

WASHINGTON STATE

Department of EcologySpill Prevention, Preparedness and Response Program Prevention Section

P.O. Box 47600, Olympia, WA 98504-7600 Office Phone: (360) 407-7455 or toll free 1-800-664-9184

Transfer start 1-4	DELIVERING FACILITY TRANSFER CH	_	Τ
	re:/_ / Time:: Duration: Location		
	ate:// Time::_ Duration: Bunker		
Inspector(s):	Pre-bo	om: 🛛 Yes	□No
Name:	Name:	<u>-</u>	Tank Barge C&P F/V Otho
Company:	Company:		
Name of PIC:	Name of PIC: _		
Transfer at:	ate A (>500gpm)		
Product information	n, type(s) and qty. (bbl/liter/metric ton/gal):		
Weather:	Wind speed/direction: Water spee	ed:	Wave height:
WAC 173-180	REQUIREMENT	√, X, C, N/A	REMARKS
	Recordkeeping, Manuals, Plans		
040(1)(a)	Declaration of Inspection (DOI) (past 30 days)		
040(1)(a)	Preload Plan (past 30 days)		
411(1) – Class 1 & 2 only	Operations Manual is in an immediately accessible location		
721 – Class 2 only	Response Plan is kept at the transfer location for easy access and use during spills		
055	Work Hours		
055(1)	Personnel within work hour limits (16 in last 24 hrs/40 in last 72 hrs)		
060	Personnel Qualifications		
060(1)	Designated PICs supervising the oil transfer operation		
060(4)	PICs carrying, or readily available, designation as PIC		
060(5)	Proof of completing company T&C program, carry or available		Class I & 2 Facility PIC only
205	Oil Transfer Equipment		
205(1)(a)	Hose/piping/transfer assembly properly supported		
205(1)(a)	Hose integrity visually checked prior to the transfer		
205(1)(b)	Hoses or loading arms long enough to allow movement		
205(1)(c)(d)	Hoses free of visible defects and sources of chafing Hose ends blanked tightly when hoses are moved		
205(1)(e)	<u> </u>		
245	Oil Transfer Procedures		
245(2)(a)	Connections properly made and leak free Means to contain/recover drips from transfer connections		
245(2)(b)	•		If no fived containment
245(2(c)	Portable containment used for all tank vents		If no fixed containment
245(2)(f)	At start-up: tanks checked– to ensure receiving oil at expected rate		
250	Emergency Shutdown		
250(1-6); 245(2)(g)	Facility has proper emergency shutdown system and procedures		
221 & 222	Rate A & Rate B Transfer Requirements		
221(8)(9); 222(2)	Required amount of boom available		
221(8)(9); 222(1)(2)	Suitable cleanup materials available (Rate A: 7 bbls; Rate B 2 bbls)		
	If using Alternative Measures:		

WAC 173-180	REQUIREMENT	√, X, C, N/A	REMARKS	
217 (1)	If Equivalent Compliance plan on file, is transfer in compliance with it?	,		
221(4) — Rate A only	Are Safe and Effective Thresholds exceeded? Y / N If yes, were Ecology Boom Reporting Forms submitted at required intervals?			
221(9)(c) – Rate A only	Tracking system functional and on scene or quickly available (30 Mins)			
	If Pre-Booming			
221(8); 222(1)	Boom correctly deployed for coverage of vessel and transfer area			
221(8)(a); 222(1)	Minimum stand-off of five feet		As detailed in the S & E Report	
221(6) – Rate A only	Multiple oil transfers simultaneously? Y / N If yes, suitable portions pre-boomed or alternative measures used?			
221(7) – Rate A only	Deliverer able to quickly disconnect all boom in the event of an emergency			
221(8)(a); 222(1)	Boom periodically checked and adjusted as necessary throughout the duration of the transfer and specifically during tidal changes and significant wind or wave events.			
225	Providing Safe Vessel Access			
225(1-4)	Access between vessel and facility safe			
230	Preload Plan Requirements			
230(1 - 5)	Proper preload plan prepared and includes level and type of liquid in all bunker or cargo oil tanks prior to the oil transfer, including those not receiving or discharging oil			
235	Pre-transfer Conference			
235(1); 245(2)(d)	PICs held a face-to-face meeting prior to transfer operation			
235(2)(b); 245(2)(h)	Contents of the DOI discussed. DOI complete, no deficiencies			
235(2)(a); 245 (2)(f)	Preload or cargo transfer plan discussed			
245(2)(e)	Capacity of tank(s) >volume transferred & valve alignment checked			
235(2)(c)	Way to communicate soundings, changing tanks, topping off			
235(2)(e), 250	Emergency shutdown procedures discussed			
220(2)	Expected transfer rates (A or B) agreed on			
235(2)(f); 221(2)	Threshold values for weather and sea conditions discussed			
235(2)(f)	Expected weather and/or sea conditions discussed			
235(3)	Vessel's point-of-transfer and deck-rover watch identified		(vessel > 300 gross tons)	
235(2)(d)	Shift change procedures discussed			
235(4)	English language proficiency			
240	Communications			
240(1)	Continuous two-way voice communication between the PICs			
240(2)	Two portable communication devices and air horn available			
240(3)	Personnel know and use English phrases and hand signals			
245	Shift change procedures			
245(2)(i)	Proper shift change procedures followed			
	e (Yes), "X" deficiency (No), "C" deficiency corrected on deficiencies corrected on site (C):	on site,	"N/A" Not Applicable	
Comments/recomm	mendations:		Crude Oil Gravity: Viscosity: Sulfur:	
	Date:			
Inspector: Date:				

ECY 070- 283 (Rev. 08/23)
If you need this publication in an alternate format, call the Spills Program at 360-407-7455. Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

Excerpts from Chapter 173-180 WAC Facility Oil Handling Standards

WAC 173-180-030 Compliance with federal rule or law.

(1) Any person with oil handling and transfer duties must comply with applicable provisions of federal law and regulation governing licensing and documentation, equipment, operations, and oil transfers.

WAC 173-180-040 Recordkeeping.

(1) Records required by this chapter must be maintained and available to ecology for a minimum of three years, except for the following: (a) Preload plans and declaration of inspection (DOI) must be kept for at least 30 days from the date of the oil transfer operation.

WAC 173-180-055 Work hours.

(1) Personnel with oil transfer duties may not work more than 16 hours in any 24-hour period, nor more than 40 hours in any 72-hour period, except in an emergency or spill response operation.

WAC 173-180-060 Personnel qualifications.

- (1) The owner or operator of a Class 1, 2, or 3 facility must designate a person in charge (PIC) in writing. A designated PIC must supervise all oil transfer operations.
- (4) Each PIC must carry or have readily available evidence of designation as a PIC when engaged in an oil transfer operation.
- (5) All Class 1 and 2 personnel involved in a transfer must carry or have readily available evidence of completion of the facility's training and certification program.

WAC 173-180-205 Oil transfer equipment at Class 1, 2, 3, and 4 facilities.

- (1) All hoses, pipelines, or piping used in an oil transfer operation must meet the following criteria:
- (a) Hoses, pipelines, or piping must be supported so as to avoid crushing or excessive strain. Flanges, joints, hoses, and piping must be visually checked prior to the transfer for cracks and signs of leakage.
- (b) All hoses and loading arms are long enough to allow the vessel to move to the limits of its moorings without placing strain on any component of the oil transfer equipment.
- (c) Each hose must have no unrepaired loose covers, kinks, bulges, soft spots, or any other defect which would permit the discharge of oil or hazardous material through the hose material and no gouges, cuts, or slashes that penetrate the first layer of hose reinforcement. For the purposes of this section, reinforcement means the strength members of the hose, consisting of fabric, cord, and/or metal.
- (d) Hoses, pipelines, or piping must not be permitted to chafe on the dock or vessel or be in contact with any source that might affect the integrity of the hoses or piping.
- (e) Hose or loading arm ends must be blanked tightly when moved into position for connection and immediately after they are disconnected. Residue must be drained either into vessel tanks or suitable shoreside receptacles before the hose or loading arm ends are moved away from their connections.

WAC 173-180-221 Rate A pre-booming requirements and Rate A alternative measures requirements.

- (1) The Rate A deliverer must pre-boom oil transfers when it is safe and effective to do so. When pre-booming is not safe and effective, the deliverer must meet the alternative measure requirements found in subsection (9) of this section and submit the Ecology Boom Reporting Form pursuant to subsection (4) of this section.
- (2) The determination of safe and effective must be made prior to starting a transfer and reevaluated if conditions change before or during a transfer.
- (4) When it is not safe and effective to preboom, or when conditions develop during a pre-boomed transfer that require removal of the boom, the Rate A deliverer must report this finding to ecology through the Ecology Boom Reporting Form.
- (7) For the purposes of this section, the deliverer must be able to quickly disconnect all boom in the event of an emergency.

(8) Rate A pre-booming requirements.

- (a) In order to pre-boom transfers, the deliverer must have, prior to the transfer, access to boom four times the length of the largest vessel involved in the transfer or 2,000 feet, whichever is less. (i)The deliverer must deploy the boom such that it completely surrounds the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation, or the portion of the vessel and transfer area that provides for maximum containment of any oil spilled. (ii) The boom must be deployed with a minimum standoff of five feet away from the sides of a vessel, measured at the waterline. This stand-off may be modified for short durations needed to meet a facility or vessel's operational needs. (iii) The deliverer must periodically check the boom positioning and adjust as necessary throughout the duration of the transfer and specifically during tidal changes and significant wind or wave events.
- (b) In addition to pre-booming, the deliverer must have the following available on-site: (i) Enough sorbent materials and storage capacity for a seven barrel oil spill appropriate for use on water or land;(ii) Containers suitable for holding the recovered oil and oily water;(iii) Non-sparking hand scoops, shovels, and buckets.
- (c) For pre-boomed transfers, within one hour of being made aware of a spill, the deliverer must be able to complete deployment of the remaining boom as required in (a) of this subsection, should it be necessary for containment, protection, or recovery purposes.
- **(9)** Rate A alternative measures. Rate A deliverers must use these alternative measures when it is not safe and effective to meet the pre-booming requirements:
- (a) Prior to starting the oil transfer operation, the deliverer must have access to boom four times the length of the largest vessel involved in the transfer or 2,000 feet, whichever is less.
- (b) The deliverer must have the following available on-site:(i) Enough sorbent materials and storage capacity for a seven
- barrel oil spill appropriate for use on water or land;
- (ii) Containers suitable for holding the recovered oil and oily water; (iii) Non-sparking hand scoops, shovels, and buckets.
- (c)The deliverer must have the ability to safely track an oil spill in low visibility conditions. The tracking system must be on-scene and ready to be deployed within 30 minutes of being made aware of the spill.

WAC 173-180-222 Rate B pre-booming and alternative measures requirements.

- (1) Rate B pre-booming requirements. The Rate B deliverer must choose to meet either the following pre-booming requirements or the alternative measures found in subsection (2) of this section. If pre-booming is chosen, then:
- (a) Prior to starting the oil transfer operation, the deliverer must deploy boom so that it completely surrounds the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation, or the deliverer may pre-boom the portion of the vessel and transfer area which will provide for maximum containment of any oil spilled into the water.
- (i) The deliverer must deploy the boom with a minimum standoff of five feet away from the sides of a vessel, measured at the waterline. This stand-off may be modified for short durations needed to meet a facility or vessel's operational needs;
- (ii) The deliverer must periodically check boom positioning and adjust the boom as necessary throughout the duration of the transfer and specifically during tidal changes and significant wind or wave events.
- (b) The deliverer must have the following available on-site:(i) Enough sorbent materials and storage capacity for a two barrel
- oil spill appropriate for use on water or land;
- (ii) Containers suitable for holding the recovered oil and oily water; and
- (iii) Non-sparking hand scoops, shovels, and buckets.

Excerpts from Chapter 173-180 WAC Facility Oil Handling Standards

(2) Rate B alternative measures requirements. If a Rate B deliverer chooses alternative measures, then:

- (a) Prior to starting the oil transfer operation, the deliverer must have access to boom sufficient to completely surround the vessel(s) and facility/terminal dock area directly involved in the oil transfer operation, or the deliverer may pre-boom the portion of the vessel and transfer area which will provide for maximum containment of any oil spilled into the water.
- (b) The deliverer must have the following available on-site:
- (i) Enough sorbent materials and storage capacity for a two barrel oil spill appropriate for use on water or land;
- (ii) Containers suitable for holding the recovered oil and oily water;
- (iii) Non-sparking hand scoops, shovels, and buckets.

WAC 173-180-225 Providing safe vessel access.

- (1) A Class 1 or 3 facility must provide safe access for personnel if the vessel cannot provide safe access.
- (2) The access must be secured both top and bottom to prevent movement of the access platform.
- (3) The entire ladder and the portion of the facility and vessel's deck where access is provided must be illuminated during low light or low visibility situations and without glare to the persons using the access
- (4) In the event weather conditions make the access unsafe, the persons in charge (PICs) may elect to use radio communication.

WAC 173-180-230 Preloading or cargo transfer plan

<u>requirement.</u> Prior to any oil transfer, a transfer plan must be filled out and discussed between the delivering and receiving persons in charge (PICs). A facility must not begin a transfer until this plan has been discussed during the pre-transfer conference described in WAC 173-180-235. The plan must include:

- (1) Identification, location, and capacity of the vessel's tanks receiving or discharging oil;
- (2) Level and type of liquid in all bunker or cargo oil tanks prior to the oil transfer, including those not receiving or discharging oil;
- (3) Final ullage or innage, and percent of each tank to be filled;
- (4) Sequence in which the tanks are to be filled; and
- (5) The facility or vessel's procedures to regularly monitor tank levels and valve alignments during the transfer operation.

WAC 173-180-235 Pre-transfer conference. (1) Before the start of an oil transfer operation, the persons in charge (PICs) must hold a face-to-face pre-transfer conference. If the PICs determine weather conditions prevent safe access, PICs may communicate via radio. (2) The PICs must discuss and agree upon: (a) The preloading or cargo transfer plan; (b) The contents of the declaration of inspection (DOI) required under 33 CFR Part 156.150; (c) Procedures for communicating soundings, changing over tanks, and beginning topping off; (d) Shift change procedures;(e) Emergency shutdown procedures and identify all means to shut down the oil transfer operation in an emergency; and (f) Expected weather and/or sea conditions and threshold values for weather

- and sea conditions above which oil transfer operations must cease. (3) During a pre-transfer conference that involves a covered vessel, the point-of-transfer watch and deck-rover watch must be identified to PICs.
- (4) An oil transfer operation will not begin unless a person proficient in both English and a language common to the vessel's officers and crew is present at the pre-transfer conference.

WAC 173-180-240 Communications.

- (1) The facility persons in charge (PIC) must ensure continuous two-way voice communication is usable and available in all weather conditions and all phases of the transfer operation between the PICs.
- (2) The facility PIC must ensure at least the following are available for use during the oil transfer operation: (a) Two portable communication devices that are intrinsically safe; and (b) An air horn for emergency signals.

(3) The PICs must ensure personnel involved in the oil transfer operation know and use English phrases and hand signals to communicate the following instructions during the oil transfer: "Stop," "hold." "wait." "fast." "slow." and "finish."

WAC 173-180-245 Oil transfer procedures.

- (1) All oil transfer operations for Class 1 and 2 facilities must be conducted in accordance with the facility's approved operations manual.
- (2) All transfer operations involving Class 1, 2, or 3 facilities must comply with the transfer procedures in 33 C.F.R. Parts 154 and 156 and the following:
- (a) Ensure that transfer connections: (i) Use appropriate material in joints and couplings to ensure a leak-free seal; (ii) Use either: (A) A bolted or full threaded connection; or (B) A quick-connected coupling with a means of securing the coupling to prevent accidental release.
- (iii) Use a new compressible gasket appropriate for the product and transfer pressure; (iv) Use a bolt in every available hole; (v) Use bolts of the correct size in each bolted connection; (vi) Ensure that each bolt is properly torqued to distribute the load to ensure a leak-free seal; and (vii) Do not use any bolt that shows signs of strain or is elongated or deteriorated.
- (b) Have the means to contain and recover any drips from connections within the oil transfer system.
- (c) Deliverers providing oil to vessels without fixed containment must provide enough portable containment for each tank vent on the vessel
- (d) Conduct a pretransfer conference as defined in WAC 173-180-235.
- (e) Ensure that the available capacity in the receiving tank(s) is greater than the volume of oil to be transferred and all other valves which
- could influence the routing of the transferred oil are properly aligned. (f) The persons in charge (PICs) must verify at the start of the transfer that the tanks designated in the preload or cargo transfer plan are receiving or discharging oil at the expected rate, and no other tanks are receiving or discharging oil.
- (g) Each PIC must ensure that the means of operating the emergency shutdown system is immediately available while oil is transferred between the deliverer and receiver.
- (h) A PIC must refuse to initiate or must cease transfer operations with any vessel which: (i) Has not provided complete information as required by the declaration of inspection (DOI);(ii) Has refused to correct deficiencies identified by the PIC during the pretransfer conference; or (iii) Does not comply with the operations manual or does not respond to concerns identified by the PIC.
- (i) When a PIC shift change occurs the departing PIC must: (i) Discuss the preload or cargo transfer plan and transfer rate with the arriving PIC; (ii) Notify the PIC at the other side of the transfer that a shift change is taking place; and (iii) Ensure the relieving PIC reads and signs the DOI.

<u>WAC 173-180-250 Emergency shutdown.</u> (1) Class 1, 2, or 3 facilities must have an emergency shutdown capable of stopping the flow of oil from the fixed or mobile facility to a vessel.

- (2) The emergency shutdown must be located at the persons in charge (PICs) usual operating station and at the dock manifold if not the same location.
- (3) For oil transfers, the emergency shutdown must stop the flow: (a) Within 60 seconds for any facility or portion of the facility that started transferring oil on or before November 1, 1980. (b) Within 30 seconds for any facility or portion of the facility that started transferring oil after November 1, 1980.
- (4) Both PICs must be capable of ordering or activating an emergency shutdown.
- (5) If a PIC orders an emergency shutdown, the shutdown must be activated immediately.
- (6) To meet the requirements of subsection (3) of this section, the emergency shutdown must be either of the following: (a) An electrical, pneumatic, or mechanical linkage to the facility; or (b) An electronic voice communications system continuously operated by a person on the facility who can stop the flow of oil.