

**United States Coast Guard**



**Barge Inspection Book**

<b>Name of Vessel</b>		
<b>Official Number</b>	<b>Class</b>	
<b>Date Completed</b>	<b>Location</b>	
<b>Route</b>		
Oceans	Limited Coastwise	Lakes/Bays/Sounds
Coastwise	Great Lakes	Rivers
<b>Inspection Type</b>		
Certification of Inspection (COI)	Annual	
Drydock Inspection	Periodic	
Internal Structure Exam (ISE)	Underwater Survey in Lieu of Drydock (UNWILD)	
Cargo Tank Internal Exam (CTIE)		
<b>Inspectors</b>		
1. _____ 2. _____		
<b>Activity Number</b> _____		

**Total Time Spent Per Activity**

<b>Regular Personnel (Active Duty)</b>			
<b>Activity Type</b>	<b>Activity</b>	<b>Training</b>	<b>(PERS) MI</b>

<b>Total ADMIN Hours</b>	<b>Total Travel Hours</b>
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<b>Reserve Personnel</b>			
<b>Activity Type</b>	<b>Activity</b>	<b>Training</b>	<b>(PERS) MI</b>

<b>Total ADMIN Hours</b>	<b>Total Travel Hours</b>
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<b>Auxiliary Resources</b>	
<b>Total Boat Hours</b>	<b>Total Aircraft Hours</b>

### ***Use of Barge Inspection Book:***

This inspection book is intended to be used as a job aid by Coast Guard marine inspectors during inspections of U.S. flagged barges. The lists contained within this book are not intended to limit the inspection. Each marine inspector should determine the depth of inspection necessary. A checked box should be a running record of what has been inspected. It does not imply that the entire system has been inspected or that all or any items are in full compliance. This job aid does not constitute part of the official inspection record.

This document does not establish or change Federal laws or regulations. References given are only general guides. Refer to IMO publications, CFRs, NVICs or any locally produced cite guides for specific regulatory references. Not all items in this book are applicable to all vessels.

***Note:*** *Guidance on how to conduct inspections of U.S. flagged barges can be found in the Marine Safety Manual (MSM) Volume II, Chapter B1: Inspection of Vessels for Certification. All MSM cites listed in this book refer to MSM Volume II unless otherwise indicated.*

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**Conversions:**

<b>Distance and Energy:</b>				
Kilowatts (kW)	X	1,341	=	Horsepower (hp)
Feet (ft)	X	3.281	=	Meters (m)
Long Ton (LT)	X	.98421	=	Metric Ton (t)
<b>Liquid: (NOTE: Values are approximate)</b>				
Liquid	bb/LT	m <sup>3</sup> /t	bb/m <sup>3</sup>	bb/t
Freshwater	6.40	1.00	6.29	6.29
Saltwater	6.24	.975	6.13	5.98
Heave Oil	6.77	1.06	6.66	7.06
DFM	6.60	1.19	7.48	8.91
Lube Oil	7.66	1.20	7.54	9.05
<b>Weight:</b>				
1 Long Ton	= 2240 lb	1 Metric Ton	= 2204 lb	
1 Short Ton	= 2000 lb	1 Cubic Foot	= 7.48 gal	
1 Barrel (oil)	= 5.61 ft =42 gal = 6.29	1 psi	= .06895 Bar = 2.3106 ft of water	
<b>Temperature: Fahrenheit = Celsius ( F= 9/5 C+32 and C=5/9 ( F-32))</b>				
0	= -17.8	80	= 26.7	200 = 93.3
32	= 0	90	= 32.2	250 = 121.1
40	= 4.4	100	= 37.8	300 = 148.9
50	= 10.0	110	= 43.3	400 = 204.4
60	= 15.6	120	= 48.9	500 = 260
70	= 21.1	150	= 65.6	1000 = 537.8
<b>Pressure:</b>				
1 Bar	= 14.5 psi	5 Bars	= 72.5 psi	9 Bars = 130.5 psi
2 Bars	= 29.0 psi	6 Bars	= 87.0 psi	10 Bars = 145.0 psi
3 Bars	= 43.5 psi	7 Bars	= 101.5 psi	
4 Bars	= 58.0 psi	8 Bars	= 116.0 psi	







**Task 3: Vessel Information**

<b>Classification Society:</b>	
<b>Last Drydock Date:</b>	<b>Next Drydock Date:</b>
<b>Location of Last Drydocking:</b>	
<b>Gross Tons:</b>	
<b>Net Tons:</b>	
<b>Built Date: (use delivery date)</b>	
<b>Overall length: (in feet)</b>	
<b>Does vessel meet double-hull requirements?</b>	
YES	NO If not, vessel must meet requirements by: _____ (date) in accordance with 33 CFR Part 157 Appendix G.
<b>Required Crew:</b>	
Number of Tankermen Required _____	Number of Lifeboatmen Required _____
<b>Cargo Carried (inspected and approved)</b>	
Type of Cargo _____	Amount of Cargo _____
<b>Date Cargo Tanks Entered:</b>	

**Vessel Description**  
 Subchapter D cargoes only  
 Subchapter I cargoes only  
 Subchapter D & O cargoes  
 Subchapter I & O cargoes

**Hull Type**  
 Type I  
 Type II  
 Type III

**Recommended U.S. Vessel Deficiency Procedures:**

Use the following table to complete deficiency issues.

- | Step | Action   |
|------|--|
| 1.   | Identify deficiency.   |
| 2.   | Inform vessel representative.  |
| 3.   | Record on the <i>Deficiency Summary Worksheet</i> (next page).   |
| 4.   | If deficiency is corrected prior to end of inspection, go to step 6.   |
| 5.   | If deficiency is unable to be corrected prior to end of inspection, issue CG-835 in accordance with table below. |

If deficiency...	THEN issue CG-835...
Does not immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g., missing placards.	That provides a specific time for correcting deficiency, e.g., "x" number of days.
Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g. P/V valves fail to seal properly.	That restricts operation of vessel to meet current vessel conditions, e.g., reduce cargo grade
DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g., structural defect or damage.	That requires the deficiency to be corrected prior to operating vessel ("NO SAIL" item), e.g., prior to carrying cargo

6. Enter information into MISLE.
7. Initiate Report of Violation (ROV) if necessary.





Name of Certificate	Issuing Agency	ID #	Port Issued	Issued Date	Exp. Date	Endors. Date
International Air Pollution Prevention Certificate (IAPP) <input type="checkbox"/> No Change						
Engine International Air Pollution Prevention Certificate (EIAPP) <input type="checkbox"/> No Change						

Step	Action	Ref
17.18	<input type="checkbox"/> Security measures for monitoring <ul style="list-style-type: none"> <li>• IAW ASP</li> <li>• Lighting</li> <li>• Test intrusion alarms</li> <li>• Emergency search procedures</li> </ul>	33 CFR 104.285
17.19	<input type="checkbox"/> Security Incident Procedures <ul style="list-style-type: none"> <li>• Witness during drill</li> </ul>	33 CFR 104.290
17.20	<input type="checkbox"/> Amendment and audit <ul style="list-style-type: none"> <li>• CSO / VSO audit letter attached to ASP</li> <li>• Audits conducted as required (annually or after vessel modifications)</li> </ul>	33 CFR 104.415

Should an enforcement inspection reveal that an owner/operator has correctly implemented an approved ASP in its entirety but security vulnerabilities exist in the vessel operation, the COTP shall be advised. Under 33 CFR 104.415 (a) (ii) for vessels or 33 CFR 105.415 (a) (ii) (f), the Coast Guard can determine that an amendment is necessary and advise the organization that submitted the ASP for approval accordingly. Following such notification, it will be necessary for the original submitting organization to provide their proposed amendment to the Commandant (CG-543) for review and approval. If the submitting organization does not wish to amend the ASP, the vessel owner must submit a VSP for the vessel to the MSC.

Notes: \_\_\_\_\_

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Step	Action	Ref
17.13	<input type="checkbox"/> Security measures for access control <ul style="list-style-type: none"> <li>• Access points examined – signs posted in conspicuous locations.</li> <li>• Control areas for authorized dangerous substances / devices</li> <li>• Means of identifying unauthorized personnel</li> <li>• TWIC for unescorted access to secure areas</li> </ul>	33 CFR 104.265
17.14	<input type="checkbox"/> Security measures for newly hired employees (Pending receipt of TWIC) <ul style="list-style-type: none"> <li>• Access permitted for up to 30 days if:</li> <li>• Has applied for TWIC</li> <li>• Accompanied by TWIC holder in secure areas</li> <li>• Operator enters new hire personal info in HOMEPORT</li> <li>• Notified via HOMEPORT that new hire has passed initial name check.</li> <li>• Provision does not apply to CSO, VSO or individual hired to perform security duties</li> </ul>	33CFR 104.267
17.15	<input type="checkbox"/> Security measures for restricted areas <ul style="list-style-type: none"> <li>• Secure areas protected</li> <li>• Properly marked</li> <li>• Control measures adequate</li> <li>• Do not conflict with safety measures</li> </ul>	33 CFR 104.270
17.16	<input type="checkbox"/> Security measures for handling cargo <ul style="list-style-type: none"> <li>• Identifying cargo tamper</li> <li>• Identifying approved cargo</li> <li>• Access point – inventory control</li> <li>• Checking cargo for dangerous substances</li> </ul>	33 CFR 104.275
17.17	<input type="checkbox"/> Security measures for delivery of vessel stores and bunker <ul style="list-style-type: none"> <li>• Security procedures followed</li> <li>• Standing agreements valid</li> </ul>	33 CFR 104.280

## Section 2: Complete Pre-Inspection Screening:

### Task 1: Pre-Inspection Items

Step	Action	Ref
1.1	<input type="checkbox"/> Receive the inspection request. Subchapter “D” and “I” <ul style="list-style-type: none"> <li>• Written COI application 30 days before the desired inspection date</li> <li>• Verbal Inspection Annual/Periodic 3 months before the desired inspection date or after COI issue date</li> </ul>	46 CFR 31.01-15 46 CFR 91.25-5 46 CFR 31.10-17 46 CFR 31.10-21 46 CFR 91.25-5 46 CFR 91.27-1
1.2	<input type="checkbox"/> Review MISLE’s appropriate critical profile records, vessel history, and outstanding discrepancies, user fee and notes.	
1.3	<input type="checkbox"/> Determine examination types needed.	46 CFR 31.10 46 CFR 151-05 46 CFR 91.15 46 CFR 151.04
1.4	<input type="checkbox"/> Review Code of Federal Regulations (CFR) for applicable subchapter and dates.	46 CFR Table 31.10-21 46 CFR Table 151-05
1.5	<input type="checkbox"/> Print applicable documents and certificates from MISLE and local districts. <ul style="list-style-type: none"> <li>• Temp COI</li> <li>• IOPP</li> <li>• PTP</li> <li>• Cargo Authorization Attachment</li> </ul>	46 CFR 31.05 MSM II B Ch.1.C MSM II A Ch.6.B MSM II A. Ch. 3.H MSM II A Ch.3.I MSM II A.Ch.3.J MSM II A.Ch.3.L
1.6	<input type="checkbox"/> Obtain required safety equipment.	

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**Task 2: Certificates and Documents**

Step	Action	Ref
2.1	<input type="checkbox"/> Verify that the COI is posted.	46 CFR 31.05-5 46 CFR 91.01-5
2.2	<input type="checkbox"/> Verify that the stability letter is posted.	46 CFR 35.08-1 46 CFR 91.40.3
2.3	<input type="checkbox"/> Verify that the station bill/muster list is posted in accordance with subchapter "W". <b>Manned barges only</b>	46 CFR 35.10-5 46 CFR 97.13-7 46 CFR 199.80
2.4	<input type="checkbox"/> Examine the waste management plan. <b>Oceangoing manned barges &gt;40 feet</b>	33 CFR 151.57 33 CFR 151.63
2.5	<input type="checkbox"/> Verify annual drug testing program. <b>Manned barges only</b>	46 CFR 16.260
2.6	<input type="checkbox"/> Examine annual life raft servicing certificates. <b>Manned barges only</b>	46 CFR 160.051
2.7	<input type="checkbox"/> Verify that required international safety and pollution prevention convention certificates are posted valid and accurate. <b>Barges on international route only</b>	46 CFR 91. 60-35 33 CFR 151.19 33 CFR 151.27
2.8	<input type="checkbox"/> Examine cargo gear certificate.	46 CFR 31.10-16
2.9	<input type="checkbox"/> Examine cargo and ballast instruction manual.	46 CFR 31.10-32(b) 46 CFR 42.15-1(a)
2.10	<input type="checkbox"/> Examine general arrangement/fire control plan. <b>Manned barges only</b>	46 CFR 35-10-3(a) 46 CFR 91.55-5(d)
2.11	<input type="checkbox"/> Examine equipment test records. <ul style="list-style-type: none"> <li>• Piping Hydrostatic/ tightness test</li> <li>• Cargo Hose hydrostatic 1-½ MWAP test</li> <li>• Vapor hose hydrostatic 1-½ MWAP test</li> <li>• Relief valves</li> <li>• Gauges</li> </ul>	46 CFR 31.10-16 46 CFR 35.07-10(c) 46 CFR 35.35-70 33 CFR 156.170(a) 33 CFR 156.170(f)(3) 46 CFR 35.35-70(b) 33 CFR 156.170(c)(2)

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Step	Action	Ref
17.8	<input type="checkbox"/> Vessel Record Keeping Requirements <ul style="list-style-type: none"> <li>• Training</li> <li>• Drills and exercises</li> <li>• Breaches of security</li> <li>• Change in MARSEC levels</li> <li>• Maintenance, calibration, and testing of security equipment.</li> <li>• Security threats</li> <li>• Annual audit of the VSP</li> <li>• Declaration of Security (DoS)</li> <li>• Retained for Two years</li> </ul>	33 CFR 104.235 IAW ASP
17.9	<input type="checkbox"/> MARSEC level coordination and implementation <ul style="list-style-type: none"> <li>• Proper MARSEC level</li> <li>• MARSEC level at least at current port level</li> </ul>	33 CFR 104.240 IAW ASP
17.10	<input type="checkbox"/> Communications <ul style="list-style-type: none"> <li>• Vessel security personnel</li> <li>• Facility</li> <li>• National and local authorities</li> <li>• Demonstrate communications operations consistent with the ASP</li> </ul>	33 CFR 104.245 IAW ASP
17.11	<input type="checkbox"/> Declaration of Security (DoS) <ul style="list-style-type: none"> <li>• Required for cruise ships or manned CDC bulk vessels and any vessel or facilities with which it interfaces.</li> <li>• Valid (for MARSEC level and effective time period) Must have last 10 or continuous DoS reviewed at interval consistent with MARSEC level.</li> <li>• Signed</li> </ul>	33 CFR 104.255 ISPS, Part A, 5.1
17.12	<input type="checkbox"/> Security systems and equipment maintenance <ul style="list-style-type: none"> <li>• Testing completed IAW manufacturer's recommendations</li> <li>• Working properly, effectively functions IAW ASP.</li> </ul>	33 CFR 104.260

Step	Action	Ref
17.1	<input type="checkbox"/> Name of approved ASP  • _____	33 CFR 104.140
17.2	<input type="checkbox"/> Compliance Documentation <ul style="list-style-type: none"> <li>• Copy of ASP aboard vessel</li> <li>• Vessel Specific Security Assessment (VSA) completed</li> <li>• Letter to MSC stating use of approved ASP and that it has been fully implemented</li> </ul>	33 CFR 104.120
17.3	<input type="checkbox"/> Maritime Security (MARSEC) directive <ul style="list-style-type: none"> <li>• Proper safeguards</li> <li>• Incorporated into VSP</li> </ul>	33 CFR 104.145
17.4	<input type="checkbox"/> Company Security Officer (CSO) <ul style="list-style-type: none"> <li>• Training / experience</li> <li>• Valid TWIC</li> <li>• See list of example questions</li> </ul>	33 CFR 104.210 IAW ASP
17.5	<input type="checkbox"/> Vessel Security Officer (VSO) <ul style="list-style-type: none"> <li>• Training / experience</li> <li>• Valid TWIC</li> <li>• See list of example questions</li> </ul>	33 CFR 104.215 IAW ASP
17.6	<input type="checkbox"/> Company or vessel personnel with security duties <ul style="list-style-type: none"> <li>• Training / experience</li> <li>• Valid TWIC</li> <li>• See list of example questions</li> </ul>	33 CFR 104.220 IAW ASP
17.7	<input type="checkbox"/> Security Training for all other vessel personnel (manned barges only)	33CFR 104.225 IAW ASP

Step	Action	Ref
2.12	<input type="checkbox"/> Examine fixed fire extinguisher servicing certificate.	46 CFR 31.10-18
2.13	<input type="checkbox"/> Verify packaged hazardous materials for appropriate cargo documents/records.	46 CFR 151.45-7 46 CFR 35.01-10
2.14	<input type="checkbox"/> Verify information is available to master (as required)/person-in-charge. <ul style="list-style-type: none"> <li>• Loading manual</li> <li>• Trim and stability book</li> </ul>	46 CFR 31.10-22 46 CFR 97.12-1 46 CFR 170.110 46 CFR 35.20-7

**Task 3: Pollution Prevention Plans/Certificates/Records**

Step	Action	Ref
3.1	<input type="checkbox"/> Examine the Certificate of Financial Responsibility.	33 CFR 138.65 33 CFR 138
3.2	<input type="checkbox"/> Examine the NLS Certificate.	46 CFR 153.15 46 CFR 153.901(d)(5) MARPOL 73/78 Annex II
3.3	<input type="checkbox"/> Examine the Shipboard Oil Pollution Emergency Plan. <ul style="list-style-type: none"> <li>• Approved by the Coast Guard/class society</li> <li>• Contact numbers correct</li> <li>• Immediate actions list</li> </ul>	MARPOL Ax. 1/26.1 33 CFR 151.26
3.4	<input type="checkbox"/> Examine Vapor Collection System Approval Letter.	46 CFR 39.10-13
3.5	<input type="checkbox"/> Examine the Benzene Monitoring Program.	46 CFR 151.50-60 46 CFR 30-25 46 CFR 197.501
3.6	<input type="checkbox"/> Examine the Stability Letter.	46 CFR 31.10-30

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Step	Action	Ref
3.7	<input type="checkbox"/> Examine International Air Pollution Prevention Certificate. <b>Barges on international routes only</b>	
3.8	<input type="checkbox"/> Examine the Oil Record Book. <ul style="list-style-type: none"> <li>• Each operation signed by person-in-charge</li> <li>• Book maintained for three years</li> </ul> <b>Only barges equipped to discharge any oil or oily mixture overboard</b>	MARPOL Ax. 1/20 33 CFR 151.25
3.9	<input type="checkbox"/> Examine the Vessel Response Plan. <ul style="list-style-type: none"> <li>• Manned</li> <li>• Unmanned</li> </ul> <b>Vessels carrying oil as primary cargo</b>	33 CFR 155.1030 33 CFR 155.1035 33 CFR 155.1040 46 CFR 91.25-38
3.10	<input type="checkbox"/> Examine Response Plan. <b>Vessels carrying oil as secondary cargo</b>	33 CFR 155.1045 46 CFR 91.25-38

**Alternative Security Program (ASP):**

Vessels operating under the auspices of an approved ASP are required to address the relevant areas cited in 33 CFR parts 104. However, the ASP provision of the rule has provided a mechanism by which segments of the maritime industry, through application by the industry associations or other representative groups, are able to tailor their program to the unique functions inherent of their specific operations. The result is a set of relevant, performance-based security measures for the industry groups choosing to utilize an approved ASP. For this reason, the inspector of a vessel using an approved ASP may find that certain language or security measures contained in some parts of the rule will differ from the language or security measures listed in the ASP.

In those cases where both the vessels and the facilities serving those vessels are owned and/or operated by the same entity, an alternative plan may recognize that the same party is responsible for security in both areas and approve an approach that addresses vulnerabilities and mitigation strategies for the vessels and the facility under one ASP. Therefore, the inspector will not be using separate plans for the vessels and the facility to determine compliance and, likewise, will not see some citations addressed in the plan if they are redundant between 33 CFR 104 and 33 CFR 105.

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Step	Action	Ref
3.12	<input type="checkbox"/> Verify waiver letters are carried.	46 CFR 153.10
3.13	<input type="checkbox"/> Verify packaged hazardous materials for appropriate cargo documents/records.	
3.14	<input type="checkbox"/> Review security plan. <ul style="list-style-type: none"> <li>• Approval letter issued by MSC</li> <li>• Vessels using vessel-specific approved plan or, if manned, verify using "Domestic Vessel Security Plan Verification Guide for MTSA/ISPS Code"</li> <li>• Vessel using ASP and unmanned must have letter signed by owner or operator stating which ASP is used and vessel is in full compliance with that program</li> </ul>	NVIC 04-03 Ch. 1 33 CFR 104.140 33 CFR 104.120

**Task 4: Logs and Manuals**

Step	Action	Ref
4.1	<input type="checkbox"/> Examine lifesaving equipment maintenance records.	46 CFR 35.40-40 46 CFR 91.20-20
4.2	<input type="checkbox"/> Examine required logbooks/records.	46 CFR 35.07 46 CFR 97-35
4.3	<input type="checkbox"/> Verify vessel has access to shore-based computerized damage stability program.	33 CFR 155.240
4.4	<input type="checkbox"/> Examine emergency training and drill logs.	46 CFR 97.35-5 46 CFR 97.15-35
4.5	<input type="checkbox"/> Examine the cargo securing manual.	46 CFR 35.35-60 46 CFR 97.12-5

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Step	Action	Ref
17.14	<input type="checkbox"/> Security measures for access control <ul style="list-style-type: none"> <li>• Access points examined – signs posted in conspicuous locations.</li> <li>• Control areas for authorized dangerous substances / devices</li> <li>• Means of identifying unauthorized personnel</li> <li>• TWIC for unescorted access to secure areas</li> </ul>	33 CFR 104.265
17.15	<input type="checkbox"/> Security measures for newly hired employees (Pending receipt of TWIC) <ul style="list-style-type: none"> <li>• Access permitted for up to 30 days if:</li> <li>• Has applied for TWIC</li> <li>• Accompanied by TWIC holder in secure areas</li> <li>• Operator enters new hire personal info in HOMEPORT</li> <li>• Notified via HOMEPORT that new hire has passed initial name check.</li> <li>• Provision does not apply to CSO, VSO or individual hired to perform security duties</li> </ul>	33CFR 104.267
17.16	<input type="checkbox"/> Security measures for restricted areas <ul style="list-style-type: none"> <li>• Secure areas protected</li> <li>• Properly marked</li> <li>• Control measures adequate</li> <li>• Do not conflict with safety measures</li> </ul>	33 CFR 104.270
17.17	<input type="checkbox"/> Security measures for handling cargo <ul style="list-style-type: none"> <li>• Identifying cargo tamper</li> <li>• Identifying approved cargo</li> <li>• Access point – inventory control</li> <li>• Checking cargo for dangerous substances</li> </ul>	33 CFR 104.275
17.18	<input type="checkbox"/> Security measures for delivery of vessel stores and bunker <ul style="list-style-type: none"> <li>• Security procedures followed</li> <li>• Standing agreements valid</li> </ul>	33 CFR 104.280



**Section 3: Drydock Inspection**

Step	Action	Ref
17.9	<input type="checkbox"/> Vessel Record Keeping Requirements <ul style="list-style-type: none"> <li>• Training</li> <li>• Drills and exercises</li> <li>• Breaches of security</li> <li>• Change in MARSEC levels</li> <li>• Maintenance, calibration, and testing of security equipment.</li> <li>• Security threats</li> <li>• Annual audit of the VSP</li> <li>• Declaration of Security (DoS)</li> <li>• Retained for Two years</li> </ul>	CFR 104.235
17.10	<input type="checkbox"/> MARSEC level coordination and implementation <ul style="list-style-type: none"> <li>• Proper MARSEC level</li> <li>• MARSEC level at least at current port level</li> </ul>	33 CFR 104.240
17.11	<input type="checkbox"/> Communications <ul style="list-style-type: none"> <li>• Vessel security personnel</li> <li>• Facility</li> <li>• National and local authorities</li> <li>• Demonstrate communications operations</li> </ul>	33 CFR 104.245
17.12	<input type="checkbox"/> Declaration of Security (DoS) <ul style="list-style-type: none"> <li>• Required for cruise ships or manned CDC bulk vessels and any vessel or facilities with which it interfaces.</li> <li>• Valid (for MARSEC level and effective time period) Must have last 10 or continuous DoS reviewed at interval consistent with MARSEC level.</li> <li>• Signed</li> </ul>	33 CFR 104.255
17.13	<input type="checkbox"/> Security systems and equipment maintenance <ul style="list-style-type: none"> <li>• Testing completed IAW manufacturer's recommendations</li> <li>• Working properly, effectively functions IAW VSP.</li> <li>• Ship Security Alert System (SSAS)</li> </ul>	33 CFR 104.260

**Task 1: External Structural Examination**

Step	Action	Ref
1.1	<input type="checkbox"/> Examine Gauging Periodic Report. <ul style="list-style-type: none"> <li>• Date Completed _____</li> <li>• Tank Vessel over 30 years old that carry oil</li> <li>• Class requirement</li> <li>• For cause</li> </ul>	46 CFR 31.10-21(a) ABS Steel Rules 1/3
1.2	<input type="checkbox"/> Verify availability of vessel plans. (Special requirements for vessels with load lines)	MSM B.Ch1.E MSM B.Ch.3.A MSM B.Ch.3.B
1.3	<input type="checkbox"/> Inspect external structure members. <ul style="list-style-type: none"> <li>• Plating</li> <li>• Caulking</li> <li>• Reinforcing straps</li> <li>• Rakes</li> <li>• Welds</li> <li>• Pitting</li> <li>• Rub Bars</li> <li>• Overall Steel Wastage</li> </ul>	NVIC 7-68 Inland Barge Guide 46 CFR 31.10-15



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Step	Action	Ref
1.4	<input type="checkbox"/> Inspect hull and/or structural members. Yes (attached gauging report) <ul style="list-style-type: none"> <li>• Transverse belt of deck plating</li> <li>• Transverse belt of bottom and sideshell</li> <li>• Wind-and-water strakes</li> <li>• Keel plates</li> <li>• Bulkhead plating and stiffeners</li> <li>• Suspect areas</li> <li>• Other _____</li> </ul> No	46 CFR 31.10-21(a) ABS Rules 1/3 Inland Barge Guide
1.5	<input type="checkbox"/> Inspect fastenings and welds.	MSM Vol. IV Ch.6.H NVIC3-68
1.6	<input type="checkbox"/> Inspect vessel for fractures and fracture repairs.	MSM II.CH.B.E.B.6.D NVIC 7-68
1.7	<input type="checkbox"/> Inspect hatches, gaskets, and fasteners.	MSM II Ch.B.1.E.5
1.8	<input type="checkbox"/> Inspect dry dock plugs.	
1.9	<input type="checkbox"/> Inspect draft marks and load lines. <ul style="list-style-type: none"> <li>• Proper location</li> <li>• Legibly inscribed</li> <li>• Proper spacing and size</li> <li>• Load line marking verified</li> </ul>	46 CFR 32.05 46 CFR 97.40-10 MSM II Ch.B.1.E.4
1.10	<input type="checkbox"/> Inspect rudders, bars, and skegs.	
1.11	<input type="checkbox"/> Inspect bow/stern thrusters.	
1.12	<input type="checkbox"/> Inspect sea chests, spool pieces, and through-hull fittings.	

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**Task 17: MTSA Compliance**

**Vessel Security Plans (VSP):  
(If using ASP, skip to next section)**

Step	Action	Ref
17.1	<input type="checkbox"/> Compliance documentation <ul style="list-style-type: none"> <li>• Approved Vessel Security Plan</li> </ul>	33 CFR 104.120
17.2	<input type="checkbox"/> Waiver <ul style="list-style-type: none"> <li>• Approved by CG-543</li> </ul>	33 CFR 104.130
17.3	<input type="checkbox"/> Equivalentents <ul style="list-style-type: none"> <li>• Approved by CG-543</li> </ul>	33 CFR 104.135
17.4	<input type="checkbox"/> Maritime Security (MARSEC) directive <ul style="list-style-type: none"> <li>• Proper safeguards</li> <li>• Incorporated into VSP</li> </ul>	33 CFR 104.145
17.5	<input type="checkbox"/> Company Security Officer (CSO) <ul style="list-style-type: none"> <li>• Training / experience</li> <li>• Valid TWIC</li> <li>• See list of example questions</li> </ul>	33 CFR 104.210
17.6	<input type="checkbox"/> Vessel Security Officer (VSO) <ul style="list-style-type: none"> <li>• Training / experience</li> <li>• Valid TWIC</li> <li>• See list of example questions</li> </ul>	33 CFR 104.215
17.7	<input type="checkbox"/> Company or vessel personnel with security duties <ul style="list-style-type: none"> <li>• Training / experience</li> <li>• Valid TWIC</li> <li>• See list of example questions</li> </ul>	33 CFR 104.220
17.8	<input type="checkbox"/> Security Training for all other vessel personnel (manned barges only)	33 CFR 104.225

Step	Action	Ref
16.4	<input type="checkbox"/> Inspect pressure vacuum protection. <ul style="list-style-type: none"> <li>• Pressure set at not less than 1.0 psi</li> <li>• Vacuum set at not less than 0.5 psi</li> <li>• Methods to check that the device operates freely and does not remain open</li> <li>• Flame screen installed</li> </ul>	46 CFR 39.20-11
16.5	<input type="checkbox"/> Verify the following: <ul style="list-style-type: none"> <li>• Pressure drop calculations provided</li> <li>• System included in oil transfer procedures</li> <li>• Approval letter from Marine Safety Center.</li> </ul>	46 CFR 39.30-1

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Step	Action	Ref
1.13	<input type="checkbox"/> Inspect sea valves and nonmetallic expansion joints. <ul style="list-style-type: none"> <li>• Fitted where required</li> <li>• Opened for examination</li> <li>• Body</li> <li>• Guides</li> <li>• Threads</li> <li>• Seat</li> <li>• Stems</li> <li>• Discs</li> <li>• Valves opened every five years at dry dock</li> </ul>	46 CFR 56.59-95 46 CFR 61.20-5 46 CFR 91.40-1(a) 46 CFR 56.20 46 CFR 56.35.10 46 CFR 91.20-20 MSM II B.3.B
1.14	<input type="checkbox"/> Inspect ground tackle. <ul style="list-style-type: none"> <li>• Anchor cables ranged Yes/No</li> <li>• Cable shackles and pin</li> <li>• Anchors</li> <li>• Hawse pipes and covers</li> <li>• Chain pipes and covers</li> <li>• Chain lockers</li> </ul>	46 CFR 32.15-15 46 CFR 96.07-5 ABS Rules 33 CFR 155.230
1.15	<input type="checkbox"/> Inspect scuppers, soil lines, and tank overflows.	46 CFR 35.35.10 46 CFR 98.30-23(g)
1.16	<input type="checkbox"/> Complete underwater survey.	MSM II.B.Ch.3.C
1.17	<input type="checkbox"/> Check 30-year mid-body analysis.	46 CFR 31.10-21(a) 46 CFR 32.59 46 CFR Table 30.25
1.18	<input type="checkbox"/> Process drydock extension request.	MSM II. B.Ch.3.A.4

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**Section 4: Internal Structural Examination (ISE)**

**Task 1: Internal Structural Exam**

Step	Action	Ref
1.1	Verify Marine Chemist Certificate.	46 CFR 35.01-1
	<input type="checkbox"/> Marine Chemist No. _____	46 CFR 91.50-1(a)
	<input type="checkbox"/> Certificate No. _____	MSM II Ch.A.5.H
	<input type="checkbox"/> Date Issued _____	NFPA 306
	<input type="checkbox"/> Location _____	
	<input type="checkbox"/> Last three cargoes _____	
	<input type="checkbox"/> All spaces certified "Safe for Workers" that are to be entered	
	<input type="checkbox"/> MCC maintained by competent person	
1.2	<input type="checkbox"/> Inspect internal structural members.	NVIC 7-68
	• Bulkheads	MSM II A.5.E
	• Decks	MSM II B.3.A.4.9(b)(ii)
	• Tank tops	MSM II B.3.A.1
	• Longitudinals	MSM II B.3.B.3
	• Floors	MSM II A.5.4
	• Frames	33 CFR 157.10-d
	• Intercoastals	
	• Stiffeners	
	• Beams	
	• Connections	
	• Wastage	
	• Broken welds	
	• Cargo tank exterior (double-hulled)	
1.3	<input type="checkbox"/> Inspect watertight integrity.	MSM II B.1.E.5
1.4	<input type="checkbox"/> Inspect hull openings and closures.	MSM II.A.5.5
		MSM II B.1.E.5
		ABS Part 4 Ch.7 Sect. 1

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**Task 16: Vapor Control Systems**

Step	Action	Ref
16.1	<input type="checkbox"/> Inspect piping.	46 CFR 39-20-1
	• Drain lines and plugs	
	• Electrically bonded to hull	
	• Last 3.3 feet painted red/yellow/red and labeled "vapor" in 2-inch black letters	
	• Internally examine piping if Polymar cargos authorized	
16.2	<input type="checkbox"/> Inspect closed gauging system.	46 CFR 39.20-3
16.3	Inspect liquid overfill protection.	46 CFR 39.20-9
	<input type="checkbox"/> High level and tank overfill alarms	
	• Self-contained power supply	
	• Install generator or shore tie	
	<input type="checkbox"/> Alarm with automatic shutdown system	
	• Independent of cargo gauging	
	• Alarms and automatically shuts down at the facility	
	• Operation checked at tank	
	• Alarm junction box labeled "connector for barge overflow control system"	
	<input type="checkbox"/> Spill Valve	
	• Meets ASTM F1271	
	• Set pressure higher than relief	
	• Valve and lower that rating of	
	• Cargo tank	
	• Approve by Commandant	

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**Task 15: Bulk Liquefied Flammable Gases Cargo Operations**

Step	Action	Ref
15.1	<input type="checkbox"/> Inspect secondary barrier cargo tank.	46 CFR 38.05
15.2	<input type="checkbox"/> Inspect cargo piping.	46 CFR 38.10
15.3	<input type="checkbox"/> Inspect pump and compressor rooms.	
15.4	<input type="checkbox"/> Inspect pressure relief valves.	46 CFR 38.10 46 CFR 38.20-1 46 CFR 38.25-10 46 CFR 38.10-1(g)
15.5	<input type="checkbox"/> Verify maximum allowable relief valve settings for cargo tanks.	46 CFR 38.05-2
15.6	<input type="checkbox"/> Inspect cargo hoses.	46 CFR 38.15-5
15.7	<input type="checkbox"/> Inspect cargo vent systems.	46 CFR 38.05-1(b) 46 CFR 38.01-2(a)
15.8	<input type="checkbox"/> Verify electrical safety in gas-dangerous spaces or zones.	46 CFR 38.15-15
15.9	<input type="checkbox"/> Inspect temperature-measuring devices.	46 CFR 38.10-1(g)
15.10	<input type="checkbox"/> Inspect safety equipment.	46 CFR 38.10-1(j)
15.11	<input type="checkbox"/> Verify marking is labeled vapor or liquid.	46 CFR 38.05-05(b)
15.12	<input type="checkbox"/> Inspect cargo-gauging system.	46 CFR 38.10-20
15.13	<input type="checkbox"/> Inspect liquid overfill protection systems.	
15.14	<input type="checkbox"/> Inspect insulation.	46 CFR 38.05
15.15	<input type="checkbox"/> Inspect high and low vapor pressure protection systems.	
15.16	<input type="checkbox"/> Inspect operations remote shutdown.	46 CFR 38.15.20
15.17	<input type="checkbox"/> Inspect cargo tanks.	46 CFR 38.05-10(f) 46 CFR 38.25
15.18	<input type="checkbox"/> Inspect marine portable tanks.	46 CFR 38.01-2 46 CFR 38.01-5

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Step	Action	Ref
1.5	<input type="checkbox"/> Inspect all voids, ballast tanks, and cofferdams. (List all spaces entered)  <hr/> <hr/> <hr/>	46 CFR 176.400 46 CFR 32.70-10
1.6	<input type="checkbox"/> Inspect guards, ladders, and rails.	46 CFR 32.02-15
1.7	<input type="checkbox"/> Inspect bulkhead penetrations.	MSM II B.1.E.6
1.8	<input type="checkbox"/> Inspect striker plates.	
1.10	<input type="checkbox"/> Inspect fastening, rivets, and welding.	MSM Vol. IV Ch.6.H NVIC 3-68
1.11	<input type="checkbox"/> Inspect the forward peak/rake.	
1.12	<input type="checkbox"/> Inspect the aft peak/rake.	

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**Section 5: Cargo Tank Internal Inspection**

**Task 1: Cargo Tank Internals**

<b>Step</b>	<b>Action</b>	<b>Ref</b>
1.1	Verify Marine Chemist Certificate. <input type="checkbox"/> Marine Chemist No. _____ <input type="checkbox"/> Certificate No. _____ <input type="checkbox"/> Date Issued _____ <input type="checkbox"/> Location _____ <input type="checkbox"/> Last three cargoes _____ <input type="checkbox"/> All spaces certified "Safe for Workers" that are to be entered <input type="checkbox"/> MCC maintained by competent person	46 CFR 35.01-1 MSM II Ch.A.5.H NFPA 306
1.2	Verify cargo gauging type is correct for authorized cargos <input type="checkbox"/> Open Restricted <input type="checkbox"/> Closed	46 CFR 151.15-10
1.3	<input type="checkbox"/> Verify overfill protection device is installed.	33 CFR 155.480 33 CFR 151.05
1.4	<input type="checkbox"/> Inspect all cargo tanks. <ul style="list-style-type: none"> <li>• Welds</li> <li>• Bulkheads</li> <li>• Framing</li> <li>• Sumps</li> <li>• Pumps</li> </ul> (list all spaces entered) _____ _____ _____	MSM II Ch.B.3.B.4 NAVIC 7-68

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14.18	<input type="checkbox"/> Inspect the Vapor Control System (VCS).	46 CFR 151.20-20
14.19	<input type="checkbox"/> Inspect cargo transfer procedures.	46 CFR 151.45
14.20	<input type="checkbox"/> Inspect cargo hose. <ul style="list-style-type: none"> <li>• Inspected every 2 years (visual exam hydro-tested one and half times)</li> <li>• Test pressure is marked on the hose</li> </ul>	46 CFR 151.20-15 46 CFR 151.04-5(j)
14.21	<input type="checkbox"/> Inspect the benzene or butyl acrylate cargos.	46 CFR 151.05-2 46 CFR 151.05
14.22	<input type="checkbox"/> Inspect piping and valves.	46 CFR 151.20
14.23	<input type="checkbox"/> Verify warning sign are posted. <ul style="list-style-type: none"> <li>• Dangerous cargo</li> <li>• No visitors</li> <li>• No smoking</li> <li>• No open lights</li> </ul>	46 CFR 151.45-2(e)

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**Task 14: Chemical Gas Cargo Operations**

Step	Action	Ref
14.1	<input type="checkbox"/> Inspect containment system.	46 CFR 151.45
14.2	<input type="checkbox"/> Verify that the COI is endorsed to carry 151 cargo.	46 CFR 151.45-2(d)
14.3	<input type="checkbox"/> Inspect cargo tanks. <ul style="list-style-type: none"> <li>• Gravity tanks</li> <li>• Press vessel</li> <li>• External inspection</li> <li>• NDT</li> </ul>	46 CFR 151.01-10 46 CFR 151.04-5 46 CFR 151.15 46 CFR 151.25-1
14.4	<input type="checkbox"/> Inspect insulation.	46 CFR 151.15-3(g)
14.5	<input type="checkbox"/> Inspect valves and handling equipment.	46 CFR 151.04-5(f)
14.6	<input type="checkbox"/> Verify cargo special requirements.	46 CFR 151.50
14.7	<input type="checkbox"/> Inspect pump rooms.	46 CFR 151.56-1
14.8	<input type="checkbox"/> Inspect tank venting.	46 CFR 151.25-2
14.9	<input type="checkbox"/> Inspect tank venting.	46 CFR 151.15-5
14.10	<input type="checkbox"/> Examine pressure vacuum relief valve.	46 CFR 151.25-2
14.11	<input type="checkbox"/> Examine safety relief valve.	46 CFR 151.04-5(h)
14.12	<input type="checkbox"/> Conduct external examination of the inert gas system.	
14.13	<input type="checkbox"/> Inspect the gauging system.	46 CFR 151.15.10
14.14	<input type="checkbox"/> Inspect the tank overflow control.	46 CFR 151.45-6
14.15	<input type="checkbox"/> Inspect temperature control systems.	46 CFR 151.20-10 46 CFR 151.40
14.16	<input type="checkbox"/> Inspect emergency equipment.	
14.17	<input type="checkbox"/> Inspect toxic vapor detectors.	

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Step	Action	Ref
1.5	<input type="checkbox"/> Inspect cargo brackets, piping, valves, and reach rods.	
1.6	<input type="checkbox"/> Inspect all openings of vents, piping and valves.	
1.7	<input type="checkbox"/> Inspect pressure vessel cargo tanks. <ul style="list-style-type: none"> <li>• Required NDT for PVCT's 30 yrs and older having a 10-year internal exam period.</li> <li>• Owner submit proposal meeting guidance in NVIC 5-89</li> <li>• Testing conducted by personnel qualified and certified in nondestructive testing</li> </ul>	46 CFR 38.25-1 NVIC 5-89 46 CFR 151.04-7 46 CFR 98.25.97

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**Section 6: COI/ Periodic/ Annual Inspection**

**Task 1: General Health and Safety Systems**

Step	Action	Ref
1.1	<input type="checkbox"/> Test general alarms.	
	<b>Manned Barges Only</b>	
1.2	Inspect crew accommodations.	46 CFR 113.25-30
	<input type="checkbox"/> Sleeping	46 CFR 113.25-30
	<input type="checkbox"/> Washrooms and toilets	46 CFR 96.05-1
	<input type="checkbox"/> Messrooms	46 CFR 92.20
	<input type="checkbox"/> Hospital space	
	<input type="checkbox"/> Other spaces	
	<b>Manned Barges Only</b>	
1.3	<input type="checkbox"/> Verify means of escape.	46 CFR 92.10
	<ul style="list-style-type: none"> <li>• Two means required</li> <li>• No locked doors</li> <li>• Properly sized stairway</li> <li>• Dead end corridors</li> </ul>	
	<b>Manned Barges Only</b>	
1.4	<input type="checkbox"/> Inspect cooking and heating systems including liquefied flammable gas system.	46 CFR 96.05-1
	<ul style="list-style-type: none"> <li>• Marking and Instructions</li> <li>• Controls</li> <li>• Piping</li> <li>• Cylinders (test, hydro)</li> <li>• Appliances</li> <li>• Safety devices</li> <li>• Compartment ventilation</li> <li>• Evidence of crew conducting tests</li> </ul>	46 CFR 58.16 46 CFR 61.15-10 46 CFR 31.30 46 CFR 91.25-35
	<b>Manned Barges Only</b>	
1.5	<input type="checkbox"/> Inspect storerooms.	
	<ul style="list-style-type: none"> <li>• Stowage</li> <li>• Fire hazards</li> <li>• Lighting</li> </ul>	

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**Task 13: New Construction and Modified Vessels**

Step	Action	Ref
13.1	<input type="checkbox"/> Verify approved plans.	46 CFR 31.01-5
	<ul style="list-style-type: none"> <li>• General arrangements</li> <li>• Hull structure</li> <li>• Subdivision and stability</li> <li>• Electrical systems</li> <li>• Hazardous locations 5</li> <li>• Cargo gear</li> <li>• Fire control and systems</li> </ul>	46 CFR 31.10 46 CFR 31.10-5 46 CFR 110.25 46 CFR 91.20-10 46 CFR 91.40- 46 CFR 91.55 46 CFR 91.55-5
13.2	<input type="checkbox"/> Inspect all items ensuring they are constructed or installed as detailed in the approved plans.	
13.3	<input type="checkbox"/> Witness testing of all welds.	ABS Rules
13.4	<input type="checkbox"/> Witness tank testing.	
	<ul style="list-style-type: none"> <li>• Double bottom tank</li> <li>• Double side tank</li> <li>• Cargo oil tank</li> <li>• Fore peak void</li> <li>• Aft peak void (air test)</li> <li>• Cofferdams</li> <li>• Watertight bulkhead-hose test</li> <li>• Chemical cargo tank</li> </ul>	
13.5	<input type="checkbox"/> Inspect all repairs and modifications.	46 CFR 31.10-35 46 CFR 91.45-1

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**Task 12: Cargo Tank Internals**

Step	Action	Ref
12.1	Verify Marine Chemist Certificate. <input type="checkbox"/> Marine Chemist No. _____ <input type="checkbox"/> Certificate No. _____ <input type="checkbox"/> Date Issued _____ <input type="checkbox"/> Location _____ <input type="checkbox"/> Last three cargos _____ <input type="checkbox"/> All spaces certified "Safe for Workers" that are to be entered <input type="checkbox"/> MCC maintained by competent person	MSM II A.5.H NFPA 306
12.2	<input type="checkbox"/> Verify cargo gauging type is correct for authorized cargo. <ul style="list-style-type: none"> <li>• Open</li> <li>• Restricted</li> <li>• Closed</li> </ul>	
12.3	<input type="checkbox"/> Inspect overfill device installed.	
12.4	<input type="checkbox"/> Inspect all cargo tanks. <ul style="list-style-type: none"> <li>• Welds</li> <li>• Bulkheads</li> <li>• Framing</li> <li>• Sumps</li> <li>• Pumps</li> </ul>	MSM II Ch.B.3.B.4 NVIC 7-68
12.5	<input type="checkbox"/> Inspect cargo brackets, piping, valves, and reach rods.	
12.6	<input type="checkbox"/> Inspect openings of vents/piping/valves.	
12.7	<input type="checkbox"/> Inspect Pressure Vessel Cargo Tanks. <ul style="list-style-type: none"> <li>• Required NDT for PVCTs 30 yrs and older having a 10-yr internal exam period</li> <li>• Owner submit proposal meeting guidance in NAVIC 5-89</li> <li>• Testing conducted by personnel qualified and certified in nondestructive testing.</li> </ul>	46 CFR 38.25-1 NVIC 5-89 46 CFR 151.04-7 46 CFR 98.25.97

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Step	Action	Ref
1.6	<input type="checkbox"/> Conduct general safety inspection throughout the vessel.	46 CFR 31.10-21(b)
1.7	<input type="checkbox"/> Verify warning signs and signals are posted. <ul style="list-style-type: none"> <li>• Red warning signals (flag by day, light at night)</li> <li>• Warning Signs (no smoking, no open lights, no visitors)</li> <li>• Radio Room signage (radio equipment shall not be used during the transfer of grade A, B, or C liquids except by permission of senior Deck Officer)</li> </ul>	46 CFR 35.30-1
1.8	<input type="checkbox"/> Examine benzene-monitoring program. <ul style="list-style-type: none"> <li>• Regulated areas</li> <li>• Record of personal exposure</li> </ul>	46 CFR 197.501 NVIC 6-92
1.9	<input type="checkbox"/> Inspect the combustible gas indicators. <ul style="list-style-type: none"> <li>• Check operation/calibration</li> <li>• UL or FM approved</li> </ul> <p style="text-align: center;"><b>Manned Barges Only</b></p>	46 CFR 35.30-15
1.10	<input type="checkbox"/> Inspect emergency outfits/equipment. <ul style="list-style-type: none"> <li>• One outfit on barges with cargo Tanks &lt; 15 feet</li> <li>• One SCBA</li> <li>• Lifeline with belt/harness</li> <li>• Flashlight</li> <li>• Ax</li> <li>• Non-conductive boots and gloves</li> <li>• Helmet</li> <li>• Protective clothing</li> </ul> <p style="text-align: center;"><b>Manned Barges Only</b></p>	46 CFR 35.30-20(b) 46 CFR 96.35-1

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Step	Action	Ref
1.11	<input type="checkbox"/> Inspect protection of spaces for vehicles, as applicable. <ul style="list-style-type: none"> <li>• Ventilation</li> <li>• Alarms for loss of ventilation</li> <li>• Markings for failure alarm</li> <li>• Carbon monoxide tests</li> <li>• Plans showing vehicle space</li> <li>• Arrangements</li> <li>• Preparation of vehicles prior to carriage</li> </ul>	46 CFR 90.10-38 46 CFR 92.15-10(d) 46 CFR 97.37-50 46 CFR 97.80
1.12	<input type="checkbox"/> Inspect cranes, as applicable.	46 CFR 31.10.16(d)(3)
1.13	<input type="checkbox"/> Inspect ventilation systems. <ul style="list-style-type: none"> <li>• Means of closure</li> <li>• Remote shut-offs</li> <li>• Cleanliness of vents and intakes</li> </ul>	46 CFR 92.15
1.14	<input type="checkbox"/> Inspect emergency lighting. <ul style="list-style-type: none"> <li>• Weekly test by crew logged</li> <li>• Storage batteries tested every 6 months</li> <li>• Marked by minimum ½ letter "E"</li> </ul>	46 CFR 31.35 46 CFR 96.05 46 CFR 97.15-30 46 CFR 97.37-25
1.15	<input type="checkbox"/> Verify that muster and emergency instruction lists are posted. <ul style="list-style-type: none"> <li>• Ensure content is IAW 46 CFR 199.80</li> <li>• See exemptions in 46 CFR 199.610(c)</li> </ul>	46 CFR 35.10-5 46 CFR 97.13.1 46 CFR 199.80

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Step	Action	Ref
11.1	Conduct a visual inspection of the following: <ul style="list-style-type: none"> <li><input type="checkbox"/> Combustion chamber</li> <li><input type="checkbox"/> Refractory</li> <li><input type="checkbox"/> Exhaust</li> <li><input type="checkbox"/> Heat exchanger</li> <li><input type="checkbox"/> Pumps</li> <li><input type="checkbox"/> Piping</li> </ul>	46 CFR 61.30-15
11.2	<input type="checkbox"/> Verify that a copy of the test procedures is on board.	46 CFR 63.10-1
11.3	<input type="checkbox"/> Witness the operational test of the following: <ul style="list-style-type: none"> <li>• Pre-purge</li> <li>• Ignition sequence</li> <li>• Combustion controls</li> <li>• Flame safeguards</li> <li>• Limit controls (low fluid output, low flow cutout, high temperature cutout)</li> <li>• Post-purge</li> <li>• COI endorsed to carry cargo</li> <li>• Pump relief valve</li> <li>• Flame screens</li> <li>• Ventilation of the pump room</li> </ul>	46 CFR 61.30-20 46 CFR 62.25-5
11.4	<input type="checkbox"/> Verify that the COI is endorsed to carry elevated cargo.	
11.5	<input type="checkbox"/> Inspect the cargo pump relief valve.	
11.6	<input type="checkbox"/> Inspect the flame screens.	
11.7	<input type="checkbox"/> Inspect the ventilation of the pump room.	

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Step	Action	Ref
10.14	<input type="checkbox"/> Inspect tanks for liquefied flammable gas having lethal characteristics or having dangerous cargo. <ul style="list-style-type: none"> <li>• Markings</li> <li>• Lagging and fire protection</li> <li>• Manholes</li> <li>• Piping</li> <li>• Fittings</li> <li>• Gauges</li> <li>• Valves</li> <li>• Controls</li> <li>• Fill and vent</li> <li>• Foundations and supports</li> </ul>	46 CFR 38.01-1

Type of Examination/Test	Date of Examination/Test
Internal Examination	
External Examination (lagging removed)	
Safety Valve test	
Hydrostatic test	

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**Task 11: Thermal Fluid Heaters**

**Task 2: Lifesaving Equipment: (Manned Barges Only)**

Step	Action	Ref
2.1	Inspect life rafts. <ul style="list-style-type: none"> <li>• Launching instructions posted</li> <li>• Stowage</li> <li>• Annual service dates</li> <li>• Hydro release service dates</li> <li>• Weak link</li> <li>• Float free</li> <li>• Markings</li> <li>• Capacities</li> </ul>	
2.2	Inspect life jackets. <ul style="list-style-type: none"> <li><input type="checkbox"/> Retro-reflective tape</li> <li><input type="checkbox"/> Lights</li> <li><input type="checkbox"/> Whistles</li> <li><input type="checkbox"/> Work vest</li> <li><input type="checkbox"/> Markings</li> <li><input type="checkbox"/> Number of lifejackets rejected by inspector</li> </ul>	46 CFR 32.05-5 46 CFR 199.620 MSM II Ch.2.H.4
2.3	<input type="checkbox"/> Inspect life jacket stowage. <ul style="list-style-type: none"> <li>• Accessibility</li> <li>• Required notices and markings</li> <li>• Stowage lockers</li> <li>• Wearing instructions</li> </ul>	46 CFR 199.70 46 CFR 199.80(c)
2.4	<input type="checkbox"/> Verify that the life jacket donning placards are posted.	
2.5	<input type="checkbox"/> Inspect ring lifebuoys. <ul style="list-style-type: none"> <li>• Lights</li> <li>• Lines</li> <li>• Smoke signals</li> <li>• Stowage</li> <li>• Markings</li> </ul>	46 CFR 199.70

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Step	Action	Ref
2.6	<input type="checkbox"/> Inspect life floats and buoyant apparatus. <ul style="list-style-type: none"> <li>• Equipment</li> <li>• Stowage</li> <li>• Markings</li> </ul>	46 CFR 199.640
2.7	<input type="checkbox"/> Inspect immersion suits.	46 CFR 199.610(b) NVIC 2.63
2.8	<input type="checkbox"/> Inspect the sea painter. <ul style="list-style-type: none"> <li>• Secured</li> <li>• Weak link</li> <li>• Cleat</li> </ul>	46 CFR 199.175(b)(21)
2.9	<input type="checkbox"/> Inspect the general alarms. <ul style="list-style-type: none"> <li>• Controls</li> <li>• Batteries and fuses</li> <li>• Tested</li> <li>• Markings</li> <li>• Bell locations audible</li> </ul>	46 CFR 32.35 46 CFR 113.25
2.10	<input type="checkbox"/> Examine distress signals. <ul style="list-style-type: none"> <li>• Required amount</li> <li>• Type</li> <li>• Check expiration date</li> <li>• Storage and condition</li> </ul>	

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10.7	<input type="checkbox"/> Inspect independent tanks, fixed, portable, or marine portable. <ul style="list-style-type: none"> <li>• External exam</li> <li>• Date of internal exam</li> <li>• Date of hydrostatic test</li> <li>• Metal information plate</li> <li>• Marking and labeling</li> <li>• Saddles: foundations and stowage</li> <li>• Piping and valves</li> <li>• Lifting fittings</li> <li>• Securing devices</li> <li>• Pumps and controls</li> <li>• Cargo hoses</li> <li>• Electrical grounding</li> <li>• Firefighting requirements</li> <li>• Authorized cargo</li> </ul>	46 CFR 32.20-5 46 CFR 32.20-10 46 CFR 151.15-5 46 CFR 32.55-25 46 CFR 32.20-10 46 CFR 151.56
10.8	<input type="checkbox"/> Conduct external examination of inert gas systems.	
10.9	<input type="checkbox"/> Ensure proper ventilation system for cargo carried.	46 CFR 32.20-5
10.10	<input type="checkbox"/> Verify warning notices and signals are posted.	
10.11	<input type="checkbox"/> Inspect explosion-proof fixtures in the destination hazardous area.	
10.12	<input type="checkbox"/> Inspect weather decks.	
10.13	<input type="checkbox"/> Inspect air compressor intakes.	

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Step	Action	Ref
10.3	<input type="checkbox"/> Inspect piping and valves. <ul style="list-style-type: none"> <li>• Expansion joints</li> <li>• Valve controls</li> <li>• Supports</li> <li>• Flanges</li> <li>• Containment</li> <li>• Materials</li> </ul>	46 CFR 32.50-15 33 CFR 155-310 46 CFR 151.56
10.4	<input type="checkbox"/> Inspect hoses. <ul style="list-style-type: none"> <li>• External examination</li> <li>• Hydrostatic test</li> <li>• Markings</li> <li>• Test dates</li> <li>• Hose log (if available)</li> </ul>	46 CFR 56.04 46 CFR 32.50-15 33 CFR 155.310 46 CFR 151.56
10.5	<input type="checkbox"/> Inspect pumps and engines. <ul style="list-style-type: none"> <li>• Controls and shutdowns</li> <li>• Relief valves</li> <li>• Gauges</li> <li>• Engine fuel system</li> <li>• Spark arrestor</li> <li>• Cover</li> </ul>	46 CFR 32.50-30 33 CFR 155.800 33 CFR 156.170 33 CFR 154.500
10.6	<input type="checkbox"/> Inspect pump rooms. <ul style="list-style-type: none"> <li>• Electrical insulation</li> <li>• Ventilation</li> <li>• Bulkhead penetrations</li> <li>• Gas-tight boundaries</li> <li>• Cofferdams</li> <li>• Fire extinguishing system</li> </ul>	46 CFR 91.25-37 46 CFR 151.15-10 46 CFR 39.20-3 46 CFR 32.50-15 46 CFR 111.105 33 CFR 155.480

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### Task 3: Navigation Equipment

Step	Action	Ref
3.1	<input type="checkbox"/> Verify/Test navigational lights and signals are properly displayed. <ul style="list-style-type: none"> <li>• Running lights</li> <li>• Sidelight screens proper color and shape</li> <li>• Anchor lights</li> <li>• Anchor/Towing day shapes</li> </ul>	33 CFR 81 33 CFR 82 72 COLREGS

### Task 4: Fire Protection Equipment

Step	Action	Ref
4.1	<input type="checkbox"/> Inspect fire and smoke detection system. <ul style="list-style-type: none"> <li>• Required in vehicle spaces only</li> <li>• Test alarms/detection system</li> <li>• Remote pull stations</li> <li>• Annual testing/service</li> </ul>	46 CFR 95.05-1 46 CFR 91.25-20
4.2	<input type="checkbox"/> Inspect portable and semi-portable fire extinguishers. <ul style="list-style-type: none"> <li>• Controls/instructions/markings</li> <li>• Annually serviced</li> <li>• Markings (weight and hydrostatically test date)</li> <li>• Portable bottles hydrostatically-tested (every 5 years)</li> <li>• Semi-portable bottles hydrostatically-tested (every 5 years)</li> <li>• Flexible loops tested or replaced (same as bottled)</li> <li>• Hose and diffuser</li> </ul>	46 CFR 147.60 46 CFR 34.50-15(a) 46 CFR 95.50-10(a) NVIC 7-70 MSM II Ch.C2.I.3 MSM II Ch.C2.I.4 NVIC 13-86

Required		On board	
Number	Class	Number	Class

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Step	Action	Ref
4.3	Inspect fixed fire extinguisher systems.	46 CFR 95.05-10(a)
	<input type="checkbox"/> <b>CO<sub>2</sub></b>	46 CFR 147.65
	<ul style="list-style-type: none"> <li>• Cylinders weighted annually</li> <li>• Cylinders hydrostatically-tested (every 12 years) Controls/instructions/markings</li> <li>• Alarms, time delays</li> <li>• Piping, heads</li> <li>• Flex loops tested/replaced (10% per year)</li> <li>• Test or renew every 12 years</li> <li>• Closures for openings</li> </ul>	46 CFR 34.05-5 46 CFR 95.05-10 46 CFR 34.15 46 CFR 95.15 NVIC 6-72
	<input type="checkbox"/> <b>Sprinklers</b>	46 CFR 34.30
	<ul style="list-style-type: none"> <li>• Pumps</li> <li>• Pressure tanks</li> <li>• Piping, heads</li> <li>• Alarms</li> </ul>	46 CFR 95.30 NFPA-13 NVIC 6-72
	<input type="checkbox"/> <b>Foam</b>	
	<ul style="list-style-type: none"> <li>• Pumps</li> <li>• Tank</li> <li>• Piping, heads</li> <li>• Foam tested</li> </ul>	
	<b>Required on Barges with sleeping accommodations for &gt;12 persons</b>	
4.4	<input type="checkbox"/> Inspect fire main system and stations.	46 CFR 95-05-5
	<ul style="list-style-type: none"> <li>• Operation of pumps</li> <li>• Inspect piping for soundness</li> <li>• Relief valve if installed</li> <li>• Two effective streams simultaneously applied</li> <li>• Nozzles and spanner wrenches on station</li> <li>• Hoses connected at station</li> <li>• UL-approved hoses</li> <li>• Correct hose length</li> <li>• Annual hose hydro test (minimum 100 psi)</li> </ul>	46 CFR 95.10.5
	<b>Required on Barges with sleeping accommodations for &gt;12 persons</b>	

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### Task 9: Observe Drills (Manned Barges Only)

Step	Action	Ref
9.1	<input type="checkbox"/> Observe fire drills.	46 CFR 97.15 46 CFR 199.180
9.2	<input type="checkbox"/> Observe abandon ship drills.	46 CFR 97.15 46 CFR 199.180
9.3	<input type="checkbox"/> Observe man overboard drills.	46 CFR 97.15 46 CFR 199.180
9.3	<input type="checkbox"/> Observe security drills.	33 CFR 104.230

### Task 10: Tank Barge Cargo Operations

Step	Action	Ref
10.1	<input type="checkbox"/> Inspect cargo tanks.	46 CFR 151.15-10
	<ul style="list-style-type: none"> <li>• Trunks/hatches</li> <li>• Ullage openings</li> <li>• Liquid level gauges (open, restricted, closed)</li> <li>• Deck penetrations</li> <li>• Heating oils</li> <li>• Explosion-proof electrical fittings</li> <li>• Overfill device</li> </ul>	46 CFR 39.20-3 46 CFR 32.50-15 46 CFR 111.105 33 CFR 155.480
10.2	Inspect cargo tank ventilation.	46 CFR 32.60-20
	<input type="checkbox"/> Common header system	45 CFR 36.20-5 46 CFR 34.05-05
	<ul style="list-style-type: none"> <li>• P/V valves</li> <li>• Flame arrestors</li> <li>• Flush and drain connections</li> </ul>	
	<input type="checkbox"/> Independent PV valves	
	<ul style="list-style-type: none"> <li>• Flame screen</li> <li>• Valve material (dangerous cargoes)</li> </ul>	
	<input type="checkbox"/> Independent goosenecks	
	<ul style="list-style-type: none"> <li>• Flame screen</li> <li>• Closure device</li> </ul>	

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Step	Action	Ref
8.8	<input type="checkbox"/> Inspect oil water/waste retention.	
8.9	<input type="checkbox"/> Inspect oily bilge/ballast discharge. (oceangoing, 400 gross tons discharge shore connection or portable adapter)	33 CFR 155.330 33 CFR 155.350
8.10	<input type="checkbox"/> Inspect prohibited oil spaces.	33 CFR 155.470
8.11	<input type="checkbox"/> Inspect discharge removal equipment spill kit.	33 CFR 155.210
8.12	<input type="checkbox"/> Inspect emergency lightering equipment. <ul style="list-style-type: none"> <li>• Single-hulled &gt;54,000 gross tons carrying oil <ul style="list-style-type: none"> <li><input type="checkbox"/> Permanently marked with sizes</li> <li><input type="checkbox"/> One extra spare set must be onboard</li> </ul> </li> </ul>	33 CFR 157.410
8.13	<input type="checkbox"/> Verify that shipboard garbage is properly disposed. (oceangoing manned only)	33 CFR 151.63
8.14	<input type="checkbox"/> Verify that the proper placards are in place.	MARPOL Ax.V/3
8.15	<input type="checkbox"/> Conduct MARPOL survey. <ul style="list-style-type: none"> <li>• Discharge of cargo residue</li> <li>• Approved monitoring and control system</li> </ul>	33 CFR 151.09
8.16	<input type="checkbox"/> Conduct MARPOL survey. <ul style="list-style-type: none"> <li>• Discharge of cargo residue</li> <li>• Approved monitoring and control system</li> </ul>	33 CFR 151.30
8.17	<input type="checkbox"/> Inspect barges that ballast cargo tanks. <ul style="list-style-type: none"> <li>• Pumping, piping, and discharge arrangements</li> <li>• Designated observation area</li> <li>• Slop tank</li> <li>• Cargo and ballast information</li> <li>• Instruction manual</li> </ul>	33 CFR Part 157 33 CFR 157.11 33 CFR 157.13 33 CFR 157.15 33 CFR 157.23 33 CFR 157.49

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Step	Action	Ref
4.5	<input type="checkbox"/> Inspect fire axes.	46 CFR 34.60
4.6	<input type="checkbox"/> Verify presence of fire control plan. <b>Required on barges with sleeping accommodations for &gt;6 persons.</b>	46 CFR 97.36-1
4.7	<input type="checkbox"/> Inspect structural fire protections systems. <ul style="list-style-type: none"> <li>• Bulkhead penetration</li> <li>• Fire doors</li> <li>• Noncombustible trim</li> <li>• Fire-resistant furnishing</li> <li>• Fire loads</li> <li>• Windows in control areas</li> <li>• Fire dampeners</li> </ul> <p><b>All vessels 4000 gross tons and over and Industrial vessels of 330 gross tons but less than 4000 gross tons with &gt;12 industrial personnel on board.</b></p>	
4.8	<input type="checkbox"/> Test fire doors and controls.	46 CFR 92.07
4.9	<input type="checkbox"/> Inspect paint, oil, and lamp stowage. <ul style="list-style-type: none"> <li>• Fixed CO<sub>2</sub> or other approved system</li> <li>• Explosive-proof fixtures</li> <li>• Closures</li> <li>• Fireproof/metal lined</li> <li>• Lighting/electrical</li> <li>• Fire protection</li> <li>• Markings</li> </ul>	46 CFR 32.85-1 46 CFR 34.05.5(a)(3) 46 CFR 92.05-10 46 CFR 95.05-10(c) 46 CFR 95.15.35 46 CFR 111.105-43

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**Task 5: Ground Tackle**

Step	Action	Ref
5.1	<input type="checkbox"/> Verify proper tackle. <ul style="list-style-type: none"> <li>• Required number of equipment</li> <li>• Review ABS</li> <li>• Safety program/single-hulled</li> <li>• Anchor stowed for immediate use</li> </ul>	46 CFR 32.15-15 46 CFR 96.07 33 CFR 155.230 ABS Rules
5.2	<input type="checkbox"/> Inspect mooring, towing, standing, and running gear.	46 CFR 32.15-15
5.3	<input type="checkbox"/> Inspect emergency towing arrangement. <ul style="list-style-type: none"> <li>• Available on barge or tow vessel</li> <li>• Retrieval equipment required</li> <li>• Annual inspection IAW manufacturing recommendations</li> <li>• Barge retrieval drills by crew</li> </ul>	33 CFR 155.235
5.4	<input type="checkbox"/> Test anchor, windlass (including foundation), and capstans. <ul style="list-style-type: none"> <li>• Drop test</li> <li>• Brake test</li> <li>• Retrieval</li> <li>• Check equipment for wastage</li> <li>• Check condition of hydraulic hoses</li> </ul>	46 CFR 96.07 ABS Rules

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**Task 8: Pollution Prevention Systems**

Step	Action	Ref
8.1	<input type="checkbox"/> Verify that the International Convention for the Prevention of Pollution from Ships (MARPOL) placard is posted.	33 CFR 155.450
8.2	<input type="checkbox"/> Inspect machinery space or bilge/ballast control.	
8.3	<input type="checkbox"/> Verify that bilges are free of oil and trash/debris.	
8.4	<input type="checkbox"/> Inspect the marine sanitation device and associated equipment. <ul style="list-style-type: none"> <li><input type="checkbox"/> Marine sanitation device               <ul style="list-style-type: none"> <li>• Type I</li> <li>• Type II</li> <li>• Type III</li> </ul> </li> <li><input type="checkbox"/> Certified for inspected vessels.</li> <li><input type="checkbox"/> Capacity satisfactory</li> <li><input type="checkbox"/> Installation               <ul style="list-style-type: none"> <li>• Operation</li> <li>• Ventilation</li> <li>• Writing and piping</li> <li>• Maintenance</li> <li>• Placard posted</li> <li>• Safety</li> <li>• Accessibility to parts requiring routine servicing</li> <li>• Manufacturer's instructions available</li> </ul> </li> </ul>	33 CFR 159.55 MSM II Ch.B.6.F 33 CFR 159.57 33 CFR 159.59
8.5	<input type="checkbox"/> Verify person-in-charge designation.	33 CFR 155.700
8.6	<input type="checkbox"/> Inspect fuel oil/cargo oil containment systems.	33 CFR 155.320
8.7	<input type="checkbox"/> Inspect tank level or pressuring monitor device.	

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Step	Action	Ref
7.5	Inspect cable, wiring, receptacles, outlets, and accessories.	
	<input type="checkbox"/> Spot check for proper cable size	46 CFR 111.60-4
	<input type="checkbox"/> Ensure that splices are only made in cable size 12 AWG or greater	46 CFR 111.60-13
	<input type="checkbox"/> Check for splices located in Hazardous Atmosphere locations	46 CFR 111.60.19
	<input type="checkbox"/> Visually check that wires/cables are properly insulated (no naked wiring/cables)	46 CFR 111.60
	<input type="checkbox"/> Twist-on type connectors (wire nuts) are not located in an enclosure and/or not used as spliced joints.	46 CFR 111.60
	<input type="checkbox"/> Receptacles/outlets have covers and no exposed live parts	46 CFR 111.79.1 46 CFR 111.81-1
	<input type="checkbox"/> Receptacles/outlets are mounted in outlet boxes	46 CFR 111.81-1
7.6	Inspect miscellaneous motors and controllers.	
	<input type="checkbox"/> Enclosures located in hazardous locations meet the requirements of 46 CFR 111.105	46 CFR 111.70-3
	<input type="checkbox"/> Wiring schematic/diagrams of the controller is located on the door interior.	
7.7	Inspect emergency lighting.	
	<input type="checkbox"/> Emergency lights are marked with "E"	46 CFR 97.37
	<input type="checkbox"/> Emergency lighting is provided in the required spaces	46 CFR 112.15-1
	<input type="checkbox"/> Light fixtures located in hazardous locations are explosion proof	46 CFR 111.105-31 46 CFR 111.105-32
	<input type="checkbox"/> Emergency lighting is operational	
	<input type="checkbox"/> Ensure general lighting switch will not secure emergency lights	46 CFR 112.43-1
	<input type="checkbox"/> Witness the emergency lights automatically energize upon loss of power to general lighting, if equipped to do so	

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### Task 6: Auxiliary Machinery and Machinery Spaces

Step	Action	Ref
6.1	<input type="checkbox"/> Inspect ventilation of machinery installations. <ul style="list-style-type: none"> <li>• Closure</li> <li>• Remote shut-offs</li> <li>• Cleanliness of vents/intakes</li> </ul>	MSM II Ch.1 MSM II Ch.0
6.2	<input type="checkbox"/> Inspect fuel systems. <ul style="list-style-type: none"> <li>• Flame screen</li> <li>• Flexible hose meets SAE J-1942</li> <li>• Material fuel piping</li> <li>• Shutoff valves installed</li> </ul>	
6.3	<input type="checkbox"/> Test internal combustion engines. <ul style="list-style-type: none"> <li>• Operating within parameters</li> <li>• Flexible hose that meets SAE J-1942 doesn't exceed 30" in length</li> </ul>	46 CFR 32.35.5 46 CFR 35.35-85 46 CFR 58.10
6.4	<input type="checkbox"/> Inspect machinery guards.	46 CFR 58.01-20
6.5	<input type="checkbox"/> Inspect watertight bulkheads and doors. <ul style="list-style-type: none"> <li>• Bulkhead penetrations</li> <li>• Material condition</li> <li>• Welds</li> <li>• Gaskets/knife edges/dogs/welds/alignment</li> </ul>	
6.6	<input type="checkbox"/> Inspect nonmetallic piping materials. <ul style="list-style-type: none"> <li>• Flexible hose meets SAE J-1942 device</li> <li>• Plastic pipe not in a concealed space</li> <li>• Shell valves</li> </ul>	46 CFR 56.60-25

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Step	Action	Ref
6.7	<input type="checkbox"/> Test bilge pumps. (not required on manned barges)	46 CFR 32.52
6.8	<input type="checkbox"/> Inspect bilge piping. <ul style="list-style-type: none"> <li>• Manifolds/valves/strainers/piping</li> <li>• Remote shut-offs</li> </ul>	46 CFR 56.50-50
6.9	<input type="checkbox"/> Verify air compressor is installed properly.	46 CFR 32.35-15
6.10	<input type="checkbox"/> Test pressure vessels. (hydrostatically or internally tested)	46 CFR 61.10

Service	MAWP	Date tested or Examined Internally	Relief Valve Tested

6.11	<input type="checkbox"/> Verify that relief valves are set within range. <ul style="list-style-type: none"> <li>• Up to 250 psi; reset within 10%</li> <li>• Above 250 psi; reset within 5%</li> </ul>	46 CFR 54.15-10(g) 46 CFR 61.10-5(i)
6.12	<input type="checkbox"/> Inspect refrigeration and air-conditioning systems.	46 CFR 58.20
6.13	<input type="checkbox"/> Inspect ballast tanks. (noncargo tank) <ul style="list-style-type: none"> <li>• Vent 2 inch nominal pipe size</li> <li>• Means of vent closing (example: ball check valve) (Exempt Inland Service)</li> </ul>	46 CFR 56.50-85

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### Task 7: Electrical Equipment

Step	Action	Ref
7.1	<input type="checkbox"/> Inspect primary power and light system.	
7.2	Inspect independent generators. <ul style="list-style-type: none"> <li><input type="checkbox"/> Primer mover must meet part 58 of CFR and sections 4/5 C2.15 and 4/5C2.15 of ABS rules for Building and Classing steel vessels</li> <li><input type="checkbox"/> Circuit breaker protected</li> <li><input type="checkbox"/> Reverse power relay</li> <li><input type="checkbox"/> Ground detection system</li> </ul>	46 CFR 111.12-1 46 CFR 111.12-11 46 CFR 111.05-21
7.3	Inspect batteries and alternator. (if stated) <ul style="list-style-type: none"> <li><input type="checkbox"/> Not in a sleeping space</li> <li><input type="checkbox"/> Ventilation provided</li> <li><input type="checkbox"/> Trays lined</li> <li><input type="checkbox"/> Conductors/cables sizes</li> <li><input type="checkbox"/> Over current protection provided</li> <li><input type="checkbox"/> Terminals cleaned and protected</li> </ul>	46 CFR 111.15.2 46 CFR 111.15-5 46 CFR 111.15-10 46 CFR 111.15-5
7.4	Inspect switchboards and distribution panels. <ul style="list-style-type: none"> <li><input type="checkbox"/> Non-conductive deck coverings front/rear of switchboards</li> <li><input type="checkbox"/> Nameplates for circuit designations</li> <li><input type="checkbox"/> Circuit breaker amperage does not exceed nameplate rating</li> <li><input type="checkbox"/> Test ground detection</li> <li><input type="checkbox"/> Meters in good working order</li> <li><input type="checkbox"/> Distribution panels have a circuit directory</li> <li><input type="checkbox"/> Distribution panels have an enclosure (door)</li> </ul>	46 CFR 111.30-11 46 CFR 111.30-15 46 CFR 111.12-11 46 CFR 111.77-1 46 CFR 111.05-23 46 CFR 111.30-25 46 CFR 111.40-11 46 CFR 111.40-5

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