant provided a work order request [REDACTED] for the [REDACTED]. However, as of the writing of this report, the status of the work order remained at “scheduled” and no actual finish date was provided.

Table 4: [REDACTED]

[REDACTED]
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The Plant provided a March 2023 Fire [REDACTED] report [REDACTED]. The report showed [REDACTED] had one failure in the [REDACTED] and three deficiencies (see list below). The Plant provided a work order request [REDACTED] for the repair of the [REDACTED] failure and deficiencies. However, as of the writing of this report, the status of the work order remained as “in progress” and no actual finish date was provided.

Table 5: [REDACTED]

[REDACTED]
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**Finding 4: The Plant needs to label fire hose cabinets.**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

**GO 167, OS 20: Preparedness for On-Site and Off-Site Emergencies** states in part:

*“The GAO plans for, prepares for, and responds to reasonably anticipated emergencies on and off the plant site, primarily to protect plant personnel and the public, and secondarily to minimize damage to maintain the reliability and availability of the plant.”*

ESRB identified multiple fire hose cabinets that had faded/deteriorated labels, listed below in Figures 1 to 3. Signage is required to identify equipment. The Plant must continue to monitor the condition of all signage and make repairs as needed.

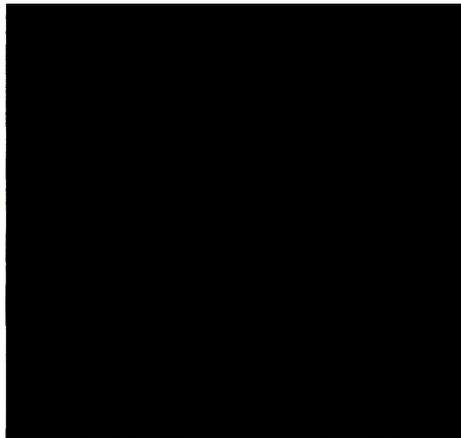


Figure 1: The fire hose cabinet [REDACTED] has deteriorated labels.

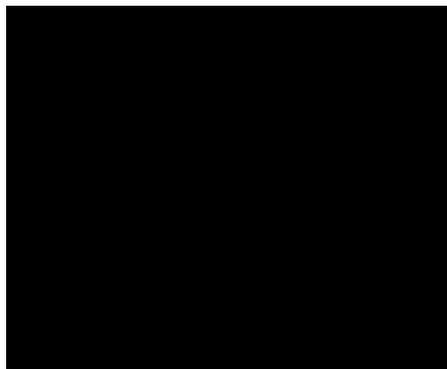


Figure 2: The fire hose cabinet [REDACTED] has deteriorated labels.

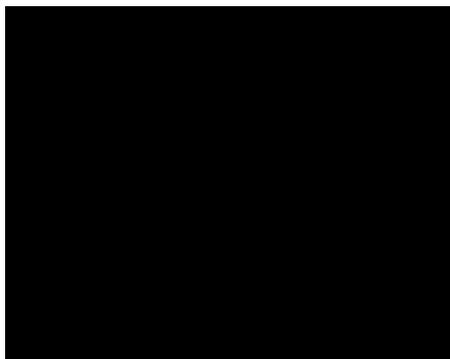


Figure 3: The fire hose cabinet [REDACTED] has deteriorated labels.

**Finding 5: The Plant needs to install and/or replace confined space signs.**

**GO 167, OS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

**Occupational Safety and Health Administration Standard (OSHA) 1910.146(c)(2): Permit-required confined spaces** states:

*“If the workplace contains permit spaces, the employer shall inform exposed employees, by posting danger signs or by any other equally effective means, of the existence and location of and the danger posed by the permit spaces.”*

ESRB identified deteriorated and missing confined space signage around the Plant’s facilities, listed below in Figures 4 to 14. Signage is required to notify staff and contractors of safety hazards and the need to obtain a permit before entering a confined space. The Plant must continue to monitor the condition of all signage and replace as needed.



Figure 4: [REDACTED] is missing a confined space sign.

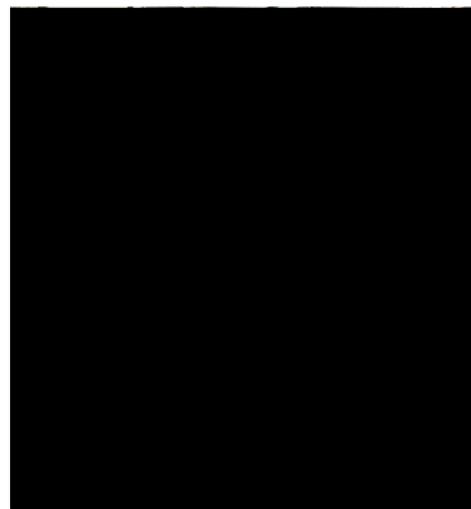


Figure 5: [REDACTED] has faded and missing confined space signs.

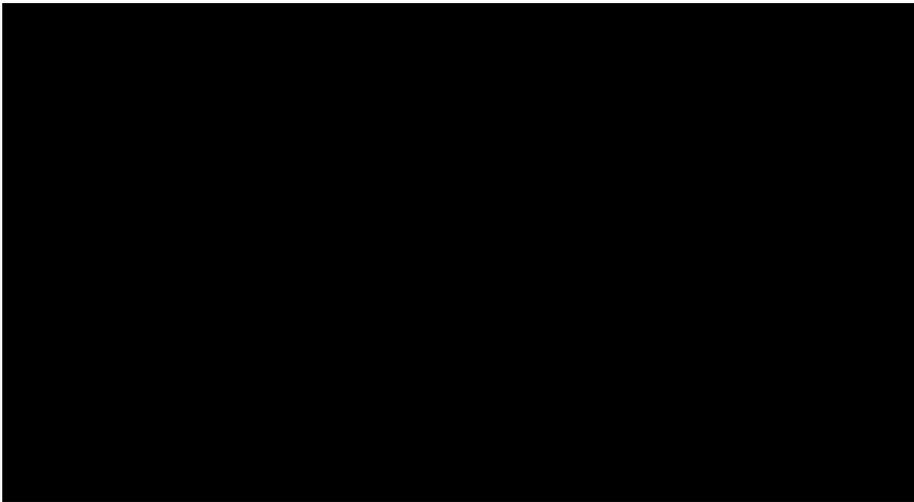


Figure 6: [REDACTED] has faded confined space signs.

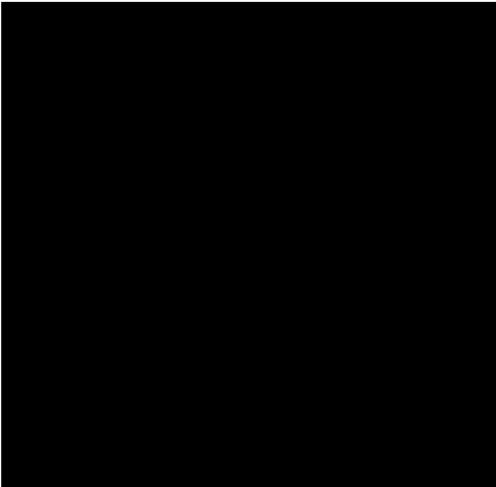


Figure 7: [REDACTED] has a faded confined space sign.

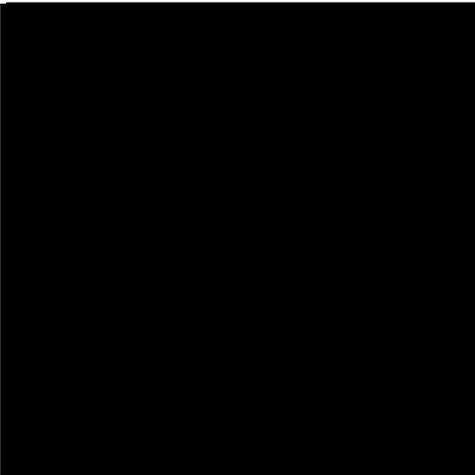


Figure 8: [REDACTED] has a faded confined space sign.

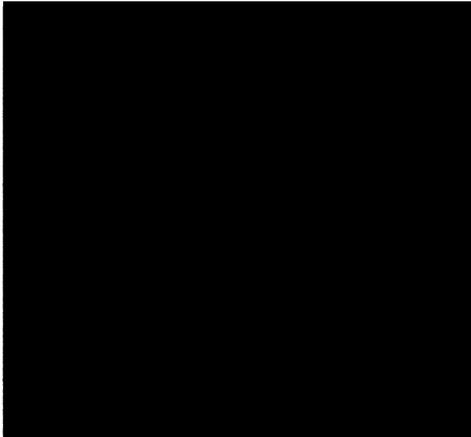


Figure 9: [redacted] has a faded confined space sign.

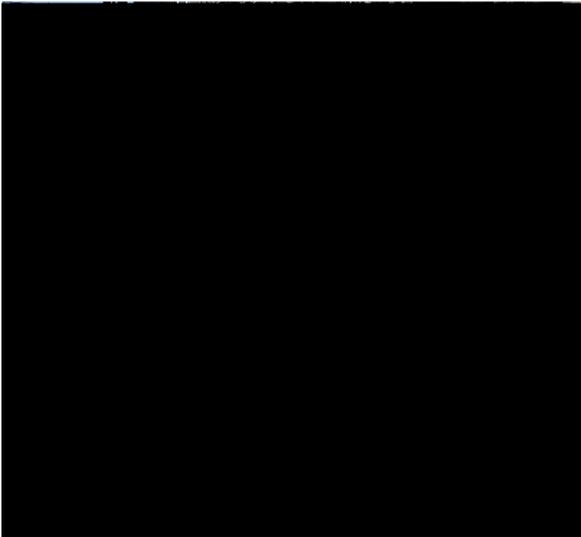


Figure 10: [redacted] have faded confined space signs.



Figure 11: [redacted] have faded/deteriorated confined space signs.



Figure 12: [REDACTED] is missing confined space signs [REDACTED]



Figure 13: [REDACTED] are missing confined space signs.

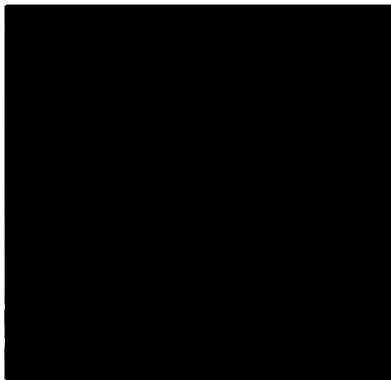


Figure 14: [REDACTED] has a deteriorated confined space sign.

**Finding 6: The Plant needs to correct various leaks throughout the Plant.**

**GO 167, OS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

**GO 167, OS 11: Operations Facilities, Tools and Equipment states:**

*“Facilities and equipment are adequate to effectively support operations activities.”*

**GO 167, MS 9: Conduct of Maintenance states:**

*“Maintenance is conducted in an effective and efficient manner so equipment performance and materiel condition effectively support reliable plant operation.”*

ESRB noted that various equipment throughout all three inspected Plants had leaks, as shown in Figures 15 to 26. Leakage of water and oil poses risks to worker safety, environmental hazards, and operational reliability. The Plant must repair these leaks to maintain safety, reliability, and efficiency of the Plants.



Figure 15: [REDACTED] has several leaks which created a puddle posing a trip hazard in a walkable area.

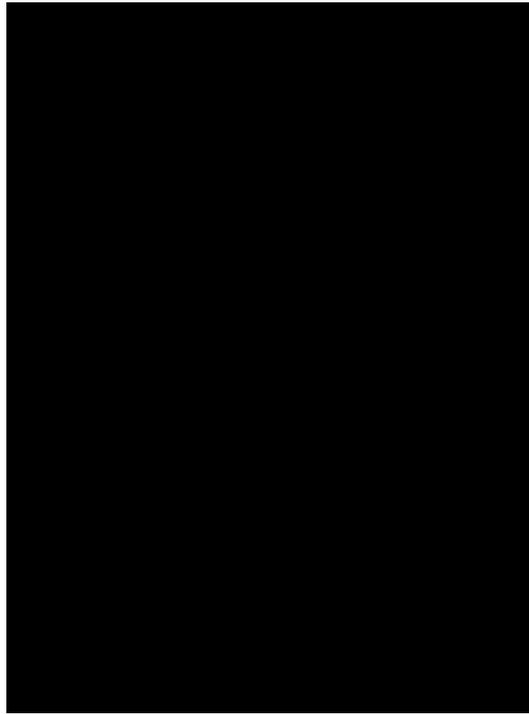


Figure 16: [REDACTED] has a leak. The Plant has a preexisting work order [REDACTED] to repair the leak.

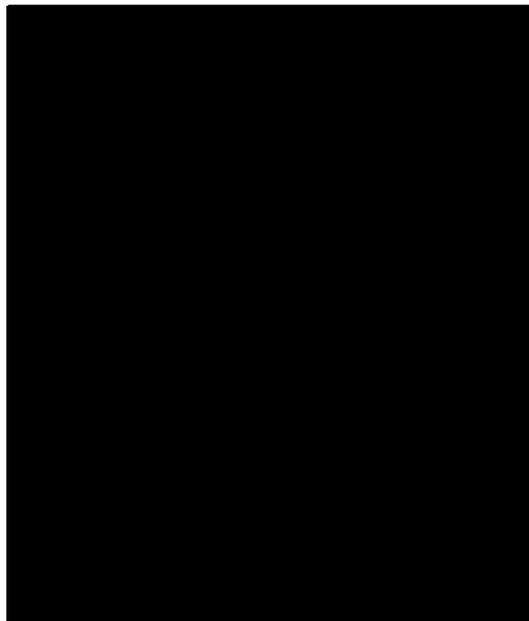


Figure 17: [REDACTED] has a leak that is causing significant oxidation/corrosion  
[REDACTED]

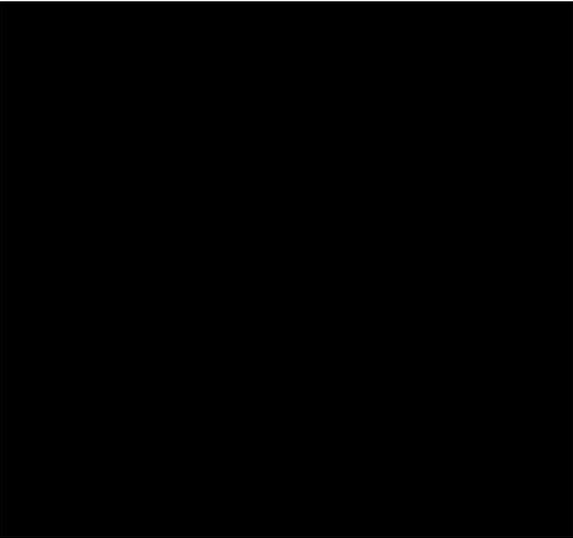


Figure 18: [REDACTED] has an oil leak. The Plant cleaned up the leak during the audit and created work order [REDACTED] to investigate the leak.

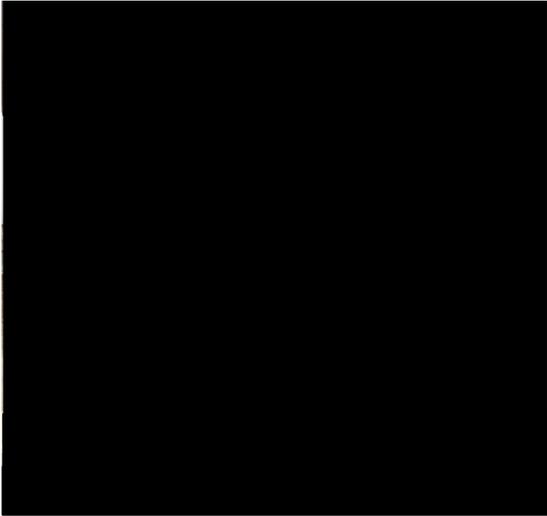


Figure 19: [REDACTED] battery room [REDACTED] has a leak creating a puddle [REDACTED] the battery room.



Figure 20: [REDACTED] has a water leak creating a puddle on the ground.

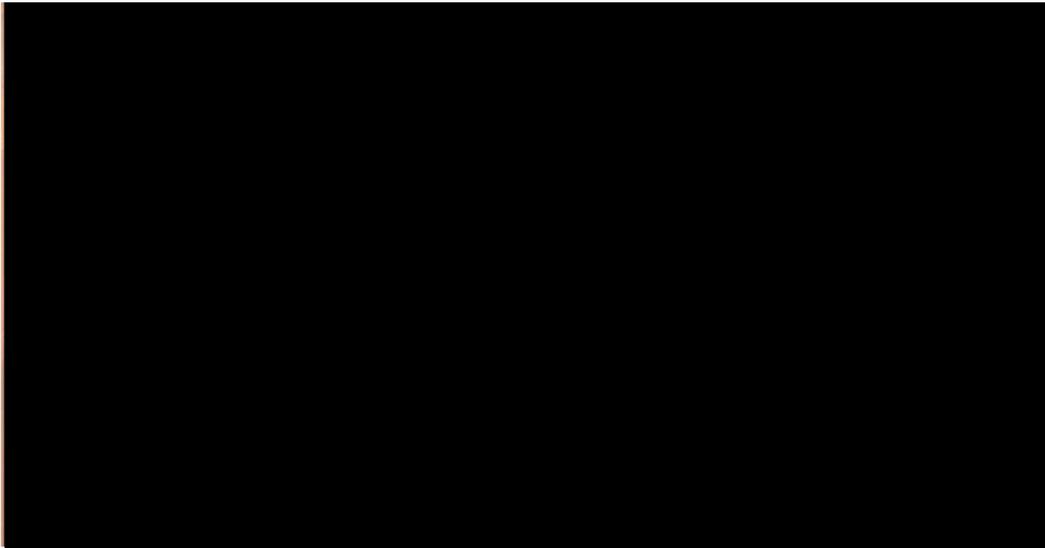


Figure 21: [REDACTED] has an oil leak.

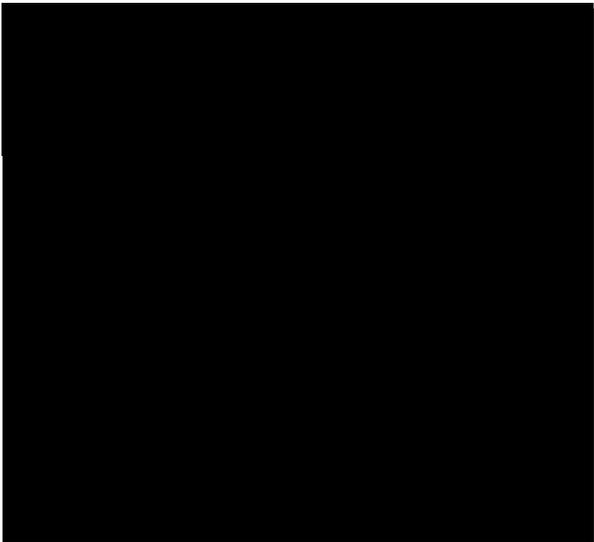


Figure 22: [REDACTED] has a minor oil leak.



Figure 23: [REDACTED] has an oil leak.

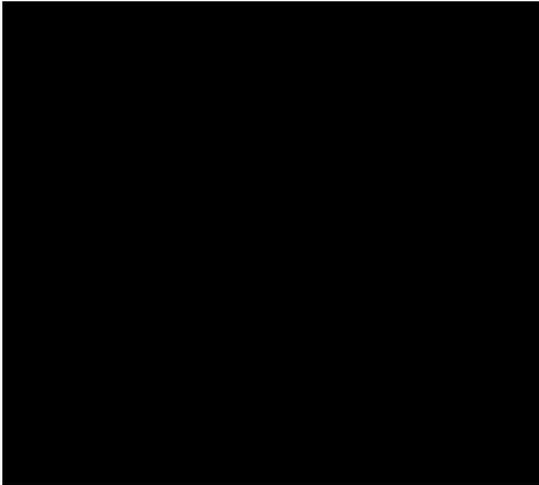


Figure 24: [redacted] has a water leak.



Figure 25: [redacted] leaks.

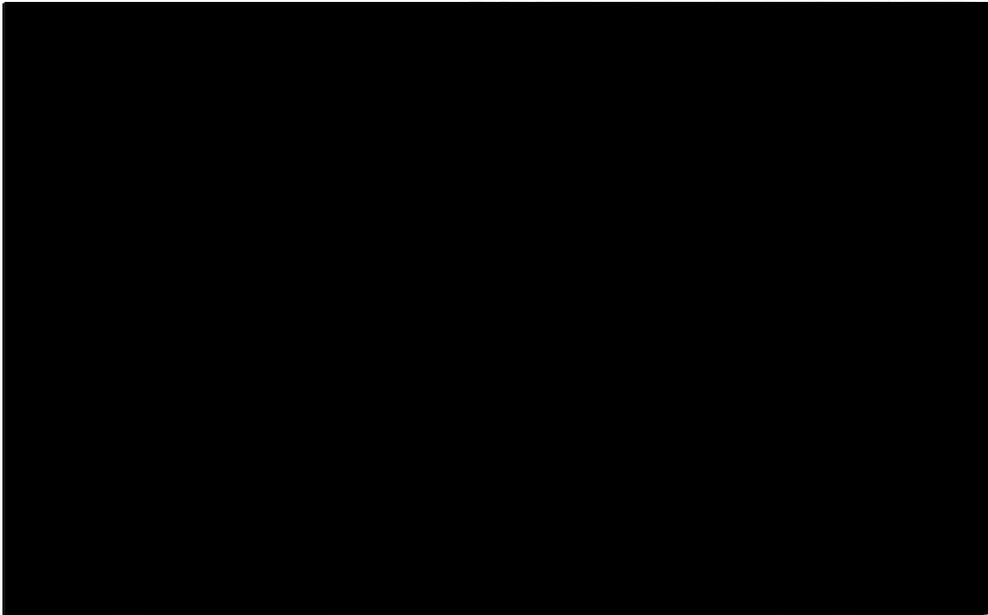


Figure 26: [redacted] has a water leak.

**Finding 7: The Plant needs to practice proper housekeeping.**

**GO 167, OS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

ESRB observed old equipment and tools that are no longer in use creating clutter around the Plant’s facilities, as shown in Figures 27 to 36 below. The Plant must properly dispose of and store equipment that is no longer in use.

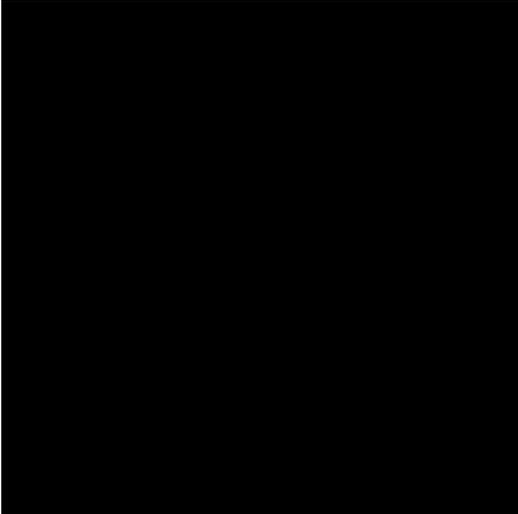


Figure 27: Old hose [redacted]

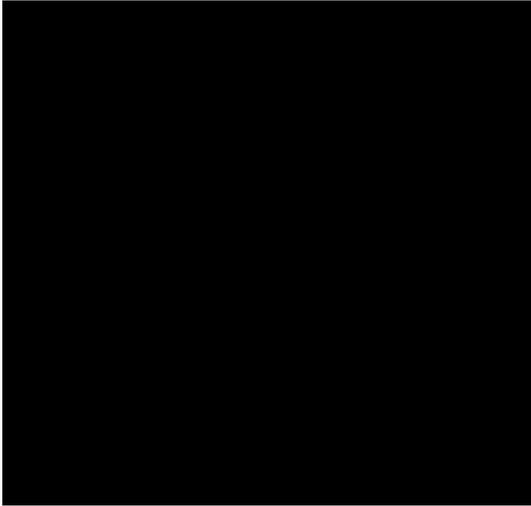


Figure 28: Idle [redacted] wire is exposed [redacted]

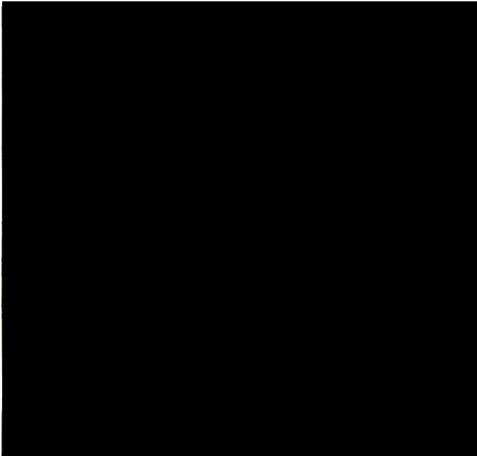


Figure 29: A stick was attached to a rope [REDACTED] The Plant removed the stick and rope during the audit.

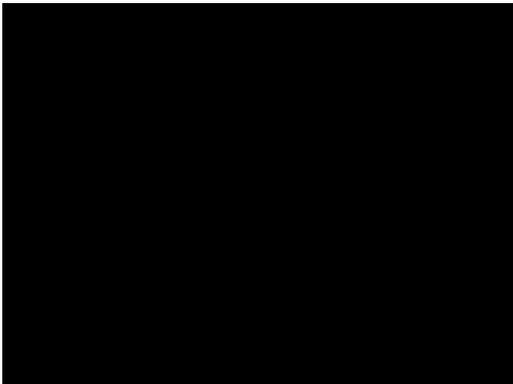


Figure 30: A metal bar is [REDACTED] The metal bar is posing a fall/trip hazard and should be placed [REDACTED]

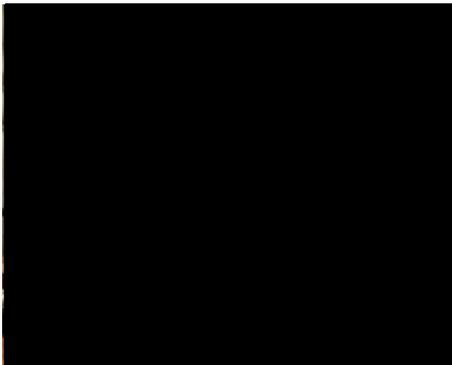


Figure 31: A kneeling pad was left [REDACTED]

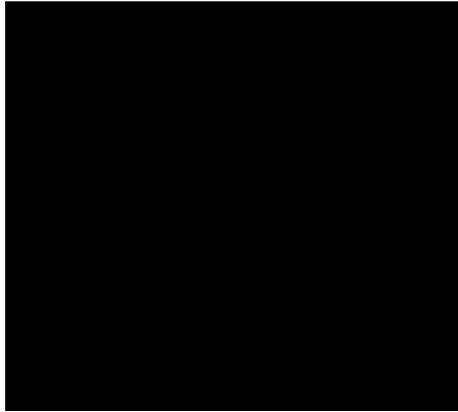


Figure 32: A glove and tool were left [REDACTED]

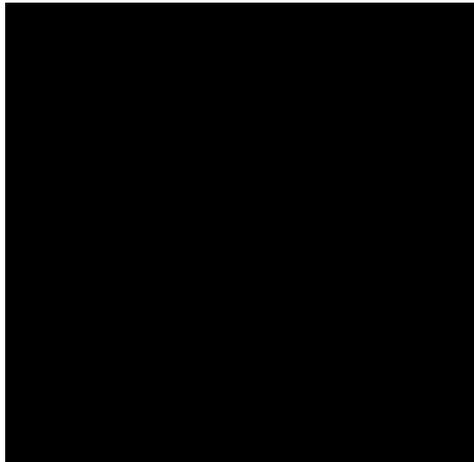


Figure 33: A milk jug filled with oil was left [REDACTED]



Figure 34: There are 2 used oil buckets [REDACTED] posing a spill hazard.

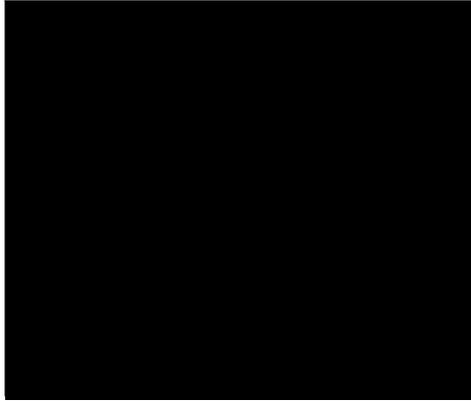


Figure 35: There are 2 water jugs and funnel left [REDACTED] Battery Storage Room

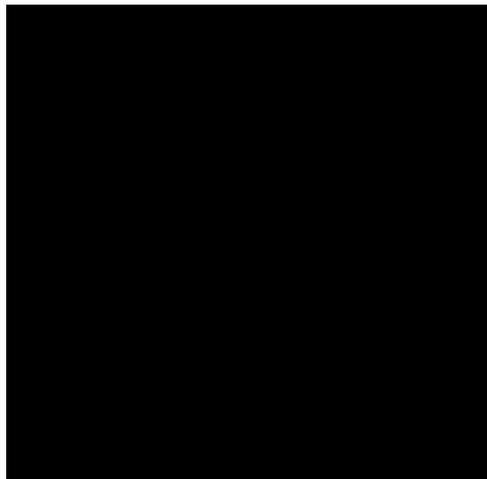


Figure 36: [REDACTED] filled with trash and open containers.

**Finding 8: The Plant needs to replace/install insulation for piping.**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

**GO 167, MS 9: Conduct of Maintenance** states:

*“Maintenance is conducted in an effective and efficient manner so equipment performance and materiel condition effectively support reliable plant operation.”*

**GO 167, OS 11: Operations Facilities, Tools and Equipment** states:

*“Facilities and equipment are adequate to effectively support operations activities.”*

ESRB noted that the insulation for some piping at [REDACTED] requires replacement, as seen in Figures 37 and 38. The Plant must properly insulate piping to ensure proper and efficient operation of equipment.

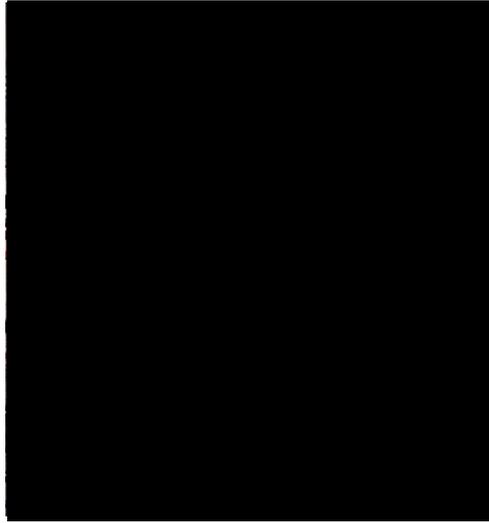


Figure 37: The insulation at [REDACTED] requires replacement. The Plant must properly insulate the piping, [REDACTED]. [REDACTED] The Plant has two preexisting work orders [REDACTED] to install the insulation.

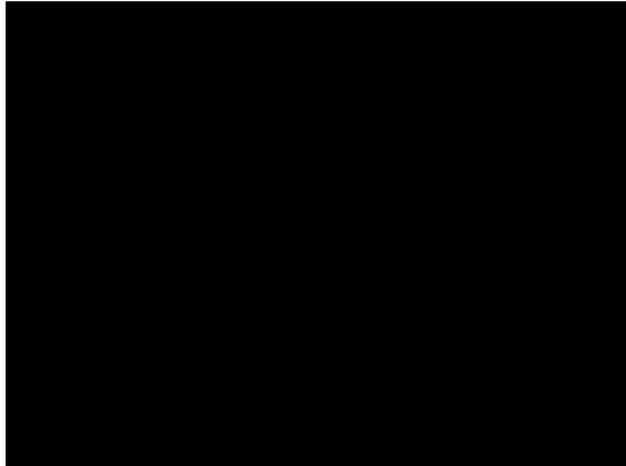


Figure 38: The [REDACTED] is damaged.

**Finding 9: The Plant needs to install or replace National Fire Protection Association (NFPA) 704 placards.**

**GO 167, OS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

**NFPA 704: 4.3 Location of Signs** states:

*“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.”*

ESRB identified deteriorated NFPA 704 signage around the Plant's facilities, listed below in Figures 39 and 54. Signage is required to identify threats and safety hazards for staff, contractors, and emergency personnel. The Plant must continue to monitor the condition of all signage and replace as needed.

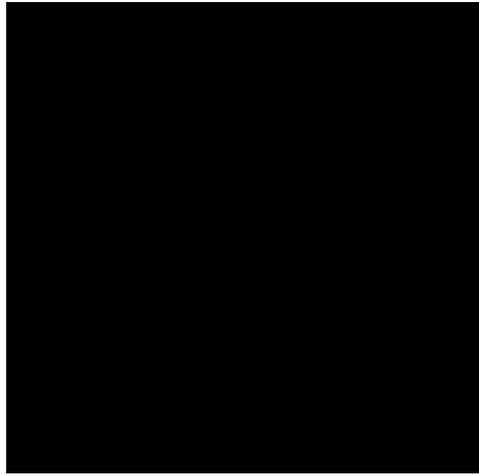


Figure 39: [REDACTED] has a faded NFPA 704 placard.



Figure 40: [REDACTED] is missing a NFPA 704 placard.

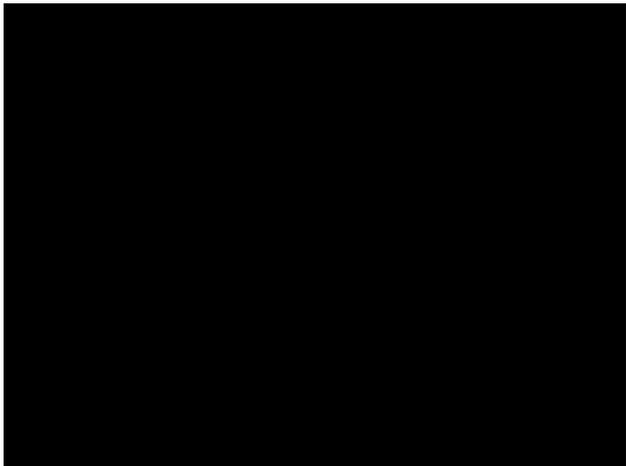


Figure 41: [REDACTED] has damaged NFPA 704 placards.

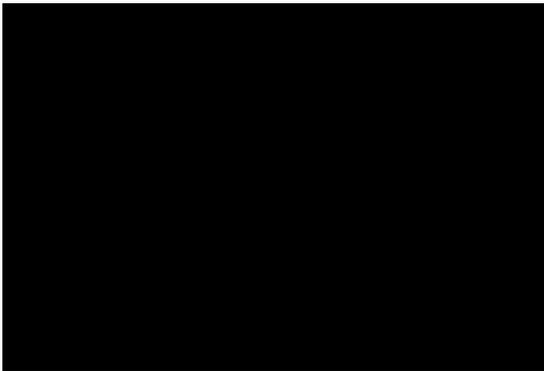


Figure 42: [REDACTED] is missing a NFPA 704 placard.

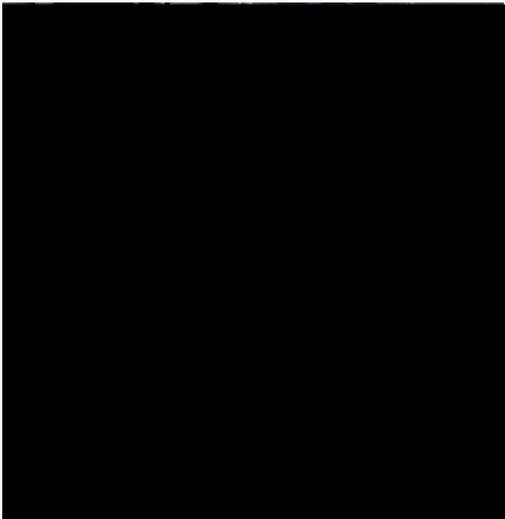


Figure 43: [REDACTED] is missing a NFPA 704 placard.



Figure 44: [redacted] are missing NFPA 704 placards.

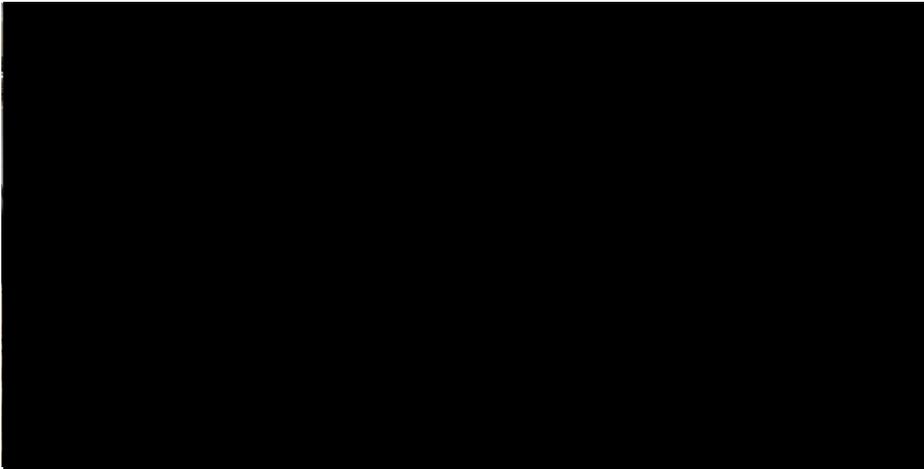


Figure 45: [redacted] are missing NFPA 704 placards.

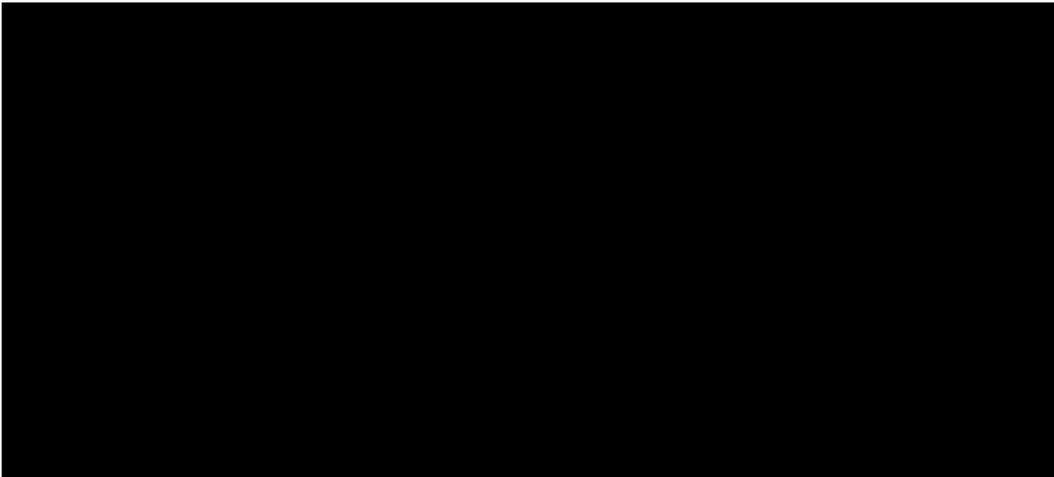


Figure 46: [redacted] are missing NFPA 704 placards.

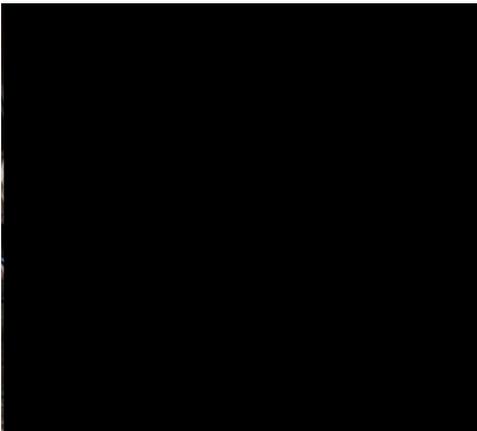


Figure 47: [REDACTED] is missing an NFPA 704 placard.

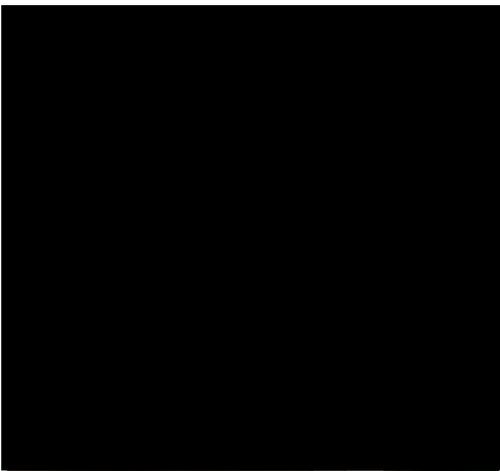


Figure 48: [REDACTED] is missing an NFPA 704 placard.

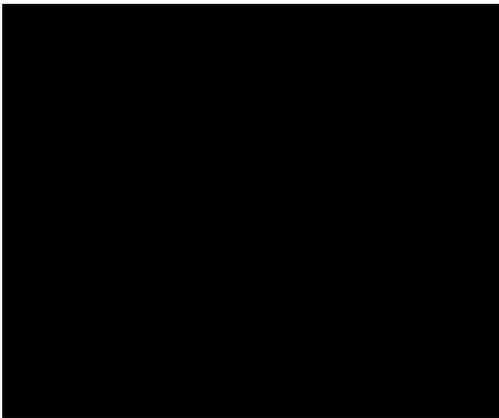


Figure 49: [REDACTED] is missing an NFPA 704 placard.



Figure 50: [redacted] are missing NFPA 704 placards.

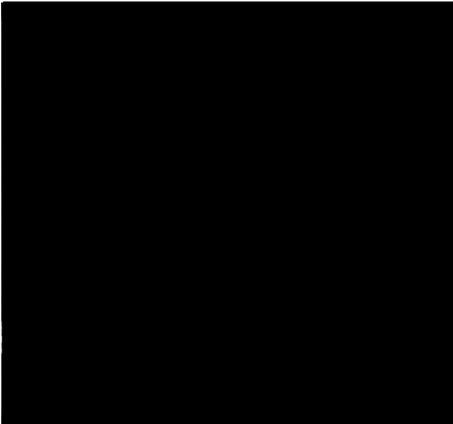


Figure 51: [redacted] has a damaged NFPA 704 placard.

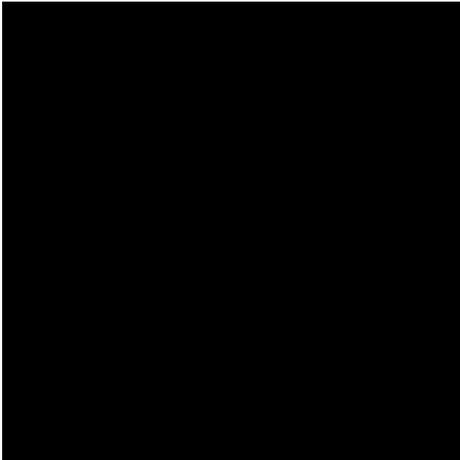


Figure 52: [redacted] has a faded NFPA 704 placard.



Figure 53: [REDACTED] has a damaged NFPA 704 placard, and [REDACTED] is missing an NFPA 704 placard.



Figure 54: [REDACTED] has a faded NFPA 704 placard.

**Finding 10: One fire extinguisher was missing, and various other fire extinguishers were missing [REDACTED] inspections.**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

**GO 167, OS 20: Preparedness for On-Site and Off-Site Emergencies** states in part:

*“The GAO plans for, prepares for, and responds to reasonably anticipated emergencies on and off the plant site, primarily to protect plant personnel and the public, and secondarily to minimize damage to maintain the reliability and availability of the plant.”*

ESRB observed a missing fire extinguisher, and various fire extinguishers were missing required [REDACTED] inspections, listed below in Figures 55 to 61. ESRB also noted that the Plant is not

inspecting the [REDACTED] listed below in Figure 61. All fire extinguishers must be inspected [REDACTED] to ensure the extinguisher will function in the event of an emergency.

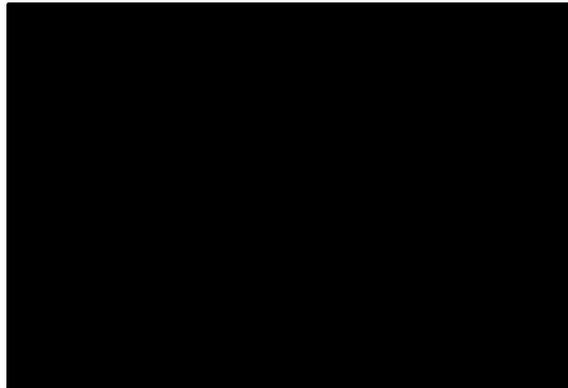


Figure 55: Fire extinguisher [REDACTED] is missing.

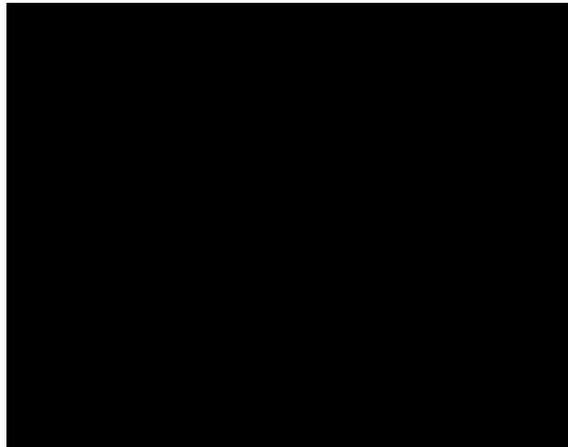


Figure 56: The fire extinguisher [REDACTED] is missing a [REDACTED] inspection.

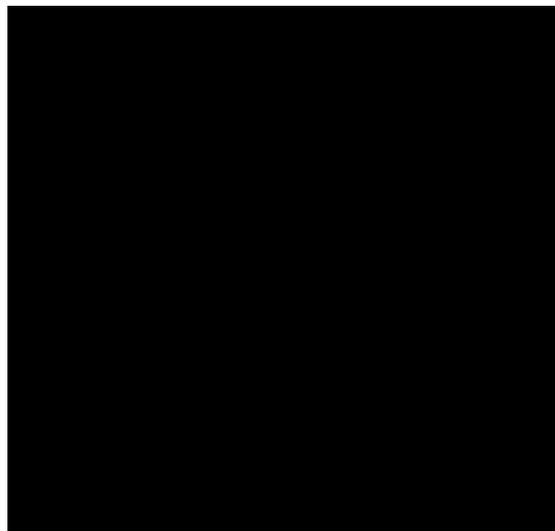


Figure 57: Fire extinguisher [REDACTED] is missing the inspection tag.

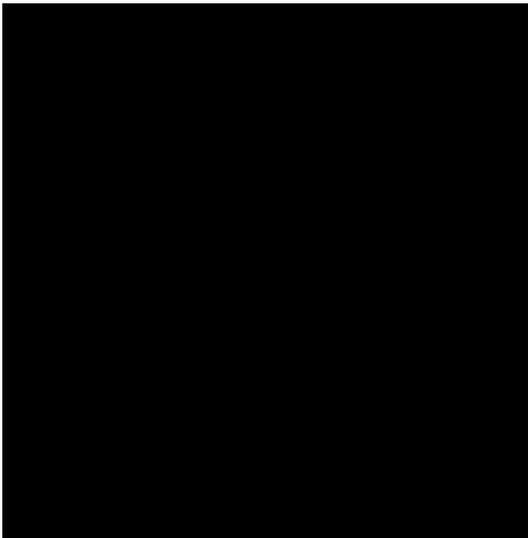


Figure 58: Fire extinguisher [redacted] is missing a [redacted] inspection.



Figure 59: Fire extinguisher [redacted] is missing a [redacted] inspection.



Figure 60: Fire extinguisher [redacted] is missing a [redacted] inspection.

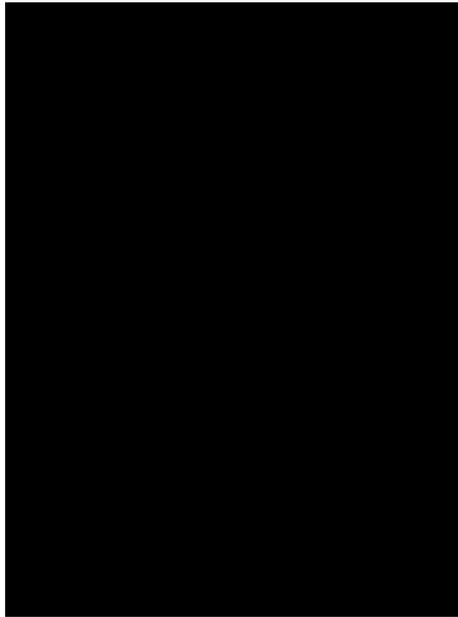


Figure 61: Spare fire extinguisher [REDACTED] is not inspected [REDACTED]. Spares must be inspected [REDACTED] to ensure they operate properly in case of an emergency.

**Finding 11: The Plant needs a warning sign for equipment and areas that require flame resistant Personal Protective Equipment (PPE).**

**GO 167, OS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

ESRB noted that some high voltage equipment and high voltage areas had deteriorated or missing signage that is needed to identify proper PPE before entry, listed below in Figures 62 through 67. Signage is required to identify threats and safety hazards for staff, contractors, and emergency personnel. The Plant must continue to monitor the condition of all signage and replace as needed.



Figure 62: [REDACTED] has faded warning signs.

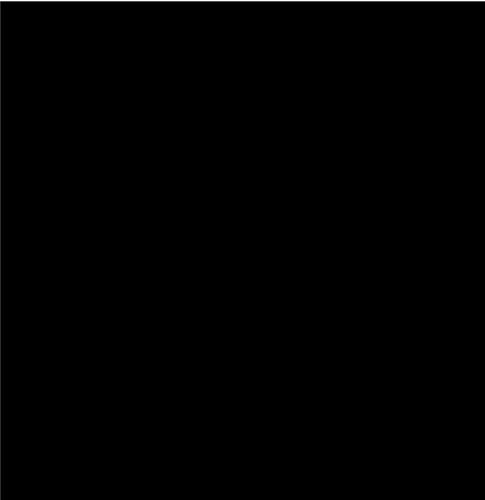


Figure 63: [redacted] did not have any [redacted] warning signs posted [redacted]



Figure 64: [redacted] did not have any high voltage warning signs posted [redacted]

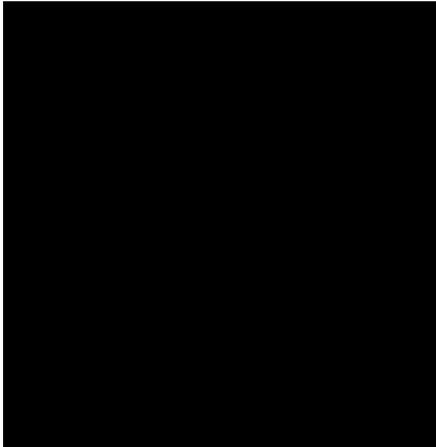


Figure 65: [redacted] do not have [redacted] warning signs, and [redacted] warning sign.

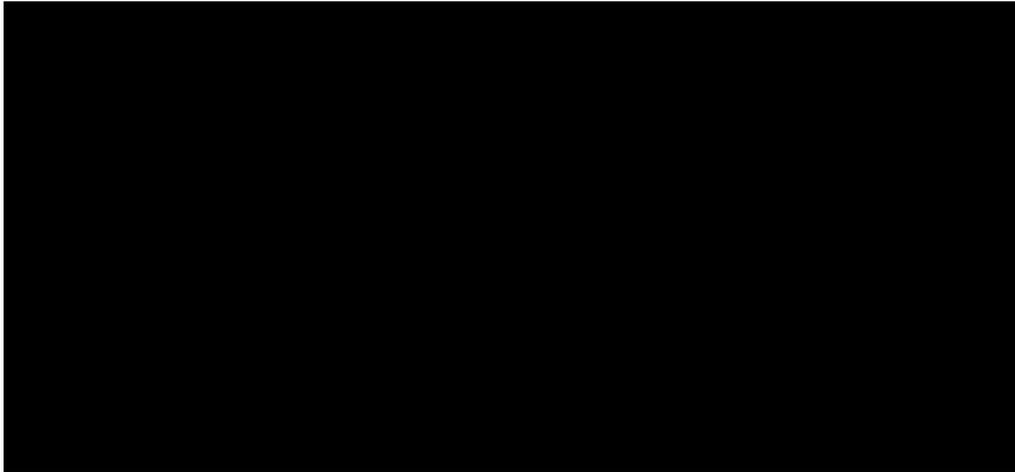


Figure 66: [REDACTED] is missing [REDACTED] warning signs [REDACTED]  
[REDACTED]



Figure 67: [REDACTED] is missing a [REDACTED] warning sign.

**Finding 12: The Plant needs to take necessary corrective actions and preventive measures to address corrosion throughout the Plant’s facilities.**

**GO 167, OS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

**GO 167, OS 11: Operations Facilities, Tools and Equipment** states:

*“Facilities and equipment are adequate to effectively support operations activities.”*

**GO 167, MS 9: Conduct of Maintenance** states:

*“Maintenance is conducted in an effective and efficient manner so equipment performance and materiel condition effectively support reliable plant operation.”*

ESRB observed significant corrosion on pipes, structures, etc. throughout the Plant's facilities, as shown in Figures 68 to 74 below. The Plant must take necessary corrective actions and preventive measures to address corrosion on its facilities since it negatively impacts structural integrity and could lead to failure if not addressed.

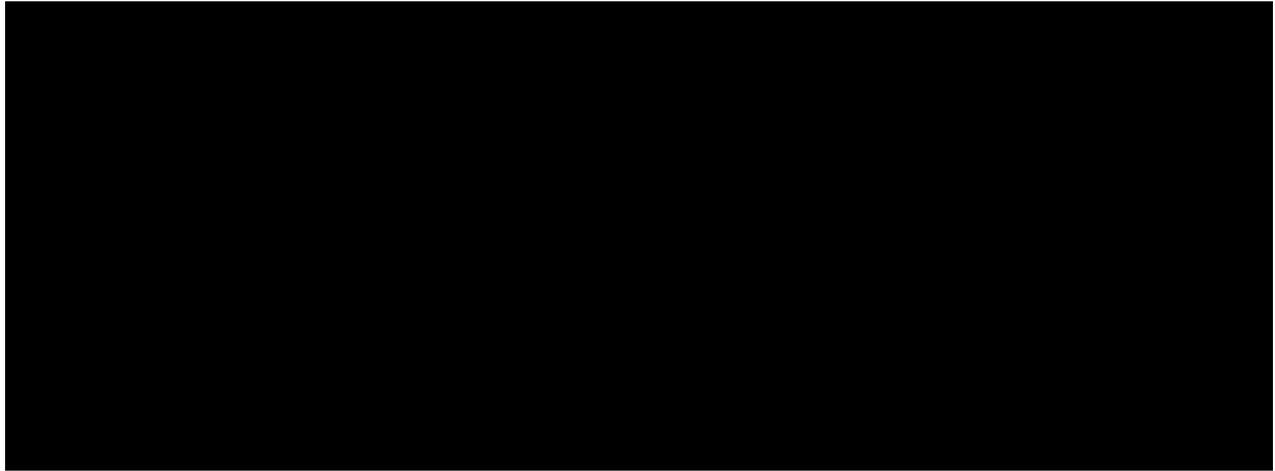


Figure 68: [REDACTED] are significantly corroded.

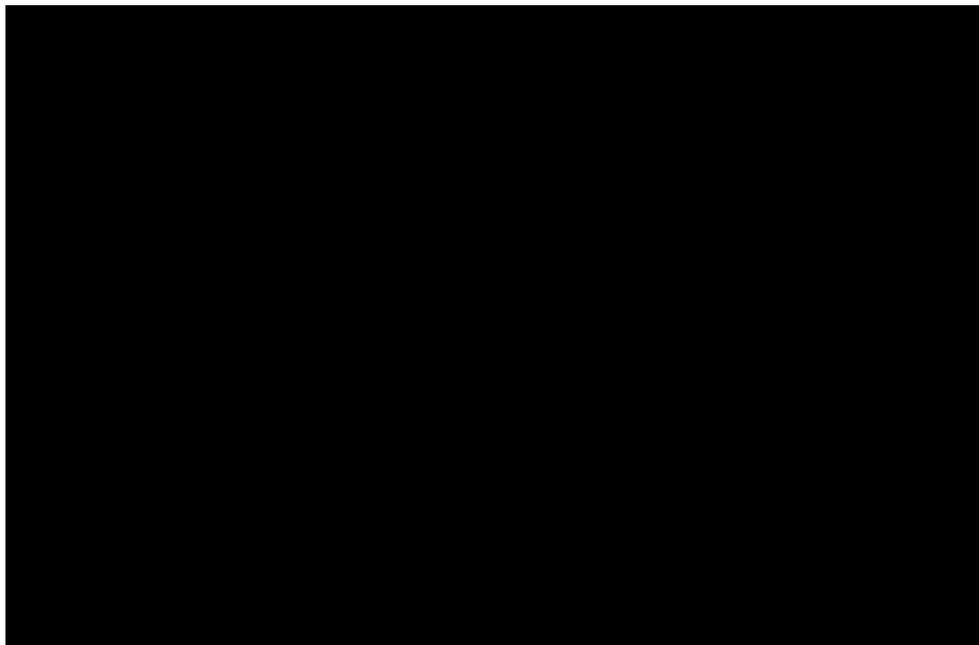


Figure 69: [REDACTED] are significantly corroded.



Figure 70: [redacted] is significantly corroded.

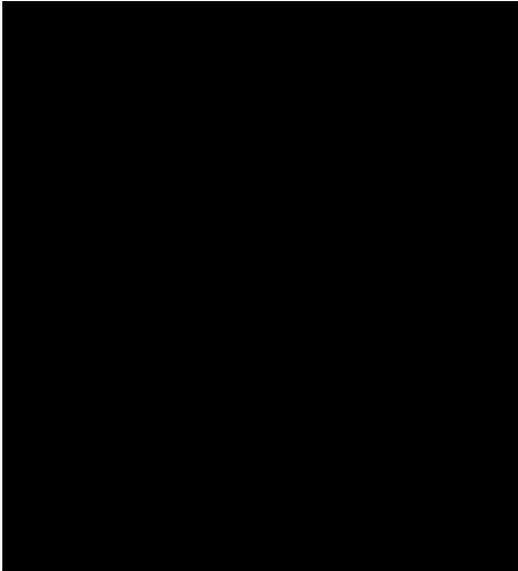


Figure 71: [redacted] is significantly corroded.

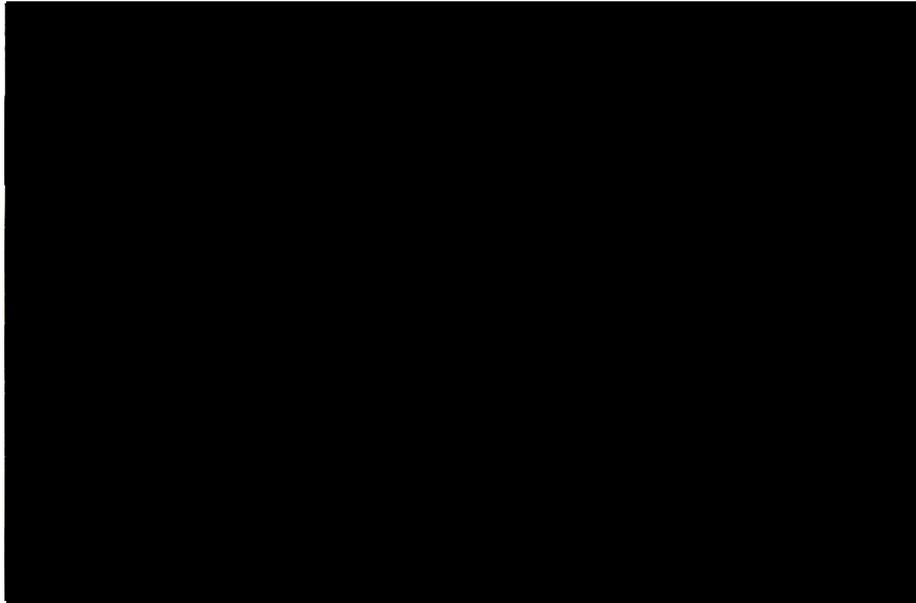


Figure 72: [REDACTED] are significantly corroded.

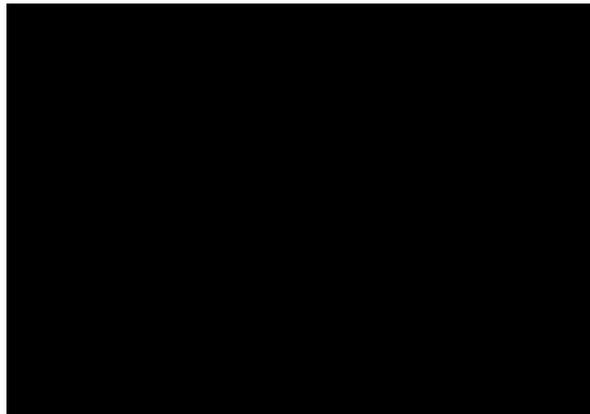


Figure 73: [REDACTED] is significantly corroded.

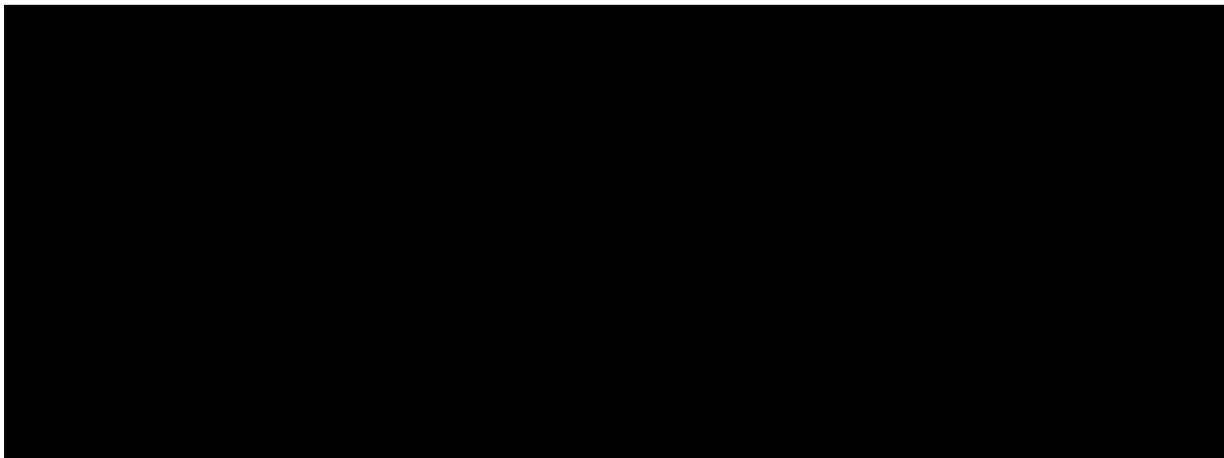


Figure 74: [REDACTED] due to corrosion.

**Finding 13: The Plant must not use red paint on non-fire protection system piping.**

**GO 167, MS 1: Safety states in part:**

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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...”*

**OSHA Standard 1910.144(a)(1)(i), Color Identification - Red** states:

*“Red shall be the basic color for the identification of: Fire protection equipment and apparatus.”*

ESRB observed that piping for [REDACTED] was painted red. The Plant must not use red paint on non-fire protection system piping since it can cause unnecessary confusion.

**Finding 14: The Plant needs to replace defective indicator lights.**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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...”*

**GO 167, MS 9: Conduct of Maintenance** states:

*“Maintenance is conducted in an effective and efficient manner so equipment performance and materiel condition effectively support reliable plant operation.”*

**GO 167, OS 11: Operations Facilities, Tools and Equipment** states:

*“Facilities and equipment are adequate to effectively support operations activities.”*

ESRB observed that multiple indicator lights were not working [REDACTED] as shown in Figures 75 and 76. The Plant must replace the defective lights so that the status of the equipment can be easily seen [REDACTED]

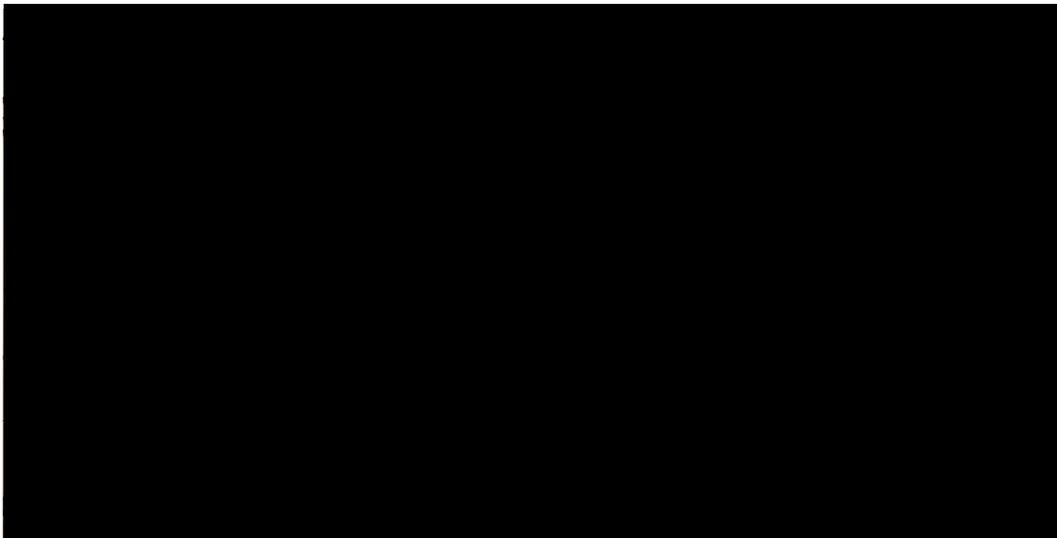


Figure 75: [REDACTED]  
[REDACTED] indicator lights [REDACTED] are not working.

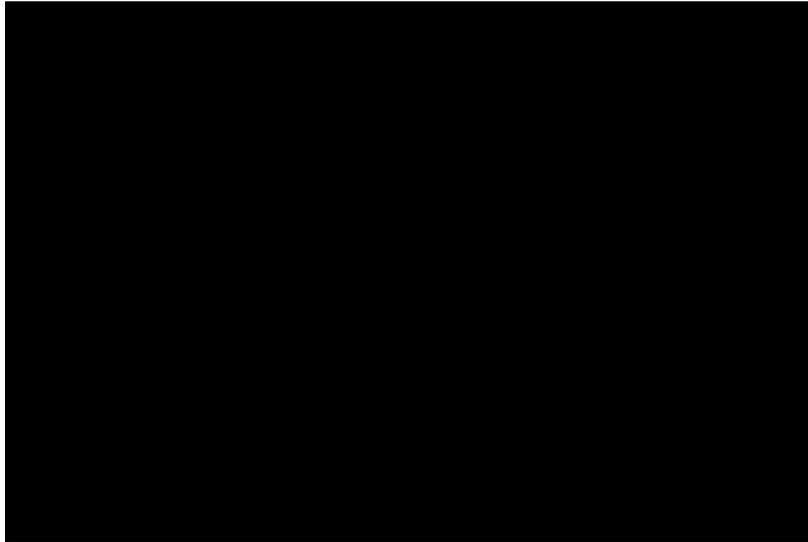


Figure 76: [REDACTED] indicator lights [REDACTED] are not working.

**Finding 15: The Plant needs to ensure proper ventilation and air conditioning in battery rooms.**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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...”*

**GO 167, MS 9: Conduct of Maintenance** states:

*“Maintenance is conducted in an effective and efficient manner so equipment performance and materiel condition effectively support reliable plant operation.”*

**GO 167, OS 11: Operations Facilities, Tools and Equipment** states:

*“Facilities and equipment are adequate to effectively support operations activities.”*

ESRB observed that battery rooms did not have proper ventilation and air conditioning (A/C) units throughout the Plant’s facilities, as shown in Figures 77 and 78. The Plant must keep batteries at a proper temperature to ensure they operate safely and efficiently. Additionally, the Plant must have proper ventilation in battery rooms to prevent the accumulation of toxic and flammable gases from batteries.

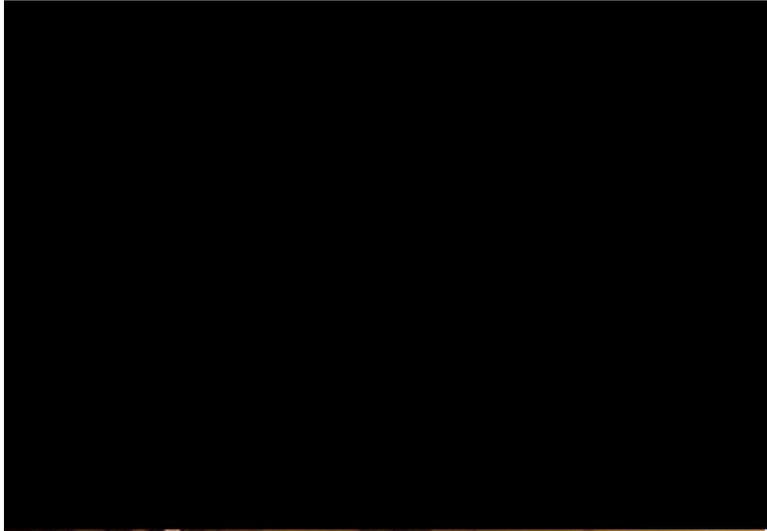


Figure 77: [REDACTED] battery room [REDACTED] is not working. The Plant created work order [REDACTED] to repair [REDACTED]

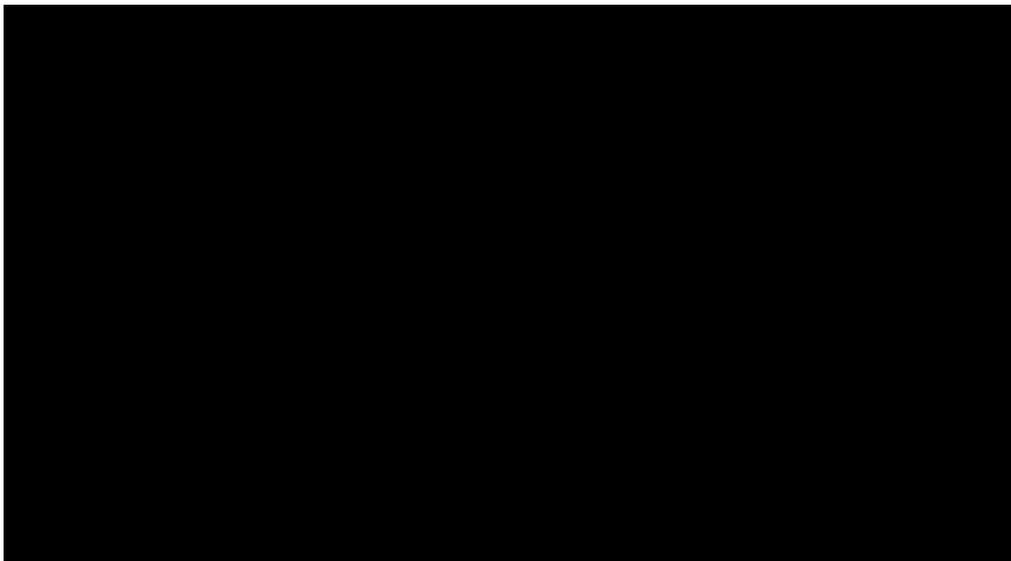


Figure 78: [REDACTED] battery room has [REDACTED]

**Finding 16: The Plant must repair/replace broken gauges.**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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...”*

**GO 167, MS 9: Conduct of Maintenance** states:

*“Maintenance is conducted in an effective and efficient manner so equipment performance and materiel condition effectively support reliable plant operation.”*

**GO 167, OS 11: Operations Facilities, Tools and Equipment** states:

*“Facilities and equipment are adequate to effectively support operations activities.”*

ESRB noted that multiple gauges were broken throughout the Plant's facilities, as shown in Figures 79 and 83. The Plant must repair or replace the broken gauges, so the values can be easily observed at the equipment and recorded during daily rounds as needed.

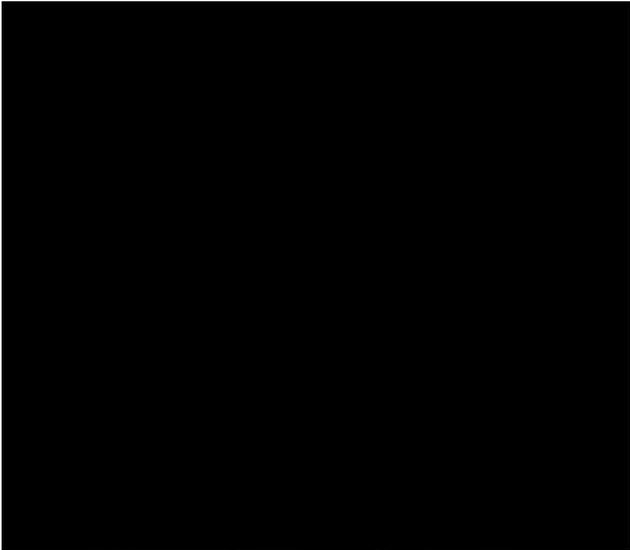


Figure 79: [REDACTED] is broken. The Plant created work order [REDACTED] to repair the gauge.

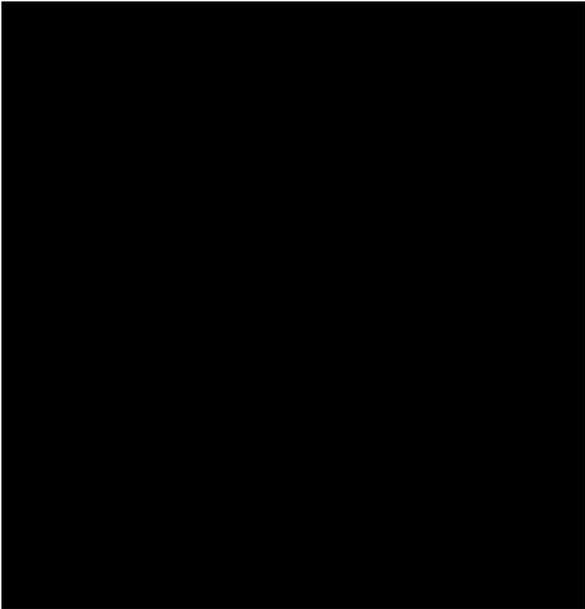


Figure 80: [REDACTED] are broken.



Figure 81: [REDACTED] is broken.



Figure 82: [REDACTED] is obsolete and the sight glass is broken. The Plant created work order [REDACTED] to remove the gauge.

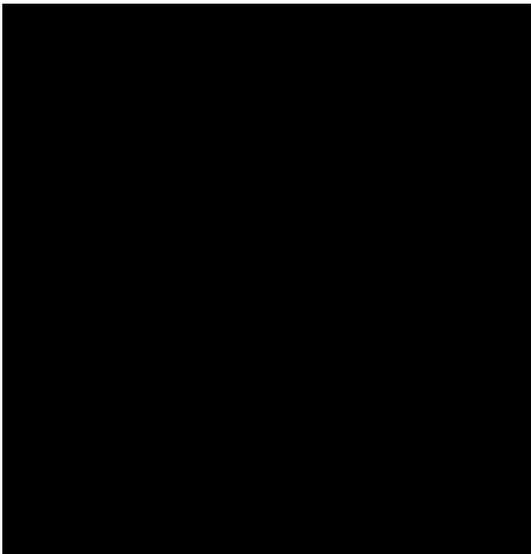


Figure 83: [REDACTED] is broken.

**Finding 17: The Plant must acknowledge and correct issues indicated by active alarms.**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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...”*

**GO 167, MS 9: Conduct of Maintenance** states:

*“Maintenance is conducted in an effective and efficient manner so equipment performance and materiel condition effectively support reliable plant operation.”*

**GO 167, OS 11: Operations Facilities, Tools and Equipment** states:

*“Facilities and equipment are adequate to effectively support operations activities.”*

ESRB observed active alarms for [REDACTED] as shown in Figures 84 and 85 below. The Plant must acknowledge and correct issues indicated by active alarms in a timely manner to ensure safe and reliable operation of its facilities.



Figure 84: There was an active alarm [REDACTED]

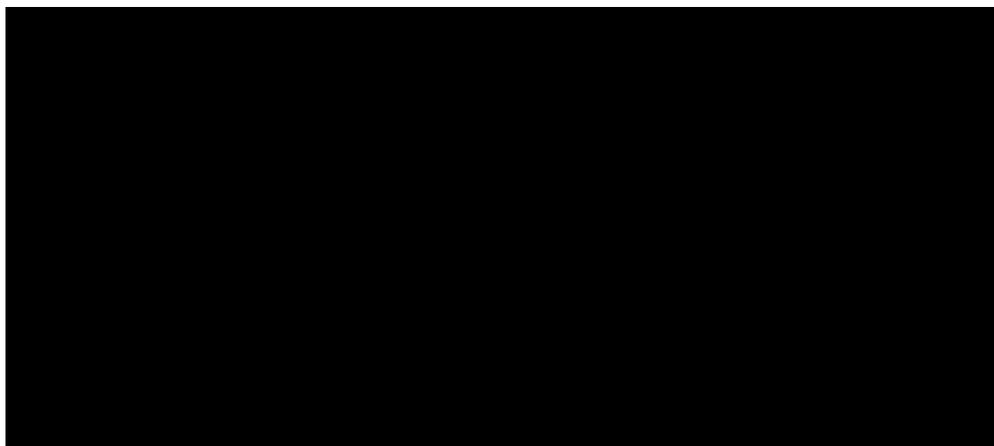


Figure 85: There were active alarms [REDACTED]

**Finding 18: The Plant must maintain proper lighting [REDACTED] battery room.**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

ESRB observed that the battery room lighting shows extended delay time to be fully illuminated at [REDACTED] battery room due to an improper type of lighting installed. The [REDACTED] battery room [REDACTED] lighting which has inherent delayed response time to be fully illuminated.

NFPA 70E article 320 states *“employees shall not enter spaces containing batteries unless illumination is provided that enables the employees to perform work safely”* The battery room poses toxic and flammable hazards from lead acid batteries. For worker’s safety during emergencies, the Plant must replace the existing lighting with a proper lighting type which can provide workers with instant illumination without time delays for the battery room.

**Finding 19: The Plant needs to repair or barricade holes in walkable areas that present a tripping or fall hazard.**

**GO 167, OS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

ESRB identified several locations [REDACTED] with holes on the ground in walkable areas, shown in Figures 86 and 89. These holes present a safety hazard, either through tripping or falling. The Plant must repair or barricade these holes to mitigate the safety hazard.

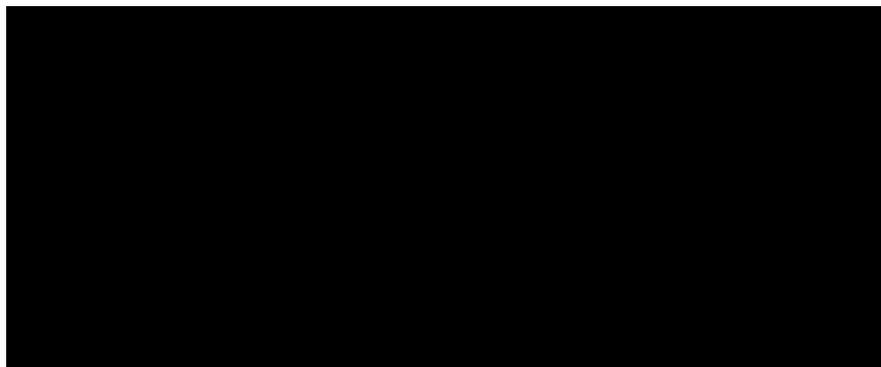


Figure 86: [REDACTED] covered with wood and an uncovered [REDACTED] at [REDACTED]

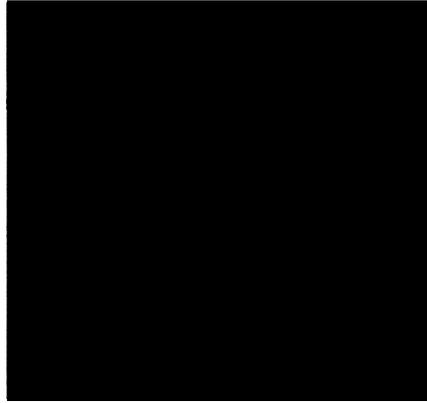


Figure 87: [REDACTED] is loose.

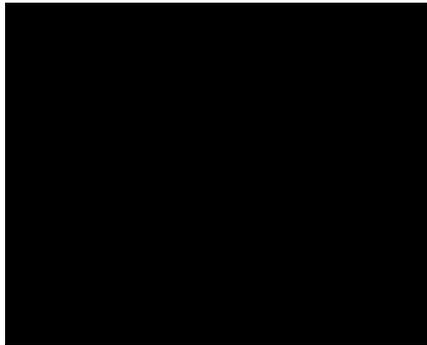


Figure 88: [REDACTED]

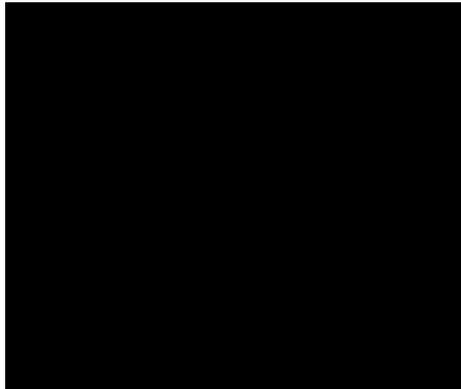


Figure 89: There are 2 holes [REDACTED] battery room.

**Finding 20: Scaffolding [REDACTED] is missing its information tag.**

**GO 167, OS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

ESRB identified that the information tag on the scaffolding [REDACTED] was missing its information tag, as shown in Figure 90. The Plant must install caution tags on all scaffolding and fill out all necessary fields to ensure safe usage and inspections of scaffolding.

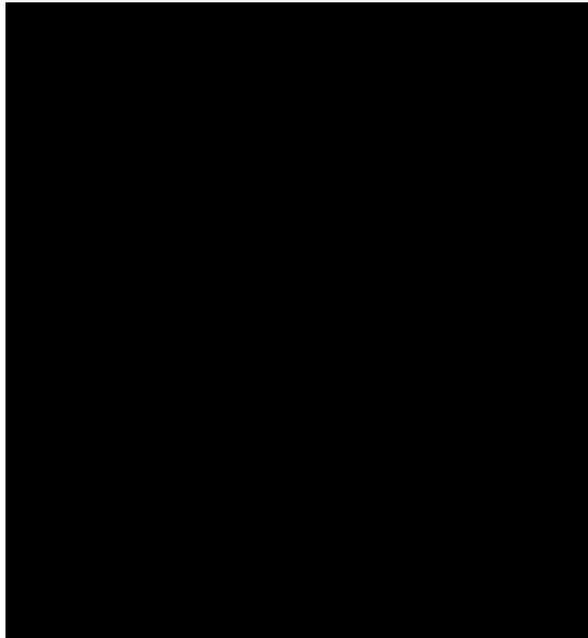


Figure 90: Scaffolding missing an information tag.

**Finding 21: The Plant must replace faded/deteriorated signage.**

**GO 167, OS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

ESRB identified faded/deteriorated “No Smoking” signs, flammable warning signs, etc. around the Plant’s facilities, as shown in Figures 91 to 94. The Plant must monitor the condition of signage and replace deteriorated/missing signage as needed, so employees and contractors are properly alerted of hazards.

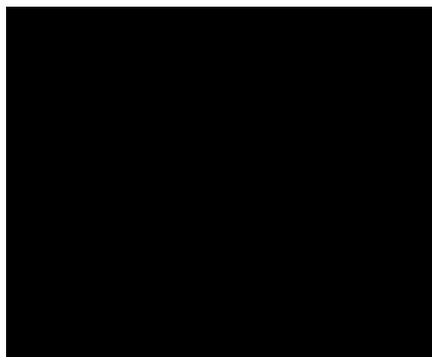


Figure 91: Faded “No Smoking” sign

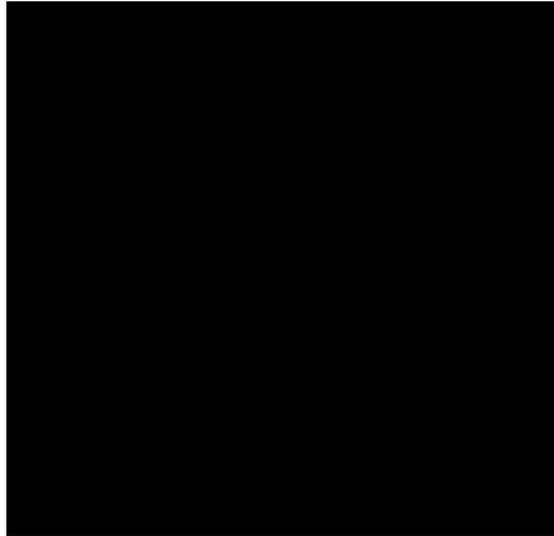


Figure 92: [REDACTED] has faded/damaged warning signs and nameplate.

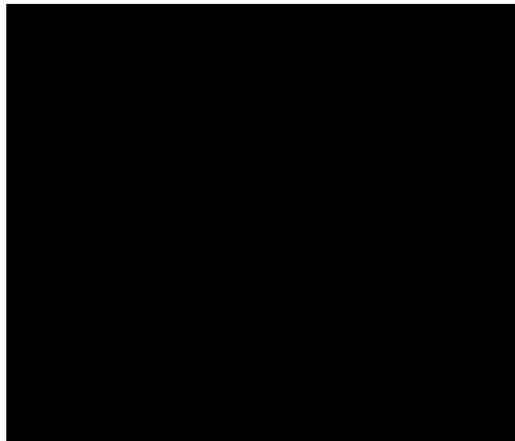


Figure 93: Faded “No Smoking” and flammable warning signs [REDACTED]



Figure 94: [REDACTED] a faded identification label.

**Finding 22: The Plant must have secondary containment for hazardous chemicals.**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

ESRB observed hazardous chemicals and oils [REDACTED] requiring secondary containment, as shown in Figure 95 to 97 below. These hazardous chemicals and oils can potentially spill onto the ground posing a safety hazard to workers and the environment.

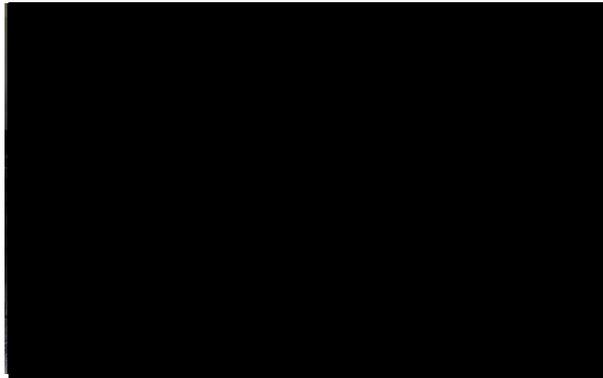


Figure 95: [REDACTED] require secondary containment.



Figure 96: [REDACTED] require secondary containment. Because the [REDACTED] are on the lip of the secondary containment, they could fall and spill creating a safety hazard.



Figure 97: [REDACTED] require secondary containment.

**Finding 23: The battery rack [REDACTED] does not have a grounding conductor.**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

**GO 167, OS 11: Operations Facilities, Tools and Equipment** states:

*“Facilities and equipment are adequate to effectively support operations activities.”*

The battery rack [REDACTED] does not have grounding conductors, as shown in Figure 98. Electrical systems that are required to be grounded shall be connected to earth in a manner that will limit the voltage imposed by line surges, or unintentional contact with higher voltage lines for practical safeguarding of workers and property from electrical hazards. It is important to apply appropriate grounding methodologies to maintain a battery systems’ functionality and personnel safety. The Plant must evaluate the battery systems and pertinent electrical systems to determine grounding requirements and establish an appropriate grounding method to mitigate potential hazards.

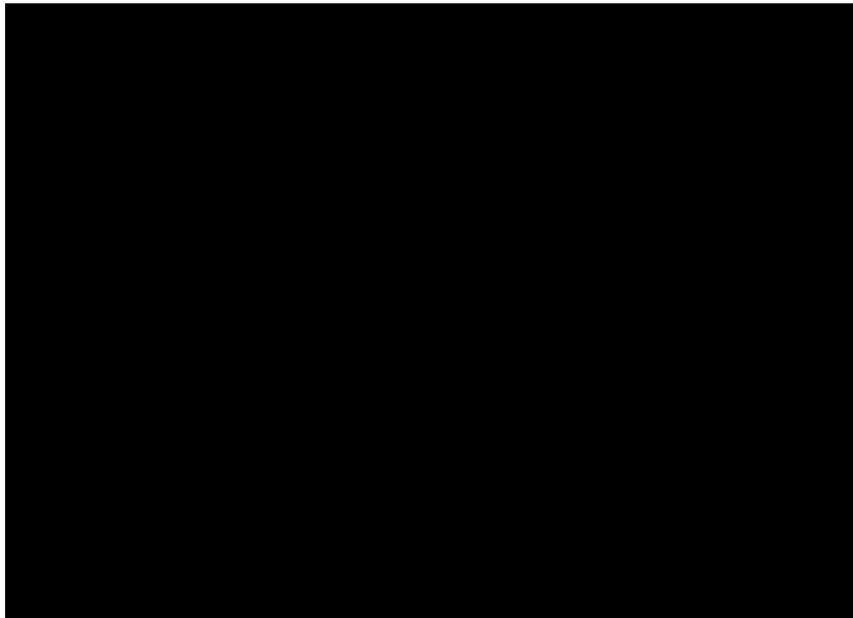


Figure 98: [REDACTED] battery racks have no grounding conductors.

**Finding 24: The Plant must ensure proper operation of cooling fans [REDACTED]**

**GO 167, MS 1: Safety** states in part:

*“The protection of life and limb for the work force is paramount. GAOs have a comprehensive safety program in place at each site. The company 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.”*

**GO 167, OS 11: Operations Facilities, Tools and Equipment** states:

*“Facilities and equipment are adequate to effectively support operations activities.”*



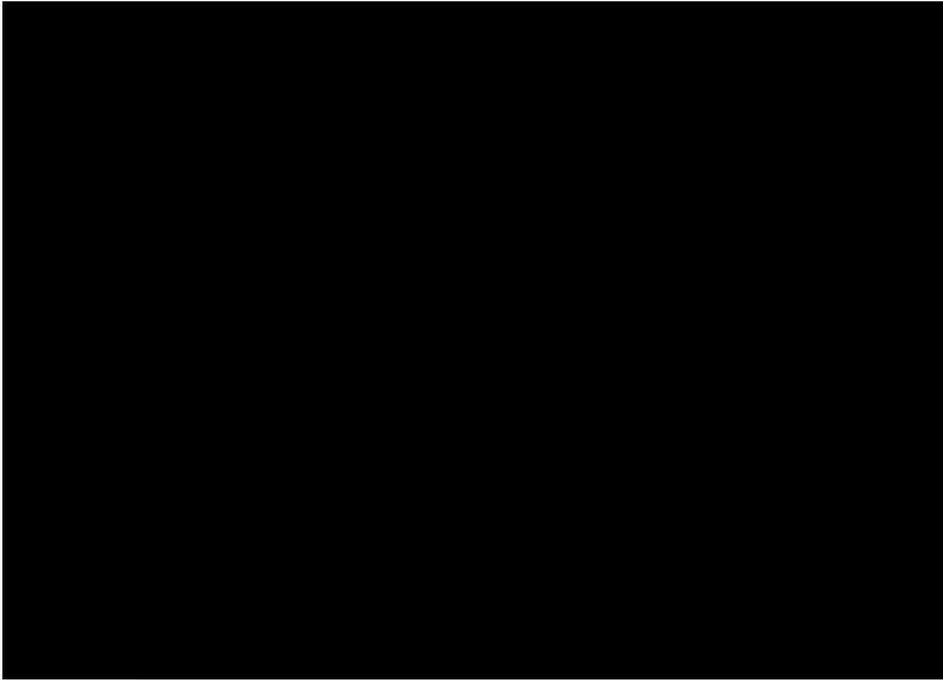


Figure 100:



## II. Documents Reviewed

ESRB staff reviewed the following records and documents:

Category	Ref #	CPUC-Requested Documents
Safety	1	Orientation Program for Visitors and Contractors**
	2	Evacuation Procedure**
	3	Evacuation Map and Plant Layout
	4	Evacuation Drill Report & Critique (last 3 years)
	5	Hazmat Handling Procedure**
	6	MSDS 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	Root Cause Analysis of all Reportable Incidents (if any)
	12	Fire Sprinklers Test Report (last 3 years)**
	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 and Records**
	18	Fire Protection System Inspection Record**
	19	Job Safety Analysis Program**
	20	Hot work Procedure**
Training	21	Safety Training Records*
	22	Skill-related Training Records*
	23	Certifications for Welders, Forklift & Crane Operators*
	24	Hazmat Training and Record*
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**
	30	Air Permit*
	31	Water Permit*
	32	Spill Prevention Control Plan (SPCC)**
	33	RATA Test Results (past 5 years)**
	34	Hazardous Waste Transfer Manifests (past 5 years)**
	35	Daily Round Sheets / Checklists*
	36	Feedwater Grab-sample Test Records**

O&M	37	Water Chemistry Manual**
	38	Logbook**
	39	List of Open/Backlogged Work Orders*
	40	List of Closed/Retired Work Orders (last 4 quarters)*
	41	Work Order Management Procedure (last 3 revisions, if applicable)**
	42	Computerized Maintenance Management System (Demonstration Onsite)**
	43	All Equipment Failure Root Cause Analyses **
	44	Vegetation Inspection & Control Program Records*
Main Plant Compressor(s)	45	Inspection Procedures and Records*
Document	46	P&IDs*
	47	Vendor Manuals*
Spare Parts	48	Spare Parts Inventory List*
	49	Shelf-life Assessment Report*
Management	50	Employee Performance Review Procedures and Verifications**
	51	Organizational Chart*
Steam Piping	52	Scaling Inspection & Removal Program and Records*
	53	Safety Valve Test Records*
	54	Hot Spots / IR Inspection Reports*
	55	FAC Inspection Procedure & Measurements*
	56	Corrosion Under Insulation Inspection Program*
	57	Pipe Hangers / Support Calibration Records*
Steam Turbine	58	NDE Reports*
	59	Overspeed Trip Test Records*
	60	Bearing Lube Oil Analysis Reports*
	61	DC Lube Oil Pump Test Records*
	62	Emergency Stop Valve Test Records on Main Steam Line*
	63	Borescope Inspection Records*
	64	Most recent Major/Minor STG inspection reports*
Generator	65	Bearing Lube Oil Analysis*
	66	Maintenance & Inspection Procedures (or related documents)**
	67	Polarization Test Records*
Transformer	68	Hot Spots / IR Inspection Reports*
	69	Oil Analysis Reports*
Cathodic Protection	70	Procedures and Inspection Records*
Cooling Tower System	71	Cooling Fans & Motors Inspection Records*
	72	Cooling Tower Structural Integrity Assessment*
	73	Condensate Pumps Maintenance Records*

Reinjection Pumps	74	Maintenance & Inspection Procedures and Records*
Instrumentation	75	Instrument Calibration Procedures and Records*
Test Equipment	76	Calibration Procedures and Records*
Emission Control Equipment	77	Maintenance & Inspection Procedures and Records**
Internal Audit	78	Internal Audit Procedures and all Records**

\* Provide data in a searchable format such as a searchable PDF, Word Document, Excel Spreadsheet, etc.

\*\* These items may be provided on-site by the first day of the audit.