

JNITED STATES COAST GUARD

U.S. Department of Homeland Security

FINDINGS OF CONCERN

First Coast Guard District

December 8, 2025 Boston, MA

Findings of Concern 015-25

OVERLOOKED FIRE BOUNDARY DOORS

<u>Purpose</u>. 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. In July 2023, a JEEP Wrangler, used by longshoremen as a "pusher vehicle" to load non-running cargo vehicles onto a foreign flagged Ro-Ro/Container vessel moored at Port Newark, New Jersey, caught fire while inside one of the vessel's vehicle decks. Firefighting efforts by the vessel's crew and land-based firefighters were ineffective at suppressing the fire. Tragically, during the response, two land-based firefighters lost their lives, and several others were injured.

Contributing Factors and Analysis. During this incident, the vessel's fixed low-pressure CO2 fire suppression system was utilized, and it was initially successful at knocking down the fire. However, it's effectiveness was significantly impacted by an open hydraulically actuated vehicle ramp door that led from interior cargo spaces to the top weather deck. This prevented the fire protection zone from being fully sealed. This opening allowed dissipation of the CO2 and reintroduction of oxygen into the space, which impacted the effectiveness of the CO₂ and enabled the fire to reflash. The door, which was designed, approved, and installed during vessel construction in 2011, only had a single set of operating controls interior to the protected space. A crewmember seeking to close the door had to do so by depressing the actuating button from inside the fire protection zone until the door reached the desired position. As a result, the crewmember's only egress option when the door was fully closed was through the loaded vehicle cargo deck, which in this case, was actively on fire. This, along with the intense heat and smoke exhausting from the opening, prohibited crewmembers from attempting to close the door to seal the space. The lack of secondary controls for this weathertight door was inconsistent with the International Maritime Organization's regulations for weathertight or fire boundary doors as follows:

International Convention on Load Lines (ICLL) Regulation 12.1 (Doors) requires: "All access openings in bulkheads at ends of enclosed superstructures shall be fitted with doors of steel or other equivalent material, permanently and strongly attached to the bulkhead, and framed, stiffened and fitted so that the whole structure is of equivalent strength to the un-pierced bulkhead and weathertight when closed. The means for securing these doors weathertight shall consist of gaskets and clamping devices or other equivalent means and shall be permanently attached to the bulkhead or to the doors themselves, and the doors shall be so arranged that they can be operated from both sides of the bulkhead."



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Safety of Life at Sea (SOLAS) II-2, Regulation 10.4.2 (Closing appliances for fixed gas fire-extinguishing systems) requires: "Where a fixed gas fire-extinguishing system is used, openings which may admit air to, or allow gas to escape from, a protected space shall be capable of being closed from outside the protected space."

Factors that contributed to the door not being closed included:

- Lack of operating controls outside the protected space.
- Lack of a specific crewmember(s) assigned to immediately close the door in a fire emergency. This delayed attempts to do so.
- Lack of conducting fire drills in-port for cargo operation scenarios that require the actual closing of all fire protection zone doors. Although fire drills were conducted for cargo space fires onboard the vessel, they were only done at sea when the vehicle ramp doors were already closed. Therefore, the vessel crew was not practiced or proficient in closing the doors in an emergency scenario.

<u>Findings of Concern.</u> Coast Guard investigators identified the following measures to mitigate the risks associated with the contributing factors identified above:

- Vessel Owners/Operators, Classification Society Surveyors, and Flag/Port State
 Inspectors should validate that all doors in fire boundaries meet applicable SOLAS
 standards to ensure they can be quickly closed from outside the protected space in exigent
 circumstances.
- Ensure shipboard fire emergency planning and training includes the assignment of specific crewmembers to immediately close fire boundary doors, particularly those that rely on mechanically operated systems.
- Conduct shipboard fire drills while in port to accurately simulate conditions during cargo
 operations, ensuring adequate crew readiness and equipment functionality during the
 response.
- When practical, keep fire boundary doors closed.

<u>Closing</u>. 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 the First Coast Guard District, Inspections and Investigations Branch, by email at D01-DG-D1-CCPrevention@uscg.mil.