U.S. Department of Homeland Security

United States Coast Guard

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MSUPORTINST 16601.1
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MSU PORTLAND INSTRUCTION 16601.1

Subj: DEAD SHIP TOW POLICY

Ref: (a) 33 CFR §160, Ports and Waterways Safety—General

1. PURPOSE. This instruction establishes MSU Portland's Dead Ship Tow (DST) Policy in the MSU Portland area of responsibility (AOR). For the purposes of this instruction, a DST is defined as the scheduled movement of a vessel that does not satisfy the conditions of normal operations. This instruction applies to vessels, other than barges, greater than or equal to 150 feet in length or any vessels that are deemed applicable by the COTP on a case-by-case basis.

2. ACTION. MSU Waterways Management (WWM) and Inspections (INS) personnel shall work with the owners, operators, agents, master, or persons in charge of vessels desiring to conduct DST operations and shall adhere to the specifications of this instruction applying its contents as applicable.

3. DIRECTIVES AFFECTED. None.

4. DISCUSSION.

a. Reference (a) requires immediate notification to the COTP whenever there are hazardous conditions aboard or caused by a vessel. DST's for large vessels on the Columbia River create a hazardous condition and special attention needs to be paid to the movement of these vessels. Notification to the COTP and plan approval is required anytime a vessel over 150 feet will be moved in a dead ship status.

b. Reference (a) allows the COTP to order a vessel to operate or anchor in a manner directed when a hazardous condition exists. Depending upon the particulars of the vessel being towed (age, size, transit route, etc.), additional safety precautions may be established before a DST is authorized. Under most circumstances, this will include, but is not limited to, requirements such as obtaining a marine surveyor's report to attest to the vessel's seaworthiness and/or having an inspector from MSU Portland's INS Branch verify seaworthiness, pollution potential, etc.

5. PROCEDURES.

a. Upon receipt of a request to conduct a DST evolution in the MSU Portland AOR, the owner, operator, agent, master, or person in charge of a dead ship shall be directed to liaise with WWM. WWM shall be guided by the Dead Ship Tow Procedures (enclosure 1) when dealing with a DST request. WWM personnel shall provide the Dead Ship Tow Procedures (enclosure 1) and the Dead Ship Tow Application (enclosure 2) to the requesting party.

b. INS personnel shall utilize the Checklist for Inspection of the Dead Ship Tow (enclosure 3) to conduct an examination, as necessary, prior to the evolution. INS shall submit the results of the examination with a recommendation for approval or disapproval (with disqualifying factors) to WWM.

c. WWM and INS personnel shall liaise with applicable stakeholders (bar and river pilots, class society representatives, etc.) in the DST evolution to ensure that applicable safety requirements are recognized and hazards mitigated as possible.

d. Upon agreement of the DST plan between WWM, INS, and industry stakeholders the evolution shall be briefed to the Chief of Prevention and the COTP for final approval. When approved by the COTP, WWM is authorized to sign, by direction, a letter approving the DST evolution for the specified dates listed in tow plan.

e. WWM and INS personnel shall monitor the status of all DST evolutions on the river and amend/cancel plans as they see fit to ensure the safety of the waterway. Approvals for DST evolutions will be voided if any changes are made to the information submitted in the original request, and a COTP Order may be issued preventing the DST until an amended application has been submitted and approved.

6. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. Environmental considerations were examined in the development of this instruction and have been determined to be not applicable.

7. FORMS/REPORTS. Dead Ship Tow Application and Inspection Checklist for Dead Ship Tow Evolutions (both are enclosures).

D. L. LeBLANC

Encl: (1) MSU Portland Dead Ship Tow Procedures
(2) Dead Ship Tow Application
(3) Inspection Checklist for Dead Ship Tow Evolutions

MSU Portland Dead-Ship Tow Procedures

Note: The requirements listed below are minimum requirements for dead-ship tow operations. The owners, operators, agents, masters, or persons in charge of the dead-ship and the towing company contracted to move the dead-ship maintain ultimate responsibility for conducting a safe tow. Nothing in this policy relieves the owners, operators, agents, masters, or persons in charge of the dead-ship and the towing company contracted to move the dead-ship from any of the requirements regarding vessel safety and the protection of the environment specified in the applicable sections of 46 CFR "Shipping" and 33 CFR "Navigation and Navigable Waters."

1. Introduction: All dead-ship tows within, or transiting through, the Captain of the Port (COTP), Sector Columbia River area of responsibility (AOR) must comply with this policy. The owner, operator, agent, master, or person in charge of the dead-ship tow evolution shall notify Marine Safety Unit (MSU) Portland, Oregon as early as possible, but no less than 72 hours, prior to the scheduled movement date. Emergency situations shall be dealt with on a case-by-case basis. Dead-ships shifting between berths within the same port area may be exempt from this guidance if approved by the MSU Portland Commanding Officer.

2. Authority: The Ports and Waterways Safety Act (33 USC 1221) authorizes the U. S. Coast Guard to regulate the movement of dead ships for the purposes of maintaining safety on the navigable waterway.

3. Geographical Separation: This enclosure covers dead-ship tow evolutions that are planned to be conducted in all areas of the MSU Portland AOR with the exception of upstream of the Bonneville Dam and on the Snake River. In the event that a dead-ship tow is requested upstream of the Bonneville Dam or in the Snake River, applicable portions of this enclosure shall be applied as seen fit by the MSU Portland WWM.

4. Definitions:

    a. Dead-Ship Tow – The scheduled movement of a vessel that does not satisfy the conditions of normal vessel operation.

    b. Draft – Maximum depth of the vessel below the waterline.

    c. Air Draft – Maximum height of the vessel above the waterline.

    d. Horsepower – Designed shaft horsepower of the vessel.

    e. Length – Length overall of the towed vessel.

    f. Responsible Party (RP) – The individual/company responsible for taking the initial action to prevent, mitigate or clean up an oil or chemical spill or respond to a vessel emergency.

    g. Sail Height – Height from the waterline to the highest continuous weather deck or any cargo above that deck.

5. Weather: A 72 Hour Weather Forecast shall be considered and discussed 24-hours prior to sailing between the COTP Representative, the vessel representative, the towing vessel master, and the river and/or bar pilots (as applicable per pilotage requirements outlined in 46 CFR 15.812). Heavy weather offshore may necessitate a delay in departure. The coastal marine forecast and offshore waters forecast shall not exceed a 7 on the Beaufort scale (28-33 kts wind / 13.5-19 ft seas). A contingency to delay the tow in a safe refuge area shall be addressed in the tow plan.

6. Documentation: The vessel's representative shall consult with the MSU to ensure that all relevant vessel documents/certificates have been obtained for the voyage. Copies of the required documents must be provided prior to sailing. The required documents (as applicable per vessel requirements) shall include, but are not limited to, Load Line Certificate, Certificate of Financial Responsibility, etc., but may vary on a case-by-case basis. Regardless of vessel requirements, documentation showing proof of ownership and financial responsibility for the vessel and potential accidents will be required.

7. Notice to Mariners: MSU Portland WWM will work in collaboration with the appropriate Coast Guard unit(s) to ensure a VHF-FM radio broadcast regarding the dead-ship tow operation is conducted to advise other vessels to use caution when transiting in the vicinity of the tow. If time permits, WWM shall provide notice of the operation to Coast Guard Thirteenth District for inclusion in the Local Notice to Mariners.

8. Requirements for Dead-Ship Tows:

   a. Tow Plan:

      (1) Towing companies contracted to conduct dead-ship tows of vessels, other than barges, greater than or equal to 150 feet in length, or as otherwise applicable by the COTP, shall submit a dead-ship tow plan as early as possible, but no less than 72 hours, prior to the scheduled movement date. Proposals may be made by fax at (503) 861-6360 or by email to columbiarivercc@uscg.mil. When approved or disapproved, the MSU will reply by official written correspondence unless directed to reply by other means as approved by the department head.

      (2) Consultation shall be made with the bar and river pilots to determine the safest pilot and tug configuration for the DST.

      (3) Dead ship tows which cross COTP Zone boundaries require approval of all involved COTPs.

      (4) The proposal must include the Dead Ship Tow Application (enclosure 2).

      (5) Bunker soundings, quantities, and locations of any remaining oil or hazardous substances on board will be provided with the tow plan. In general, no excess waste oil or hazardous waste will be carried on board.

(6) Drawings of vessel piping systems such as ballast and cargo shall be included in the tow plan.

(7) A diagram of sea valves and associated piping diagrams shall be provided in the tow plan.

(8) The tow plan shall include discussion on the ability of the dead-ship to anchor, maintain emergency lighting, and establish capstan/windless operations.

(9) A communications plan shall be submitted with the tow plan. Inadequate direct communications may result in termination of the dead-ship tow through a COTP Order. This may include inadequate English-speaking ability on the lead towing vessel.

(10) The tow plan shall provide exact details/diagrams of the towing wire/bridle and emergency towing wire/bridle to be used including specific dimensions of each. The tow plan must address both the Columbia River (other rivers, as applicable) and open ocean transits of the tow. A competent marine surveyor experienced in ocean towing must complete a tow survey prior to departure, unless previously granted a waiver. The survey report shall include a statement from the surveyor that the towing gear and emergency towing gear is both appropriate and in adequate condition for the proposed job. A copy of the survey report will be included in the tow plan. WWM will rely upon the judgment of the marine surveyor to assess the adequacy of towing tackle; however, these diagrams will be retained to facilitate decision-making in the event of an emergency. The following information should be included in the towing wire/bridle portion of the tow plan:

(a) Description of surge chain or catenary.

(b) Diameter, type, age and length of tow wire.

(c) Description of emergency tow wire rigged on vessel.

(d) Additional equipment available for emergency operations (connections, gear, orville hook, etc.).

(e) Date(s) of last tow wire end-for-ending, re-termination, slushing and inspection.

b. Tug Requirements:

(1) Towing companies, vessels, or their agents must maintain communications with the Sector Columbia River Command Center at (503) 861-6212 or via radio guard in accordance with the approved communications plan. Position reports shall be provided every sixty minutes, not to exceed ninety minutes between reports as operations permit, while transiting the applicable river, and every four hours between the inland demarcation line and the Exclusive Economic Zone (200nm) of the United States. Notifications of any changes in status of an approved tow must be

made as soon as possible (e.g., date or time of departure, arrival at destination, and problems with the tow). Approvals for dead-ship tows will be voided if any changes are made to the information submitted in the original request, and a COTP Order may be issued preventing the dead-ship tow until an amended application has been submitted and approved.

(2) The towing vessel's Certificate of Inspection and licenses of its crew will be checked. If the towing vessel is of foreign flag, Coast Guard personnel may conduct a Port State Control boarding to assess the safety and condition of the tug if applicable.

(3) Inbound vessels are not relieved of their requirements for Notice of Arrival as required by 33 CFR 160.

(4) Navigation lights and day shapes will be properly rigged and adequate to provide lighting and recognition for the tug throughout its journey in accordance with 72 COLREGS and/or Inland NAVRULES, as applicable.

c. Dead-Ship Condition:

(1) The vessel tailhaft(s) will normally be locked to prevent freewheeling and vibration during a dead-ship tow evolution unless otherwise specified and approved in the tow plan.

(2) The rudder will normally be locked during a dead-ship tow evolution unless otherwise specified and approved in the tow plan. A marine surveyor or Coast Guard Inspector must verify adequacy of the lock, if required.

(3) If pilotage is required, the vessel shall ensure adequate means are available for the pilot to safely embark or disembark the ship.

(4) An adequate means of personal relief (operational heads, portable toilets, etc.) and protection from the weather shall be made available to any persons remaining on board during the evolution.

(5) All large, loose gear shall be secured including portable flammable/pressurized gas tanks, large machinery, etc.

(6) All cranes/booms will be lashed and secured.

(7) All hatch covers will be sufficiently secured and inspected for watertight integrity.

(8) All double bottoms/voids/cofferdam hatches will be secured.

(9) All watertight subdivision doors and hatches will be secured.

(10) All watertight doors above decks will be secured.

(11) All air ports and side ports will be secured.

(12) All sea valves will be closed and secured with wire. Locks should be avoided, but if necessary, the keys will be available on the vessel, preferably in close proximity and marked such that emergency personnel can quickly operate.

(13) The forepeak tank shall not carry any fuel; all covers to this tank are to be secured.

(14) Fuel for the towing vessel or other vessels involved in the operation shall not be stored in the dead-ship tanks.

(15) The list and trim conditions will not exceed the limitations of the vessel.

(16) Free surface affects will be minimized.

(17) Navigation lights and day shapes will be properly rigged for the entire voyage in accordance with 72 COLREGS and/or Inland NAVRULES, as applicable.

d. The table below was developed in cooperation with the Columbia/Snake River System maritime industry in 2011 and should be used when developing your proposals. These minimums apply for wind conditions of 25 knots or less.

Vessel Length (FT)	**Vessel Sail Height (FT)**	**Minimum # of Tugs**	**# of tugs w/ minimum horsepower for each****	
400-499	**<21**	**2**	**1 > 2,500**	**1 > 2,000**
500-599	**21-30**	**2**	**1 > 3,000**	**1 > 2,000**
600-699	**31-40**	**3**	**1 > 3,000**	**2> 2,000**
Over 700	**>40**	**4**	**1 > 3,000**	**3>2,000**

1. ****When determining the number of tugs required, always err on the side of caution. For example, if the vessel's sail height requires three tugs, but the vessel length only requires 2, use the greater number.**

2. ****This table is for conventional tugs. If tractor tugs are utilized, exceptions may be considered for the minimum number of tugs required.**

Coast Guard Marine Safety Unit Portland
Dead Ship Tow Application

Company/Agency Name		
Point of Contact		
Phone Number	OFFICE:	MOBILE:
Fax Number		
Email Address		
Responsible Party Phone	OFFICE:	MOBILE:
VESSEL INFORMATION		
Vessel Name		
Class/Type/Designation		
Length		
Beam		
Draft		
Air Draft		
Displacement		
Flag		
Documentation # (if any)		
TOWING INFORMATION		
Origin		
Destination*		
Departure Date & Time		
Purpose		
Estimated Dist/Duration		
Description of Transit (route, waypoints, etc)		
Havens of Safe Refuge		

* If crossing COTP zone boundaries, concurrent approval is required.

TOWING INFORMATION (Cont.)						
Type	Alongside		Pushing Ahead		Astern	
	Surge Chain		Long Catenary			
Diameter of Tow Wire						
Length of Tow Wire						
Emerg. Wires Rigged	Location:		Type:			
Towing Condition	Single Drum		Double Drum			
Length & Position of Tows						
Diagram:						

TOWING VESSEL INFORMATION	
Vessel Name	
Documentation #	
Length	
Beam	
Horsepower	
Gross Tonnage	

Crew Information		
Name	Position	License

ASSIST TUG(S) INFORMATION	
Vessel Name	
Documentation #	
Horsepower	
Vessel Name	
Documentation #	
Horsepower	

ADDITIONAL NOTES

U. S. Coast Guard Marine Safety Unit Portland
Inspection Checklist for Dead-Ship Tow (DST) Evolutions

- ☐ Review the vessel's history prior to the inspection to determine any issues regarding watertight integrity, stability, and structural issues.
- ☐ Ensure tail shaft(s) is locked to prevent freewheeling and vibration unless requested and approved in tow plan.
- ☐ Ensure rudder is locked unless approved in the tow plan. A marine surveyor or Coast Guard inspector must verify adequacy of a rudder lock if used.
- ☐ Ensure all large, loose gear is secured, including portable flammable/pressurized gas tanks, large machinery, etc.
- ☐ Ensure all cranes/booms are lashed and secured.
- ☐ Ensure all hatch covers are sufficiently secured and inspected for watertight integrity.
- ☐ Ensure all double bottoms/voids/cofferdams are secured.
- ☐ Ensure all watertight subdivision doors and hatches are secured.
- ☐ Ensure all watertight doors above decks are secured.
- ☐ Ensure all air ports and side ports are secured.
- ☐ Ensure all sea valves are closed and secured with wire or lock. If a generator is available to run basic ships facilities the sea valves should remain open.
- ☐ Ensure forepeak tank does not carry any fuel; all covers to this tank are to be secured.
- ☐ Ensure no fuel for the tug(s) is carried onboard.
- ☐ Ensure free surface effects are minimized.
- ☐ Ensure list and trim conditions do not exceed limitations of vessel.
- ☐ Ensure navigation lights and day-shapes are properly rigged and functioning.
- ☐ Ensure adequate means of embarking and disembarking the vessel are available for Pilot and any workers.
- ☐ Ensure adequate means of relief (operating head, portable toilet, etc.) and protection from the weather are available to personnel onboard the vessel.

Exceptions/Notes:_____

_____

Completed by:_____
(printed name of CG inspector)

Signature:_____ Date:_____