



## **TOP 10 TOWING VESSEL DEFICIENCIES**

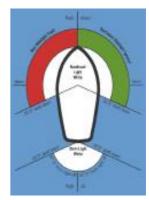
We conducted an analysis of all deficiencies recorded by CG field personnel while inspecting, investigating or boarding "uninspected towing vessels" (UTV) that have been required to meet the provisions of Subchapter C. The purpose of this analysis was to identify the ten most common deficiencies to share with the owners/operators assist UTV owners/operators identify and correct common problems.

The top ten deficiencies, including a brief explanation of the deficiency, applicable regulation, and potential correction methods are provided below. These deficiencies are not listed in any specific order.

1. General Alarm (46 CFR 27.201) General alarm installations in the engine room are required to include both audible and visual indicators (i.e., warning bell/siren and light). A placard with the inscription: "Attention General Alarm – When Alarm Sounds or Flashes, Go to Your Station" is required to be posted in the vicinity of the general alarm. Missing placards and visual indicators as well as inoperable audible indicators are frequent deficiencies on towing vessels.



2. Running Lights (Masthead, Side and Stern) Inoperable or Defective (46 CFR 25.10-3) All vessels must have navigation lights in accordance with the International and Inland Navigation Rules. Many towing vessels are found to have inoperable stern, masthead, and sidelights. In some instances the installation of these lights was found to conflict with the International and Inland Navigation Rules, including the lack of "matte black" painting of the light screens. Vessel owners/operators should test their navigation lights prior to each voyage to ensure proper operation. Operators should inspect their running lights periodically, paying particular attention to the condition of the lenses, wattage and focal height of the light bulbs. The bulb's filament must be at the same height as the middle portion of the lens. Household bulbs are not acceptable. Navigation Rule 24 provides the running light requirements for towing vessels and Rule 22 gives the ranges of visibility over which the lights must be visible.



3. Remote Fuel Shut-off Valves (46 CFR 27.207) Any fuel line that supplies fuel directly to a diesel engine must have a shut-off valve that can be remotely-operated from outside the space. All mechanical linkages for the valve must be kept clean and lubricated. The valve control must be labeled in one-inch letters. Owners/operators should ensure that the instructions are posted in the vicinity of the emergency fuel shut-off valve control.



4. Fire Detecting Control Panel (46 CFR 27.203) All of the control panel's required features must function properly: Power-available indicator light, audible alarm, visible indication of the zone (or zones) of the fire's origin, means to silence the audible alarm, and a circuit-fault detector test switch. Labels for all switches and indicators must be in place. Documentation that the system was certified (by either a registered professional engineer or a recognized classification society) should be on board. Owners/operators should be prepared to demonstrate proper operation during each examination or boarding.



5. Life Buoys (SOLAS, Ch. III, Reg. 31) Life buoys on UTV's are not required to be marked with the name of the vessel and the vessel's hailing port. However, the information on the manufacturer's label in waterproof lettering, required by 46 CFR 160.050-6, must not be faded to the point that it is unreadable. For those UTV's operating under SOLAS, life buoy stowage positions should be marked with either the word LIFE BUOY or the life buoy symbol from IMO Resolution A.760(18). There are four different life buoy symbols; depending on how the buoy is equipped. These owners/operators should check that the required number of life buoys is equipped with 'self-igniting' lights, 'self-activated' smoke signals and that the buoyant line (typically polypropylene) is not oxidized.



6. Fire Pumps (46 CFR 27.301) Current regulations require a towing vessel to be equipped with a self-priming fire pump; which may be either fixed or portable. A. Owners whose vessels have fixed pumps should ensure that the pump has been fitted with a remote start control and that the control is in working order. If fire-main valves have

to be operated from this remote location, ensure that the valves open properly.



B. Portable pumps, along with the hose and nozzle, must be stowed outside of the machinery space. A fifty-foot hose is required. The portable pump must be considered to be a dedicated fire pump. It may not be used to pump oily mixtures.

7. Vessel Response Plan (33 CFR 155.1040, 155.1060) With regard to towboats that push tank barges, the most common items that are either lacking from or not sufficiently addressed in the response plan are: (1) Certification that response

resources are ensured under contract to respond, to the maximum extent possible, to a Worst Case Discharge; (2) Volume and type of oil that would be discharged in a Worst Case Discharge; (3) Responsibilities of the qualified individual for immediate communication with the NRC; (4) Vessel-specific information on the barges and the Captain of the Port Zone information for the areas in which the barges will be operated. Documentation of "Contract of other Approved Means of Spill Removal" must be on board. Response exercises and Qualified-Individual Notification exercises are required quarterly. Management Team exercises and Equipment Deployment



exercises are required annually. Records of these exercises must be kept for three years. Owners/operators, who need to amend a Response Plan or submit a plan for approval, must use the "Homeport" web portal, http://homeport.uscg.mil - Log-in,

click Help and navigate the "Homeport Plan Submitter".

Vessel Security Plan (33 CFR 104, Subpart D) The Company Security Officer or the Vessel Security Officer must ensure that the Vessel Security Plan (VSP) is audited annually. The VSP must also be audited if the owner or operator of the vessel changes or if there has been any change in the operations of the vessel not addressed in the existing VSP (104.415). If the results of an audit indicate that the VSP must be amended, an amended VSP must be submitted to the Coast Guard's Marine Safety Center for review and approval (104.410). Plans may be submitted electronically through the Coast Guard's "Homeport" web portal after becoming a registered user. Vessel Security Officers must conduct at least one drill every three months while the vessel is in service. These drills must test individual elements of the VSP. Annual exercises are required to test communication & notification procedures and elements of resource availability, coordination and response (104.230). Records of drills, exercises and all other security activities must be kept for two years (104.235).



9. Wiring Materials and Methods Wires must be properly installed and connected in accordance with IEEE Std 45 sections 20 & 22 as well as IEC 92-3 and paragraph 8 of IEC 92-352. The use of temporary wiring where equipment must be hard-wired is a common electrical deficiency. Missing junction-box or switch-plate covers and exposed dead-end wires account for 27% of the inspection deficiencies. Insufficient mounting of cables as they run along bulkheads is also a noted problem. All junction boxes should have their covers in place at all times. Operators should perform self-inspections periodically.



10. <u>Guards for Exposed Hazards</u> Missing guards for moving machinery is the most common deficiency in this category. "Exposed Hazards" also includes battery boxes, exhaust pipes and heaters. Additionally, (hot surface) guards are sometimes missing from cooking appliances in the galley. Insulation missing from diesel engine exhaust piping is also a common finding.



For more information about Commercial Vessel inspections and how you can prevent these common deficiencies, including performing your own self inspection, please contact your local Coast Guard Sector/Inspections Division. For a listing of local Sector Offices, click on "Sector Directory" on Homeport - <a href="http://homeport.uscg.mil">http://homeport.uscg.mil</a>



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