

# SAFETY ALERT



**Safety Alert No. 356**  
**13 June 2019**

**Contact: Jason Mathews**  
**Phone: (504) 731-1496**

## **Pipeline Pigs Inadvertently Ejected in Vicinity of Personnel**



*(above) Pigs located in Pig Loading Area*

*(left) Damaged/Bent Platform Structural Member*

On 31 January 2019, two employees were tasked with initiating pigging operations on a U.S. Department of Transportation platform natural gas pipeline in the Gulf of Mexico (GOM). Lock-Out Tag-Out (LOTO) procedures were followed for isolating and bleeding the pig launcher from possible pressure sources. Due to unanticipated issues with bleeding down the pressure in the launcher, a decision was made to re-pressurize and perform a second LOTO and bleed of the launcher.

After apparently bleeding down the launcher to zero pressure, the launcher door was opened in order to begin loading pigs. One employee looked inside the launcher to confirm that there was at least one spherical pig in the launcher. (Note: records indicate that there were two pigs in the launcher prior to opening the launcher door, and a third was subsequently loaded.) As one employee was preparing to place another pig onto the pig raising mechanism, and the other employee was nearby, three pigs were ejected from the launcher. The force was strong enough that a platform structural support member was damaged (see photograph above). The employees pulled the facility Emergency

Shutdown (ESD) and notified management of the occurrence. After the ESD, technicians isolated the pigging system from the blowdown line.

In addition to the damaged structural support member of the platform, the pigs also damaged an atmospheric storage tank and hand railings. The pigs were lost into the GOM as unrecoverable marine debris. The incident was originally reported as marine debris. The most likely causal factor was determined to be pressure inside the 36-inch launcher isolation valve body that was released into the pig launcher. Another possible cause was that a pig expanded to seal off the launcher from exiting pressure in and upstream of the isolation valve.

**Therefore, BSEE recommends that operators consider the following:**

- Verify that events categorized within this incident-type – serious near miss involving personnel safety – are not only reported as marine debris, but are also submitted to BSEE as a written report within 15 days of the incident date.
- Review and update (as necessary) hazard analyses for pigging operations, including hazards associated with (but not limited to) valve seating issues and pig deformation possibilities.
- Review and update operating procedures for pigging operations to ensure that the hazards identified from the above analyses are taken into consideration.
- Confirm the integrity of isolation valves by initiating more frequent inspections of applicable components. Verify that these valves are being addressed within your maintenance procedures.
- Conduct additional hazard identification training and process isolation training for personnel whose tasks involve pig loading and launching.

-- BSEE--

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