U.S. Department of Homeland Security

United States Coast Guard

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Upper Mississippi River

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MAY 17 2018

Dear Members of the Maritime Community:

On July 20, 2018, we will complete a decade long journey of towing vessel safety oversight under the Towing Vessel Bridging Program and begin a new chapter under Subchapter M. As we have maintained over the course of the past several months, open communication will be key to working through any ambiguity that follows the compliance deadline. The enclosed work instruction outlines my guidance as the Officer in Charge, Marine Inspection for a number of processes and regulatory items under Subchapter M. It applies to vessels to be certificated in the Sector Upper Mississippi River Marine Inspection Zone.

This work instruction does not address every regulatory item, nor is it intended to. It addresses the most pertinent matters brought to my attention since the announcement of the final rule in 2016. The Coast Guard does not routinely release its work instructions; however, given the scope of the regulatory change and the number of initial ambiguities to work through, I thought it would be helpful to communicate to industry the same guidance that I am communicating to my inspections staff. I do not plan to release future work instructions at this time.

I am committed to facilitating commerce on the Western Rivers and will implement Subchapter M in alignment with the Eighth District Commander's recently published Intent. Sector Upper Mississippi River will continue to engage the towing vessel industry and third party organizations as we all adjust to the new culture and regulatory paradigm of Subchapter M. We will continue our outreach, both formal and informal.

I hope the towing vessel industry and third party organizations will use this instruction to make the best possible decisions for your respective implementation of Subchapter M. Through continued open communication and collaboration, I am confident that we will successfully navigate the uncharted (inland) waters that lie ahead while further mitigating safety, security and environmental risks.

If you have any questions or comments, please feel free to contact the Inspections Division Chief, Lieutenant Sean Haley, at (314) 269-2621 or via email at Sean.M.Haley@uscg.mil.

Sincerely,

S. A. STOREMER

Enclosure: (1) WI-INSP 18-01 dtd May 17, 2018.

Sector UMR Inspections Work Instruction

Officer in Charge, Marine Inspections (OCMI) Determinations

1. PURPOSE. This instruction sets forth OCMI specific guidance related to Title 46 Code of Federal Regulations, Subchapter M. The primary objective is to identify inconsistencies between the regulatory requirements and existing industry practices and clarify how Sector UMR will enforce those requirements.

2. DISCUSSION. Since July 2016 when the final rule for Subchapter M was published, towing vessel examiners have identified multiple "gray areas" within the regulations.

   Third Party Organizations (TPO), the towing vessel industry and others have routinely asked how Sector Upper Mississippi River (UMR) will enforce these matters. Subchapter M, CG Policy Letters and frequently asked questions on the Towing Vessel National Center of Expertise (TVNCOE) website provide a good strategic framework but lack the technical detail to execute OCMI decisions at the tactical level.

3. ACTION. Sector UMR shall adhere to the guidance in this document for instruction on each respective matter. This instruction shall be modified as necessary as additional District or National Policy becomes available.

Fire Pump Pressure Testing

1. ISSUE. In many cases, the pressure and flow rate required by Subchapter M for fixed and portable fire pumps far exceeds the adequate pressure needed to reach all parts of the vessel.

2. REFERENCES.
   (a) 46 CFR 142.325
   (b) 46 CFR 27.301
   (c) Towing Vessel Center of Expertise Frequently Asked Questions, Part 142
   (d) D8 Towing Vessel Inspections Field Note (TVIFN) 18-01

3. BACKGROUND. The requirements for fire pump pressure in Subchapter M are relatively consistent with those in Subchapter C. Both require 50 psi (80gpm) for fixed pumps and 60 psi (80 gpm) for portable pumps. Since, there is no requirement for a pressure gauge so, to prove adequate pressure, the Marine Inspector either has to provide their own pitot tube or require the vessel to provide a pitot tube to measure the psi.

4. DISCUSSION. Towing vessels vary greatly in size and, in some cases, the requirement for a fire pump to display 50 psi on a pitot tube may far exceed the actual pressure necessary to reach all parts of the vessel.

5. ACTION. Marine Inspectors shall use their judgment in determining whether water delivery capability of the vessel is adequate to extinguish a fire at any location on the vessel. A pitot tube test may be conducted if the water delivery capability is in question, however the standard remains the same and may not necessarily be 50/60 psi (80 gpm). Refs (c) and (d) shall be taken into consideration when addressing fire pump pressure.

Shipboard Lighting with 90-Minute Batteries

1. ISSUE. Many vessels are equipped with a popular manufacturer's light with a 90-minute duration battery for emergency lights. The regulation calls for a 2-hour lighting requirement.

2. REFERENCES.
   (a) 46 CFR 143.410
   (b) D8-TVIFN 18-1
   (c) FR Docket No. USCG-2006-24412
   (d) TVNCOE FAQ's

3. DISCUSSION. Ref (a) requires sufficient lighting suitable for the marine environment be provided within crew working and living areas by way of an automatic, battery-operated light with a duration of no less than 2 hours; or, non-electric, phosphorescent adhesive lighting strips installed along escape routes. There are currently no exceptions or exemptions based on routes. The vast majority of towing vessels operating on the Western Rivers currently have 90-minute duration batteries installed for use as emergency lighting. While operating on the Western Rivers, extending the use emergency lighting to 120 minutes provides minimal benefit to 90-minute lights given the vessels' continual proximity to shore.

4. ACTION. Marine Inspectors will defer enforcement for vessels operating on the Western Rivers for shipboard lighting and authorize the use of the widely used 90-minute duration battery for emergency lighting until further guidance is promulgated. The use of the 90-minute battery shall be documented in the MISLE narrative and a special note shall be added. Refs (a-d) shall be taken into account when addressing shipboard lighting.

Pressure Vessel Maximum Allowable Working Pressure (MAWP)

1. ISSUE. Many pressure vessels on board towing vessels do not have a stamp, nameplate or other means visible to the crew that indicates it's MAWP.

2. REFERENCES.
   (a) 46 CFR 143.300 Pressure Vessels (Existing)
   (b) 46 CFR 143.245(b) Required Tests and Frequency
   (c) 46 CFR 143.545 Pressure Vessels (New)
   (d) ABS Rules for Building and Classing Steel Vessels under 90 meters (295) in length
   (e) National Board of Boiler and Pressure Vessel's NB-132 Revision 8
   (f) D8-TVIFN 18-1
   (g) Marine Safety Alert 02-11
   (h) 46 CFR 136.110 - Definitions

3. DISCUSSION. Refs (a-b) require existing towing vessels to test the relieving capacity of the pressure vessel relief valve to ensure it does not exceed 10% of the MAWP. Many pressure vessels are as old as the vessel itself and the nameplate is not attached to the pressure vessel or it's been painted over, etc. Without knowing the MAWP, it is impossible to determine whether the relief valve is set to the appropriate pressure.

4. ACTION. For existing vessels, in accordance with ref (f), the owner shall be required to provide additional documentation regarding the details of the pressure vessel and its associated equipment. Calculations for determining the MAWP may be conducted using the National Board of Boiler and Pressure Vessel's NB-132 Revision 8 document or as determined by a Professional Engineer.

   New vessels, as defined by ref (h), shall comply with ref (c). Refs (a-g) shall be taken into account when addressing pressure vessels where the MAWP is not clearly indicated.

Monitoring Thrust (Shaft Tachometers)

1. ISSUE. Refs (a-b) require towing vessels to have a means to monitor and control the amount of thrust at each operating station independently, which alludes to a requirement for a shaft tachometer.

2. REFERENCES.
   (a) 46CFR143.225(a)
   (b) 46CFR143.585(d)
   (c) Towing Vessel Center of Expertise FAQs (143-005, 143-024)
   (d) D8-TVIFN 18-1

3. BACKGROUND. Ref (a) states each towing vessel must have a means to monitor and control the amount of thrust and direction of thrust at each operation station. Ref (b) states that vessels that move tank barges carrying oil or hazardous material in bulk must have a means to monitor the amount of thrust and direction of thrust that must be independent from the controls.

4. DISCUSSION. Ref (d) adequately addresses this issue.

5. ACTION. Marine Inspectors will accept visual indication (i.e. making way, visual observation of propeller wash, etc.) as a means of monitoring the amount and direction of thrust; shaft tachometers are not required. Refs (a-d) shall be taken into account when addressing the monitoring of thrust.

MISLE Data Entry for Towing Vessels

1. ISSUE. As towing vessels become certificated, it will be necessary to ensure the proper data fields in MISLE are populated prior to issuance.

2. REFERENCES.
   (a) Sector UMR Towing Vessel Particulars Data Entry Sheet

3. DISCUSSON. The PRA requires agencies to obtain the approval of the Office of Management and Budget before obtaining, soliciting, or requiring disclosure of information from the public.

   Inspectors shall be careful not to violate the Paperwork Reduction Act of 1995 (PRA) by requiring towing vessel representatives to fill out unauthorized forms.

4. ACTION. All appropriate MISLE data necessary to populate the COI shall be entered prior to COI issuance. Inspectors may request the use of reference (a) to expedite the data entry process but may not require it as a condition of scheduling an inspection.

Inspection and Repair of Steel Hulls for Inland Towing Vessels

1. ISSUE. NVIC 7-68 has long been the standard for inspection and repair of steel hulls for inspected vessels, however inland towing vessels are unique and do not experience the same stresses that coastal vessels experience, making it difficult to apply an inspection and repair standard.

2. REFERENCES.
   (a) NVIC 7-68; Notes on Inspection and Repair of Steel Hulls
   (b) TSAC Task 13-07; Recommendations for Repair of Steel Hulled Towing Vessels on Inland Service
   (c) NMA Report #R-276-M; Towing Vessel Hull Inspection and Repair Standards
   (d) Inland Tank Barge Inspection and Repair Guide
   (e) ABS Rules for Building and Classing Steel Vessels for Service on Rivers and Intracoastal Waterways 2018
   (f) ASTM F2991-13; Standard Guide for Doubler Plate Repairs for Non-Classed Ship Structures
   (g) TVNCOE FAQ 144-048
   (h) MTN 1-17: Guidance on Design Verification for Subchapter M Towing Vessels

3. DISCUSSION. Considerable ambiguity surrounds what the Coast Guard will accept in terms of satisfactory repairs and allowable methods for hull repairs to maintain compliance with structural integrity and vessel seaworthiness. Refs (b) and (c) are the primary documents used to provide clarity to Marine Inspectors, however all existing policies along with the Marine Inspector's training and experience shall be used to determine the extent of necessary steel repair. As towing vessels experience a culture change from uninspected vessels to inspected vessels, Marine Inspectors should expect these repair standards to be challenged. At no time should Marine Inspectors feel compelled to relax safety standards when, in their judgement, a higher repair standard should be met to return the towing vessel to the service for which it's intended.

4. ACTION. The following practices will be allowed for ITVs conducting dry dock exam (DDE), internal structural exams (ISE) and repairs:

   1. ***Operating Environment***

      a. For ITVs that operate on a **"Protected Waters"** and **"Partially Protected Waters", but not beyond 3 NM of the territorial Sea Baseline or coastline of the Great Lakes**, as defined in 46 CFR 175.400 and listed in MISLE, may utilize ref (b) and applicable sections of this instruction to approve repairs associated with damage and scheduled dry-docks.
      b. For ITVs that operate on a **"Exposed Waters"** and **"Partially Protected Waters" beyond 3 NM of the territorial Sea Baseline or coastline of the Great Lakes,** as defined in 46 CFR 175.400 and listed in MISLE, this guide does not apply. MIs should utilize existing guidance and apply it appropriately when attending for or approving repairs associated with damage and scheduled dry-docks (DDE) or internal structural exams (ISE).

   2. ***Use of Doubler Plates***

      a. For ITVs under paragraph 1.a from above, MIs may utilize the criteria outlined in ref (b) and ref (c) for guidance on the installation of doublers.
      b. All installations for doubler plates must be completed to the standards outlined in ref (f).

c. Previously installed doubler plates in way of fuel tanks and the like should not necessarily be removed and replaced because it does not conform to the guidance in ref (c). The existing doubler can remain in place, so long as the condition and integrity of the doubler plate remains serviceable in the opinion of the attending MI.
d. If evidence supports that a doubler plate has been installed in way of a fuel tank or the like, without CG or Third Party (TPO) approval post COI issuance; then the attending MI may require the owner/operator (O/O) to remove the doubler plate and effect repairs IAW ref (a).

3. Set-ins (Hull Plating)

a. Generally speaking, most set-ins will be addressed at the next scheduled dry-dock for inspection; however, if in the opinion of the attending MI the set-in is so severe that it necessitates immediate repairs, then the MI may require the O/O to effect repairs in a reasonable amount of time.
b. For ITVs under paragraph 1.a from above, MIs may utilize the guidance in ref (d) to aid them in determining whether repairs are warranted.
c. In the event hull plating requires repair, MIs should utilize ref (a) as a guide. Doubler plates are not allowed for repairs of set-ins.

4. Internal Structural Members

a. For ITVs under paragraph 1.a from above, MIs may use both ref (c) and (d) for determining whether repairs to structural members repair/replacement.
b. Typically most side shell or bottom plating set-ins that are in need of repair will also require work to be done to the structural members that support them as well.
c. In addition to the guidance above, and as per ref (b), ITV shall be required to effect repairs to shaped structural members, including smooth bends that are discussed in ref (c), required to support bilge knuckles or gunwales with radius' greater than 12".

5. Wastage

a. For ITVs under paragraph 1.a from above being repaired or surveyed for DDE or/and ISE, MIs may accept wastage limits up to 20% from the “as required” thickness for structural members and 25% for plating as outlined in refs (c) and (e).
b. Allowable wastage limits for ITVs built (or identified as) undersized to the standards in ref (e), for the time period to which the ITV was built, will be determined on a case by case basis.
c. Replacement of hull plating should be to “as built” thickness unless satisfactory evidence can be provided to allow to deviate from such standards.
d. Doubler plates are not allowed as a repair for ITVs that are replacing hull plating for reasons of wastage.

6. Testing of Repairs

a. All repairs which require verification of watertight integrity will be tested utilizing at least one of the nondestructive testing (NDT) procedures outlined in ref (e).
b. It is the MIs discretion of acceptance of third party reports, vice attending, to demonstrate compliance with 6.a from above.

7. Welding Standards/Welder Qualifications

a. Generally speaking, ITVs (vessel's inspected under Subchapter M) do not require the use of certified welders as per 46 CFR 2.75-70 and therefore MIs should not require them for most repairs on the vessel.
b. MIs should require certified welders for those specific vessel systems which identify employing certified welders for repairs.
c. All welding should adhere to the guidelines outlined in ref (a), (d), (e), and (f) as appropriate. Any deviation from these standards is strictly at the discretion of the attending MI. Substandard welding and repairs could and may require the shipyard or welder to remove the repair and start over. Adherence to the CG longstanding welding and repair standards should not be compromised or lowered.
d. MIs should clearly articulate to the shipyard or welder the various "stages" (i.e. cropping, fit-up, etc.) of a repair they wish to observe prior to any work beginning. It is the MIs discretion to accept photos in lieu of attendance for any repairs.

8. Water in Voids

a. ITVs transiting in Sector UMR's AOR should not have an arrangement or situation on board the vessel where water is being unintentionally introduced in a void space; especially from the exterior of the hull. No other vessel design subject to Coast Guard regulation is allowed to have an unintentional ingress of water and ITVs should be no different. The unintentional introduction of water can pose several hazards to the safe navigation of the vessel if not addressed immediately.
b. Should a situation arise where the unintentional ingress of water is discovered or caused by the regular operation of the ITV, the company and/or vessel's Master should initiate procedures to effect, at the very least, temporary repairs to the satisfaction of the local OCMI. A reasonable timeframe should be established, in consult with the company representative(s), for the vessel to operate before deciding on a deadline for permanent repairs. There may exist circumstances in which temporary repairs cannot be made and therefore permanent repairs may be necessary; ultimately permanent repairs are the desired end state.
c. A seal leak on a manhole cover or the presence of condensation in a void does not constitute an unintentional introduction of water.
d. Situations where there is an internal unintentional introduction of water into a void, such as water leaking from a pipe or drain that is transiting through a space or a hole between two watertight spaces, will be handled on a case by case basis.

Visual Distress Signals

1. ISSUE. Very few, if any, inland towing vessels carry visual distress signals, however it is a new requirement in Subchapter M.

2. REFERENCES.
   (a) Navigation Rules & Regulations Handbook – Rule 37
   (b) COMDTINST M16672.2 (series)
   (c) 46 CFR 141.375
   (d) D8-TVIFN 18-1

DISCUSSION. There is no existing requirement in Part 24 (Subchapter C) which was promulgated in 1965 for UTV's to carry distress signals. There is marginal benefit for distress signals in the benign Western River's operating environment for the following reasons:

- Most modern radios have a DSC button for instantaneous distress broadcasting. Most towing vessels are required to have at least two installed radios and one hand held radio. (46 CFR 140.715)
- There is an exemption from the vessels to carry survival craft within one mile from shore which essentially encompasses the Western Rivers. A scenario where the crew is assembled in a survival craft relying solely on visual distress signals for assistance would be extremely rare.
- Historically, towing vessels have catastrophically and rapidly sank (down streaming) which would leave no time to activate flares
- Most flooding/fire incidents that would provide enough time to activate flares would give the vessel time to intentionally ground or push into shore, thus no need for visual distress signals.
- If a towing vessel is flooding or on fire the vessel's procedures typically have them egress the vessel for safety if they couldn't ground the tow.
- Discharging pyro near or on flammable and combustible cargo barges could be problematic.
- Most crewmembers have private cell phones.
- Most on watch crewman carry portable hand held VHF radios in addition to the required vessel radios.
- Towing vessels are now easily tracked by the CG, AIS, tracking software and even cell phone apps.
- Ref (d) allows operational commanders the flexibility to defer enforcement of appropriate Subchapter "M" requirements until further enterprise-wide guidance is promulgated specifically addressing Visual Distress Signals.
- Potential hazards (flares and red flags) coupled with the cost to acquire maintain flares and crew training outweighs any gains by their extremely limited use.
- Even in the most remote areas, towing vessels are normally within yards of either land or shallow water were they can beach the vessel if necessary to get ashore or await assistance.
- There is numerous feedback in the "M" preamble and the TVCOE FAQ section from industry attempting to clarify the need for the requirement and industry's resistance to the regulation.
- There is no documented evidence illustrating a scenario where flares used on the Western Rivers for a towing vessel in distress that resulted in the saving of the vessel or life.

3. ACTION. Marine Inspectors shall defer enforcement per reference (d) and document non-compliance via the issuance of a CG-835V worklist item. The due date shall be prior to recertification (5 years).

Navigation Lights, Shapes, and Sound Signals

1. ISSUE. There are regulatory inconsistencies on certain classes of vessels operating on rivers and lakes, bays, and sounds with regard to the requirements for visual distress signals.

2. REFERENCES.
   (a) Navigation Rules & Regulations Handbook – Part C
   (b) COMDTINST M16672.2 (series)
   (c) 46 CFR 140.720
   (d) D8-TVIFN 18-1

3. BACKGROUND. Prior to the unified rules (1972 international and 1980 inland) aka. Navigational Rules (COMDTINST M16672.2D) there was a patchwork of rules that covered different areas.

   - International Rules
   - Inland Rules
   - Rules of the Road Western Rivers (CG-184) (Aug 1972 and 1959)
   - Pilot Rules for the Western Rivers (1955 and 1957)
   - Motor Boat Safety Act of 1940 (<65')

   The Rules of the Road Western Rivers and Pilot Rules for the Western Rivers were the primary governing rules north of the Huey P. Long Bridge in the river system prior to the unified rules. Neither of these rules described the use of Not under Command or Aground lights (hence forth called specialty lights) or day shapes except for unique use vessels (dredge, pipe laying, laying cable, towing astern, towing a partially submerged object…). The rules did mandate an anchor light but not the additional day shape. Only the old Inland Rules (not applicable to Western Rivers) discussed vessels aground and not-under command lights/shapes.

   The requirements for a normal inland towing vessel (pushing ahead) to carry these specialty lights and shapes (in addition to the unique vessels as previously noted above) did not come in to effect until the Unified Rules were published in 1972 (international) and 1980 (inland).

   Due to the vast array of conflicting rules and the fact that even after the unified rules 1980 (inland) were in effect, the requirements for vessel to display these specialty lights and day shapes were not enforced on either inland towing vessels or smaller passenger vessels operating exclusively on the Western Rivers.

4. DISCUSSION. The display of navigation lights, shapes and sound signals were not a focus of the Towing Vessel Bridging Program and were not addressed in the PQS, UTV guidebook nor the check off sheets used for UTV's bridging examinations.

   Many towing vessels do not have the mast area to add these additional specialty lights and met the technical spacing of the lights as per Annex I, Navigational Rules (COMDTINST M16672.2) without either lengthening the mast (creating potential air draft issues) or installing an additional mast (potential radar interferences issues). This would require both structural and electrical modifications at a substantial cost for equipment that would rarely and quite possibly never be utilized.

If the carriage and display of these specialty lights and day shapes was not a prior CG enforcement issue in the Western Rivers, when visual navigation and visual communication was paramount, then it should not become an enforcement issue in modern times with enhanced radio communications, tracking software, navigational plotters, GIS, AIS, cell phones, etc.

5. ACTION. Marine Inspectors shall defer enforcement per reference (d) and document non-compliance via the issuance of a CG-835V worklist item. The due date shall be prior to recertification (5 years).

Excess Firefighting Equipment

1. ISSUE. Certain towing vessels carry excess firefighting equipment that may not comply with the applicable regulation; the Coast Guard has been asked if this equipment should be removed, left as is or needs to comply with the applicable standard.

2. REFERENCES.
   (a) 46 CFR142.215 - Approved equipment.
   (b) 46 CFR 25.30-15 - Fixed fire extinguishing systems.
   (c) CG-543 Policy Letter 10-06 – Carriage of Lifesaving and Firefighting Equipment On Board Uninspected Towing Vessels in Excess of Subchapter C Requirements

3. BACKGROUND. Ref (a) allows "new installations of fire-extinguishing and fire-detection equipment of a type not required, or in excess of that required by this part, to be permitted if Coast Guard approved, or if accepted by the local OCMI, a TPO, or a Nationally Recognized Testing Laboratory (NRTL). Existing equipment and installations not meeting the applicable requirements of this part may be continued in service so long as they are in good condition and accepted by the local OCMI or TPO."

   Ref (b) states "(a) When a fixed fire extinguishing system is installed, it must be a type approved or accepted by the Commandant (CG-ENG-4) or the Commanding Officer, U.S. Coast Guard Marine Safety Center; and (b) If the system is a carbon-dioxide type, then it must be designed and installed in accordance with subpart 76.15 of part 76 of subchapter H (Passenger Vessels) of this chapter."

4. DISCUSSION. Ref (c) does a good job addressing this issue but does not incorporate changes in Subchapter M. For example, the requirement for the carbon-dioxide type system to be installed in accordance with Subchapter H is removed. Questions have been asked what standard the Coast Guard will use for accepting existing systems that are in excess of the requirement. (Example: the towing vessels has a B-V and a CO2 system.)

   Ref (c) states that the excess CO2 system will have to be listed by an independent testing laboratory and be designed, installed, tested and maintained in accordance with the manufacturer's recommendations to assure it is capable of working when required.

   In cases where no manufacturer's recommendations are available the installation will need to be satisfactorily tested to ensure the installation is not more of a hazard than excess protection.

6. ACTION. Marine Inspectors will verify that excess firefighting systems are in good condition, installed in accordance with good marine practice and require that the crew can demonstrate familiarization with the system using ref (c) as a guide.

Fire Control Panels

1. ISSUE. Ref (a-b) require the fire control panel to be at the operating station by many inland towing vessels have the fire control panel in the engine room or elsewhere on the vessel. The issue is wide spread and cost prohibitive for industry to comply.

2. REFERENCES.
   (a) Sub C: 46 CFR 27.203 - "What are the requirements for fire detection on towing vessels?"
   (b) Sub M: 46 CFR 142.330 – "Fire-detection system requirements"
   (c) 81 FR 40003
   (d) 69 FR 34064
   (e) CG-CVC Policy Letter 17-01 USE OF THE UNINSPECTED TOWING VESSEL (UTV) DECAL TO MEET CERTAIN REQUIREMENTS REGARDING ISSUANCE OF THE INITIAL COI UNDER SUBCHAPTER M
   (f) D8-TVIFN 18-1
   (g) Sector UMR White Paper on Fire Control Panels

3. BACKGROUND. Ref (g) outlines Sector UMR's position on fire control panels on inland towing vessels.

4. DISCUSSION. Ref (f) directs operators to seek an equivalency through their TPO or CG-ENG for fire control panels not installed in accordance with regulations to assess whether the arrangement is an equivalency or it is simply not meeting the regulation.

   Coastal vessels typically conduct fire monitoring and detection from the bridge or the pilot house, where inland towing vessel have assigned this responsibility to the engineering chief in many cases. It is more convenient for the fire control panel to be in an engineering space because that is where the engineering chief is, thereby relieving the master of fire monitoring responsibilities.

5. ACTION. Marine Inspectors shall defer enforcement per reference (f) and document non-compliance via the issuance of a CG-835V worklist item. The CG-835V shall require compliance with the applicable requirement or submission of an equivalency request prior to re-issuance of a COI. Equivalency requests for Coast Guard option vessels are submitted to CG-ENG via the cognizant OCMI. Refs (a-g) shall be used as guidance.

Objective Evidence

1. ISSUE. Owners or managing operators of towing vessels selecting the TSMS option must provide objective evidence that the vessel complies with Subchapter M prior to the issuance of the initial COI. The requirements for objective evidence are listed in Subchapter M, however the scope is left to the OCMI in many cases.

2. REFERENCES.
   (a) 46 CFR 136.110 – Definitions
   (b) 46 CFR 136.210 – Obtaining or renewing a COI
   (c) 46 CFR 137.202 – Documenting compliance for the TSMS option
   (d) 46 CFR Part 138 – Towing Safety Management Systems (TSMS)
   (e) CG-CVC Policy Letter 17-02 - USE OF EXISTING SAFETY MANAGEMENT SYSTEMS TO OBTAIN AN INITIAL CERTIFICATE OF INSPECTION UNDER 46 CFR SUBCHAPTER M
   (f) TVNCOE FAQ's #136-011

3. BACKGROUND. TPO's have begun to inquire what each OCMI will accept at objective evidence for TSMS option vessels and this work instruction is intended to provide guidance and clarity on what Sector UMR will accept as objective evidence when applying for or renewing a COI.

   Ref (a) defines key terms such as "objective evidence", "audit" and "survey" that shall be used in review for issuance of a COI.

   Ref (b) outlines items the owner or managing operator of TSMS option vessels must submit to the cognizant OCMI to obtain or a renew a COI.

   Ref (c) outlines how owners or managing operators of TSMS option vessels must document compliance of required inspections and surveys for certification, both for an initial COI and for a renewal. This subpart includes instruction on how to conduct a survey, the scope of the survey to include dry-dock and internal structure exam intervals and verification that the vessel is enrolled in a TSMS that complies w/ ref (d).

   Ref (e) allows the Coast Guard to issue an initial COI to a TSMS vessel after receiving objective evidence that the owner or managing operator is in compliance with the TSMS and the vessel meets the applicable stability, structures, and essential system requirements.

   Ref (f) gives examples of what should be considered as "objective evidence".

4. DISCUSSION. Accepting objective evidence in lieu of conducting a physical inspection for a COI represents a culture change in the Inspections Program. Marine Inspectors may accept that the vessel owner, managing operator or TPO have verified vessel compliance with subchapter M without possibly verifying the compliance themselves. Marine Inspectors are reminded that the TPO is accepting much of the responsibility for vessel safety in lieu of the Coast Guard and our guidance is to assume they are doing their due diligence until proven otherwise as human capital resources do not allow on-site verification in every instance. Inspectors shall evaluate risk on a case-by-case basis when determining whether on-site attendance is necessary or if they should focus on other matters that pose a higher risk.

5. ACTION. Refs (a-f) shall be used in determining whether the objective evidence is sufficient for issuance of an initial COI or a COI renewal. Objective evidence submission shall be submitted in an orderly and professional manner or returned to the submitter for revision. At a minimum, the requirements listed in refs (b-d) shall be met to the satisfaction of the OCMI.

Marine Casualty Response and Writing Deficiencies for TSMS Vessels

1. ISSUE. This clarifies Sector UMR's policy on writing deficiencies for TSMS vessels after the Coast Guard has attended in response to a marine casualty.

2. REFERENCES.
   (a) 46 CFR Part 4
   (b) 46 CFR 140.900
   (c) NVIC 01-15 – Marine Casualty Reporting Procedures Guide with Associated Standard Interpretations.
   (d) Eighth District Subchapter "M" Implementation – Commander's Intent
   (e) CVC Policy Letter 17-10

3. BACKGROUND. As of July 18, 2018, Towing Vessels will become Inspected Vessels under 46 CFR Subchapter "M". Questions have been asked as to whether it changes the response posture for towing vessels involved in marine casualties and whether it should differ between CG option and TSMS vessels.

4. DISCUSSION. Eighth District Commander's Intent states "the overall risk profile for towing vessels will not dramatically change." With regards to companies using the TSMS option and TPOs, it further states "operation commanders…shall leverage Coast Guard approved third party organizations (TPOs) to the maximum extent possible. During the implementation phase of Sub M, TPO oversight should be most rigorous in response to an incident or violation, at which time the TPOs should be held accountable."

   For the purposes of this work instruction, it is important to understand a few terms that were clarified in NVIC 01-15:

   - **Loss** – Interpreted as an occurrence where an applicable system or component unexpectedly fails, shuts downs, or is otherwise rendered unable to perform its specified function, no matter its duration, even if momentary. It also includes any situation where an applicable system or component is required to be intentionally shut down as a casualty control measure. The unavailability of an applicable system or component due to scheduled, preventative maintenance is not considered a loss of that system or component, as it is a planned, intentional act and not based on an unexpected occurrence. Additionally, taking engines out of operation that are otherwise fully operational for fuel cost savings purposes is not considered a loss under this criteria.

   - **Reduces the maneuverability of the vessel** – Interpreted as an occurrence that renders a vessel incapable of maintaining safe speed and steerage for the prevailing or anticipated conditions (e.g., weather, other vessel traffic, tidal influences) and/or adversely impacts specific vessel operations (e.g., mooring, towing, anchoring, and dynamic positioning).

   - **Fitness for service or route** – Defined as the condition of the vessel and its equipment being such that it meets or exceeds minimum safety standards and is safe and reliable to operate in one or more particular types of service and in the locations in which it will be used. For vessels subject to inspection under 46 U.S.C. Chapter 33, fitness for service and route are directly

related to the "Route Permitted and Conditions of Operation" provided by the vessel's Certificate of Inspection (COI). Should an occurrence result in the material condition on the vessel becoming such that it requires the temporary or permanent reduction or restriction in the vessel's operating parameters or route as compared to what it is permitted in its COI, then the occurrence is considered to have met this criterion.

It is important to note, a reportable marine casualty involves both a loss as well as a reduction in maneuverability. For example, a triple-screw vessel loses its center engine but is still able to effect safe steerage and navigate to the bank to await a service technician. In this instance, this would not be considered a reportable marine casualty because the vessel was still capable of maintaining safe speed and steerage under the prevailing conditions. Despite this instance not being a reportable marine casualty, the loss of this center engine is an inspections issue as the vessel is certificated as having three main engines and must therefore be reported for possible marine inspector follow-up action.

When marine casualties are reported, the Captain of the Port (COTP) must determine if the incident is in fact a "reportable marine casualty" as defined by 46 CFR 4.05-1 and if it poses an immediate risk to people, the vessel, the environment, or the port. While the response posture to towing vessels may not necessarily change after the implementation of Sub M, follow-up action with companies and/or TPOs after a marine casualty has occurred may be necessary.

5. ACTION. The marine casualty reporting requirements in 46 CFR Part 4 already apply to Uninspected Towing Vessels and these requirements will not change once they are subject to inspection. Responses to marine casualties involving Inspected Towing Vessels in Sector Upper Mississippi River's AOR should occur on a case-by-case basis after considering all relevant information. The following is a general list of factors (not all inclusive) to consider when deciding on an immediate response, a delayed response, or no response necessary:

- Does the casualty pose an immediate risk to people, the vessel, the environment, or the port?
- What environmental conditions pose a risk to responders? Is there value added by an immediate response (risk vs. reward)? Is the vessel a TSMS option vessel? If so, what does the TSMS state regarding the type of incident, failure, damage, etc.? Has the TPO been notified and what is their response?
- Does it affect the maneuverability, seaworthiness or routes and conditions of the vessel?
- What actions are the vessel personnel or company taking to mitigate risk?
- What is the company's plan? Repair on scene? Temporary or Permanent Repairs? Taking to dry-dock?
- Is it a CG-option vessel? Does the incident require the issuance of CG-835V or Permit to Proceed?

Regardless of whether an on-scene response is conducted, a marine inspector will follow up with the towing vessel company or TPO following the incident to determine actionable items outlined CG-CVC Policy Letter 17-10 are considered and appropriately addressed.

COI Routes Permitted and Conditions of Operation

1. ISSUE. No routes permitted or conditions of operation exist for towing vessels.

2. REFERENCES.
   (a) D8 MMS Work Instruction – Inspection, casework and review of the towing vessel safety management system's compliance option for subchapter M.

3. BACKGROUND. Since towing vessels have not been certificated in the past, COI's will need to create routes permitted and conditions of operation limitations that reflect their operating environment. Certain general conditions of operation can be utilized from what is commonly seen from other inspected vessel types, however the distinct nature of inland towing must be taken into account.

4. DISCUSSION. Many towing vessels, specifically line haul vessels, are transient in nature and operate in multiple Marine Inspection zones. These vessels are not subject to new-to-zone inspections similar to other inspected vessels, even though their operations routinely take them from warm water to cold, from lakes bays and sounds to rivers, etc. In the case of these transient vessels, it may be required to issue COI's with Routes Permitted and Conditions of Operation based on them operating in other Marine Inspection zones.

   Efforts should be made to limit the "Routes Permitted & Conditions of Operation" section of the COI to verbiage that is not already captured elsewhere. In other words, do not re-write the CFR's or add superfluous requirements; it is assumed that all applicable rules and regulations are understood and complied with via issuance of the COI. Verbiage should instead focus on requirements specific to this Marine Inspection zone such as local waivers or exceptions. Additionally COI's are written so that owners, operators, crew and passengers can understand them so use plain language.

5. ACTION. The Routes Permitted and Conditions of Operation contained in ref (a) and below shall be used for towing vessels.

   SUMR may issue routes other than RIVERS so long as the vessel meets all the material and operational requirements for that increased route IAW 46 CFR 136.212(b), 46 CFR 136.230, and 46 CFR 141.200(c).

SITUATION	ENDORSEMENT
Skiff Substituted for Rigid or Inflatable Survival Craft on L,B,S or LC Route	Also, not more than 3 miles from shore.
No survival Craft on Rivers Route <1nm from Shore	Also, not more than 1 mile from shore.

Less than 26' pushing and/or pulling oil/hazmat barges	This vessel engages in the pushing, pulling or hauling of a barge carrying oil or hazardous material in bulk and is required to comply with 46 CFR Subchapter "M".
Keel Laid or Major Conversion on or after 20 Jul 2017	Vessel is considered a "New Towing Vessel" for the purposes of Subchapter M applicability.
TSMS Vessel with ***Initial*** COI Issued IAW CVC Pol Ltr 17-01	This COI is issued in consideration of the provisions contained in 46 U.S.C. 3103 and 46 CFR Part 139, on the basis of reports, documents and records provided by *(insert name of TPO or TPOs)*, a Third Party Organization, and the vessel's possession of a valid Coast Guard Decal.
Utilizes TSMS Option for Sub M Compliance	This vessel operates under a Towing Safety Management System (TSMS) to ensure compliance with Subchapter M. This Certificate of Inspection (COI) is only valid when accompanied by a valid Towing Safety Management System (TSMS) certificate.
Utilizes ISM Option for Sub M Compliance	This vessel operates under a Safety Management System (SMS) fully compliant with the International Safety Management (ISM) Code to ensure compliance with Subchapter M. This Certificate of Inspection is only valid when accompanied by a valid Document of Compliance (DOC) and a valid Safety Management Certificate (SMC).
Fresh Water Endorsement for Hull/Dry-dock Inspections	This vessel has been granted a fresh water service examination interval in accordance with 46 CFR 137.300(a)(2). If this vessel is operated in salt water more than 6 months in any 12 month period, the vessel must be inspected using salt water intervals per 46 CFR 137.300(a)(1) and the cognizant OCMI must be notified in writing as soon as this change in status occurs.
Excepted Vessel *(Limited Geographic Area)*	This vessel is considered an "Excepted Vessel" when operating within a Limited Geographic Area (LGA) in the Sector Upper Mississippi River Captain of the Port Zone. When operating within the LGA, vessel is not required to comply with the requirements contained in (*142.315-300, 143.235, 143.265, Subpart C of 143*). ***(Select only those that apply)***
Excepted Vessel *(Harbor Assist)*	This vessel is a Harbor Assist Vessel and is considered an "Excepted Vessel." Vessel is not required to comply with the requirements contained in (*142.315-300, 143.235, 143.265, Subpart C of 143*). ***(Select only those that apply)***
Excepted Vessel *(Emergency Response or Pollution Response)*	This vessel is considered an "Excepted Vessel" when engaged in *(Emergency Response or Pollution Response)*. Vessel is not required to comply with the requirements contained in (*142.315-300, 143.235, 143.265, Subpart C of 143*). ***(Select only those that apply)***
Special Consideration	After special consideration, this vessel is authorized a departure from the requirements contained in 46 CFR *(XXX.XXX)* in accordance with Sector Upper Mississippi River OCMI letter of (MMM DD, YYYY)

International Voyage 150 GT built before 21 Jul 68 or 79' or more, built after 21 Jul 68	Vessel is subject to the load line requirements contained in Subchapter E of this chapter.
Domestic Voyage 150 GT built before 1 Jan 86 or 79' or more, built after 1 Jan 86	Vessel is subject to the load line requirements contained in Subchapter E of this chapter.
COI issued before 22 Jul 19 & Health & Safety Plan not implemented	Vessel is required to implement a Health and Safety Plan complying with the requirements of 46 CFR 140 subpart E no later than 22 July 2019.
Vessel Stability for Vessels with trim & stability book, stability letter or loadline certificate	Prior to getting underway, the Master or Officer in Charge of a Navigational Watch shall ensure that the vessel is in compliance with the stability requirements of the (*trim & stability book, stability letter or load line certificate*).
Vessel operating below 32' North and above 32' South without Immersion Suits	Immersion Suits are not required when operating in the Atlantic Ocean between 32 degrees North latitude and 32 degrees South latitude.
No survival Craft on Rivers Route <1nm from Shore	Vessel is required to carry a 406 MHZ EPIRB meeting 47 CFR Part 80 when not carrying a survival craft in accordance with 46 CFR 141.305.
Vessel fitted with a flammable and/or combustible liquid storage locker or cabinet	1 B-II or 20-B portable fire extinguisher, in addition to those required by table 142.230(d)(2), must be located near the flammable storage (*locker/cabinet*).
Additional fire extinguishers per 1,000 brake horsepower to comply with 142.230(d)(2)(i)	B-II or 20-B portable fire extinguisher(s), in addition to those required by table 142.230(d)(2), must be located in the engine room.

Vessel greater than 79', on Oceans or Coastwise Route with No Installed Fixed Fire Fighting System	Vessel is required to carry two (2) fire fighter outfits and two (2) self-contained breathing apparatus (SCBA) in accordance with 46 CFR 142.26.
No Pilothouse Alerter at 1st COI Issuance (Existing Vessel)	Vessel is not required to meet the pilothouse alerter system requirements contained in 46 CFR 143.450 until (*5 years after COI issuance*).
Towing Machinery Requirements not met at 1st COI issuance (Existing Vessel)	Vessel is not required to meet the towing machinery requirements contained in 46 CFR 143.460 until (*5 years after COI issuance*).
MMC requirements for towing vessels conducting fuel transfers. (CG-MMC Policy Letter 01-17)	Vessels conducting midstream fuel transfers require the person in charge to hold a "tankerman PIC" endorsement or "tankerman PIC restricted to fuel transfers on towing vessels" endorsement.
For Fleet Vessels which utilize 12 hour shifts with one crew at a time	An alternate crew or alternate Master shall be provided when the vessel is away from the dock for a period exceeding twelve (12) hours in any twenty-four (24) hour period.

Limited Geographic Areas

1. ISSUE. Subchapter M excepts towing vessels from certain requirements if they operate in a limited geographic area. Limited geographic areas are poorly defined as a "single port or harbor" in the regulations and not clearly defined for inland waters.

2. REFERENCES.
   (a) 46 CFR 136.110 – Definitions
   (b) 46 CFR 136.230 – Routes Permitted

3. BACKGROUND. Declaration of a Limited Geographic Area (LGA) by the Captain of the Port (COTP) is a pathway for towing vessels to receive relief from lifesaving, firefighting, electrical, and machinery regulatory requirements. Identical relief is also available to towing vessels through designation as a response vessel to either emergency or pollution events, designation as a harbor assist-vessel, or based on consideration of the individual requirements in light of the operating parameters of the vessel. In each case the vessel would meet the definition of an "excepted vessel".

   Restricting the operation of a towing vessel to an LGA may provide relief from certain Subchapter C and Subchapter M requirements. Combined, there are a total of 16 individual requirements as well as all requirements contained in Subpart C of 46 CFR 143 (new towing vessel machinery and electrical) that have this conditional provision.

   Letters issued previously to local companies have already designated certain vessels as operating in limited geographic areas.

   On July 20, 2018 most towing vessels in Sector UMR's area of responsibility will no longer be regulated under 46 CFR Subchapter C (uninspected vessels). COTP letters citing Subchapter C regulations will no longer provide relief to firefighting equipment requirements. Vessels will also be required to comply with all of Subchapter M, however, vessels may not receive a COI until as late as July 2022.

   Regulations in Subchapter M eliminate some of the relief available to uninspected vessels under Subchapter C and require operating restrictions and limitations to be stated on the vessel's Certificate of Inspection.

   Special Note: The OCMI provides designations of limited areas for the purposes of providing relief from credentialing requirements (46 CFR 11.463). This policy does not address nor pertain to local OCMI designated limited areas for the purpose of issuing restricted merchant mariner credentials.

4. DISCUSSION. Subchapter M provides for relief from certain regulatory requirements when a vessel is designated as an excepted vessel, which shall be documented on the COI in the "Conditions of Operation".

   Subchapter M allows the local COTP to determine what constitutes a LGA and the meaning of "a local area" with little additional regulatory or policy restrictions. COTPs could designate their entire AOR as an LGA and they would not be in violation of the letter of the regulations, however this would not meet the spirit of the regulations. Parameters for defining LGAs vary depending on many factors

including location of additional resources, volume of industry, and service of the specific vessel. LGA designations should not be based on a specific set of parameters which could be too restrictive in one set of circumstances and too relaxed in another. Each request should be evaluated on its own merits. Excepted vessel designations may be revisited at any time based on cause, future regulatory changes, or additionally promulgated Coast Guard policy.

Certain vessels have been previously issued LGA determination letters by the Captain of the Port exempting them from certain requirements under Subchapter C. Those letters remain effective until COI issuance.

5. ACTION. Requests for vessels to be excepted from certain requirements shall be made in writing to the OCMI and reviewed on a case-by-case basis. If approved, the endorsement from this Instruction shall be included on the COI.

   Use the following criteria to evaluate the request:

   a. The requirement which is sought relief and the purpose of that requirement,

   b. Waterway characteristics,

   c. Additional resources in area,

   d. Additional industry activity in area, and,

   e. Service of the vessel.

   Excepted vessel status requests based on new LGA determinations require the following information for each item:

All	Geographic boundaries of LGA requested
Marine Radar	Commitment to: (a) operate only during daylight hours and in good visibility, or, (b) operate within a very limited geographic area, and, whether or not area is in the navigational channel
LNM	Provide: (a) alternative means to receive info and provide to crew, or, (b) reasons limited benefit of having ready access to LNMs

120 B:C Extinguishers Fixed FFS Fire Pump Fire Main Fire Hose Fire Detection General Alarm Internal Comms. Fuel Shutoff Fuel Piping New Vessel ➢ Electrical ➢ Machinery	Provide: (a) alternative means to achieve similar level of safety, or, (b) Description of how LGA limits risks associated with a particular requirement

Approvals should not be so broad that they do not meet the definition of "a single port or harbor" (ex: the ILR between St. Louis and Peoria) but they should not be so restrictive that every change in the vessels operation requires a new approval. (ex: MM 173.3 to MM 175.3 on the UMR) A balance between meeting the intent of the rule and excess administrative work is desired.

Use the following chart to determine applicability for exception via an LGA:

- Green items can be excepted for vessels operating in an LGA.
- Gray items can be exempted for *uninspected* towing vessels operating in an LGA, however, will no longer be excepted for *inspected* towing vessels operating in an LGA.

Cite(s)	Item	Description
46 CFR 140.710 33 CFR 164.72(a)(1) 33 CFR 164.01(b)(1-4) 46 CFR 10.107	Marine Radar	-Used solely within a fleeting area or commercial facility or restricted service, such as making up or breaking up larger tows -Assistance Towing -Pollution Response -Case-by-case as determined by the COTP
46 CFR 141.375(d)	Visual Distress Signals	Vessels operating in an LGA and on short runs limited to approximately 30 minutes away from the dock are **not** required to carry visual distress signals.
46 CFR 141.305	Survival Craft	-Vessels operating in an LGA are **not** required to carry an Inflatable Buoyant Apparatus unless required by the cognizant OCMI or TPO. –Survival Craft are **not** required for vessels operating within 1 mile of shore.
46 CFR 140.725(b) 33 CFR 164.72(a)(2) 33 CFR 164.01(b)(1-4)	Searchlight	33 CFR 164.01(b)(1-4) provides relief from searchlights for self-propelled vessels operating in LGAs, however Subchapter M requires it.

46 CFR 140.715 33 CFR 164.72(a)(3) 33 CFR 164.01(b)(1-4)	VHF-FM Radio	33 CFR 164.01(b)(1-4) provides relief from VHF-FM radio for self-propelled vessels operating in LGAs, however Subchapter M requires it.
46 CFR 140.725 33 CFR 164.72(a)(4) 33 CFR 164.01(b)(1-4)	Magnetic Compass	33 CFR 164.01(b)(1-4) provides relief from a magnetic compass for self-propelled vessels operating in LGAs, however Subchapter M requires it.
46 CFR 140.705 33 CFR 164.72(b)(1) 33 CFR 164.01(b)(1-4)	Charts & Nautical Publications	33 CFR 164.01(b)(1-4) provides relief from certain charts and nautical publications for self-propelled vessels operating in LGAs, however Subchapter M requires it.

When operators desire to operate their excepted vessel outside the parameters of their vessel's COI, they will be required to request an excursion permit in accordance with 46 CFR 136.245. A pattern of repeated requests for excursions permits is sufficient cause for the OCMI to consider readdressing a vessel's status as an excepted vessel.