

- Liferafts**
  - Launching instructions posted 46 CFR 199.261
  - Stowage MSM Ch. C2.H.3
  - Annual service dates 46 CFR 199.190(g)

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  - Hydro release service dates 46 CFR 199.190(h)

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  - Weak link
  - Float free
  - Markings 46 CFR 32.05-5
  - Capacities
- Lifefloats and buoyant apparatus** 46 CFR 199.640
  - Equipment
  - Stowage
  - Markings
- Sea painter** 46 CFR 199.175(b)(21)
  - Secured
  - Weak link
  - Cleat
- Lifebuoys** 46 CFR 199.640
  - Lights
  - Lines
  - Smoke signals
  - Stowage
  - Markings
- Lifejackets** 46 CFR 199.620  
MSM Ch. C2.H.4
  - Retro-reflective tape
  - Lights
  - Whistles
  - Work vests
  - Stamped passed
  - Markings 46 CFR 32.05-5
  - Number of lifejackets rejected by inspector \_\_\_\_\_

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

- Lifejacket stowage** 46 CFR 199.70(b)
  - Accessibility
  - Required notices and markings 46 CFR 199.80(c)
  - Stowage lockers 46 CFR 199.70(b)(2)
  - Wearing instructions 46 CFR 199.80(c)  
46 CFR 199.217
- Immersion suits** 46 CFR 199.610(a)  
MSM Ch. C2.H.5
  - Condition
  - Retro-reflective material

**Fire Protection Equipment:**

- Fire extinguishers**
  - Controls, instructions, markings 46 CFR 34.50-15(a)
  - Annually serviced 46 CFR 95.50-10(a)
  - Markings (weight and hydrostatic test date) NVIC 7-70
  - Portable bottles hydrostatically tested (every 5 years) MSM Ch C2.I.3
  - Semiportable bottles hydrostatically tested (every 12 years) MSM Ch C2.I.4
  - Flexible loops tested or replaced (same as bottle) NVIC 13-86
  - Hose and diffuser

Required		On Board	
Number	Class	Number	Class

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

**Vapor Control Systems:**

- Piping 46 CFR 39.20-1
  - Drain lines
  - Electrically bonded to hull
  - Flange stud
  - Vapor connection painted red / yellow / red and labeled vapor in 2-inch black letters
- Closed gauging arrangement 46 CFR 39.20-3
- Liquid overflow protection 46 CFR 39.20-9
  - High-level and tank overflow alarms
  - Alarm with automatic shutdown system
  - Spill valve
  - Rupture disk
  - Intrinsically safe
  - Audible and visual alarms
  - Operational test

**Thermal Fluid Heaters:**

- Visual inspection 46 CFR 61.30-15
  - Combustion chamber
  - Refractory
  - Exhaust
  - Heat exchanger
  - Pumps
  - Piping
- Test procedures 46 CFR 63.10-1

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

- Periodic test and inspection of boilers in accordance with 46 CFR Table 61.05-10

Boiler ID Number	Date Hydrostatically Tested	Date Mountings Opened	Date Mountings Removed and Studs Examined	Fireside	Waterside	External

- Boiler safety valves 46 CFR 52.01-120(a)
- Fusible plugs 46 CFR 52.01-50  
 46 CFR Table 61.05-10  
 MSM Vol. IV Ch. 3.I.3.b
  - Examined
  - Renewed at this inspection
- Fuel systems 46 CFR 56.50-65
  - Remote shutoff valves
  - Reliefs and bypass valves
  - Strainers
  - Piping
  - Fuel tanks
  - Filling and venting
  - Gauges

**Auxiliary Machinery:**

- Internal combustion engines 46 CFR 58.10-10  
 ABS Rules
  - Spark arrestor
  - Controls
  - Insulation
  - Exhaust
  - Cooling
  - Fuel system

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

- Piping and valves 46 CFR 56.04
  - Expansion joints 46 CFR 32.50-15
  - Valve controls 46 CFR 32.50-15
  - Supports 33 CFR 155.310
  - Flanges 46 CFR 151.56
  - Containment 33 CFR 155.310
  - Materials 46 CFR 151.56
- Hoses 46 CFR 32.50-30
  - External examination 33 CFR 155.800
  - Hydrostatic test 33 CFR 156.170
  - Markings 33 CFR 154.500
- Cargo pumps and engines
  - Controls and shutdowns 46 CFR 32.50-55
  - Relief valves 46 CFR 32.50-5
  - Gauges 46 CFR 32.50-5
  - Engine fuel system
  - Spark arrestor
  - Cover
- Pumprooms 46 CFR 32.60-20
  - Electrical installation 46 CFR 36.20-5
  - Ventilation 46 CFR 36.20-5
  - Bulkhead penetrations
  - Gas-tight boundaries
  - Cofferdams
  - Fire extinguishing 46 CFR 34.05-5

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

**Pollution Prevention:**

*NOTE: Guidance for inspecting pollution prevention items is detailed in MSM Volume II, Chapter 31.*

- Pollution placard posted 33 CFR 155.450
- Person-in-charge designation 33 CFR 155.700  
33 CFR 155.820
- Fuel oil containment 33 CFR 155.320
  - Portable
  - Fixed
- Fuel tank vents 46 CFR 56.50-85
  - Flame screens
  - Closures
- Deck lighting 33 CFR 155.790
- Oily waste retention 33 CFR 157.17
  - Bilge
  - Tank
- Ballast discharge 33 CFR 155.330  
33 CFR 155.350  
33 CFR 155.360  
33 CFR 155.370
  - Acceptable processing equipment
- Oily bilge discharge 33 CFR 155.430
  - Piping system
  - Stop valve
  - Standard discharge connection
  - Pump stop
- Prohibited oil spaces 33 CFR 155.470
- Emergency shutdown 33 CFR 155.780  
46 CFR 32.50-35

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

- Hull openings and closures
  - Hatch covers
  - Closing devices, gaskets
  - Light / water test
 46 CFR 42.15  
MSM Ch. B1.E.5  
ICLL 66 Regs. 12 - 23
- Deck openings and closures
  - Closing devices
  - Gaskets
  - Light / water test
 MSM Ch. B1.E.5  
ICLL 66 Regs. 12 - 20
- Rakes
  - Opened
    - Yes
    - No
  - Evidence of cargo or water
 46 CFR 31.10-21(b)
- Guards, ladders, rails, and gangways lifelines (including accommodation ladders or pilot ladders)
 46 CFR 32.02-10  
46 CFR 92.25  
46 CFR 42.15-75  
ICLL 66 Reg. 25
- Cargo gear examined (in absence of Cargo Gear Certificate)
  - Tested
  - Records
  - Safe Working Load markings
 46 CFR 31.10-16  
46 CFR 91.37
- Gas freeing for repairs
  - Current Gas Chemist Certificate for areas as required
  - Date \_\_\_\_\_
  - Chemist No. \_\_\_\_\_
 46 CFR 35.01-1  
MSM Ch. A5.H  
NFPA 306
- Hull marks
  - Name
  - Hailing port
  - Official number
  - Net tonnage
 46 CFR 67.121  
46 CFR 67.123
- Draft marks
  - Legible
  - Properly sized
  - Properly spaced
 46 CFR 32.05-1  
46 CFR 97.40-10

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

\_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

## **Marine Sanitation Devices:**

**NOTE:** Guidance for inspecting marine sanitation devices is detailed in MSM Volume II, Chapter C2.K.

- Marine sanitation device
  - Type I
  - Type II
  - Type III
 33 CFR 159.55  
MSM Ch. B6.F
- Certified for inspected vessels
 MSM Ch. B6.F.4
- Capacity satisfactory
 MSM Ch. C2.K.7.d
- Installation
  - Operation
  - Ventilation
  - Wiring and piping
  - Maintenance
  - Placard posted
  - Safety
  - Accessibility to parts requiring routine servicing
  - Manufacturer's instructions available
 33 CFR 159.57  
MSM Vol. IV Ch. 3.K.1  
  
33 CFR 159.59

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Section 3: Inspection Items

#### Navigation Equipment:

- Navigation lights and signals 72 COLREGS
  - Running lights
  - Anchor lights
  - Distress signals and stowage (manned barges)
  - Anchor ball(s) or shape(s)

#### General Health and Safety:

- Accommodations 46 CFR 32.40-60  
46 CFR 92.20
  - Size
  - Lighting and wiring
  - Heating
  - Ventilation 46 CFR 92.15-15
  - Sanitation
  - Screens
  - Insulation
  - Fire retardant 46 CFR 32.57
- Paint, oil and lamp stowage
  - Closures
  - Fireproof / metal lined 46 CFR 32.85-1
  - Lighting / electrical 46 CFR 92.05-10
  - Fire protection
  - Markings
- Storerooms
  - Stowage
  - Fire hazards
  - Lighting
- Personnel safety hazards throughout vessel
- Warning notices and signals posted 46 CFR 35.30-1

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

- Hull and/or structural members gauged for material thickness 46 CFR 31.10-21(a)  
ABS Steel Rules 1/3
  - Yes (attach gauging report)
    - Transverse belt of deck plating
    - Transverse belt of bottom and sideshell
    - Wind-and-water strakes
    - Keel plates
    - Bulkhead plating and stiffeners
    - Suspect areas
    - Other \_\_\_\_\_
  - No
- Vessel carefully examined for fractures and previous fracture repairs MSM Ch. B3.B.6.d  
NVIC 15-91, Change 1
- Fastenings MSM Vol. IV Ch. 6.H  
NVIC 3-68
  - Rivets
  - Welding
- Cargo hatches MSM Ch. B1.E.5  
MSM Vol. IV Ch. 6.I.5
  - Dogs or other securing appliances
  - Covers
  - Gaskets
  - Coamings
- Rudder(s) / skeg(s) MSM Ch. B3.E  
ABS Rules
- Draft marks and load lines 46 CFR 32.05  
46 CFR 97.40-10  
MSM Ch. B1.E.4
  - Proper locations
  - Legibly inscribed
  - Proper spacing and size
  - Load line markings verified
- Compartment or inner bottom drains (drydocking plugs secured)

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

**Certificates and Records:**

- COI available
- Waste management plan (oceangoing manned barges ≥ 40 feet) 33 CFR 151.57
- Annual drug and alcohol program audit (manned barges only) 46 CFR Part 16
- Annual liferaft servicing certificates 46 CFR 160.151-57(p)
- Cargo Gear Certificate 46 CFR 31.10-16  
46 CFR 91.37-75
- Information available to master (as required) / person-in-charge 46 CFR 31.10-22  
46 CFR 97.12-1
  - Loading manual
  - Trim and stability book
- Equipment test records 33 CFR 156.170
  - Piping hydrostatic test
  - Hose hydrostatic test
  - Relief valves
  - Gauges

**Pollution Prevention Records:**

- Oil record book (Required only if barge is equipped to discharge any oil or oily mixture overboard) MARPOL Ax. I/20  
33 CFR 151.25
  - Each operation signed by person-in-charge
  - Book maintained for 3 years
- Shipboard oil pollution emergency plan MARPOL Ax. I/26.1  
33 CFR 151.26
  - Approved by Coast Guard / class society
  - Contact numbers correct
  - Immediate Actions List

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

- Forward peak / rake
- Aft peak / rake
- Cargo tanks entered 46 CFR 31.10-21  
46 CFR 91.40-3  
MSM Ch. B3.B.4  
MSM Ch. B3.B.6

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Overall Condition of Coatings:**

Poor	Good	N/A
------	------	-----

**Overall Steel Wastage:**

Poor	Good	N/A
------	------	-----

**Valves and Through-Hull Fittings:**

*NOTE: Guidance on valves and through-hull fittings is detailed in MSM Volume II, Chapter B3.F.*

- Sea chests, spool pieces, through-hull fittings 46 CFR 56.50-95
  - Strainers removed
  - Welds
  - Baffles
  - Strainer fastenings
  - Fastenings
  - Branch connections

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

**Vessel Information:**

Classification Society	
Last Drydocking Date	Next Drydocking Date
Location of Last Drydocking	
Gross Tons	No Change (VFMD)
Net Tons	No Change (VFMD)
Built Date (use delivery date)	No Change (VFCD)
Overall Length (in feet)	No Change (VFMD)
Does vessel meet double-hull requirements? Yes    No    If not, vessel must meet requirements by _____ (date) in accordance with 33 CFR Part 157 Appendix G.	
Required Crew	
Number of Tankermen Required _____	Number of Lifeboatmen Required _____
Cargo Carried (inspected and approved)	
Type of Cargo _____	Amount of Cargo _____
Date Cargo Tanks Entered	

**Vessel Description:**

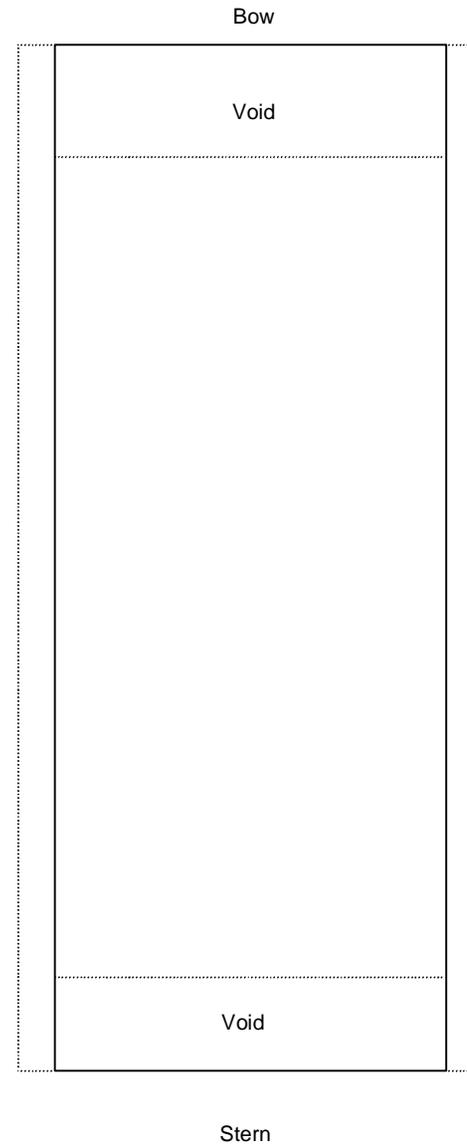
Subchapter D cargoes only  
 Subchapter I cargoes only  
 Subchapter D & O cargoes  
 Subchapter I & O cargoes

**Hull Type:**

Type I  
 Type II  
 Type III

**Section 5: Appendices**

**Vessel Layout:**



- Double hull / bottom / sides
- Ballast tanks
- Chemical tank type: I II III





**Total Time Spent Per Activity:**

Regular Personnel (Active Duty)			
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS
-------------------	--------------------

Reserve Personnel			
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS
-------------------	--------------------

Auxiliary Resources	
TOTAL BOAT HOURS	TOTAL AIRCRAFT HOURS

**Conversions:**

Distance and Energy				
Kilowatts (kW)	X	1.341	=	Horsepower (hp)
Feet (ft)	X	3.281	=	Meters (m)
Long Ton (LT)	X	.98421	=	Metric Ton (t)
Liquid (NOTE: Values are approximate.)				
Liquid	bbbl/LT	m <sup>3</sup> /t	bbbl/m <sup>3</sup>	bbbl/t
Freshwater	6.40	1.00	6.29	6.29
Saltwater	6.24	.975	6.13	5.98
Heavy 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
Weight				
1 Long Ton	=	2240 lbs	1 Metric Ton	= 2204 lbs
1 Short Ton	=	2000 lbs	1 Cubic Foot	= 7.48 gal
1 Barrel (oil)	=	5.61 ft = 42 gal = 6.29 m <sup>3</sup>	1 psi	= .06895 Bar = 2.3106 ft of water
Temperature: Fahrenheit = Celsius (°F = 9/5 °C + 32 and °C = 5/9 (°F - 32))				
0	=	-17.8	80	= 26.7
32	=	0	90	= 32.2
40	=	4.4	100	= 37.8
50	=	10.0	110	= 43.3
60	=	15.6	120	= 48.9
70	=	21.1	150	= 65.6
200	=	93.3	250	= 121.1
300	=	148.9	400	= 204.4
500	=	260	1000	= 537.8
Pressure: Bars = Pounds per square inch				
1 Bar	=	14.5 psi	5 Bars	= 72.5 psi
2 bars	=	29.0 psi	6 Bars	= 87.0 psi
3 Bars	=	43.5 psi	7 Bars	= 101.5 psi
4 Bars	=	58.0 psi	8 Bars	= 116.0 psi
9 Bars	=	130.5 psi	10 Bars	= 145.0 psi