

NEW TOWING VESSEL SAFETY REGULATIONS



PREPARED BY:
American Institute of Marine Underwriters
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Introduction:

In July of 1996, (61 Federal Register 35064), the US Coast Guard published new safety regulations for uninspected towing vessels. These regulations became effective on August 2, 1997 and will be fully phased in, over the next four years. The purpose of this paper is to inform underwriters as to the scope and applicability of these regulations. The paper will conclude with what the committee sees as the pros and cons of these regulations, in relation to the expressed purpose of this rule making, which is improving navigation and safety within the towing industry.

Background Information:

As with most rule making, these regulations were motivated by two relatively recent maritime catastrophes within U.S. territorial waters. The train wreck of Amtrak's Sunset Limited, near Mobile, AL, in September of 1993, captured the nation's attention with its horrific loss of lives. A major contributing factor in this catastrophe was a tug operating in fog, without a radar. The oil spill of the tank barge "Morris J. Berman" in San Juan harbor, in January 1994, also received national attention. This casualty occurred when the main towline broke, allowing a loaded tank barge to become stranded on the reefs, at the entrance to the harbor, during the peak of the winter tourist season. The towing company's lack of any maintenance and inspection program for its main tow lines was considered one of the primary casual factors in this casualty. Subsequently, the Coast Guard pursued a comprehensive rule making process, which included publication of proposed rules, followed by a period of public comment, before the final rules were issued. Although the rules are applicable to only uninspected towing vessels, the criterion for a tug to be inspected (i.e., required to have a Coast Guard Certificate of Inspection) is that it must have a net tonnage of at least 200 tons. Since tugs are generally designed to be under 200 net tons, the reality is that virtually all tugs are considered uninspected vessels. Hence these rules became known as the Towing Vessel Safety Regulations.

Applicability:

Basically, the rules are applicable for any tug of 12 meters (39.4') or more in length. As with any rules, there are always exceptions. Exemptions can be given by a local Captain of the Port. Small tugs engaged in assistance towing, those operating exclusively within a fleeting operation and those vessels used solely for pollution response are all exempt. Basically, the rules apply only to those vessels engaged in commercial towing. The rules are differentiated for those vessels operating on the inland rivers, and connecting water ways, and those vessels engaged in coastwise or ocean hawser line towing.

The time table for compliance ranges from August of 1997 to August of 2001, varying with certain elements of regulations, so as not to impose any "undue economic burden" on the industry.

Required Safety & Navigation Equipment

The following navigation – safety equipment is required on towing vessels.

- Marine radar
- Searchlight, capable of illuminating objects at a distance of at least twice the length of its tow (only when configured in the pushing mode).
- VHF-FM radio
- Magnetic compass
- Echo depth sounding device, unless the vessel is engaged in towing exclusively on the Western Rivers.
- Electronic position fixing device (i.e., Loran C or GPS), if the vessel engages in towing more than 3 miles offshore, including on the Great Lakes.
- Current, corrected charts & aids to navigation publications, for the areas to be traversed.

Towing Gear Maintenance & Inspection Requirements:

Hawser line Towing:

For vessels engaged in coastwise or ocean towing, the following procedures and documentation must be implemented.

- Owner, master, and/or operator of the vessel must ensure that the size, strength and type of towline is adequate for the vessel's intended service, and appropriate for various named factors (i.e. route, expected weather conditions, etc.).
- Tow lines must be free of knots and the eye splice provided with thimble or a poured socket.
- Record of the towline's initial documentation and breaking strength test, including testing of any used equipment acquired and/or retesting.
- Tow line inspection and maintenance program, including an inspection log and replacement schedule.
- Terminal gear inspection and maintenance, including a log.
- Appropriate sized terminal fittings.
- Towing safety equipment and gear, including towing safety shackles.
- Appropriate sizing of the towing winch brake, for the tug's bollard pull.

River Towboats:

The owner, master, or operator of an vessel towing alongside or pushing ahead shall ensure that the facing wires, spring lines, and push gear are:

- Appropriate for the vessel's horsepower.
- Appropriate for the length of the tow.
- Frequently inspected.

Testing and Maintenance of Equipment:

At least weekly, and before any vessel embarks on a voyage of more than 24 hours, or when a new master or operator assumes command of the vessel, the following equipment must be tested.

- Steering systems
- Navigation equipment
- Communications equipment
- Navigation & tow lights
- Terminal gear (visual inspection)
- Propulsion systems (visual inspection)

The new regulations contain log keeping requirements for the maintenance and failures/ repairs to the vessel's navigational safety related equipment. This includes requirements for reporting same to the local Captain of the Port.

Conclusion:

There are many **positive** aspects to the new regulations for underwriters of towing vessels, which include:

- Ø Establishment of minimum navigational equipment
- Ø Requirement to establish a maintenance and inspection program for tow wires and gear, including log keeping requirements.
- Ø Chart and navigation aid requirements.
- Ø Equipment testing and log keeping requirements.
- Ø Documentation and log keeping requirements for maintenance and repairs of navigational safety related equipment, including propulsion equipment.

There has been however, considerable discussion as to the limitations of the regulations and criticism that the regulations do not go far enough. Among the **drawbacks** of the regulations for underwriters include:

- Ø The Coast Guard's ability, mostly due to staff reductions, to enforce the regulations. The Coast Guard has considered nominating qualified third party inspectors, such as certain classification societies and the National Association of Marine Surveyors.

- Ø The four year implementation period, primarily for economic impact considerations, but this is historically the time frame given for the implementation of new regulations.
- Ø The regulations do not address manning and licensing requirements for uninspected vessels. The Coast Guard has taken the position that manning and licensing issues are not within the scope of this particular rule making. Consequently, these regulations address crew qualifications and manning requirements only in the most general fashion. A subsequent revised notice of proposed rule making has been issued by the Coast Guard, which covers licensing, manning and training of mariners that operate towing vessels. It should be noted that the period for public comment will close on February 28, 1998.[\[1\]](#)
- Ø Training is widely acknowledged to be one of the critical factors for improving safety, but the regulations are silent with respect to training requirements for the crew. Again, this is beyond the scope of this rule making, but is included in the above referenced notice of proposed rule making.
- Ø The regulations considered the requirements for fire fighting equipment to be beyond the scope of the rule making. Principally, many have advocated that machinery spaces should be equipped with fixed fire fighting extinguishing systems, which can be remotely activated, because most tugs operate with their machinery spaces unmanned. Most recently, the Coast Guard has published a notice of proposed rule making (NPRM), requiring the installation of equipment to suppress fires aboard towing vessels. The proposal was developed in cooperation with the Towing Safety Advisory Committee (TSAC). It should be noted that public comments must be received by January 5, 1998.[\[2\]](#)
- Ø Coast Guard has not attempted to establish any minimum guidelines for the size of tow wires, relative to the vessel's horsepower and/or bollard pull. Instead, the Coast Guard has chosen to leave these decisions to the vessel owners, due to the great variety of vessels and types of services in which they are engaged.

Of particular interest to underwriters may be the increased liabilities that these regulations conceivably could create for towing vessel owners and operators. The requirements for equipment, maintenance and log keeping (to document same) are requirements that did not previously exist. Further, the rules attempt to tie together the responsibility of the vessel owner and master. This could make the task of demonstrating negligence and/or unseaworthiness on the part of the vessel owner easier. Of course, this can be a double edged sword for underwriters, depending where their interests may lie.

Basically, rules also seek to improve safety not only by adding requirements for equipment, but by increasing the accountability of the vessel owner and master. In that sense, the rules are similar to the American Waterways Operators (AWO) Responsible Carrier Program. This program is a comprehensive safety management system, which is similar to IMO's International Safety Management Code (ISM), but specific to the tug and barge industry. Certainly, any towing vessel that is operated by a company that has a Responsible Carrier Program will have a safety management system in place that far exceeds the requirements of these regulations. But the Responsible Carrier Program is a voluntary safety initiative, and for those operators that do not have any formal safety program, the new regulations establish a baseline for towing vessels.

If the regulations can be effectively *implemented* and *enforced*, navigation and safety of towing vessels, both offshore and on the inland rivers, should be improved.

[1] Fed. Reg. Vol. 62, No. 207, 10/27/97 (CGD – 94-055) Licensing & Manning for officers of Towing Vessels.

[2] Fed. Reg. Vol. 62, No. 193, 10/06/97 (CGD – 97-064), Towing Vessel Safety.