



UNITED STATES COAST GUARD

U.S. Department of Homeland Security

FINDINGS OF CONCERN

Marine Safety Unit Duluth

August 11, 2026
Duluth, MN

Findings of Concern 005-26

CRITICAL IMPORTANCE OF SAFE CARGO LOADING

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 appropriate voluntary action or highlight existing applicable company policies or state/local regulations.

The Incident. A Canadian-flagged self-discharging bulk carrier was underway on western Lake Superior when it sustained a fracture in the hull's bottom shell plating. The hull breach resulted in water ingress and necessitated the evacuation of half the crew.

Contributing Factors and Analysis. The Coast Guard investigation revealed that the vessel was overloaded, with bending moments exceeding the maximum allowable limits by as much as 13% when the incident occurred. It was also determined that the ship had been similarly overloaded during the four voyages prior to the incident. Moreover, the investigation found that the vessel's cargo loading practices relied exclusively on historical data from previous port visits throughout the Great Lakes District. The vessel was readied for departure based on the Master's preferred draft readings, relying on their experience and logbook entries rather than precise calculations.

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

- Ensure that cargo loading software is approved by a recognized classification society and aligns with the data specified in the cargo loading manual. If the software's accuracy is found to be insufficient, appropriate corrective measures should be taken, such as:
 - Consulting with the classification society to verify the software's accuracy;
 - Performing manual calculations based on the cargo loading manual; and
 - Providing crew members with training to ensure they are proficient in both software and manual procedures.
- Document and report any discrepancies to the classification society and company management.
- Schedule regular audits of both the loading operations and software systems to ensure compliance with safety standards.

Closing. These findings of concern are provided for informational purposes only and do not relieve any domestic or international safety, operational, or material requirements. For any questions or comments please contact Marine Safety Unit Duluth Investigations Division by phone at (218) 491-3184 or by email at D09-SMB-MSUDuluth-DuluthINSP@uscg.mil.