

Safety Bulletin No. 013
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Severe Corrosion Found Under Insulation

In July 2018, the Bureau of Safety and Environmental Enforcement (BSEE) investigated a platform diesel generator fire that occurred inside of a generator enclosure. Although the cause of the fire was inconclusive, the onsite investigation team identified discoloration of the exhaust pipe insulation blankets, soot build-up around the exhaust flanges, and holes and/or complete separation of the exhaust piping due to excessive corrosion.



Exhaust Side



Exhaust with Insulation



Corroded Exhaust

BSEE instructed the operator to shut-down an identical generator on the same facility for inspection; the same corrosion-related issues were identified. Corrosion beneath the insulation blankets was severe and affected the exhaust piping at the same points as the unit that experienced the fire.

Although this Safety Alert focuses on insulation effects on corrosion associated with generator exhaust systems, BSEE has identified corrosion issues that also exist on process piping, valves, and vessels that have been covered with insulation for extended periods. Surfaces covered by decals may face similar corrosion issues.

Therefore, BSEE recommends that operators consider two steps:

- Survey engine exhaust components (i.e., firewater pump drivers, cranes, compressors, generators, etc.) to identify exhaust leaks.
- Expand piping and vessel inspection programs to include routine inspections of all components covered with insulation or decals to identify corrosion issues that could result in process leaks. Such inspections may require removal of protective guards as well as the insulation.

-- BSEE --

A **Safety Bulletin** is a tool used by BSEE to share lessons learned from an incident or near miss. It also contains recommendations that should help prevent the recurrence of such an incident or near miss on the Outer Continental Shelf.