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MARINE SAFETY AND SECURITY INFORMATION BULLETIN (MSSB) 14-13

Pier Safety and Heavy Weather Arrangements

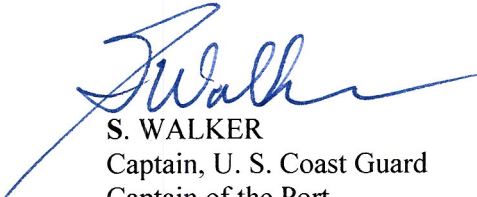
This bulletin encourages marine transportation related facilities and vessel operators to verify the structural condition and rated capacities of their pier(s) and mooring apparatus. In doing so and taking corrective action, operators may prevent potential mooring failures that lead to ship break-a-ways.

Currently, Federal regulations do not include specific requirements regarding construction, installation, and maintenance of piers, bollards or other mooring apparatus at commercial waterfront facilities. However, several publications provide best practices, including Sector Mobile's *Maritime Severe Weather Contingency Port Plan*, Army Corps of Engineers and Department of Defense Unified Facilities Criteria, and OSHA regulations on Terminal Facilities (see attached listed of references).

After generating conclusions and safety recommendations from a recent marine casualty investigation involving a ship break-a-away during a high wind event, the Captain of the Port strongly recommends facility and vessel operators consider implementing the following:

- Conduct an analysis of the mooring capacity of the pier(s) to ensure the pier and mooring apparatus are suitable for the intended size and type of vessels moored during normal operational loads and periods of heavy weather. The analysis should include adequate calculations for wind shear and other forces acting upon vessels, the mooring lines, apparatus, and pier.
- Conduct baseline and routine inspections of pier and mooring apparatus to check for deterioration and defects.
- Document and mark mooring apparatus with safe working capacities.
- Inform vessel operators of any known defects or limitations.
- Develop heavy weather contingency plans that take into account heavy weather monitoring procedures, the rated mooring capacity of the pier(s) and availability of assist tugs, as appropriate.

For more information regarding this MSSB, please contact Sector Mobile's Facilities Compliance Branch at the contact information above.


S. WALKER
Captain, U. S. Coast Guard
Captain of the Port

References:

Sector Mobile **Maritime Severe Weather Contingency Port Plan**

Army Corps of Engineers Unified Facilities Criteria (UFC) – **Inspection of Mooring Hardware:** UFC 4-150-08 (01 April 2001)

Department of Defense Unified Facilities Criteria (UFC) – **Design: Moorings:** UFC 4-159-03 (3 October 2005 Change 1, 1 September 2012)

OSHA Regulations – 33 Code of Federal Regulations Part 1917 Subpart F – **Terminal Facilities**

Rice, S. and Seelig, W. (2001) **Pierside Mooring for Cruise Ships.** Ports '01

Heffron, R. (2013) **New ASCE Waterfront Facilities Inspection & Assessment Manual.** Ports 2013