



## **FINDINGS OF CONCERN**

### **Sector Ohio Valley**

August 12, 2022  
Louisville, KY

Findings of Concern 010-22

## **IMPORTANT COMMUNICATIONS DURING LOCKAGE OPERATIONS**

Purpose. The U.S. Coast Guard issues findings of concern to disseminate information related to unsafe conditions that were identified as causal factors in a casualty and could contribute to future incidents. Findings of concern are intended to educate the public, state, or local agencies about the conditions discovered so they may address the findings with an appropriate voluntary action or highlight existing applicable company policies or state/local regulations.

The Incident. A towing vessel with two loaded oil barges (in a stern to stern towing configuration) was positioned inside the chamber on a Lock and Dam on the Tennessee-Tombigbee Waterway awaiting to lock downward. As the water levels began to drop, no individual noticed or reported that one of the barges was not fully inside the chamber and behind the marked miter sill line within the chamber. This meant a portion of the barge's hull was sitting directly over the concrete miter sill (a concrete ledge). As the dewatering progressed, the barge hull came into contact with the concrete miter sill and remained "stuck" on the sill as the water level dropped. As the water level continued to decrease, the rest of the barge's hull was at a lower angle causing the hull to buckle and fracture near the #1 cargo tank. The failure of the hull and cargo tank envelope resulted in a release of 117,000 gallons of crude oil.

Contributing Factors and Analysis. The Coast Guard investigation determined the causal factors contributing to this incident to include: (1) Failure of the Deckhand to conduct his responsibilities to monitor the vessel position within the lock, and (2) Failure of the Deckhand to report the misalignment of the barge in relationship to the miter sill line to the Master and/or Lock Master.

Findings of Concern. Coast Guard Investigators identified the following measures that could be implemented by owners/operators of vessels in similar service to mitigate the risks associated with the above identified contributing factors:

- **Maintain Situational Awareness:** Communication between Deckhands, Pilots and Lock & Dam operators is critical throughout locking operations; vigilance is highly encouraged.
- **Periodic Review of Written Procedures:** Provide feedback if vessel locking procedures or Lock and Dam visual aids are unclear; discuss with responsible entities immediately.

Closing. These findings of concern are provided for informational purpose only and do not relieve any domestic or international safety, operational, or material requirements. For any questions or comments please contact Sector Ohio Valley Investigations Division by phone at (502) 779-5339 or by email [STL-SMB-SectorOhioValley-Louisville2692@uscg.mil](mailto:STL-SMB-SectorOhioValley-Louisville2692@uscg.mil).