Pump Can Pollution Incident

Recently, a pollution incident occurred when a hole approximately ½-inch in diameter developed on the outboard side of a pipeline pump can. This hole allowed between 20 and 30 barrels of crude oil to spill into the Pacific Ocean in the Santa Barbara Channel.

A Minerals Management Service investigation into this incident revealed that the hole was caused by external corrosion of the pump can near the water line. The investigation further revealed that the operator’s inspection and maintenance program did not include x-ray or ultrasonic testing of the pump can to ensure physical integrity. Also, the pump can was physically located on the outboard side of the platform and did not allow for a full 360-degree visual inspection. This physical location precluded the installation of containment barriers that would have prevented the release from entering the water. Additionally, the pump can was not protected from potential physical damage from floating vessels by guards or similar protective barriers.

MMS therefore recommends that:

- Lessees and operators should review or develop preventive maintenance and inspection procedures for pump cans (or similar equipment) in their inventory to ensure that the procedures include a full visual inspection as well as thresholds for initiating corrective actions or further inspection.
- Lessees and operators should perform risk assessments on pump can (or similar equipment) utilization without containment systems.
- Lessees and operators should include in the assessment the consideration of installing riser guards or similar protective measures on pump cans that are located on the outboard side of the platform jacket at the water line, to protect against physical damage that could result from contact with floating vessels.

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