



GUIDE FOR BUILDING AND CLASSING

SUBCHAPTER M TOWING VESSELS

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**American Bureau of Shipping
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Foreword

This *Guide for Building and Classing Subchapter M Towing Vessels* has been developed to clarify the requirements for classing existing and new towing vessels in service on major rivers and connecting intracoastal waterways, which are required to comply with *46 CFR Subchapter M, Inspection of Towing Vessels, Final Rule (Sub M)*, which was published in the U.S. Federal Register on June 20, 2016.

The Guide provides supplemental and alternative requirements to the *ABS Rules for Building and Classing Steel Vessels for Service on Rivers and Intracoastal Waterways (ABS River Rules)* based on a comparison to *Sub M*. Requirements for equipment and arrangements regarding lifesaving, fire protection, machinery, piping, electrical, structure and stability are addressed.

A vessel complying with the requirements contained in the *River Rules* and this Guide will comply with the design, construction, and outfitting requirements of *Sub M* and be eligible for Classification with ABS.

This Guide becomes effective on the first day of the month of publication.

Users are advised to check periodically on the ABS website www.eagle.org to verify that this version of this Guide is the most current.

We welcome your feedback. Comments or suggestions can be sent electronically by email to rsd@eagle.org.



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SECTION 1 General

1 Classification Notations

Vessels which have been built to the satisfaction of the ABS Surveyors to the requirements contained in the *ABS Rules for Building and Classing Steel Vessels for Service on Rivers and Intracoastal Waterways (ABS River Rules)* and this Guide, where approved by the Committee, are to be classed and distinguished in the *Record* by the symbols **A1** for vessels built under ABS attendance, or **A1** for existing vessels entering class, followed by the notation **Towing Vessel (Sub M, River Service)**.

3 Scope

The following table describes the scope of this document by providing a cross-reference between the Parts of *Sub M* and Sections of this Guide.

<i>Sub M Part No.</i>	<i>Sub M Part Title</i>	<i>Guide Section</i>
Part 136	Certification	See Note
Part 137	Vessel Compliance	3/1
Part 138	Towing Safety Management System (TSMS)	See Note
Part 139	Third-Party Organizations	See Note
Part 140	Operations	3/1
Part 141	Lifesaving	2/1, Table 1; 3/1
Part 142	Fire Protection	2/1, Table 2; 3/1
Part 143	Machinery and Electrical Systems and Equipment	2/1, Table 3; 2/3, Table 5; 3/1
Part 144	Construction and Arrangement	2/1, Table 4; 3/1

Note: Refer directly to applicable Parts of Sub M.

5 Application

This Guide is applicable to towing vessels, as defined in 1/7.1, in service on major rivers and connecting intracoastal waterways. The listed routes permitted by *Sub M* are as indicated in 46 CFR 136.230. The requirements laid forth in this Guide are clarifications to the *ABS River Rules* for vessels intended for service in bodies of comparatively smooth water.

Classification of any vessel subject to *Sub M* that is not exclusively in service on rivers and intracoastal waterways is subject to the *ABS Rules for Building and Classing Steel Vessels Under 90 Meters (295 feet) in Length (ABS Under 90 Meter Rules)*. This Guide is not intended to apply to vessels in service on the Great Lakes of North America, coastwise operation, or on any ocean regardless of US Gross Tonnage.

7 Definitions

7.1 Towing Vessel

For the purposes of this document, a *Towing Vessel* is defined by 46 CFR 136.110, with applicability per 46 CFR 136.105.

Per 46 CFR 136.110, a *Towing Vessel* means a commercial vessel engaged in or intending to engage in the service of pulling, pushing, or hauling alongside, or any combination of pulling, pushing, or hauling alongside. Per 46 CFR 136.105, *Sub M* is applicable to all U.S.-flag towing vessels as defined in 46 CFR 136.110 engaged in pushing, pulling, or hauling alongside, except:

- i) A vessel less than 7.92 meters (26 feet) in length measured from end to end over deck (excluding the sheer), unless that vessel is pushing, pulling, or hauling a barge that is carrying oil or hazardous material in bulk;
- ii) A vessel engaged in one or more of the following:
 - a) Assistance towing as defined in 46 CFR 136.110;
 - b) Towing recreational vehicles for salvage; or
 - c) Transporting or assisting the navigation of recreational vessels within and between marinas and marina facilities, within a limited geographic area, as determined by the local Captain of the Port (COTP);
- iii) A workboat operating exclusively within a worksite and performing intermittent towing within the worksite;
- iv) A seagoing towing vessel of 300 gross tons or more subject to the provisions of 46 CFR Subchapter I;
- v) A vessel inspected under other subchapters of 46 CFR that may perform occasional towing;
- vi) A public vessel as defined in 46 U.S.C. 2101;
- vii) A vessel which has surrendered its Certificate of Inspection (COI) and is laid up, dismantled, or otherwise out of service; and
- viii) A propulsion unit used for the purpose of propelling or controlling the direction of a barge where the unit is controlled from the barge, is not normally manned, and is not utilized as an independent vessel.

7.3 Existing Towing Vessel

Per 46 CFR 136.110, an *Existing Towing Vessel* means a towing vessel, subject to inspection under *Sub M*, which is not a new towing vessel, as defined in this section.

7.5 New Towing Vessel

Per 46 CFR 136.110, a *New Towing Vessel* means a towing vessel, subject to inspection under *Sub M*, that:

- i) Had its keel laid or was at a similar stage of construction on or after July 20, 2017; or
- ii) Underwent a major conversion that was initiated on or after July 20, 2017.

7.7 Excepted Vessel

Per 46 CFR 136.110, an *Excepted Vessel* means a towing vessel that is subject to *Sub M* but is excepted from certain provisions contained within this subchapter. An excepted vessel is:

- i) Used solely:
 - a) Within a limited geographic area, as defined in 46 CFR 136.110;
 - b) For harbor-assist, as defined in 46 CFR 136.110;
 - c) For response to an emergency or a pollution event; or

- ii) Excepted by the cognizant OCMI for purposes of some or all of the requirements in 46 CFR 142.315 through 142.330, 143.235, 143.265, and subpart C of part 143 of *Sub M*, based on consideration of those requirements and on reasons submitted by the vessel owner or managing operator as to why the vessel does not need to meet these requirements for the safe operation of the vessel.

7.9 Length

Per 46 CFR 136.110, *Length* means the horizontal distance measured from end to end over the deck, excluding the sheer. Fittings and attachments are not included in the length measurement.

7.11 Other Definitions

A full list of definitions specific to *Sub M* can be found in 46 CFR 136.110. Definitions specific to the ABS Rules related to this Guide can be found in the beginning of each part within the *ABS River Rules*.

9 Plans and/or Data

The following plans and/or data are to be submitted:

- General arrangement (including tank arrangement, handrails, and bulwarks)
- Midship section and scantling plans
- Bottom, deck, and side shell plating
- Transverse and longitudinal bulkheads
- Deckhouses
- Water-tight/weather-tight closure devices (including manholes, hatches, doors, etc.)
- Stability (lines and offsets, curves of form, cross curves of stability, etc.) (as applicable)
- Rudder and rudder stock (including vessel speed)
- Main engines, propulsion gears, and clutch systems (manufacturer make, model, and rating information, reduction ratio, etc.)
- Propulsion shafting and control system
- Propellers over 60 inches diameter
- Pressure vessels and heat exchangers
- Machinery arrangement and equipment list (including electrical)
- Shell penetrations (if not otherwise covered, including seachests, scuppers, sanitary overboards, external cooler installations, etc.)
- Steering gear piping, arrangements, and control system
- Bilge/ballast piping
- Fuel/lube oil piping
- Flammable/combustible liquid piping (if not otherwise covered)
- Fire main piping (including calculations)
- Cooling water
- Compressed air
- Vents, sounds, and overflows
- Ventilation
- Engine exhaust

- Group I (high pressure) piping (if not otherwise covered) such as hydraulics
- Fire and safety plan (fire protection equipment and lifesaving appliances)
- Fixed fire-extinguishing (including calculations) (as applicable)
- Fire and smoke detection
- Towing arrangements
- AC/DC electrical one line and load analysis
- Remote shutdowns
- Alarms and monitoring
- Main switchboard wiring and details
- Shipboard lighting and power
- Internal communications (including general alarms or public address, pilothouse alert system, as applicable)
- Navigation lighting

Additional plans and/or data may be required for additional Class Notations.