

September 2026

Environmental, Safety & Security Sequential Safety Meeting



ANACORTES REFINERY

Incident Bulletin: Rigging Failure MPC-DET



AFPM 1P Near Miss - Rigging Failure

Incident Summary:

On July 31, 2026, MPC employees were tasked with removing Complex 1 storm water pump motor, 29P98A. After removing the motor from the pump and attaching it to a metal pallet, the motor/pallet assembly was moved via crane onto a flatbed truck. During the travel of the motor/pallet assembly from its original position to its final destination, the rigging was positioned so that it was in contact against the sharp edge of the motor rain shield, resulting in abrasions/damage to the rigging. While the motor/pallet assembly was being positioned into its final destination, the slings severed causing the assembly to fall approximately 4 inches to the surface of the flatbed truck. Initial investigation revealed that neither tag lines nor sling protectors were used during the movement of the motor/pallet assembly. Additionally, opportunities for barricade use and line of fire recognition were identified. These findings increased the severity potential of the event. No injuries resulted from the failure of the rigging. The combined weight of the motor/pallet assembly ~4,200 lbs.



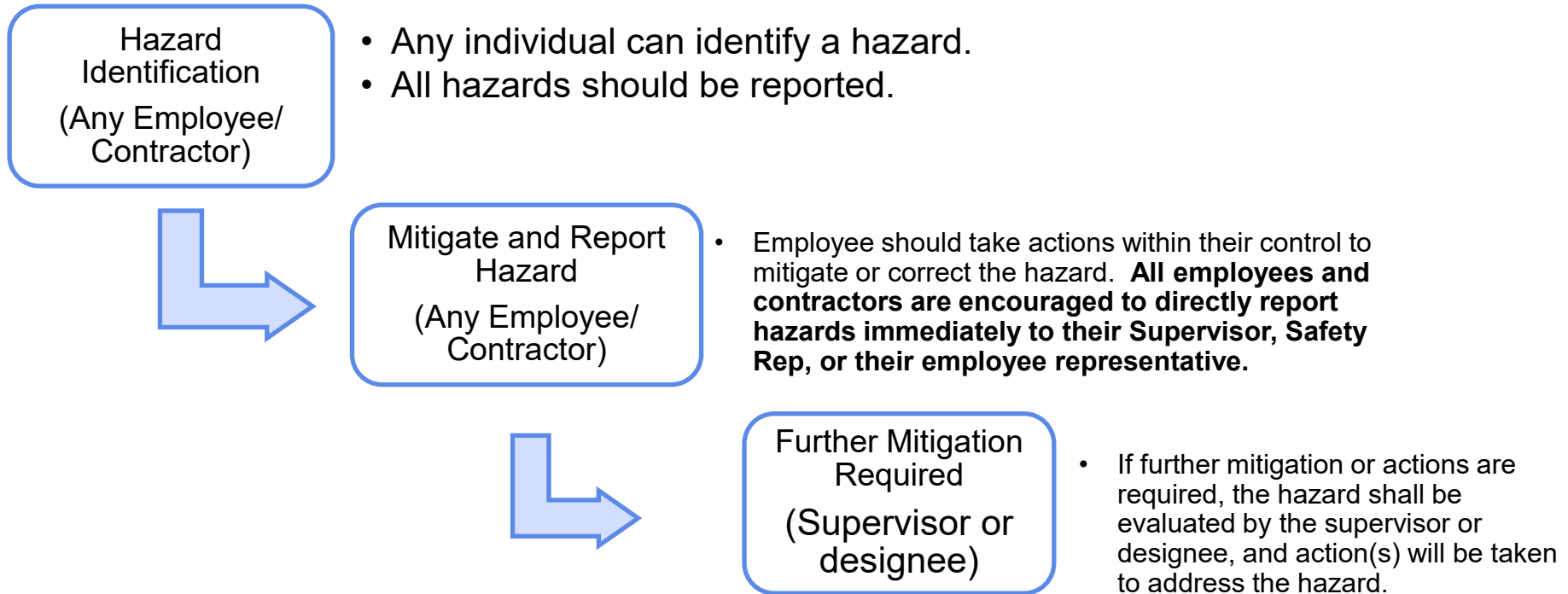
Sharp edge of motor that caused rigging damage

What right looks like

Utilize spreader bars to avoid contact with sharp edges or strap softeners to prevent damage



Hazard Reporting: Speak Up For Safety and Why it Matters



Anacortes maintains an anonymous reporting process to supplement standard reporting methods. Employees may submit an anonymous hazard report after all reasonable efforts to resolve the hazard through normal reporting channels have been exhausted.

Anonymous Hazard Reporting : Speak Up For Safety and Why it Matters



- **Purpose of Anonymous Reporting**

Allows employees to report safety concerns without fear of retaliation

- **Enhancing Safety Culture**

Encourages honest reporting that strengthens workplace safety and shared responsibility.

- **Regulatory Compliance**

Supports adherence to Washington Process Safety Management by promoting transparency and participation

- **Driving Continuous Improvement**

Leads to identification of hazards and prioritization of corrective actions to protect people and operations

Online via SharePoint

The screenshot displays the MPCConnect SharePoint site for Health Environmental and Safety. The left sidebar contains navigation links: Home, Documents, Pages, OpenText Resources, Site contents, Plant Health & Safety Co..., and Recycle bin. The main content area is organized into several sections:

- Health Services:** Includes links to Health Services, Emergency Response Manual (Replaces R-16...), ANA Witness Statement, and Tools & Portals (PSM Handbook, Safety Data Sheet (MSDS Online User Guide), Safety Data Sheet (MSDS Online Search)).
- Fire & Safety, IH:** Includes links to Home Page, Contractor Safety, Emergency Response, ESS Monthly Metrics Reports, F.A.S.T., HHFT Exemption Form, HHFT Exemption Request List, Industrial Hygiene, Permit to Work Program, Energy Isolation Q&A, **Stop Work Authority and Hazard Reporting Form**, and Stop Work Authority and Hazard Reporting Db.
- Process Safety:** Includes links to Action Item Management, MOC/PSR, Near Miss/Incident Investigation, Process Hazard Analysis (PHA), Risk Management Plan (RMP), Compliance Audit, and PSM Representative.

On the right side, there is a section for **ESS Organizational Chart**, a **Not In My House/Bring Your "A" Game** nomination form, and a **FAST Audit System** self-audit tool. Below these are two performance metrics tables for 2025 ESS Performance Metrics.

Category	Q1	Q2	Q3	Q4	YTD	Target
PSM	100%	100%	100%	100%	100%	100%
HAZOP	100%	100%	100%	100%	100%	100%
PSM Audit	100%	100%	100%	100%	100%	100%
HAZOP Audit	100%	100%	100%	100%	100%	100%

Category	Q1	Q2	Q3	Q4	YTD	Target
PSM	100%	100%	100%	100%	100%	100%
HAZOP	100%	100%	100%	100%	100%	100%
PSM Audit	100%	100%	100%	100%	100%	100%
HAZOP Audit	100%	100%	100%	100%	100%	100%

Anacortes Hazard Reporting Options(R-11-022) and Follow up



● Filling and submitting the form

Employees can submit the hazard reports anonymously by entering “anonymous” in the Name field

Evaluation and Resolution Process

Submitted reports are reviewed, investigated , and acted upon by safety and leadership teams to ensure resolution

● Transparency and accountability

Leadership shares anonymous report statistics in safety presentations to build trust and reinforce report value

● Non-Retaliation Commitment

The organization strictly prohibits retaliation and encourages speaking up for safety at all levels

Stop Work Authority & Hazard Reporting

Report a stop work event, hazard, or unsafe condition so the process safety team can review and follow up.

☐ Name (Last, First) *

Enter value here

☐ MPC or Business Partner? *

Enter value here

≡ Where did this happen? *

Enter value here

☐ Unit *

Enter value here

≡ What was the task being performed? *

Enter value here

Any reports received along with the follow up actions are posted on the ANA SharePoint site in the ESS portal.

Training – Workday Learning Notifications



- Workday sends automatic reminders when you have an in-person training due soon, and there is an offering available, regardless of the location.
- **Please do not enroll in a training at another site unless**
 - you have discussed this with your supervisor ahead of time and received approval to travel or,
 - you have been asked to enroll directly from the training department.

A screenshot of an email titled 'AUTOMATIC REMINDER Workday Learning'. The email body contains a redacted subject line, a paragraph stating that a course is coming due and is available for enrollment, and a table with course details. The table has two rows: 'Course:' with a redacted value, and 'Due Date:' with the value '08/17/2026'. Below the table is a blue hyperlink that says 'Click Here to Enroll!'.

 AUTOMATIC REMINDER
Workday Learning

■

The following course is coming due and is available for enrollment. Please use the link below to select an appropriate offering for your location and complete your enrollment.

Course:	■
Due Date:	08/17/2026

[Click Here to Enroll!](#)

Training – Virtual Offerings



- Being given the option from Workday to enroll in a class at a different location does not indicate that the class has a virtual option.
- If a training has a virtual offering, the location will show the attendance type as "Virtual" and the location will be blank *(see the second line in the example to the right)*
- It should be assumed that all other offerings with specific locations listed are fully in-person only. *(see the first line in the example to the right)*

Select Offering	Start Date	End Date	Attendance Type	Location
☐	Mon, Dec 14, 2026, 9:30 AM Central Time (Chicago)	Mon, Dec 14, 2026, 11:00 AM Central Time (Chicago)	In-Person	Robinson IL Refinery
☐	Wed, Dec 2, 2026, 12:00 PM Pacific Time (Los Angeles)	Wed, Dec 2, 2026, 1:00 PM Pacific Time (Los Angeles)	Virtual	

PSE1 MPC PROCESS SAFETY ADVISORY

GARYVILLE CRUDE SUCTION PIPING LEAK INC# 413336

PSA 26-05

Published 7/8/2026

On January 17, 2024, Tank Farm Operators discovered crude oil in Tank 500-6 containment dike. The source of the leak was identified on the bottom of a pocketed piping circuit in intermittent service in the crude suction piping circuit. The line was isolated and deinventoried. The failed section was removed and placed on its side for inspection (pictured). This revealed two non-uniform holes in the bottom section, near the low point of the piping.

➤ **This incident was categorized as a PSE 1 due to 264 barrels/hour of flammable material being released to atmosphere.**

Causal Factors:

➤ Pocketed section of intermittently used crude piping line resulting in a combination of Microbiologically Influenced Corrosion (MIC) and low pH corrosion.



“THE REST OF THE STORY”: The tank farm crude charge system has had previous MIC failures in 2015 and 2021 in stagnant flow or pocketed areas. A prioritized list of at-risk lines were inspected using Guided Wave ultrasonic (GUL) inspection. The buried piping sections within these pockets were not inspected due to a combination of the above-ground inspection findings and GUL’s limited effectiveness in assessing buried piping. After the 2024 incident, pocketed piping circuits in intermittent service are being inspected. The site investigation team recommended developing an inventory of pocketed lines within the crude charge system and implementing an inspection program to assess their current condition. The team also recommended evaluating potential design or system modifications to reduce or eliminate this failure mode. Many of the pockets were created during a previous major expansion where pipe runs had to maneuver around existing pipes (see example picture below).

DISCUSSION TOPICS:

- Are you aware of pocketed piping in intermittent service?
 - How are they inspected to find localized corrosion?
 - Are other means used to manage the risk of MIC?
 - How is water managed in low point sections of intermittently used piping?
- What processes are in place to avoid creating this risk with the new projects?
- Review similar MIC incident at GBR categorized as PSE2: INC [428914](#)

Global Action

Recommendations	Assigned to:	Due Date:
Review this advisory with your leadership team, and cascade to your entire organization to ensure site-wide review to improve process safety hazard recognition	Site VPs	9/30/2026
Identify pocketed sections of intermittently used piping with the potential for a similar damage mechanism, Microbiologically Influenced Corrosion (MIC), and update the inspection program for areas of concern (e.g., crude piping). Results from ITPM should drive additional action as needed.	Maintenance Directors	7/31/2027



Example of pipe runs maneuvering around existing pipes creating pocket

April 15, 2026, Tank 203 Gasoline Drained to Sewer Category 2 Investigation



Incident Description

On April 15, 2026, at approximately 0900, following completion of the blend to Tank 203, the water draw valve was found cracked open to the oily water sewer following biological sampling. The valve was immediately closed, and the incident was reported to Supervision and documented in Intellex.(Intellex 521449)

Area monitors were deployed at the effluent system as a precaution, and the oily water sewer system was flushed with firewater while effluent plant conditions were closely monitored.

The investigation determined the valve had been open from approximately 0040 on April 14 to 0900 on April 15. A leak volume of 2,228 barrels over 32.33 hours was calculated, averaging 68.9 barrels per hour. The incident was classified as a PSE4 Walk the Line due to tank drain valve inadvertently left open . Although the material released was significant and above a Tier 1 threshold quantity, it was determined not to meet PSE Tier 1 criteria. The type of seal on the tank drain (N' Serta Seal) is considered a closed system per API 754 (3rd Edition); therefore, no loss of primary containment occurred. There was no evidence of seal failure or overflow from the insertion seal or collection box. There were no injuries or environmental exceedances.

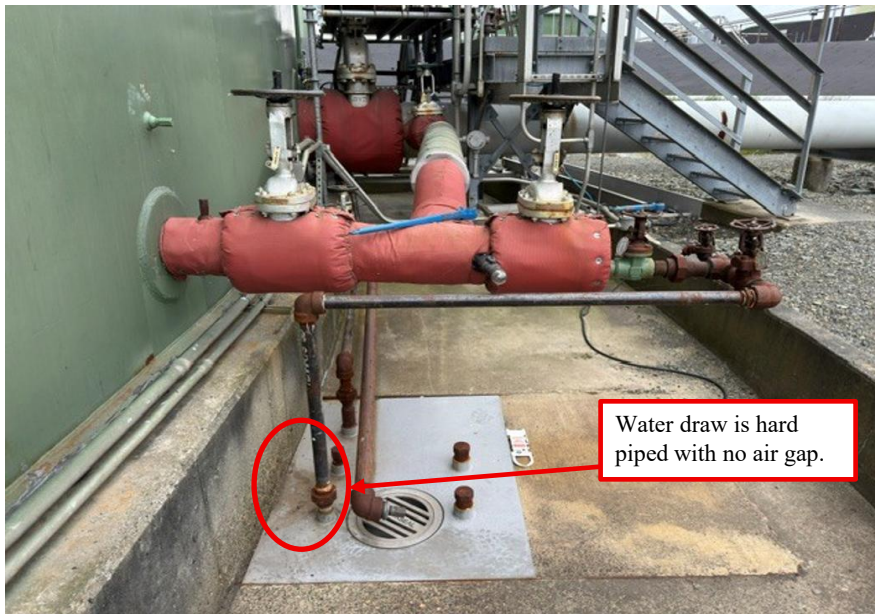
**THANK YOU TO INVESTIGATION TEAM THAT INCLUDED FRANK RAMIREZ, CHRIS SWENSON AND SPONSOR
CHRIS LEWE**

Background

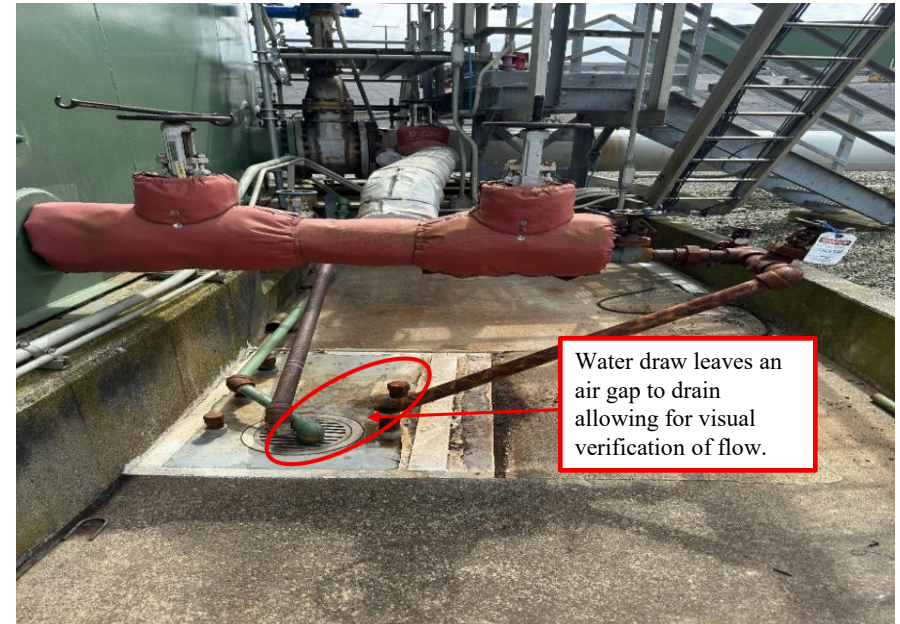


- Tank 203 is a Gasoline Tank
- Prior to the valve being found open, operations had been conducting extra microbiological samples
- The water draw configuration is atypical compared to other gasoline tanks.

Tank 203



Tank 202



Further Background



Before



Details

Prior to 2024 the water draw piping arrangement on TK 203 had an air gap into an open sewer grate.

The tank water draw piping and water draw box were modified in July 2024 to include an N-Serta seal.

The addition of the N Serta seal also included modification of the piping to eliminate the Air Gap.

No MOC was conducted for this change

After



Investigation Findings and Causal Factors



Investigation Findings:

- A MOC was not completed for the N Serta seal installation which eliminated the verification point.
- The use of MOC process for an N Serta seal installation is inconsistent across the plant.
- No procedure for microbiological sampling of this tank.

Causal Factors

- **Water draw valve was left open and unattended**

This valve was left open inadvertently. There have been 11 incidents at Anacortes in which a water draw, drain, or blowdown was left open and unattended. Throughout the plant, several tools have been implemented to help reduce the likelihood of this occurring. First, at sample stations in Zone A, diagrams have been installed to help operations open and close the sample station properly. Second, for many other operator tasks, procedures are available to help the operator recall all the necessary steps to complete the task properly. The water sample station on Tank 203 does not have either of these aids to help the operator remember each step in the process.

- **No MOC was generated for the installation of the N-Serta seal**

Anacortes Refinery has a local procedure for management of change, R-12-006. An MOC will be generated for all changes. The MOC process is critical for proper design, implementation, awareness, and training on changes.

Recommendations



Recommendation	Assignee/Target Date
Create a procedure for taking water samples from tanks.	Danny Lockwood; 10/15/2026
Develop a process safety flash and incorporate into monthly safety sequential materials and MOC learning event.	Terry Hering; 9/1/26
Restore verification point to water draw piping	John Harrington; 11/1/26
Audit other tanks to make sure hazard does not exist elsewhere in tank farm	John Harrington; 8/1/27

Opportunity for Improvement



Opportunity for Improvement	Recommendation	Responsible Party/Due Date
OFI 1: The lighting around Tank 203's water draw box is inadequate.	Install new lighting around the water draw area of Tank 203.	John Harrington; 8/27/27
OFI 2: The lighting around Tank 203's water draw box is inadequate.	Conduct lighting survey in tank farm, write corrective work orders pending results.	John Harrington; 8/1/27
OFI 3: The chemical additive company requests varying sample load directly to operations in Zone C.	Create a standard practice of routing sample requests through operations supervision.	Joel Smith; 11/1/26
OFI 4: Wireless valve position indicators exist for multiturn handwheel actuated valves.	Consider installing Wireless valve position indicators on tank water draw valves.	Joel Smith; 8/1/27
OFI 5: Winterization practices leave a single block valve closed on tank water draw.	Compare winterization practices at other sites with similar climates and look for opportunities for improvement.	Joel Smith; 9/1/26



When is MOC Required?

August 5th, 2026

Incident Summary

On April 15, 2026, an incident was discovered in the Anacortes Refinery tank farm when the water draw valve on Tank 203 was found left cracked open to the oily water sewer following sampling activities. The investigation determined that the valve had likely been left open at approximately 12:40 a.m. on April 14, 2026, and remained open until it was discovered and closed at approximately 9:00 a.m. on April 15, 2026.



Root Causes

- The water draw valve was left open and unattended following sampling activities. The team noted that no formal procedure or job aid existed for collecting tank water samples, and the task relied heavily on operator memory.
- An N-Serta seal installation completed in 2024 was performed ***without a Management of Change (MOC) review.***

RSP-1307 – PSM/RMP Management of Change(MOC)/Pre-Startup Safety Review(PSSR)

Change vs Replacement-in-Kind (RIK)	
Change	RIK
Any addition, modification, or replacement that involves equipment, process chemistry, process technology alterations, procedure, and/or personnel organizational changes or changes to the facility that potentially affect safety (e.g., facility siting issues) that are not “replacement in kind.”	Replacement that satisfies the design specification of the item it is replacing. A replacement component is one that is identical in all critical areas, such as fit, form, function and metallurgy.

The first step in any MOC process is to define “Change”. Changes meeting the change definition require them to be managed through MOC. Examples include :

- Mechanical Change – metallurgy (or materials of construction), thickness, fit, form, function
- Process Change – equipment addition/deletion, process materials (types and composition), operating envelope (NTE and maximum intended inventory)
- Technology Alterations – purpose, function, design limits, intent
- Organizational Changes –Changes made to structure of organization, e.g. changes made to reporting structure.

See 5.2 of RSP-1307 [,When a MOC is required](#) for additional information on the types of changes covered by this standard. RSP-1307 Appendix A: Examples of “Replacement in Kind” and Change

CLICK LINK ABOVE AND REVIEW A.6 Fixed Equipment Piping, and Flanges PAGE 28 of 51.

Bring It Up!!!



If there are Safety questions or concerns you wish to discuss, please bring them up!