# COMMERCIAL FISHING VESSELS DISPENSING PETROLEUM PRODUCTS 46 CFR 105

Vessel Name:	Official No.:	
Home Port:	Gross Tons:	
Date Built:	Net Tons:	
Place Built:	Length:	
Owner Name:		
Address:	<u></u>	
Operator Name:		
Address:		
Master:		
Oil Capacity: Bunkers (type/gal):		
Cargo (type/gal):		
20% of the DWT =gallons;		
To calculate 20% of the DWT:		
Vessel Full Load Displacement = _	LT(Long Tons)	
minus Light Ship Displacement	. =LT	
equals DWT	LT	
<u>(.20 X DWT in LT) X 2240 lbs/</u>	<u>LT</u> =gallons	
7.5 lbs/gal diesel		
Areas where Vessel will operate:		
Sector Seattle, WA		
Inspector: Insp Date:		
Inspection Location:		
Date LOC issued:		
Commercial Fishing Vessels Dis	spensing Petroleum Products	

\_\_\_\_\_ Application for inspection and letter of compliance RECEIVED. (105.15-10)

\_\_\_\_\_ Plans and/or sketches of the cargo tanks and piping systems for filling and dispensing cargo RECEIVED. (105.20-1)

	Certificate of Documentation on board.
	Certificate of Compliance for 46 CFR 28 on board.
	Issued by: Expires:
	Load Line Certificate on board. Issued by:
	Expires: Date Last Endorsed:
	Certificate of Financial Responsibility on board. (33 CFR
	130 -132) No.: Expires:
	Approved Vessel Response Plan on board. (OPA 90)
	Approved Shipboard Oil Pollution Emergency Plan on board; vsls $\geq$ 400 GT and has had annual review. (33 CFR 151.26)
	Vessel adheres to Pollution Discharge Restrictions, MARPOL 73/78, Annex V. (33 CFR 151.63,.65,.67,.69,.71,.73 and Appendix A) Garbage Discharge Log, Garbage Placard.
	IOPP or EQUIVALENT with latest endorsement on board, (uninspected vessels making foreign voyages). (33 CFR 151.1719)
	<b>Oil record book</b> is properly utilized.
	Vsls $\leq$ 5000 GT used in processing and assembly of fishery products of OR, WA, or AK.
	Cargo capacity of independent tanks is <u>&lt;</u> 20% DW capacity. (MSM II, Chap 11.F)
	Grade B, C, D, or E Product. (Grade A is not allowed).
	PERMANENTLY installed dispensing tanks or containers on OPEN DECKS. (Biennial inspection required.)
	PERMANENTLY installed dispensing tanks or containers located BELOW DECK or IN CLOSED COMPARTMENTS. (Biennial inspection required.)
	TEMPORARY dispensing tanks or containers installed on OPEN DECKS. (Annual inspection required.)
	LOC properly displayed. (105.15-20)
CARGO TANKS	
	Cargo tanks constructed of (Circle One): iron, steel, copper, nickel alloy, copper alloy, or aluminum.
	Cargo tanks of > 150 gal meet the minimum thickness requirements. (105.20-3)

All tank joints, connections, and fittings are welded or brazed. (105.20-3(a)(2))

- Tanks exceeding 30 inches in any horizontal dimension is fitted with vertical baffle plates with limber holes and air holes, except where tanks exceed minimum thickness and are reinforced with stiffeners. (105.20-3(a)(3))
- Tanks are adequately supported and braced with braces and supports insulated from the tank surface with a nonabrasive and nonabsorbent material.
- Fill lines are at least 1.5 inches standard pipe size and extend to within 1.5-pipe diameters of the bottom of the tank.
- \_\_\_\_\_ Suction lines from the bottom of diesel oil tanks have a shutoff valve installed at the tank.
- \_\_\_\_\_ Grades B and C liquids have TOP SUCTIONS ONLY.
- \_\_\_\_\_ Vent lines are at least equal in size to the filling lines.
- \_\_\_\_\_ Grades B or C liquids tank vents are terminated with an approved PRESSURE VACUUM RELIEF VALVE not less than 3 feet above the weather deck.
- Grades D or E cargo tank vents are terminated with a gooseneck fitted with a flame screen at a reasonable height above the weather deck. (They may meet the same requirements as Grade C or above cargo tank vents if so desired by the owners)
- \_\_\_\_\_ Cargo tanks were hydrostatically tested as per 105.20-3(d). (This is an initial build requirement.)
- Piping system is (Circle One): copper, nickel copper or copper nickel with a minimum wall thickness of 0.035in; or if in a diesel cargo system, seamless steel pipe or tubing.
- \_\_\_\_\_ Valves are of a suitable nonferrous metallic Union Bonnet type with ground seats except steel or nodular iron may be used in cargo systems using steel pipe or tubing.
- \_\_\_\_\_ Cargo dispensing pumps are of a satisfactory type.
- \_\_\_\_\_ If the pressure under shutoff conditions EXCEEDS 60 lbs, a relief valve is on the discharge side of the pump and discharges back to the suction of the pump.

- Electric motors installed with the dispensing pumps are explosions proof and are labeled as such by UL or other recognized lab, as suitable for CLASS I, GROUP D ATMOSPHERES.
- \_\_\_\_\_ All tanks and associated lines are electrically grounded to the vessel's common ground.
- \_\_\_\_\_ A grounded type hose and nozzle shall be used for dispensing fuels.

# ADDITIONAL REQUIREMENTS WHEN CARGO TANKS ARE INSTALLED BELOW DECKS

- \_\_\_\_\_ Below decks compartments or areas containing tanks or pumping systems are closed off from the remainder of the vessel by gastight bulkheads. (105.25-5)
- Each compartment has a mechanical exhaust system capable of ventilating such compartment with a complete change of air once every 3 minutes, with ducts of adequate size.
- Exhaust ducts are located so as to remove vapors from the lower portion of the space or bilges.
- \_\_\_\_\_ Ventilation outlets terminated more than 10 feet from any opening to the interior of the vessel which normally contains sources of vapor ignition.
- \_\_\_\_\_ Ventilation fans are explosion proof and unable to act as a source of ignition.
- \_\_\_\_\_ Cargo pumps installed in cargo tanks have their drive system outside the compartment.
- \_\_\_\_\_ Suction pipelines from cargo tanks run directly to the pump but NOT THROUGH WORKING OR CREW SPACES.
- \_\_\_\_\_ To permit external examination, tanks are located so as to provide at least 15in space around the tank including top and bottom. (105.25-15)
- \_\_\_\_\_ Shutoff valves, installed to shut off against the flow, are provided in the suction lines as close to the tanks as possible.
- \_\_\_\_\_ Remote control of the shutoff is provided if deemed necessary by the marine inspector.

#### ELECTRICAL REQUIREMENTS

- Electrical fittings, fixtures, and equipment approved for a Class I, Group D hazardous location, labeled by UL or other recognized lab, are installed in compartments or areas containing tanks or pumps handling other than Grade E petroleum products.
- All electrical equipment, fixtures, and fittings within 10 ft of a vent outlet or a dispensing outlet are EXPLOSION PROOF, labeled by UL or other recognized lab as suitable for Class I, Group D atmospheres.
  - \_\_\_\_ All electrical equipment is grounded to the vessel's common ground.

#### FIRE EXTINGUISHING EQUIPMENT

- In addition to equipment required in 46 CFR 25 or other laws and regulations in this chapter as may be applicable to the vessel, AT LEAST two BII DRY CHEMICAL OR FOAM PORTABLE fire extinguishers shall be located at or near each dispensing area.
- Hand operated portable fire pump with a capacity of at  $\geq$  5 gal/min equipped with suction and discharge hose suitable for firefighting. (It may also serve as a bilge pump.)
- \_\_\_\_\_ Vessels > 65 ft LOA have a POWER DRIVEN fire pump which is selfpriming and discharges an effective stream from a hose connected to the highest outlet.
- \_\_\_\_\_ The power fire pump has a capacity of 50 gal/min at a pressure of at least 60psi at the pump outlet.
- \_\_\_\_\_ A pressure gage is fitted at the power fire pump outlet.
- \_\_\_\_\_ The power fire pump is connected to the fire main and may be connected to the bilge system.
- \_\_\_\_\_ If required to have a power fire pump, the vessel also has a fire main system including fire main, hydrants, hose and nozzles.
- \_\_\_\_\_ Fire hydrants are sufficiently located so that any part of the vessel may be reached with an effective stream of water from a single length of hose.
- \_\_\_\_\_ One length of fire hose is provided for and CONNECTED AT ALL TIMES to each fire hydrant.
- Fire hose is either commercial fire hose, or equivalent of, not over 1.5in diameter OR garden hose of not less than 5/8 in nominal inside diameter.
- \_\_\_\_\_ Fire hose is one piece not less than 25 ft and not more than 50 ft in length.
- \_\_\_\_\_ 1.5in fire hose used after 1Jan80 must be (1) lined commercial hose

conforming to UL Standard 19 or Fed. Spec. ZZ-H-451E; and (2) have a combination nozzle approved IAW 46CFR162.027-6.

- Garden hose is of a good commercial grade constructed of an inner rubber tube, plies of braided cotton reinforcement and an outer rubber cover, or of equivalent material, and fitted with a commercial garden hose NOZZLE OF GOOD GRADE BRONZE or equivalent.
- \_\_\_\_\_ All fire hose fittings are of brass, copper, or other suitable corrosion resistant metal.

## SPECIAL OPERATING REQUIREMENTS

- Loading and or dispensing of petroleum products from cargo tank is performed under the supervision of a tankerman.
- \_\_\_\_\_ Tankerman inspects galley fires to determine in his judgement if they may be maintained with reasonable safety during the transfer operations.
- \_\_\_\_\_ Smoking is prohibited during and in the vicinity of the transfer operations.
- Warning signals are available: (a) transferring while tied to a dock, a red flag by day and electric lantern by night, each visible on all sides; (b) other times of transfer, a red flag.
- \_\_\_\_\_ Warning signs to post at gangway during dock transfer of cargo are AVAILABLE.

## MANNING REQUIREMENTS

- LOC states the minimum number of crew members required to hold a document endorsed as tankerman. This vessel has a person holding a merchant mariner's document bearing an endorsement as (Check one):
  - \_\_\_\_ Tankerman
  - \_\_\_\_\_ Tankerman for Commercial Fishing Vessels Only
  - \_\_\_\_\_ Valid Master, Mate, Pilot or Engineer License

# EXISTING COMMERCIAL F/Vs DISPENSING PETROLEUM PRODUCTS

- Dispensing tanks or containers and their associated piping systems in use prior to 1 Dec 69, if in SATISFACTORY CONDITION in the opinion of the OCMI, may continue in use as long as they are maintained in such satisfactory condition. (Otherwise, all other requirements in Part 105 must be met.)
- \_\_\_\_ Major repairs or replacement of such tanks or containers shall be IAW requirements governing new installations.

## OIL TRANSFER PROCEDURE REQUIREMENTS

- Persons in charge designated by given name in writing. The Person In Charge must also have one of the following: 1) A letter of instruction from the operating company stating the holder has received sufficient formal instruction and is designated as a Person In Charge; **OR 2)** Hold a license issued by the Coast Guard as a master, mate, pilot, engineer, or operator aboard that vessel; **OR** 3) Holds a valid merchant mariner's document endorsed as Tankerman-PIC.
- Oil transfer procedures are in accordance with 33 CFR 155.750. If no procedures are on board, the attached checkoff list may be filled out on scene and given to master. Coast Guard does not need a copy of the Oil Transfer Procedure on file.
- \_\_\_\_\_ Oil Transfer Procedures posted/available at transfer sight are legible and in a language understood by crew. (33 CFR 740)
- List of each product transferred by vessel, including the generic or chemical name. (33 CFR 155.750(a)(1)(i))
- \_\_\_\_\_ Description of each oil transfer system on vessel, including:

\_\_\_\_\_ Line diagram of transfer piping including each valve, pump, control device, vents and overflows. (33 CFR 155.750(a)(2)(ii))

\_\_\_\_\_ Location of shutoff valves that separate bilge or ballast systems from oil transfer systems. (33 CFR 155.750(a)(2)(i))

\_\_\_\_\_ Description of and procedures for emptying manifold equipment. (33 CFR 155.750(a)(2)(iii))

\_\_\_\_\_ Number of persons required to be on duty during oil transfer operations. (33 CFR 155.750(a)(3))

\_\_\_\_\_ Duties by title of each officer, PIC, tankerman, deckhand, and any other person that is required for oil transfer operations. (33 CFR 155.750(a)(4))

\_\_\_\_\_ Procedures and duty assignments for tending vessel mooring during oil transfers. (33 CFR 155.750(a)(5))

\_\_\_\_\_ Procedures for operating the means of communication that can be understood by both parties. (33 CFR 155.750(a)(6))

\_\_\_\_\_ Procedures for topping off tanks. (33 CFR 155.750(a)(7))

\_\_\_\_\_ Procedures for ensuring all valves used during oil transfer are closed upon completion of transfer. (33 CFR 155.750(a)(8))

\_\_\_\_\_ Procedures for reporting oil discharges into the water (33 CFR 155.750(a)(9))

\_\_\_\_\_ Exemptions or alternatives which have been granted are included. (33 CFR 155.750(b))

\_\_\_\_\_ Amendments to oil transfer procedures have been incorporated. (33 CFR 155.750(c))

## VESSEL EQUIPMENT REQUIREMENTS (33 CFR 155)

- Discharge removal equipment for containment and removal of on deck oil spills of at least 1/2 barrel is ready for immediate use during cargo fuel transfer. Includes sorbents; non-sparking hand scoops, shovels, and buckets; containers suitable for holding recovered waste; emulsifiers for deck cleaning; and protective clothing. (33 CFR 155.220)
- **Fixed container or enclosed deck area** under or around each oil tank vent, overflow and fill pipe. (ships between 100 and 300 GT = 5 gal portable, 300 and 1600 GT = one half barrel fixed, 1600 or more GT = one barrel fixed, if impractical, an automatic back pressure shut-off nozzle shall be used)
- Non-oceangoing ships must be able to retain and discharge bilge slops/fuel oil tank ballast water to a reception facility. Oily waste may be retained in the bilges until it is discharged.

\_\_\_\_ Oceangoing ships less than 400 GT, (33 CFR 155.350):

- \_\_\_\_\_ must have the capacity to retain and discharge equipment, OR
- \_\_\_\_\_ must have approved and working oily water separator
- \_\_\_\_\_ may retain oily mixtures in bilges

Oceangoing ships more than 400 GT and less than 10000 GT (33 CFR 155.360):

- \_\_\_\_\_ must be fitted with an approved 15 ppm OWS. (If built before 06JUL93, an existing 100 ppm OWS must be replaced with 15 ppm no later than 06JUL98 and enter this information into the inspection MIAR and MISN.)
- \_\_\_\_\_ must have a tank or tanks with adequate capacity to receive oily residues that cannot be dealt with otherwise
- \_\_\_\_\_ new ships: oily residue tanks must be designed and constructed to facilitate cleaning
- \_\_\_\_\_ must have adequate piping to discharge oily residues to reception facilities
- Oceangoing ships over 400 GT carrying ballast water in fuel oil tanks (33 CFR 155.370):
  - must have approved 100 ppm OWS and an approved bilge monitor. (If built before 06JUL93, an existing 100 ppm OWS must be replaced with 15 ppm no later than 06JUL98 and enter this information into the inspection MIAR and MISN, **OR**
  - \_\_\_\_\_ approved 15 ppm OWS to process oily bilge slops or oily fuel oil tank ballast and an approved bilge alarm
  - \_\_\_\_\_ must have tank capacity to receive oily residues that cannot

be dealt with otherwise

\_\_\_\_ must have adequate piping to discharge oily residues to reception facilities

- **\_\_\_\_ OWS approval:** 46 CFR 162.050, listed in International Maritime Organization Marine Environment Protection Agency Circular summary of MARPOL 73/78 approved equipment.
- \_\_\_\_\_15 ppm OWS shall replace 100 ppm OWS **no later than 06JUL98** for those vessels built prior to 06JUL93 (MARPOL 73/78, Reg 16, USCG NVIC 6-94)
- \_\_\_\_A bilge monitor may be installed in place of a bilge alarm (33 CFR 155.380(d))

## PUMPING, PIPING AND DISCHARGE REQUIREMENTS

**Non-oceangoing** ships of 100 GT and above (not applicable to ships fitted w/OWS) (33 CFR 155.410)

- \_\_\_\_\_ at least one pump installed to discharge oily mixtures through a fixed piping system to a reception facility
- \_\_\_\_\_ piping system has at least one outlet accessible from the weather deck
- each outlet is fitted with a standard discharge shore connection or portable adapter of same pattern. Discharge Shore Connection requirements: (1) outer diam=215mm/8.5 in, (2) inner diam=according to pipe outside diam, (3) bolt circle diam=183mm/7.2in, (4) slots in flange=6 holes @ 22mm/0.87in diam equidistantly placed and slotted to the flange periphery with a slot depth of 22mm/0.87in, (5) flange thickness=20mm/ 0.8in, (6) bolts/nuts=6 @ 22mm/0.87in, (7) accept pipes up to a maximum of 125mm/5in inner diameter pipe, (8) shall be of steel or equivalent material having a flat face, (9) have an oilproof material gasket.

\_\_\_\_ each outlet has a stop valve

**Oceangoing** ships between 100 GT and 400 GT (not applicable to ships fitted w/ OWS) (33 CFR 155.420)

- \_\_\_\_\_ at least one pump installed to discharge oily mixtures through a fixed piping system to a reception facility
- \_\_\_\_\_ piping system has at least one outlet accessible from the weather deck
- \_\_\_\_\_ each outlet is fitted with a standard discharge shore connection or portable adapter of same pattern
- has a means on the weather deck near the discharge outlet to stop each pump used to discharge oily wastes; and

\_\_\_\_\_ each outlet has a stop valve

- \_\_\_\_\_ Oceangoing ships 400 GT and over must be fitted with a standard discharge shore connection (specs in 33 CFR 155.430)
- New oceangoing ships of 4000 GT and above (except tankers) and new oceangoing oil tankers of 150 GT and above shall not carry ballast water in fuel oil tanks. In abnormal conditions exist that ballast water is entered into fuel oil tanks, the ballast water must be discharged to a reception facility. (33 CFR 155.440)
- "Discharge of Oil Prohibited" placard fixed in a conspicuous place in each machinery space or bilge/ballast pump control station. (33 CFR 155.450)
- Oil shall not be carried in tanks forward of collision bulkhead unless: ship was built before July 1, 1974 and tanks were designed, installed or constructed before this date; or for ships built after June 30, 1974 oil may be carried in tanks that are 24 inches inboard of the hull structure. (33 CFR 155.470)