

October 14, 2024

Rear Admiral Wayne R. Arquin  
Assistant Commandant for Prevention Policy  
U. S. Coast Guard  
2703 Martin Luther King Jr. Ave SE, Stop 7509  
Washington, DC 20593-7509

Subj: National Towing Safety Advisory Committee Final Report – Task 22-01 –  
*Recommendations to the Coast Guard for Rulemaking Improvements to Subchapter M.*

Dear Admiral Arquin,

I am writing today to forward the final report and recommendations of the National Towing Safety Advisory Committee (NTSAC) for Task 22-01 – *Recommendations to the Coast Guard for Rulemaking Improvements to Subchapter M.* At the Fall 2024 NSTAC meeting held in Portland, Maine on September 25, 2024, the Committee unanimously approved the enclosed report and recommendations.

The Subcommittee Chair, Mr. Brian Khey and Co-Chair Mr. Mark Sawyer worked with the subcommittee members to provide detailed recommendations for the improvement of Subchapter M for consideration by the U. S. Coast Guard.

The members of the National Towing Safety Advisory Committee greatly appreciate the support and cooperation of the U. S. Coast Guard participating and assisting the subcommittee with the Task. We are grateful for the opportunity to provide the Coast Guard the advice and recommendations from the Towing Industry and Public as the Coast Guard conducts its regulatory oversight. Should you have any questions regarding the final report or recommendations, please don't hesitate to call or email.

Sincerely,



Steve Huttman  
Chairman, National Towing Safety Advisory Committee

Encl: (1) Final Report – NTSAC Task 22-01 September 25, 2024

cc: Mr. Brian Khey – Chair, Task 22-01  
Mr. Mark Sawyer – Co-Chair, Task 22-01  
Mr. Matthew Layman – DFO, National Towing Safety Advisory Committee  
Ms. Laura Wilcox – Vice Chair, National Towing Safety Advisory Committee



**NATIONAL TOWING SAFETY ADVISORY COMMITTEE  
(NTSAC)**

**TASK 22-01**

**Report on Recommendations to the Coast Guard for  
Rulemaking Improvements to Subchapter M.**

(Short Title – Subchapter M Improvements)

**Final Report and Recommendations**

**NATIONAL TOWING SAFETY ADVISORY COMMITTEE**

September 25, 2024

To: National Towing Safety Advisory Committee

From: Brian Khey, Chair  
Mark Sawyer, Co-Chair

Re: NTSAC Task 22-01 - *“Report of Recommendations to the Coast Guard for Rulemaking Improvements to Subchapter M.”*

At the Fall 2022 the National Towing Safety Advisory Committee meeting a subcommittee was tasked providing recommendations to improve subchapter M and report back to the NTSAC committee with several recommendations and suggestions for the U. S. Coast Guard.

Brian Khey was nominated for Chairman and Mark Sawyer was nominated as Co-Chair of this Subcommittee. Both nominations were approved by NTSAC members without dissent.

Respectfully Submitted,

Brian Khey,  
NTSAC Task 22-01 Subcommittee Chair

Enclosure: (1) Task Statement 22-01  
(2) Regulatory/Non-regulatory Recommendation Matrix  
(3) Rear Admiral Korn’s letter to NTSAC

## **BACKGROUND AND APPROACH:**

Per 46 CFR 136.46, on July 20th, 2022, the majority of the towing fleet complied and received a valid Certificate of Compliance (COI). Since subchapter M was promulgated, the U. S. Coast Guard, the Third-Party Organizations (TPOs), and the Towing Industry have learned a significant amount. Several lessons learned and areas of improvement to the regulatory scheme have been identified. Several of these regulatory items noted led to ambiguity, which continues to make compliance more onerous and challenging for towing vessel operators.

The subcommittee was convened and aggregated both regulatory and non-regulatory lessons learned and areas of improvement. These recommendations are listed in a recommendation matrix that also seeks to prioritize the recommendations to allow the Coast Guard to focus on recommendations that are impactful.

## **PLAN OF ACTION (POA)**

1. Collect lessons learned and areas of improvement.
2. Prioritize and rank order the recommendations.
3. Present findings and recommendations to NTSAC Members and solicit feedback.
4. Submit Final Report no later than September 2024.

## **ACTION**

1. Task Chair Brian Khey was nominated by NTSAC.
2. Mark Sawyer appointed Co-Chair.
3. Subcommittee members were invited to provide lessons learned and areas of improvement.
4. Initial information was shared at NTSAC September 2023 conference and validated.
5. Reviewed and analyzed results of survey.
6. Draft report submitted for review to NTSAC at the April 2024 conference.
7. Draft final report submitted for consideration to NTSAC at the September 2024 meeting.

## **TOP RECOMMENDATIONS**

- Establish Tactics, Techniques & Procedures (TTP) for towing vessel inspections. The Coast Guard has implemented TTP for foreign vessel examinations. These TTPs provide inspectors and industry with a blueprint on how to conduct an inspection for the vessel type covered and consolidates various policies and guidance for the inspection into one location. This TTP could help ensure continuity across Coast Guard units as they can all leverage the same playbook as they prepare, execute and document the towing vessel inspection mission.
- Reintroduce and update the use of Frequently Asked Questions (FAQs) section on the Towing Vessel National Center of Expertise's (TVNCOE) website. Several other government agencies, such as Occupational Safety and Health Administration<sup>1</sup>, Bureau of

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<sup>1</sup> See <https://www.osha.gov/faq>

Safety and Environmental Enforcement<sup>2</sup> or Environmental Protection Agency<sup>3</sup> all successfully publish FAQs to help individuals obtain answers to routine questions. The TVNCOE has stopped publishing responses on their website. It is a great source of information that should be kept current.

- Publish appeal determinations that the Coast Guard units intend to use as a policy determination. Coast Guard units encourage industry to appeal certain decisions made by Officers in Charge, Marine Inspection (OCMIs). Often times, this is because they themselves don't know what the policy should be and seek to use the appeal as a means to get a decision from the District office or Coast Guard Headquarters. For example, one Coast Guard unit has issued requirements to install bilge alarms inside void spaces on multiple inland towing vessels. They encouraged companies to appeal it. Some companies choose not to deal with the issue and just install alarms to resolve the 835. Other companies have decided to appeal the finding. The issue is that any decision made only applies to the one vessel that appealed and other vessels still have an outstanding 835s and must either comply with the 835 or appeal themselves. This would also be the case for a single company with the same finding on multiple boats. This is not an efficient way to force the Coast Guard to make a policy decision and often times doesn't result in policy being made. Additionally, other OCMIs outside of the district are writing similar 835s and are unaware of other appeals. If Coast Guard units continue to leverage the appeals process for the purposes of gaining additional guidance, then it becomes incumbent upon the Coast Guard to provide a repository of appeals so other units and companies can reference it once a determination is considered to be clarifying policy.

This recommendation would be equivalent to U.S. Customs and Border Protection's use of Ruling Letters. These letters are published online in the Customs Rulings Online Search System (Cross)<sup>4</sup> and provide the public with a database of rulings on regulations. A system such as this could promote consistency and continuity among Coast Guard units while providing guidance to industry and Third-Party Organizations (TPOs).

- Establish Key Performance Indicators for the towing vessel fleet that show performance and can inform the Coast Guard and industry where the areas of concern are. According to the 2022 Domestic Annual Report The towing vessel fleet is the second largest regulated fleet just behind passenger vessels. For a large fleet size, it is possible to break out the towing fleet and establish core metrics that would show where performance is strong and where performance is weak.

For example, the report doesn't breakout CG option versus TPO performance. It could show if there are any differences and where those differences exist.

Additionally, the report shows that 18% of the fleet was involved in marine casualties but doesn't provide any analysis on the severity of the casualty. 40% of the towing casualties are

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<sup>2</sup> See <https://www.bsee.gov/subject/general-faqs>

<sup>3</sup> See <https://www.epa.gov/aboutepa/frequent-questions-specific-epa-programtopics>

<sup>4</sup> See <https://rulings.cbp.gov/home>

listed as collision, allision or grounding. Are these in channel groundings during low water where the severity and outcome was low?

Detailed analysis of the towing vessel industry would provide better insight for improving safety and operations.

- Remove drydock dates from towing vessels under the TSMS option. A large portion of towing vessels are required to undergo Ship Inspection Report (SIRE) Program inspections. These surveyors look at the COI to ensure dates are correct. This includes drydock dates. Towing vessel operators then must request that COIs be amended. Not all units are willing to amend COIs because it presents an additional administrative burden. By following existing Coast Guard programs such as the Alternate Compliance Program and removing the dates, it could lift a needless regulatory burden from Coast Guard field units and aid operators undergoing these inspections.

## **RECOMMENDATIONS**

This report will break down recommendations into two separate categories, regulatory and non-regulatory recommendations. Non-regulatory recommendations are intended to be action items that the Coast Guard can leverage in lieu of regulatory action. These recommendations can have significant impact to the inspection mission and ultimately assist with promoting continuity within the Coast Guard and across industry. Regulatory recommendations are intended to fill perceived regulatory gaps where a simple policy can't be promulgated. Some of these recommendations can be addressed with a simple scaled down rulemaking.

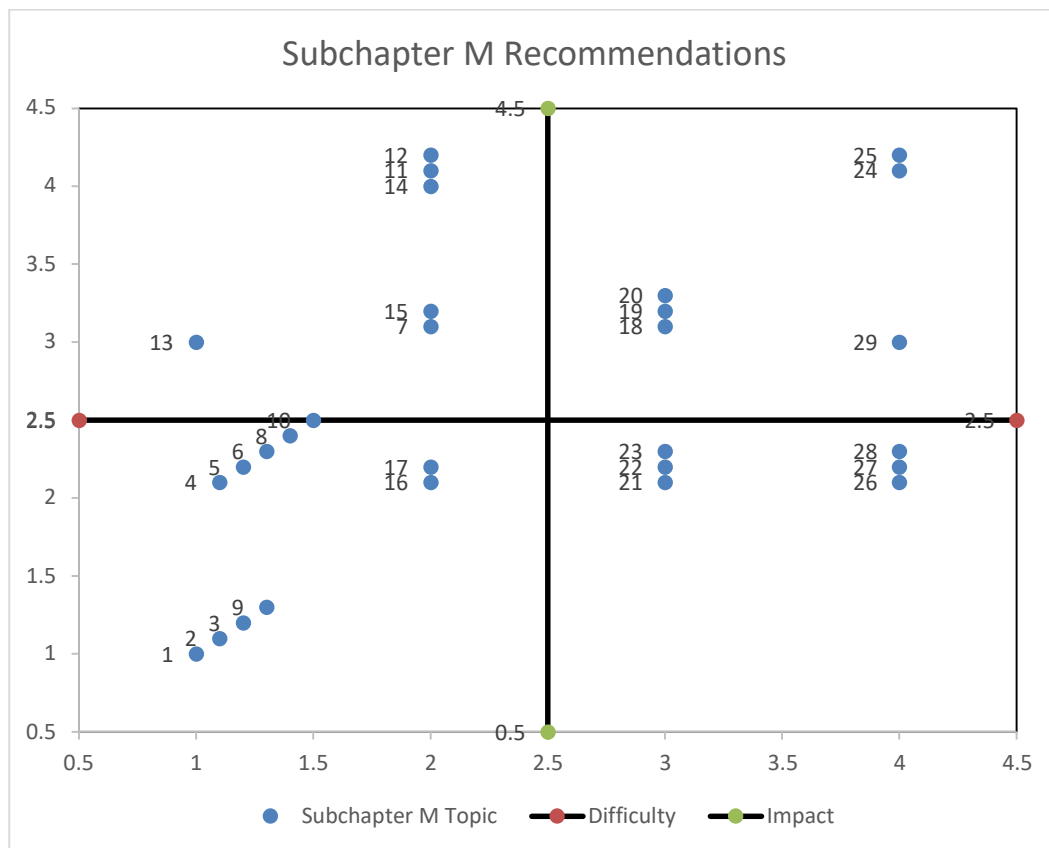
In addition, the NTSAC received a written letter from Rear Admiral Korn recommending that Automatic External Defibrillators (AEDs) be added as a recommendation to the Coast Guard. AEDs were originally part of the proposed rulemaking published in the federal register by the Coast Guard. When the final rule was published, the Coast Guard had received “several comments opposing the requirement in § 140.435(b) and (c) for small crews and low-risk environments”. Ultimately, the Coast Guard decided “due to the comparatively high cost of the carriage (estimated by the Coast Guard at \$2,500 per unit for each vessel), maintenance, and training of AEDs on board towing vessels” to remove the AED requirements proposed in the regulation.

The subcommittee reviewed Rear Admiral Korn's comments along with the findings documented in the federal register when the final rule was published. The subcommittee concluded that AEDs for small carriers may be cost prohibitive and the large carriers have voluntarily added AEDs as recommended by the Coast Guard in the federal register. For those reasons, an AED recommendation was not added to the recommendation matrix.

In the fall of 2023, the NTSAC Committee raised concerns about the requirements for self-contained breathing apparatus. 46 CFR § 142.226 (b) requires two Self-Contained Breathing

Apparatus (SCBA) that are approved by the National Institute for Occupational Safety and Health (NIOSH), under 42 CFR part 84. The issue is that NIOSH approved devices are approved for firefighting activities and non-firefighting activities. An operator must not only look for the NIOSH approval but also must also confirm the SCBA is approved for firefighting. Due to the current lack of detail in the CFR, companies within the towing industry have purchased NIOSH approved SCBA that are not approved for firefighting. NIOSH approved SCBAs rated for non-fire activities are substantially cheaper than ones rated for firefighting and could melt if used in firefighting activities. Purchasing departments only look to see if it is NIOSH approved and will tend to go with the cheaper option unaware that they need to look further to see what the intended service is. This is also not spelled out in Coast Guard regulations and Marine Inspectors may also be unaware that in addition to the NIOSH approval they must look closer to confirm they are NIOSH approved for firefighting activities.

Coast Guard Headquarters made the determination that no action is required because there were no findings or trends of deficiencies, however, if there is no awareness and Marine Inspectors are not checking the equipment, there is no reasonable expectation that there would be any trend. It is recommended that the Coast Guard reconsider publishing a Marine Safety Information Bulletin (MSIB), Frequently Asked Question (FAQ) or undertake a direct to final rulemaking to add the verbiage “rated for fire” to 46 CFR 142.226 (b) so it is clear and doesn’t lead to an incident aboard ship.



## Final Report - NTSAC Task 22-01 – Subchapter M Improvements

Recommendations					
1	Internal Survey DD/ISE notification (30 days)	11	Appeal Process Determinations	21	Distress signals (special consideration)
2	Using external auditor to conduct credit ISE/DD for a company that manages an internal program	12	Fuel Transferring	22	Line throwing appliances
3	Notification of external audit (72 hours)	13	Application of subchapter N	23	Fire Pump Pressure
4	Audit requirement on transitioning TSMS when not initial COI	14	Electronic COIs	24	Fresh/Salt water routes (reset at the next COI) (Tank coating allowance to go to a 1 in 5 drydock cycle)
5	COI renewal timeline, objective evidence	15	Internal Survey DD/ISE notification (30 days)	25	Hot Water Heaters
6	Replacement in kind definition	16	Posting COIs	26	Pressure Vessels (Packaged water boilers AKA donkey boilers)
7	Fire control panels at operation station	17	Line throwing appliances	27	Handrails/bulworks height
8	Bilge Pump testing and valve	18	160 BC Fire Extinguishers	28	Flammable Lockers
9	Flammable Material Storage Locker	19	Require self-contained breathing apparatus to be NFPA approved	29	Bilge Alarms
10	Flammable Material Storage Locker (cont.)	20	Application of subchapter N		

Note: Blue highlighted - Non-Regulatory Recommendations  
 Yellow highlighted - Regulatory Recommendations

The above scatter plot is provided to assist with identifying recommendations that may be easier to achieve and have greater or significant impact to industry. The desire would be for the Coast Guard to focus on high impact/low difficulty topics to better improve the regulatory regime of subchapter M. Enclosure (2) will provide greater detail and outline the concern and recommendation for each listed topic. Please note that some topics may be listed multiple times. That is because there will be more than one recommendation.



**NATIONAL TOWING SAFETY ADVISORY COMMITTEE (NTSAC)  
TASK STATEMENT**

**TASK #22-01**

I. TASK TITLE:

Report on Recommendation to Coast Guard for Rulemaking Improvements to Subchapter M (Short Title: Subchapter M Improvement Recommendations)

II. BACKGROUND:

In accordance with 46 CFR 136.46, on July 20<sup>th</sup>, 2022, 100% of a company's fleet must have a valid Certificate of Inspection (COI). Over the last four years, the U.S. Coast Guard, the Third-Party Organizations, and the Towing Industry have learned a significant amount. During this implementation period, lessons learned and areas of improvement to the regulatory scheme were identified. Several of these regulatory items noted led to ambiguity, which made compliance more onerous and challenging for operators. For the sake of time, there were attempts by the Coast Guard at various levels to address some of these gaps and provide clarification, in lieu of rulemaking. The Coast Guard used policy instruments and National Towing Vessel Center of Expertise FAQs. The Coast Guard policy instruments fully satisfied the need in some circumstances, but in others, a long-term resolution is required for the regulatory shortcoming and to drive consistency across the units. Additionally, the Coast Guard previously tasked TSAC to provide recommendations related to specific Subchapter M improvements and implementation. Many aspects of these reports, to the Coast Guard's credit, led to improvements in rulemaking changes (See Enclosures). However, this initiative was not a comprehensive evaluation of Subchapter M.

Given COI implementation is complete, this provides an ideal opportunity to holistically evaluate the regulations while accounting for lessons learned, existing policy, and previous reports. The analysis will determine which items are choice candidates for resolution through the rulemaking process and other policy documents. Overall, this effort will enhance regulatory compliance without compromising safety.

III. DISCUSSION:

The purpose of this task statement is to capture the lessons learned, identify areas for improvement of the towing vessel regulatory scheme, and make recommendations for a future regulatory rulemaking or creation of other policy documents.

IV. TASKING:

NTSAC will prepare a final report for the U.S. Coast Guard that provides areas for improvement of Subchapter M and recommendations for future rulemaking efforts and policy documents.

V. ESTIMATED TIME TO COMPLETE TASK:

NTSAC will provide a Draft Final Report to the Coast Guard at its fall 2023 meeting.

Enclosure (1) - NTSAC Task 22-01

VI. COAST GUARD TECHNICAL REPRESENTATIVE:

POC: Coast Guard Towing Vessel NCOE, Coast Guard CVC-1

VII. NTSAC CONTACT:

Chair- Brian Khey, [bkhey@marquettettrans.com](mailto:bkhey@marquettettrans.com)

Vice Chair- Mark Sawyer, [msawyer@marathonpetroleum.com](mailto:msawyer@marathonpetroleum.com)

VIII. ENCLOSURES:

- Final Report No. 1 of the TSAC Subcommittee on **Task Statement No. 16-01** - "[Recommendations Regarding the Implementation of 46 Code of Federal Regulations, Subchapter M - Inspection of Towing Vessels \(Short Title: Subchapter M Implementation\).](#)" (Posted: 20 JUN 2018)
- Final Report No. 2 of the TSAC Subcommittee on **Task Statement No. 16-01** - "[Recommendations Regarding the Implementation of 46 Code of Federal Regulations, Subchapter M - Inspection of Towing Vessels \(Short Title: Subchapter M Implementation\).](#)" (Posted: 20 JUL 2017)
- Final Report No. 3 of the TSAC Subcommittee on **Task Statement No. 16-01** - "[Recommendations Regarding the Implementation of 46 Code of Federal Regulations, Subchapter M - Inspection of Towing Vessels \(Short Title: Subchapter M Implementation\).](#)" (Posted: 20 JUN 2018)
- Final Report No. 4 of the TSAC Subcommittee on **Task Statement No. 16-01** - "[Recommendations Regarding the Implementation of 46 Code of Federal Regulations, Subchapter M - Inspection of Towing Vessels \(Short Title: Subchapter M Implementation\).](#)" (Posted: 20 JUN 2018)
- Final Report of the TSAC Subcommittee on **TSAC Task Statement 16-02** - "[Recommendations on Firefighting Training for Licensed Deck Officers \(except Apprentice Mate/Pilot\) on Towing Vessels in Inland Service.](#)" (Short Title: [Inland Firefighting](#)) **Note:** The Subcommittee submitted an interim final report to TSAC at the Spring 2018 Public Meeting. The report was incorporated into the Coast Guard's overarching regulatory reform initiative. (Posted: 18 DEC 2018).
- Final Report of the TSAC Subcommittee on **Task Statement No. 17-01** - "[Input to Support Regulatory Reform of Coast Guard Regulations - Executive Orders 13771 and 13783 \(Short Title: Reg Reform\).](#)" (Posted: 20 JUN 2018)
- Final Report of the TSAC Subcommittee on **TSAC Task Statement 17-02** - "[Load Line Exemption Review for River Barges on Lakes, Erie and Ontario.](#)" (Short Title: [LoadLine Exemption](#)). The final report was presented to the TSAC Committee in April 2020, for approval, & subsequently endorsed and provided to the U. S. Coast Guard. (Posted: 01 NOV 2020).

	Subchapter M Topic	Concern	Recommendation
1	Internal Survey DD/ISE notification (30 days)	Establishing a policy of 30 days notification for the internal survey in CVC-WI-029(2) is unnecessary and provides little value for the Coast Guard and TPO.	(1) Amend CVC-WI-029(3) to simply state 72 hours or as soon as practicable since the regulation doesn't have a notification timeline.
2	Using external surveyor to conduct credit ISE/DD for a company that manages an internal program	External surveyors are being used but no notification is being given to the Coast Guard.	Clarify in CVC-WI-029 that use of an external surveyor does not allviate the requirement to notify the CG.
3	Notification of external audit (72 hours)	Companies are submitting notification to CG units and are not getting any response for the cognizant OCMI in most cases.	Coast Guard should promulgate policy to units and be required to respond whether they plan on attending the audit or not.
4	Audit requirement on transitioning TSMS when not initial COI	There are no requirements or guidelines in place for a company to transition a vessel from one TSMS to another when it is not associated with an initial COI.	Coast Guard should establish policy for TPOs to provide a six month grace period prior to conducting an external vessel audit.
5	COI renewal timeline, objective evidence	There is currently no CGHQ policy on the expectation for a renewal timeline and what objective evidence must be submitted. Lack of policy leads to a greater chance of inconsistencies among ports.	Establish CG policy that sets minimum standard of what documentation must be submitted, how much in advance a request must be submitted, the timing an OCMI must have and KPIs (IE if request must be submitted 30 days in advance then the request should be processed within 30 days and not 3 months) for issuance of renewed certificate of inspection to the vessel.
6	Replacement in kind definition	For older pumps or engines, it may not be possible to replace in kind with the exact same item.	Provide guidance to 46 CFR 143.205 (d) to expand the definition of replacement in kind to include upgrading equipment that doesn't impact any other component outside of that system and state that would still be considered a replacement in kind.
7	Fire control panels at operation station	Many operators have a main fire control panel located in an unmanned engineroom with a remote indicator panel placed on the bridge.	Establish a policy that states that this meets the intent of the regulation provided the remote indicator panel in the wheelhouse has a failsafe should communications be lost with the main panel.
8	Bilge Pump testing and valve	Some vessels don't have a slop tank and only have an overboard discharge which means that there is potential for pollution if the pump needs to be tested for suction.	Establish a procedure/policy to test bilge pumps along with periodicity to ensure that CG expectations are met.

9	Flammable Material Storage Locker	SIRE inspectors are incorrectly telling vessels to remove the venting plugs.	Establish a FAQ to refer to NFPA. NFPA 30, 9.5.4 states, "Storage cabinets shall not be required by this code to be ventilated for fire protection purposes." Additionally, in Annex A, NFPA offers further reinforcement that venting is not necessary. A.9.5.4 states, "Venting storage cabinets has not been demonstrated to be necessary for fire protection purposes. Additionally, venting a cabinet could compromise the ability of the cabinet to adequately protect its contents from involvement in a fire because cabinets are not generally tested with venting. Therefore, venting of a storage cabinet is not recommended."
10	Flammable Material Storage Locker (cont.)	The interpretation of having the required fire extinguisher "near" the locker continues to cause confusion.	Coast Guard units have defined "near" as within 30 feet on COIs while others require extinguishers to be positioned much closer to the flammable locker. Recommend establishing an FAQ with a best practice that provides a range like NFPA.
11	Appeal Process Determinations	Subchapter M appeals are being used by certain OCMI as precedence. These determinations are not made public and it makes complying with these requirements impossible.	For appeals determinations that bind to the entire subchapter M fleet vice a specific vessel or company, determinations should be published to help promote consistency among both OCMI units and industry.
12	Fuel Transferring	It is common place for towing vessels to transfer fuel from a towing vessels' fuel tanks to red flag barges that require fuel for their prime movers.	Establish a policy guideline that enables a qualified PIC to conduct a transfer of excess fuel from the tow vessel to a barge for the purpose of consumption and not sale. (Maintain status quo)
13	Application of 46 CFR subchapter N	Coast Guard and Third Party Inspectors routinely call out limited quantities of combustibles that are not stored in a paint locker or the gas can that is in an approved container that sits in the skiff as a deficiency. 46 CFR subchapter N is applicable and allows limited quantities.	(1) Add 46 CFR subchapter N to the tow vessel job aid and qualification process so inspectors are aware of its applicability. Additionally, establishing a FAQ would provide greater visibility to Coast Guard MIs and industry.
14	Electronic COIs	Many units are not sending printed copies contradicting the requirement for originals.	Allow electronic COIs. They will still be posted in the wheelhouse. COI can always be validated online.
15	Internal Survey DD/ISE notification (30 days)	Notification of the Coast Guard for the internal survey program provides little benefit. TPOs are notified and have more opportunities to provide oversight.	(2) Remove the notification requirement from regulation 46 CFR 137.315.

16	Posting COIs	On small towing vessels, there is limited space in the wheelhouse to post. The wheelhouse itself is a watertight container, so storing in a safe location in the wheelhouse will meet the original intent of the regulation without the need to purchase a watertight container.	Modify regulations to allow COIs to be kept on board in the wheelhouse or electronically per electronic COI recommendation.
17	Line throwing appliances	46 CFR 141.385 references Q spec 160.040 which requires 4 shots. This is mostly to be in line with SOLAS requirements. It doesn't allow for alternatives for subchapter M vessels that are on non-SOLAS routes.	1. Request amendment of CVC-WI-010 to allow other alternatives such as a Jason's cradle or a reduced number of primers.
18	160 BC Fire Extinguishers	Many SIRE inspectors require the 160 BC fire extinguisher to be stowed outside of the engine room. (They are confusing the requirement for the auxiliary fire pump to be outside of the engine room.) This is a "first-response" piece of equipment and should be easily accessible. If the responding party has to leave the engine room, he/she will most likely not be able to re-enter the space to fight the fire.	Establish an FAQ that the 160 BC should be located inside the engine room space for easy access.
19	Require self-contained breathing apparatus to be NFPA approved	46 CFR 142.226(b) requires the two self-contained breathing apparatus to be NIOSH approved. SCBAs approved only by NIOSH and not the NFPA are not designed for firefighting.	Establish a direct to final rule to change the requirement to specify SCBAs must be fire rated.
20	Application of 46 subchapter N	Coast Guard and Third Party Inspectors routinely call out limited quantities of combustibles that are not stored in a paint locker or the gas can that is in an approved container that sits in the skiff as a deficiency. 46 CFR subchapter N is applicable and allows limited quantities.	(2) Incorporate subchapter N by reference in 46 CFR subchapter M similar to other subchapters.
21	Distress signals (special consideration)	ENG issued letter dated Feb 3, 2020 to AWO for alternative arrangements of vessel distress signal for subchapter M vessels on a rivers route with an approved TSMS.	Modify regulations to remove distress signal requirement for towings vessels on a Rivers route for vessel with a VHF radio and/or cellular/sat phone capabilities to communicate emergencies.
22	Line throwing appliances	46 CFR 141.385 references Q spec 160.040 which requires 4 shots. This is mostly to be in line with SOLAS requirements. It doesn't allow for alternatives for subchapter M vessels that are on non-SOLAS routes.	2. Revise regulations, for example remove line throwing requirement or include alternatives for domestic only routes.
23	Fire Pump Pressure	46 CFR 142.325 intent is to fight a fire in the machinery space using a single length of hose. When a vessel chooses to have two fire hydrants, the pump pressure must be tested through two remote hydrants simultaneously.	Consider revising 46 CFR 142.325 (a)(1) to clarify testing procedures on subchapter M vessels
24	Fresh/Salt water routes (reset at the next COI) (Tank coating allowance to go to a 1 in 5 drydock cycle)	WI-029 is confusing with cycles and when to reset for salt and fresh water routes.	Coast Guard should evaluate the need for 2 in 5 drydock cycles and be able to take into consideration modern protections and coating systems that prolong the life of steel.

25	Hot Water Heaters	Subchapter M doesn't contain any guidance or incorporation by reference for hot water heaters.	Incorporate precedence for water heaters addressed in 46 CFR, Subchapters T, K, and F. Subchapters T (46 CFR 182.320) and K (46 CFR 119.320) mirror each other. An electric water heater is acceptable by regulation if capacity is under 120 gallons, it has a heat input of less than 200,000 btu per hour, is protected by a relief device, and is UL listed. It would require no further inspection once installed. An oil or gas fired water heater must meet Part F (46 CFR parts 53 and 63) if under 100 PSI working pressure AND 250 degrees F working temperature. It must meet 46 CFR 52 and 63 if over these parameters.
26	Pressure Vessels (Packaged water boilers AKA donkey boilers)	Subchapter M doesn't contain any guidance or incorporation by reference for power boilers.	Incorporate precedence for package boilers contained in 46 CFR subchapter F. Must meet Part F (46 CFR parts 53 and 63) if under 100 PSI working pressure AND 250 degrees F working temperature. It must meet 46 CFR 52 and 63 if over these parameters.
27	Handrails/bulwarks height	46 CFR 144.800 requires rails or equivalent protection to be installed at the periphery of all decks to include bulwarks. It specifically includes bulwarks but doesn't provide a specific height. Shorter bulwarks are notated by some units as not being adequate or equivalent and are requiring modifications but there is no specific height guideline on what is good enough.	Recommend regulations for new construction clarify what an adequate height of bulwarks can be if no rail is present or if the use of a storm rails with shorter bulwarks is sufficient to satisfy the regulation.
28	Flammable Lockers	Regulations reference UL 1275 or FM 6050 approved flammable lockers. These approvals are for lockers that are in internal spaces. Flammable lockers stored on the weather deck present a greatly reduced risk factor and should not be required to meet UL 1275 or FM 6050 standards.	Establish a regulation that states that a suitable metal cabinet placed away from ignition sources on the weather deck would be satisfactory.
29	Bilge Alarms	Bilge alarms and alarm locations are not defined leading to lack of continuity between OCMLs.	Consider revising 46 CFR 143.230 to include a requirement to install bilge alarms in bilge spaces (not including void spaces) with through-hole fittings similar to other vessel subchapters to establish a clear intent. Additionally, consider adding an alternative to use TSMS procedures in lieu of alarms to address any potential additional risk of not having a bilge alarm installed.

here as general public  
not in any USCG capacity

**Good Afternoon.** My name is Jake Korn, I am a retired CG Rear Admiral. I propose that NTSAC recommend to the Coast Guard that AED carriage on towing vessels be made mandatory. I know that industry does not typically ask for **more** regulation. However, this change would not only be in the best interest of all vessel crews, but would also be in the best interest of all companies which do not currently carry AEDs aboard their vessels.

When implementing Subchapter M, the Coast Guard decided against mandating AED carriage, stating: *Due to the comparatively high cost of the carriage (estimated by the Coast Guard at \$2,500 per unit for each vessel), maintenance, and training of AEDs on board towing vessels, the Coast Guard has decided to remove the AED requirements proposed in 46 CFR §140.435(b) and (c).* The rule goes on to state: *“However, companies can elect to carry, maintain, and train crews on equipment above and beyond the scope of subchapter M requirements. Owners and managing operators can address AED carriage using a risk-based approach through the requirement to implement procedures to identify and mitigate health and safety hazards in CFR § 140.510.”*

CFR 140.510 <sup>EM SW</sup> does currently mandate a risk-based approach to identify and mitigate health and safety hazards. All companies have focused on identifying and mitigating safety hazards aboard vessels, addressing required safety equipment, procedures and vessel outfitting. Regarding the mitigation of health risks, there is risk control measure which would significantly reduce the chance of deaths aboard vessels and that is to carry an AED.

- Any risk assessment starts with assessing the probability of the unwanted event occurring and the severity of the consequences should the event occur:
  - **Probability of occurrence:** cardiovascular disease (CVD) has been the leading cause of death in the United States for over a decade, accounting for over 20% of deaths. It is more common among smokers, those with poor diets, sedentary individuals, and persons with health conditions including high cholesterol, diabetes, hypertension, and obesity. According to Harvard Medical School, men are about twice as likely to experience a heart attack then women. Seafarers are also exposed to a wide variety of work-related psychosocial factors that may increase the risk of heart disease, including frequent turnarounds in port, reduced crew manning, long work hours, lack of sleep, long separation from families and high time pressures, ship movements, noise and vibration. Restricted facilities on board often lead to a lack of exercise. Studies have shown that work related stress was associated with an increased cardiovascular disease risk by 50% on average.
    - Brandon Truxillo was assigned as a relief captain aboard the Towing Vessel Danny Ockman underway near Sabine Texas on November 15, 2019. That morning, he complained of chest pain and collapsed. Brandon Truxillo suffered a heart attack with fatal ventricular fibrillation. The M/V Danny Ockman did not have an onboard Automatic External Defibrillator (AED) aboard. Medical expert witnesses stated that if an on-site AED had been available and used within 3 minutes of his heart attack, it is more probable than not that Brandon Truxillo would not have died. Matt Lagarde told me

*he denotes of* *four* *cases*  
yesterday ~~that Ingram~~ had at least ~~three~~ cases where an AED was used to save somebody's life. It is not a matter of if, but when ~~someone~~ <sup>else</sup> has a heart attack underway. *An Ingram crew received a <sup>the crew</sup> callation.*

- **Severity:** Without a defibrillator aboard, even with CPR trained individuals aboard, a heart attack requiring defibrillation is fatal. For each minute defibrillation is delayed, the chance of survival reduces by approximately 7-10%. First responders ashore could not possibly respond in a matter of minutes.
- The combination of probability and severity for a heart attack leading to death would be categorized as medium or high risk in any reasonable assignment of probability and severity. Medium or higher risks require improvements to existing control measures or stopping the activity. A defibrillator is the one obvious highly effective control measure available to decrease risk of death from heart attack with ventricular fibrillation.

**Industry Standard:** In fact, AED carriage on towing vessels has already become the industry standard. ACL, Ingram, Blessey, Canal, and Kirby carry AEDs on their vessels. Marquette is in the process of implementing AEDs.

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**Cost:** The one-time cost to outfit a vessel with an AED is less than what a company pays in crew wages for a single vessel in a single day. Moreover, no additional training is required. All CPR training now includes AED training. Every vessel has at least one CPR trained person aboard. Additionally, even people untrained in CPR can use an AED. An AED will not deliver a shock unless ventricular fibrillation is present. Most AEDs come with an 8-year warranty.

- Additionally, there is also significant cost risk to the company for not having AEDs aboard their vessels. Brandon Truxillo's widow filed a lawsuit which was settled in July of 2023 with the company paying significant damages. The company also agreed to outfit all its towing vessels with AEDs as part of the settlement. The lack of a Subchapter M requirement does not insulate a company from litigation risk because a health and safety risk assessment is required.
- Further, carrying AEDs should reduce insurance costs.

*again*  
**Summary:** AED carriage is the number one thing towing companies can do to reduce deaths aboard vessels. It is the right thing to do for the workforce and sends a good signal. Although the cost is not trivial, it is manageable, especially considering the reduced risk exposure from litigation and reduced cost of insurance. Based on any reasonable health and safety risk assessment, which is already required by *CFR § 140.510*, the clear benefit from carriage and the relatively minimal investment required, AED carriage should be mandatory. Suggesting the COAST Guard change the regulation would be a good faith effort to protect both the workforce and the industry.

Thank you