MARINE MINERALS ADMINISTRATION
SAFETY ALERT

Safety Alert No. 532
Date: Nov. 23, 2026

Contact: engagement@bsee.gov
Phone: (800) 200-4853

Preventing Hydrocarbon Releases Through Corrosion Management



Figure 1: The 8-inch gas vent line shows severe corrosion that resulted in a gas release.



Figure 2: The dry oil tank shows corrosion-related metal loss that resulted in a pollution event.

Background:

The Marine Minerals Administration Gulf of America Region investigated approximately 129 gas releases and 11 pollution incidents (greater than one barrel of oil discharged) in 2025. These incidents were frequently a result from corrosion-related failures, improper inspection intervals, and inadequate documentation. The bureau identified a recurring contributing factor as the lack of evaluation for early corrosion indicators, allowing small leaks to evolve into a significant number of hydrocarbon releases.

The Marine Minerals Administration published two district investigation reports on corrosion-related failures that resulted in one gas release and one pollution incident.

Incident One:

During a routine Marine Minerals Administration annual production inspection on an offshore platform, a Marine Minerals Administration inspector observed vapors rising from piping located on the platform level above. The inspector brought the issue to the attention of the platform operator. The operator then used a portable gas detector to identify the source of the vapors. The inspector and platform operator determined the gas vapors were releasing from a

corroded section of an exposed 8-inch gas vent line under the wet and dry oil tanks. The platform operator immediately shut in the platform to prevent any further gas release.

Incident Two:

An oil discharge originated from a corrosion-related failure at the base of a dry oil tank. A hole, approximately one-quarter inch in diameter, allowed an estimated 12.8 barrels of oil to discharge from the tank. Through containment efforts, deck-washing, and sump-pump recovery, approximately 12.4 barrels were contained within platform discharge containment systems, with an estimated 0.4 barrels discharged into the Gulf of America.

Incident Findings:

The Marine Minerals Administration investigation of Incident One determined that significant corrosion went undetected during Level 1 surveys, leaving operators unaware of an ongoing gas-release hazard. Although no ignition sources were present, the conditions created the potential for a more severe event had an ignition source been introduced to the area.

Additionally, the investigation from Incident One found that the third-party inspection contractor failed to identify corrosion on the 8-inch gas vent line and the operator did not complete required corrosion-control maintenance. These recurring issues reflect persistent mechanical integrity weaknesses driven by progressive corrosion, inadequate detection, and unresolved deficiencies.

The investigation of Incident Two identified broader mechanical integrity deficiencies involving the dry oil tank, including coating failure, base corrosion, and direct contact between stainless-steel tubing and the tank shell. These conditions promoted moisture retention and metal loss, contributing to the tank's failure.

These incidents are just two examples of broader unresolved mechanical integrity issues, particularly those related to corrosion. These events commonly stem from progressive piping degradation, unaddressed corrosion anomalies, inadequate early detection, or incomplete resolution of previously identified deficiencies.

Therefore, operators and their contractors should consider the following, as appropriate:

- Ensure coating, corrosion monitoring devices and cathodic protection are functional and documented per 30 CFR 250.919(a)(4) (corrosion evaluation in annual in-service inspection reports).
- Develop and implement written operating procedures in accordance with 30 CFR 250.1913(d) that clearly define safe and environmentally sound practices for addressing identified hazards and associated risk levels.
- Ensure that the Mechanical Integrity element of their SEMS Plan complies with 30 CFR 250.1916 for inspection, testing and maintenance of equipment. Adhere to the corrosion monitoring and risk-based inspection intervals for process piping.

- Ensure the proper evaluation, repairs and documentation of corrosion per 30 CFR 250.107(a)(3), 30 CFR 250.198 (e) (1), API 510, and 250.198 (e) (2), API 570.
- Develop and incorporate a company specific policy to conduct routine corrosion inspections in addition to the third-party Level 1 surveys conducted annually.
- Ensure that deficiencies are corrected promptly to prevent escalation of gas release hazards.
- Review BSEE Safety Alert 328- Gas Release Hazards Identified by BSEE, BSEE Safety Alert 402- Deficiencies in Process Piping Cause Gas Release Incidents and BSEE Safety Bulletin 011- Concerns about Offshore Epoxy Adhesive Use.

– MMA –

A Safety Alert is a tool used by the Marine Minerals Administration to inform the offshore oil and gas industry of the circumstances surrounding a potential safety issue. It also contains recommendations that could assist in avoiding potential incidents on the Outer Continental Shelf.

As of July 10, 2026, the Department of the Interior has reunified the Bureau of Ocean Energy Management and the Bureau of Safety and Environmental Enforcement into the Marine Minerals Administration, which will oversee the responsible development of the nation's offshore energy and marine mineral resources with an integrated focus on safety, environmental protection and efficient oversight. For more information, visit Transition to the Marine Minerals Administration | U.S. Department of the Interior.

CATEGORY: Corrosion, Gas Release, Personnel Safety