



MV MARY DUPRE

Vessel Fire



LESSONS LEARNED



While eastbound at ICWW MM 408, the off-watch Pilot of the *MV Mary Dupre* was awakened by an activated smoke alarm and the smell of smoke. The Pilot alerted the officer on watch and proceeded to investigate the source of the smoke. The Pilot observed smoke coming from the wall and ceiling and removed a panel from the ceiling to further investigate. When the panel of the ceiling was

Description of the Incident



- The *MV Mary Dupre* had one barge in tow at the time of the lock allision, the loaded *Kirby-28747*.
 - The *Kirby-28747* was loaded with Pyrolysis Fuel Oil at the time of the event.
 - The *Kirby-28747* was safely dropped off to the *MV Ave Maria* without any damage.
- Dupre Marine Transportation has procedures in place that require a daily inspection of the vessel and components. This inspection includes a section specifically related to fire hazards and includes that there are no potential fire hazards such as combustible materials that are stored near a heat source and that all exhaust wrapping is cinched tightly and in good condition. This inspection was completed at 04:04 on 6/26/2022.
- The Pilots bunkroom on the *MV Mary Dupre* is located between the vessels two exhaust stacks. (See photo #1) The fire originated in the walls of this bunkroom and quickly spread.
 - The walls in this bunkroom are insulated with fire retardant and heat resistant insulation.
- The off-duty Pilot was awakened by an activated smoke alarm in his bunkroom and after waking up noticed the smell of smoke. The Pilot alerted the Relief Captain and ensured everyone on the vessel was aware of the potential emergency.
- The off-duty Pilot and both vessel Deckhands investigated the source of the smoke and eventually removed a panel from the ceiling (See photo #4). When the panel from the ceiling was removed the smoke in the vessel intensified and thwarted any ongoing efforts to eliminate the fire.
 - While the other crew members were investigating the source of the smoke, the Relief Captain was making notifications and arrangements to get the *Kirby-28747* to safety.

Event Facts



- When the smoke intensified to a level that was unsafe, the Master ordered the crew to abandon the *MV Mary Dupre* via the vessel skiff.
- The *MV Ave Maria*, *MV Cynthis K*, *MV Martha Renae*, and *MV Redfish* assisted in ensuring the crew of the *MV Mary Dupre* was safe and with firefighting efforts.
- T&T Salvage was dispatched to assist in firefighting efforts and to ensure the *MV Mary Dupre* was safe to move to J&S Contractors.
 - T&T Salvage and the USCG cleared the *MV Mary Dupre* to be moved to J&S Contractors in Freeport TX.
- While investigating the source of the fire, a Marine Surveyor, Dupre Marine Transportations Port Engineer and Operations Manager, and marine investigators from the USCG identified a cracked muffler in the starboard exhaust stack that was allowing excessive heat to contact the metal walls of the stack. (See Photo #5)
- No injuries resulted from this event.

Event Facts



- Equipment Failure

- Not at Fault Equipment Failure

- While investigating the source of the fire aboard the *MV Mary Dupre*, the exhaust stacks were cut to gain a better perspective as to why the heat increased inside of the starboard stack to a degree that would ignite a fire within the wall of the bunkroom, and it was discovered that the muffler located within the starboard exhaust stack was cracked. This crack allowed excessive heat to escape the muffler and increase the heat of the stack walls to the point where the paint started to bubble (See Photo #6). Because of the design and layout of the vessel, the excessive heat was allowed to penetrate the wall of the Pilot bunkroom and eventually cause the wood within this wall to ignite. If the muffler in the starboard exhaust stack would have not failed, the walls of the stack would have not heated to a degree that would have posed a risk.

Root Cause



Lesson Learned:

The importance of knowing how to respond in the event of an emergency is crucial to ensure the safety of the crew. This can be accomplished through:

- ~ Safety Meetings
- ~ Emergency Drills – Drills should be realistic and test all aspects of the emergency.
- ~ Vessel Orientations- Ensure crew members are properly orientated to the vessel and know where all emergency equipment is located.
- ~ Training- All safety training should be completed on time.

Lesson Learned



In the event of a fire on Dupre Marine Transportation owned and/or operated vessel, the officer on watch should take actions to ensure the safety of the crew including but not limited to:

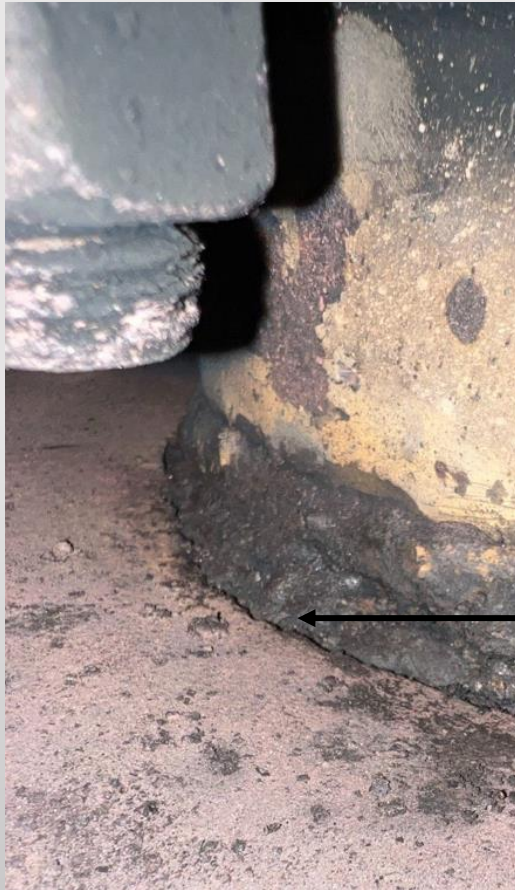
- Sound the general alarm and vessel whistle for 10 seconds or longer.
- Announce "fire" on P.A.
- Notify Crew of the location of the fire.
- Don PPE
- Ensure all persons onboard are accounted for.
- Stop the tow if it is safe to do so.
- Evaluate the degree of the emergency.
- Direct crew in firefighting efforts
- Notify appropriate shore side personnel.
- Assess damage from the fire and determine if it is safe to continue to operate the vessel.
- Assign a fire re-flash watch.

In the event of a fire on Dupre Marine Transportation owned and/or operated vessel, the deck crew on watch should take actions to ensure the safety of the crew including but not limited to:

- Notify officer on watch of the fire and its location and/or respond to the emergency signal.
- Announce "fire"
- Don PPE
- Investigate fire location, size, and source.
- Follow instructions from officer on watch

ERP 1.5 Fire Systems and Response





Crack in Muffler

Bubbling Paint



PHOTOS