State of Oregon

Department of Environmental Quality

Memorandum

Date: Jan. 28, 2011

To: Environmental Quality Commission

From: Dick Pedersen, Director

Subject: Agenda item D, Rule adoption: Ballast water management, OAR Chapter 340,

Division 143

February 16-18, 2011, EQC meeting

Why this is important

The Oregon Legislature passed statutory amendments to the Ballast Water Management law in 2003, 2005, 2007 and 2009. DEQ's proposal brings OAR chapter 340, division 143 into alignment with statutory amendments and further enhances the agency's ability to protect state waters from aquatic invasive species.

DEQ recommendation and EQC motion Background and need for rulemaking DEQ recommends that the Environmental Quality Commission adopt the proposed rules, as presented in attachment A.

Non-indigenous species pose a biological pollution threat to native ecosystems, and protection measures are needed to prevent their entry into Oregon's environment. These non-indigenous species may establish reproducing populations and proliferate in the environment, thereby becoming invasive and causing harmful ecological, economic and human health consequences. The Oregon Task Force on the Shipping Transport of Aquatic Invasive Species has studied ballast water management practices as a means to reduce invasion risk to state waterways, and, in accordance with 2009's House Bill 2714, has provided guidance for the state ballast water management program and this rulemaking package. This proposed rulemaking aligns the rules with the statute and further reduces the risk of introducing aquatic invasive species to Oregon waterways.

Three primary issues have motivated DEQ to propose new ballast water management rules. First, since rules were enacted in 2002, management has been dependent upon ballast water exchange practices, wherein higher risk ballast water sourced from inland ports is replaced with open ocean waters. When properly implemented this management practice significantly reduces the risk of introducing non-indigenous species to Oregon waterways, yet it has been widely regarded as a stop-gap measure until more effective methods become practical and feasible. Neighboring states and other jurisdictions are developing or have implemented more protective ballast water discharge standards that will likely require the implementation of treatment technology. In Oregon, House Bill 2714 explicitly granted authority to the commission to implement discharge standards for Oregon waters via rulemaking.

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The second issue concerns regulations that allow for safety exemptions to protect vessels and their crew from potential hazards associated with conducting ballast water exchange in hazardous sea conditions, or circumstances involving equipment failure. Under current rules, a safety exemption vessel may discharge high-risk ballast water, for example ballast water from an area known to be infested with aquatic invasive species, without providing state officials with reasonable advance notice and without implementing alternative management strategies. To more effectively protect state waterways from the discharge of unexchanged or untreated high-risk ballast water, DEQ is proposing a new administrative rule, OAR 340-143-0050, that requires safety exemption vessels to obtain DEQ authorization before discharging ballast water. This proposed rule allows DEQ to review specific conditions of the proposed discharge and determine whether alternative management strategies are warranted and practical.

Lastly, the 2009 Oregon Legislature clarified the legal authority for DEQ to board and inspect regulated vessels for ballast water management compliance verification purposes, codified at ORS 783.640. One of the proposed new rules, OAR 340-143-0030, establishes the conditions, purpose and scope of vessel boarding.

Effect of rule

The proposed rules align applicable definitions and discharge exemptions with current statutes, revise language for greater clarity, increase efficiency and efficacy of ballast water reporting and improve aquatic invasive species prevention capabilities. Specifically, the proposed rules:

- Provide detailed description of conditions, purpose, and scope of vessel inspections and compliance verification sampling (OAR 340-143-0030).
- Require safety exemption vessels to obtain department authorization prior to discharge of ballast water. (OAR 340-143-0040). This new requirement allows DEQ to review the conditions and pollution risks associated with a proposed discharge, and if necessary, require emergency management alternatives for high-risk circumstances.
- Establish a framework to allow the use of ballast water treatment technology in place of ballast water exchange management practices (OAR 340-143-0050).
- Establish restrictions on the management and disposal of sediments and associated living organisms that accumulate at the bottom of ballast tanks (OAR 340-143-0060).

Commission authority

The commission has authority to take this action under ORS 783.620 through 783.992.

Stakeholder involvement

DEQ worked with affected parties during the development of the proposed rules, by facilitating and providing staff support to the Shipping Transport of Aquatic Invasive

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Species Task Force. In addition to studying ballast water management issues and making legislative recommendations, the task force served as an advisory committee for the development of the proposed rules. Draft rule language was developed via consensus agreement and received unanimous support from participating members.

Public comment

A public comment period extended from Dec. 1 to Dec. 22, 2010. DEQ did not hold public hearings for this rulemaking. The comments received, and DEQ's responses, are provided in attachment B.

Key issues

Key issues were:

1. **Timeframes for safety exemption risk and alternative management assessments.** Given staff resource limitations and vessel operation schedules, what timeframe is reasonable for a DEQ review of safety exemption risk assessments and alternative management opportunities, before it allows a vessel to discharge?

Recommendation: In order to effectively analyze case-specific ballast management safety exemptions, limited existing staff must have sufficient time to assess the degree of risk presented by the proposed discharge, and if necessary, explore the feasibility of alternative management strategies that could be employed to protect state waters from the discharge of untreated or unexchanged ballast water. On the other hand, it is important to recognize that under some voyage characteristics vessels declaring safety exemption discharge may provide less than two-day notice prior to scheduled cargo loading and ballast discharge. Also, some representatives on the advisory committee were particularly concerned about unmanned tug and barge operators that must routinely declare a safety exemption for their ballast discharge due to equipment limitations that do not allow for open ocean or coastal exchange. In order to balance these interests in a manner that reduces the likelihood of causing operational delays for vessel operators, yet also ensures sufficient time for limited staff to conduct an effective assessment, DEQ recommends adopting a 10-day safety exemption case review timeline for all regulated vessels except unmanned barges. The proposed rule, OAR 340-143-0040 (2), provides unmanned barge operators with an exemption from case review and discharge authorization unless otherwise notified by DEQ.

2. **Adoption of state-specific standards.** Should the commission adopt discharge standards and an implementation timeline that phases in the use of treatment technology in place of open-sea exchange practices?

Recommendation: Rather than adopt state-specific discharge standards at a time when federal regulations are pending, and neighboring states are poised to implement regulations that may not be consistent, DEQ

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recommends establishing a framework for implementing ballast water treatment technology use in Oregon waters (i.e. based on pending discharge standards developed by federal authorities or under emergency alternative management scenarios, such as safety exemption discharge of high-risk ballast water), and reserve specific standards and implementation timelines for future rulemaking efforts. If federal authorities fail to enact discharge standards that are sufficiently protective of Oregon waters, DEQ, in consultation with the Shipping Transport of Aquatic Invasive Species Task Force, will propose to amend OAR 340-143-0050 to establish standards consistent with our neighboring states.

Next steps

If adopted, DEQ will file the rules with the Secretary of State, at which time they will become effective. Staff will communicate with local shipping agents about the newly adopted rules and provide training on the rule package at a monthly meeting of the Columbia River Steamship Operators Association. In addition, ballast water management program staff at DEQ headquarters will incorporate administrative rule outreach and education as part of routine correspondence with local agents and during vessel boarding and inspections. The rule implementation plan is available upon request.

Attachments

- A. Proposed rule revisions
- B. Summary of public comments and agency responses
- C. Advisory committee membership
- D. Relationship to Federal Requirements questions
- E. Statement of Need and Fiscal and Economic Impact
- F. Land Use Evaluation statement

Available upon request

- 1. Legal notice of proposed rulemaking
- 2. Cover memorandum from public notice
- 3. Written comment received
- 4. Rule implementation plan
- 5. STAIS Task Force meeting minutes and rule language versions
- 6. Ballast Water Management Act (ORS 783.620 783.992)

| Approved: | Division: | |
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| | Section: | |

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DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION 143

BALLAST WATER MANAGEMENT

340-143-0001

Authority, Purpose and Scope

- (1) The purpose of These rules is to establish procedures for the proper management of ballast water, ballast tank sediment and reporting of ballast water management information as regulated by under ORS 783.620 through 783.640, in order The rules' purpose is to protect the waters of this the state from ecological and economic threats associated with aquatic nuisance nonindigenous species.
- (2) These rules apply to All vessels greater than 300 gross tons carrying equipped with ballast water tanks traversing into waters of the this state from a voyage are subject to these rules, except a vessel that:
- (a) Discharges ballast water only at the location where the ballast water originated, and the ballast water is not mixed with ballast water from areas other than open sea waters;
- (a) Traverses only the internal waters of the this state; or
- (b) Traverses only the territorial sea of the United States and does not enter or depart an Oregon Port or navigate-the waters of this the state.
- (d) Discharges only ballast water that originated from coastal waters between the parallel 40 degrees north latitude and the parallel 50 degrees north latitude.
- (3) These Under ORS 783.630 (2), these rules do not authorize the spilling or releasing of any oil or hazardous materials in a manner prohibited by state or federal laws or regulations. Ballast water carried in any tank containing a residue of oil or any other pollutant must be discharged in accordance with applicable regulations.

Stat. Auth.: <u>ORS 468.020</u>, ORS 783<u>.620 through ORS 783.640</u> Stats. Implemented: ORS 783.620 through ORS 783.640

340-143-0005

Definitions

- (1) "Aquatic nuisance species" means any species or other viable biological material that enters an ecosystem beyond its historic range.
- (1) "Ballast Water" means any water and associated sediment used to manipulate the trim and stability of a vessel.

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- (2) "Cargo Vessel" means a self-propelled ship in commerce, other than a tank vessel or a vessel used solely for commercial fish harvesting, of 300 gross tons or more.
- (3) "Coastal <u>Ocean</u> Exchange" means <u>replacing</u> the <u>exchange of</u> ballast water <u>taken onboard at a North American coastal port in an area no less than 50 nautical miles from any shore and where the water depth exceeds 200 meters. in one of the following manners:</u>
- (a) For vessels departing from a North American coastal port located south of the parallel 40 degrees north latitude, and traveling northward into the waters of this state, the replacement of ballast water at sea south of the parallel 40 degrees north latitude; or
- (b) For vessels departing from a North American coastal port located north of the parallel 50 degrees north latitude, and traveling southward into the waters of this state, the replacement of ballast water at sea north of the parallel 50 degrees north latitude.
- (5) "Coastal waters" means the Pacific Ocean within 200 nautical miles of the United States or Canada.
- (4) "Common Waters Zone" means the Pacific Coast of North America between 40 and 50 degrees north latitude.
- (5) "DEQ Department" means the Oregon Department of Environmental Quality.
- (6) "Exchange" means to replace the water in a ballast tank using either flow-through exchange, empty/refill exchange, or other exchange methods recommended or required under U.S. Coast Guard rules, 33 CFR, part 151.2035.
- (7) "Exclusive Economic Zone" extends from the baseline of the U.S. territorial sea seaward 200 nautical miles.
- (8) "High-risk Ballast Water" means unexchanged or untreated ballast water obtained from a coastal area outside the common waters zone identified in this rule.
- (9) "Internal Waters of the this State" means those waters of this state that do not have shared jurisdiction with an adjacent state.
- (10) "Nonindigenous Species" means any species or other viable biological material entering an ecosystem beyond its natural range. This also includes seeds, eggs, spores and other biological material entering an ecosystem beyond its natural range.
- (11) "Oil" means oil, gasoline, crude oil, fuel oil, diesel oil, lubricating oil, oil sludge, oil refuse and any other petroleum-related product.
- (12) "Open Sea Exchange" means the exchange a replacement of ballast water that occurs in an area no less than 200 nautical miles from any shore and where the water depth exceeds 2,000 meters.
- (13) "Pacific Coast Region" means all coastal waters on the Pacific Coast of North America east of 154 degrees W longitude and north of 25 degrees N latitude, exclusive of the Gulf of California.

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- (14) "Passenger Vessel" means a ship of 300 gross tons or more, carrying passengers for compensation.
- (15) "Port" means any place to which a vessel is bound to anchor or moor.
- (16) "Sediment" means any matter that settles out of ballast water.
- (17) "Ship" means any boat, ship, vessel, barge or other floating craft of any kind.
- (18) "Tank Vessel" means a ship that is constructed or adapted to carry oil in bulk as cargo or cargo residue other than:
- (a) A vessel carrying oil in drums, barrels or other packages;
- (b) A vessel carrying oil as fuel or stores for that vessel; or
- (c) An oil spill response barge or vessel.
- (19) "Territorial Sea of the United States" means the waters extending three nautical miles seaward from the coastline in conformance with federal law.
- (20) "Vessel" means a tank vessel, cargo vessel or passenger vessel.
- (21) "Voyage" means any transit by a vessel destined for any Oregon port.
- (22) "Waters of the State" mean natural waterways including all tidal and non-tidal bays, intermittent streams, constantly flowing streams, lakes, wetlands and other bodies of water in Oregon, navigable and non-navigable, including that portion of the Pacific Ocean that is within Oregon's boundaries.

Stat. Auth.: <u>ORS 468.020</u>, ORS 783<u>.620 through ORS 783.640</u> Stats. Implemented: ORS 783.620 through ORS 783.640

340-143-0010

Ballast water management: Discharge Prohibitions

- (1) Discharge of ballast water containing oil or hazardous material into waters of <u>the</u> this state is prohibited.
- (2) <u>Vessels carrying ballast water into waters of the state must not</u> discharge of any ballast water into <u>Oregon</u> waters of this state from vessels carrying ballast water into <u>Oregon</u> waters of this state is prohibited, unless:
- (a) The vessel discharges ballast water only at the same location where the ballast water originated, and the ballast water is not mixed with ballast water or sediment from areas other than open sea water provided that the master, operator or person in charge of the vessel can demonstrate that the ballast water to be discharged was not mixed with ballast water or sediment from an area other than mid-ocean waters. For purposes of this subsection, "same location"

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means an area within one nautical mile of the berth or within the recognized breakwater of an Oregon port or place, at which the ballast water to be discharged was loaded;

- (b) The owner or operator of the vessel conducted <u>proper ballast water exchange management practices</u> an open sea, or coastal exchange, if applicable, of ballast water before entering the waters of the state of this state, such that:
- (A) An open sea exchange was conducted for ballast tanks containing water sourced outside the Exclusive Economic Zone; or
- (B) A coastal ocean exchange was conducted for ballast tanks containing water sourced from a port within the North American Pacific Coast Region;
- (c) The ballast water was solely obtained from mid-ocean waters that are no less than 200 nautical miles from any shore and where water depth exceeds 2,000 meters;
- (d) The ballast water discharged originated solely from the common waters zone, as defined by OAR 340-143-0005 (5) coastal waters between the parallels 40 and degrees north latitude and the parallel 50 degrees north latitude;
- (e) The ballast water originated solely from municipal or treated drinking water sources and is not mixed with ballast water obtained from areas other than open sea waters;
- (f) The ballast water had been treated in a manner authorized by OAR 340-143-0050; or
- (g) The <u>vessel</u> owner or operator of the vessel did not conduct an open sea exchange or a coastal exchange because the owner or operator determined that performing an exchange would threaten the safety or stability of the vessel or the vessel's crew or passengers because of extraordinary condition, including but not limited to adverse weather, vessel design limitations, or equipment failure declares a safety exemption in a manner consistent with ORS 783.635 (2)(b) and OAR 340-143-0040.

Stat. Auth.: <u>ORS 468.020</u>, ORS 783<u>.620 through ORS 783.640</u> Stats. Implemented: ORS 783.620 through ORS 783.640

340-143-0020

Ballast water management: Reporting, Management Plans and Recordkeeping

(1) A <u>vessel</u> owner or operator <u>of a vessel</u> covered by <u>these rules OAR</u> chapter 340, division 143 must report ballast water management information to <u>the Department DEQ</u> at least 24 hours before entering waters of <u>this the</u> state. When the vessel's voyage is less than 24 hours in total <u>duration</u>, the report must be submitted prior to departing the vessel's port or place of departure. The report is required whether or not the owner or operator plans to discharge ballast water into waters of <u>this the</u> state. Compliance with these reporting requirements may be met by sending the report to <u>the Merchants Exchange of Portland. DEQ via e-mail (ballast.water@deq.state.or.us)</u> fax, or mail. Vessel owners or operators who rely on a third party to collect, forward or submit ballast water reporting forms are responsible for ensuring that DEQ receives the ballast water

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management information as required in this section. Electronic reporting must be submitted using methods and file formats approved by DEQ.

- (2) The report must be submitted on a form acceptable to the U.S. Coast Guard pursuant to 33 CFR part 151, unless DEQ approves an alternative format in is approved writing the Department.
- (3) If a <u>vessel</u> owner or operator <u>of a vessel</u> alters or plans to alter its ballast water management for any reason after reporting its ballast water management information, the owner or operator must <u>immediately</u> submit an amended ballast water management report <u>to DEQ</u>. <u>An amended reporting form must be filed at the time of first known or predictable change of destination, and immediately upon completion of discharge operations resulting in changes to actual volume of ballast water discharged.</u>
- (4) Any owner or operator <u>failing</u> who fails to report its ballast water management information as required by this rule must file the required report immediately upon discovering the violation.
- (5) Vessel owners or operators must develop and maintain on board a ballast water management plan that is specifically developed for the vessel and that allows those responsible for the plan's implementation to understand and follow the vessel's ballast management strategy. The contents, training requirements and availability must be consistent with ballast water management plan regulations established by the U.S. Coast Guard under 33 CFR 151.2035a subpart D.
- (6) Vessel owners or operators must record all ballast water and sediment management operations in the vessel's ballast water log, record book or other suitable documentation system.
- (a) Content. Vessel owners or operators must maintain a version of the ballast water log, record book or other suitable documentation system in English on board the vessel that, at a minimum:
- (A) Records each operation involving ballast water or sediment management;
- (B) Describes each such operation, including the location and circumstances of, and the reason for, the operation;
- (C) Records the exact time and position of the start and stop of the ballast water exchange or treatment operations for each tank; and
- (D) Describes the nature and circumstances of any situation under which a safety exemption from ballast management requirements was declared.
- (b) Availability. Vessel owners or operators must make the ballast water log or record book readily available for examination by DEQ at all reasonable times. The vessel owner or operator must transmit to DEQ any information about the vessel's ballast operations that DEQ requires.
- (c) Retention period. The ballast water log or record book must be available on board the vessel for a minimum of two years after the date on which the last entry in the book is made.
- (d) Required signatures. DEQ will require that each completed page and each completed vessel exchange or treatment operation in the ballast water log or record book be signed and dated by the vessel owner or operator or responsible officer; and that such owner, operator or responsible

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officer attest to the accuracy of the information provided and certifies compliance with the vessel ballast water management plan.

- (e) Alternative means of recording. The ballast water log or record book may be an electronically recorded system or integrated into another record book or system. At a minimum, any alternative method must meet provisions of this section.
- (f) Records Storage for unmanned barges. If no secure location is available to store records on unmanned barges, these vessel operators may meet provisions of this section by storing records on an associated tug or at other accessible locations and must provide logbook records to DEQ on request.

Stat. Auth.: <u>ORS 468.020</u>, ORS 783<u>.620 through ORS 783.640</u> Stats. Implemented: ORS 783.620 through ORS 783.640

340-143-0030

Ballast Water Management: Vessel Inspections

- (1) DEQ or its agent is authorized to board and inspect vessels, without advance notice, to provide technical assistance, assess compliance and enforce Oregon ballast water management rules as provided under ORS 783.620-640, as long as such inspections are conducted in accordance with standards described in this rule. DEQ may prioritize vessel inspections based on: (a) Reporting compliance,
- (b) Information submitted in ballast water reporting forms,
- (c) Discharge behavior, or
- (d) Other applicable criteria to assess the risk of introducing nonindigenous species.
- (2) Conditions. DEQ inspections shall be conducted under the following conditions:
- (a) Authorized inspectors. Only DEQ employees, agents or specifically authorized contractors are authorized to conduct such inspections;
- (b) Time. Inspections may be conducted at any time. Reasonable efforts must be taken to not unduly interrupt normal cargo operations of the vessel. Vessel cargo operations may be interrupted when it appears to inspectors that the discharge of unexchanged or untreated ballast water or sediments may be occurring or is imminent;
- (c) Location. DEQ may conduct inspections when the vessel is at anchor or in port within Oregon waters;
- (d) Identification. Inspectors must have official identification, announce their presence and intent at the time of inspection, perform their duties in a safe and professional manner, and follow all appropriate ship safety requirements;

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- (e) Vessel escort. The vessel owner or operator must provide an employee to escort the inspector or inspectors.
- (f) Safety. Nothing in this section relieves the vessel owner or operator of the responsibility for ensuring the vessel's safety and stability or the safety of the crew and passengers.
- (3) Purpose. Vessel boarding may occur for any of the following reasons:
- (a) To verify regulatory compliance under ORS 783.620 through ORS 783.640. The scope of compliance verification inspection activities is described in section (4) of this rule;
- (b) To provide technical assistance and explain details of state ballast water management regulations. The inspector may also help provide details on other west coast state and federal ballast law; or
- (c) To provide outreach and education about best management practices that may further reduce the likelihood of transporting aquatic nonindigenous species.
- (4) Scope. DEQ shall limit vessel inspection to those areas reasonably necessary to inspect ballast management-related activities. DEQ may board a vessel and conduct compliance verification and inspection activities, including;
- (a) An audit of vessel ballast water management documentation to verify compliance with state laws. An audit consists of reviewing the vessel's ballast water reporting forms, management plan and record book as required in this section. In addition, the inspector may request and review any other records relating to ballast management operations including the Deck Log, GPS Log, Soundings Log, Stability Reports, Engine Room Log and Oil Record Book. Vessel operators must maintain a concise record of their ballast water management in order to expedite the timeliness and efficiency of the documentation audit.
- (b) A collection of samples from ballast tanks. Sampling may require the vessel's crew to provide safe access to ballast tanks for sampling, including lighting and ventilation of cargo holds, spaces and voids as needed. The vessel's crew will open ballast tank manhole covers and present the tank ready for sample access by taking the head off the tank level as necessary to preclude tank overflow. If tank certification is necessary for access, the vessel operator will be responsible for any marine chemist fees. Where safe and practical, an inspector may require a sample of tank sediments, collected by the vessel operator under DEQ observation or by the DEQ inspector.

<u>Stat. Auth.: ORS 468.020, ORS 783.620 through ORS 783.640</u> <u>Stats. Implemented: ORS 783.620 through ORS 783.640</u>

340-143-0040

<u>Ballast Water Management: Emergency Management Alternatives for Vessel's Declaring Safety Exemption Discharge of High-Risk Ballast Water</u>

(1) Unexchanged or untreated ballast water may not be discharged into waters of the state without DEQ review and authorization. This is to provide DEQ with sufficient time to determine whether

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ballast water proposed for discharge represents a high-risk for introduction of nonindigenous species and whether or not feasible management alternatives are available to minimize that risk and protect waters of the state.

- (2) Vessel owners or operators requesting safety exemptions under ORS 783.635 (2)(b) must file a ballast water reporting form clearly identifying the request, and provide sufficient additional information for DEQ to evaluate the request and determine whether an emergency ballast water management alternative is warranted.
- (a) Reporting Requirements. Vessel operators requesting a safety exemption must notify DEQ of their intent on the ballast water reporting form required under ORS 783.640. Notification requires writing the words "safety exemption" on the form where it asks "If no ballast treatment conducted, state reason why not:" and stating the cause as either "adverse weather," "vessel design limitation," equipment failure" or "extraordinary condition."
- (A) Vessel operators may rescind a safety exemption claim by filing an amended ballast water reporting form and notifying DEQ as required in this section.
- (B) Vessel operators using treatment technologies and claiming a safety exemption due to equipment failure must conduct an open sea exchange or explain why that was not possible.
- (b) Discharge authorization requirement. A vessel owner or operator shall not discharge untreated or unexchanged ballast water without DEQ authorization, except:
- (A) Where discharging is necessary to prevent jeopardy to the vessel, crew or passengers, or
- (B) For safety exemption discharges from unmanned barges, in which case DEQ shall review ballast water reporting form information and notify the vessel operator if further case review and discharge authorization are required, in accordance with subsection (c).
- (c) Case Review. DEQ will review safety exemption claims and determine whether alternative management strategies are feasible and necessary. DEQ will complete case review within 10 days of receiving safety exemption notification on the vessel's ballast water reporting form. When it completes its safety exemption review, DEQ will notify the vessel owner or operator whether they have authorization to discharge or whether ballast water management alternatives, referenced in section (4), are required.
- (3) DEQ may identify high-risk ballast water from safety exemption cases using factors including but not limited to:
- (a) A nonindigenous species profile of source waters;
- (b) The volume and frequency of exchanged ballast water discharged;
- (c) Design limitations in vessels that prevent effective ballast exchanges;
- (d) Voyage characteristics within 50 nautical miles that may preclude requirements to conduct ballast exchange outside of 50 nautical miles;
- (e) Vessel owner or vessel operator compliance history; or

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- (f) Frequency of vessel claims for safety exemption.
- (4) Alternative Management strategies options for responding to high-risk ballast water discharge. For vessels requesting authorization to discharge high-risk ballast water, DEQ shall identify one or more of the following options:
- (a) Conduct an open sea or coastal ocean ballast exchange after safety exemption conditions are rectified;
- (b) Discharge into DEQ-specified alternative waters;
- (c) Employ a ballast water treatment alternative using DEQ-approved methods, or using a ballast treatment system acceptable under 340-143-0050;
- (d) Discharge only the minimum amount necessary to complete a safe operation; or
- (e) Retain all ballast water on-board.
- (5) Alternative Discharge Areas. DEQ, in consultation with the U.S. Coast Guard and the state of Washington, when applicable, may identify alternative locations for the discharge of unexchanged or untreated ballast water.
- (6) Safety. Nothing in this section relieves the vessel owner or operator of the responsibility for ensuring the vessel's safety and stability or the safety of the crew and passengers.

<u>Stat. Auth.: ORS 468.020, ORS 783.620 through ORS 783.640</u> <u>Stats. Implemented: ORS 783.620 through ORS 783.640</u>

340-143-0050

Ballast Water Management: Use of Ballast Water Treatment Systems

- (1) Discharge Standards. Reserved
- (2) Use of ballast water treatment systems. Ballast water treated in compliance with federal discharge standards or treated using technology approved for shipboard use by the U.S. Coast Guard or the U.S. Environmental Protection Agency may be discharged to waters of the state unless discharge violates section (1).
- (3) As an alternative to discharging high-risk ballast water identified in 340-143-0040, DEQ may authorize the use of ballast water treatment systems identified as promising technology by the U.S. EPA, U.S. Coast Guard or neighboring states.

<u>Stat. Auth.: ORS 468.020, ORS 783.620 through ORS 783.640</u> <u>Stats. Implemented: ORS 783.620 through ORS 783.640</u> Attachment A
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340-143-0060

Ballast Water Management: Ballast Tank Sediment

- (1) Except during normal operation of ballast pump systems, a vessel operator may not remove or dispose of unsuspended sediment from spaces designed to carry ballast water into waters of the state.
- (2) The cleaning of ballast tanks within Oregon waters is prohibited except under controlled arrangements in port or in dry dock. Fouling organisms and sediments removed during the cleaning of ballast tanks may not be discharged to waters of the state and must be disposed of in accordance with local, state and federal law.
- (3) DEQ may approve sediment disposal facilities. These facilities must provide for the disposal of such sediment in a way that effectively eliminates the risk of nonindigenous species and does not impair or damage the environment, human health or property, or resources of the disposal area.

Stat. Auth.: ORS 468.020, ORS 783.620 through ORS 783.640 Stats. Implemented: ORS 783.620 through ORS 783.640

Summary of public comment and agency response

Title of Rulemaking: Ballast water management

Prepared by: Rian Hooff Date: Jan. 5, 2011

Comment period

The public comment period opened Dec. 1 and closed at 5 p.m. on Dec. 22, 2010. DEQ, in consultation with advisory committee members, chose not to hold public hearings. Two respondents submitted written comments during this period.

Organization of comments and responses

Summaries of individual comments and DEQ's responses are provided below. Those who provided each comment are referenced by number. A list of respondents and their reference numbers follows the summary of comments and DEQ responses.

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| Comment 2 | For regional consistency, the commenter recommends adopting California's | |
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| | definition of "Pacific Coast Region" as our definition for "Pacific Coastal Zone" in | |
| | OAR 340-143-0005 (15). | |
| Response | DEQ has revised the rules to reduce potential confusion over use of Pacific Coast | |
| | Region and Pacific Coast Zone by regulations in neighboring states. Specifically, the | |
| | definition of Pacific Coastal Zone (OAR 340-143-0005(15) has been replaced with | |
| | Pacific Coast Region, as defined by CA PRC 71200. To accommodate this change, | |
| | DEQ has also revised the terminology used to define "coastal ocean exchange" | |
| | (OAR 340-143-0005 (4), and "common waters" (OAR 340-143-0005 (5). | |
| | Furthermore, rules describing discharge prohibitions under OAR 340-143-0010 | |
| | (2)(b)(B) and (2)(d) were revised for greater clarity and consistency. | |

| List of respondents and reference numbers | | | | |
|---|---------------------|---|---|------------------|
| Reference Number | Name | Organization | Address | Date on comments |
| 1 | C. Renee Wallis, PE | Department of Defense, Department of the Navy | Navy Region Northwest 1100 Hunley Rd. Silverdale, Washington 98315 | 12/22/10 |
| 2 | Maurya B. Faulkner | CA State Lands Comm., Marine Invasive Species Program | 100 Howe Avenue Suite 100-South Sacramento, CA 95825 | 12/22/10 |

Ballast Water Management Rulemaking Advisory Committee 2010

Overview

The Shipping Transport of Aquatic Invasive Species, established by the Oregon Legislature, is charged with studying and making recommendations for preventing the introduction of aquatic invasive species. In addition to developing legislative recommendations, this group also served as a DEQ advisory group for ballast water rulemaking activities in 2010.

Membership

Task Force members, who also provided guidance for rulemaking activities:

- Ralph Breitenstein, citizen and retired M.D.
- Maurya Falkner, CA State Lands Commission
- Jessica Keys, Governor's Natural Resource Office
- Patrick Grill, K-Line Industries
- Marla Harrison, Port of Portland
- Frank Holmes, Western States Petroleum Association
- Debrah Marriot, Lower Columbia Estuary Partnership (Gina Seger, alternate)
- Dick Lauer, Sause Bros. Tug & Barge Co.
- Martin Nugent, OR Dept. Fish and Wildlife (Rick Boatner, alternate)
- Allen Pleus, WA Dept. Fish and Wildlife
- Mark Sytsma, Portland State University
- Lt. Bill Taylor, US Coast Guard
- Jim Townley, Columbia River Steamship Operators
- Dick Vander Schaaf, The Nature Conservancy

State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY

Relationship to Federal Requirements

Ballast water management: Revise and adopt rules to align with Oregon Revised Statutes

Answers to the following questions identify how the proposed rulemaking relates to federal requirements and the justification for differing from, or adding to, federal requirements. This statement is required by OAR 340-011-0029(1).

1. Is the proposed rulemaking different from, or in addition to, applicable federal requirements? If so, what are the differences or additions?

Yes. The proposed rules align ballast water management rules with ORS 783.620 through 783.640, which are independent from federal ballast water management requirements established by the U.S. Coast Guard (33 CFR Part 151) and EPA (NPDES Vessel General Permit). Oregon ballast water regulations were established before federal requirements were mandated, and continue to be more stringent regarding some management practices. Where possible, proposed amendments to OAR 340-143 seek consistency with federal regulations by reference or adopting language verbatim. In many cases, however, the proposed rules are in addition to federal requirements for purposes of enhanced protection and enforceability. In cases where federal regulations are not sufficient, DEQ promotes regional consistency by adopting neighboring state's requirements verbatim, where appropriate. Specifically, amended or adopted rules that are different from, or are in addition to applicable federal requirements include:

- Ship-board ballast water log book record-keeping requirements,
- Conditions, purpose, and scope of state authority to board and inspect vessels, including compliance verification sampling of ballast tanks,
- Authority to require alternative management strategies for high-risk discharge from vessels declaring safety exemptions,
- Authority to establish ballast water discharge performance standards. This proposed rule has, however, been reserved for a later date pending the outcome of US Coast Guard rulemaking activities, and
- Restrictions on the disposal of sediments that accumulate at the bottom of ballast tanks.

2. If the proposal differs from, or is in addition to, applicable federal requirements, explain the reasons for the difference or addition (including as appropriate, the public health, environmental, scientific, economic, technological, administrative or other reasons).

This proposed rulemaking implements House Bill 3620 (2003), HB 2170 (2005), Senate Bill 643 (2007), HB 2625 (2009), and HB 2714 (2009) as passed by the Oregon Legislature. Generally, the proposed rules enhance our state ballast management regulations in order to reduce the risk of introducing harmful aquatic invasive species to Oregon waterways from commercial shipping transport activities.

DEQ has proposed ship-board ballast water logbook record-keeping requirements that are more stringent than federal requirements in order to clarify expectations and enhance inspection and enforcement capabilities by the state of Oregon.

The most critical, and economical strategy for invasive species management is prevention. In the case of ballast water management, compliance verification via shipboard inspections is currently the most important prevention tool. As such, these rules seek to clarify and ensure enforcement authority at the local (state) level.

Under state and federal law, vessels may declare a safety exemption from oceanic ballast water exchange requirements. Although this exemption is critical for vessel and crew safety, it can result in the discharge of ballast water with a high-risk for introducing invasive species to Oregon waterways. The proposed rules establish greater opportunity for DEQ to review case-specific conditions of the ballast tank contents, prior to discharge, in order to assess the degree of invasion risk and the feasibility of implementing alternative management strategies. The federal government has established similar alternative management requirements for vessels operating in the Great Lakes or Hudson River, but has failed to implement similar requirements to protect waterways on the Pacific Coast. The proposed rules would provide DEQ with 10 days to review safety exemption discharge cases and identify alternative management requirements, if necessary.

To sufficiently reduce the risk of introducing invasive species via ballast water discharge, scientists and policy makers from various organizational and jurisdictional levels have acknowledged that ballast water treatment should replace oceanic ballast water exchange as the primary management strategy. Ballast water discharge standards, expressed as an allowable number of living organisms per cubic meter of discharged water, have been established by multiple states (including California), and proposed at the federal (U.S. Coast Guard NPRM – September 2009) and international level (International Maritime Organization Convention on Ballast Water Management). In order to ensure that treatment technology used prior to discharging ballast to Oregon waters is sufficiently protective, DEQ reserves the option to establish standards or alternatives, more stringent than those implemented at the federal level.

Vessel operators must periodically dispose of the sediments that accumulate over-time at the bottom of ballast tanks. However, these sediments can be biologically rich with invasive species of various life-history stages, including resting spores, larval forms, or adults. These rules clarify ballast tank cleaning and sediment disposal practices in order to prevent the inadvertent introduction of invasive species.

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3. If the proposal differs from, or is in addition to, applicable federal requirements, did DEQ consider alternatives to the difference or addition? If so, describe the alternatives and the reason(s) they were not pursued.

No action alternatives were considered for all proposed rulemaking topics. Except in the case of ballast water discharge performance standards, consensus agreement amongst stakeholders on our advisory committee supported the issuance of administrative rules more stringent than those established at the federal level.

DEPARTMENT OF ENVIRONMENTAL QUALITY Chapter 340 Proposed Rulemaking STATEMENT OF NEED AND FISCAL AND ECONOMIC IMPACT

Ballast Water Management: revise and adopt rules to align with Oregon Revised Statutes

| Title of Proposed Rulemaking | Ballast Water Management: revise and adopt OAR 340 Division 143 to align with Oregon Revised Statutes | | |
|--|--|--|--|
| Statutory Authority or other Legal Authority | ORS 468.020, ORS 783.620 through 783.640 | | |
| Statutes Implemented | ORS 783.620 through 783.640 | | |
| Need for the Rule(s) | Ballast water management rules need to be aligned in response to applicable statutory revisions in 2003 (HB 3620), 2005 (HB 2170), 2007 (SB 643), and 2009 (HB 2625, HB 2714). Enhanced ballast water regulations reduce the risk of introducing harmful aquatic invasive species to Oregon waterways from commercial shipping transport activities. | | |
| Documents Relied Upon for Rulemaking | Biennial reports from the Oregon task force on Shipping Transport of Aquatic Invasive Species (available at: http://www.deq.state.or.us/lq/cu/emergency/staistaskforce.htm). Federal ballast water regulations established by the U.S. Coast Guard (33 CFR Part 151 subpart D) and the Environmental Protection Agency Vessel General Permit (http://cfpub2.epa.gov/npdes/vessels/vgpermit.cfm). Ballast water regulations established by neighboring states in California (PRC 71200-71217), and Washington (WAC 220-150). | | |
| Requests for Other Options | Pursuant to ORS 183.335(2)(b)(G), DEQ requested public comment on whether other options should be considered for achieving the rule's substantive goals while reducing negative economic impact of the rule on business. | | |
| Fiscal and Economic Impact, Statement of Cost Compliance | | | |
| Overview | The devastating impacts of aquatic invasive species, many of which were introduced via ballast water discharge, have been documented in a variety of cases worldwide and throughout the United States. These proposed rules further enhance our ability to prevent the introduction of invasive species from commercial shipping activities into waters of the state, protecting Oregon from potentially harmful economic and environmental impacts. The proposed rules do not involve fees, additional equipment or significant administrative efforts in order to comply. Therefore, under normal operating circumstances, these rules will not have any significant negative economic impacts, either direct or indirect. | | |
| | The proposed rules establish greater protection for our water resources and aquatic ecosystems by i) articulating shipboard recordkeeping requirements to enhance regulatory enforceability, ii) describing DEQ's authority to inspect vessels for compliance verification, iii) allowing DEQ to require implementation of an acceptable emergency management alternative for vessels declaring a safety exemption if the vessel is carrying high-risk ballast water into the state, iv) authorizing use of acceptable ballast water treatment systems as an alternative to otherwise applicable ballast water exchange requirements, and v) establishing limitations on the disposal of sediments that accumulate at the bottom of ballast water tanks. | | |

| Page 2 of 3 | | | |
|--|---|--|--|
| Impacts on the General Public | These rules would not impose a negative economic impact on the general public. Rather, these rules are intended to protect the general public by preventing the introduction of aquatic invasive species, which have caused devastating economic impacts for public and private sector entities in other regions of the country. In the relatively small number of cases where some additional cost may be incurred (see Impacts on Large Businesses below), the low frequency of occurrence and moderate potential costs, coupled with the high volume of consumer goods transported indicates that consumer prices for these goods will be effectively unaffected by these rules. | | |
| Impacts to Small Business (50 or fewer employees – ORS183.310(10)) | Our state ballast water management regulations establish a minimum vessel size criteria (> 300 gross tons with ballast tanks) and exemptions for commercial fishing vessels whereby no small businesses are subject to these rules. Moreover, the proposed rules do not establish fees or require new operational practices to manage ballast water, and thus, under normal operational conditions, would not impose significant economic impacts, either directly or indirectly, to any small businesses. | | |
| Cost of Compliance on Small Business (50 or fewer | a) Estimated number of small businesses subject to the proposed rule | No small businesses own vessels that are subject to OAR 340-143. | |
| employees – ORS183.310(10)) | b) Types of businesses and industries with small businesses subject to the proposed rule | Not Applicable | |
| | c) Projected reporting, recordkeeping and other administrative activities required by small businesses for compliance with the proposed rule, including costs of professional services | Not Applicable | |
| | d) The equipment, supplies, labor, and increased administration required by small businesses for compliance with the proposed rule | Not Applicable | |
| | e) A description of the manner in which DEQ involved small businesses in the development of this rulemaking | Not Applicable | |
| Impacts on Large Business (all businesses that are not "small businesses" under ORS183.310(10)) | No significant economic impact is anticipated as a result of the proposed rules. The proposed rules do not impose fees or require the use or installation of new equipment or management practices. In the rare event that a vessel declaring safety exemption is deemed to be carrying high-risk water, however, DEQ may require consultation and potential alternative management strategies, as identified in OAR 340-143-0040 that could result in delay of business, increased administration, or other expenses. DEQ estimates these circumstances will apply to less than 5 regulated vessels per year (< 0.25% of all vessel arrivals). | | |
| Impacts on Local Government | Not Applicable | | |
| Impacts on State Agencies other than DEQ | Not Applicable | | |

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| rage 3 01 3 | | | |
|---|---|---------------------------------------|----------------------------------|
| Impacts on DEQ | Implementation of the pro | posed rules does not require addition | onal resources allocated to DEQ. |
| Assumptions | Greater than 95% of the vessels regulated by ORS 783.620 through 783.640 are owned by companies that are headquartered outside of Oregon. The limited number of local businesses that operate regulated vessels, typically ocean going tug and barge operations, have more than 50 employees. | | |
| Housing Costs | DEQ has determined that this proposed rulemaking will have no effect on the cost of development of a 6,000 square foot parcel and the construction of a 1,200 square foot detached single family dwelling on that parcel. See Impacts on the General Public for more information. | | |
| Administrative Rule Advisory Committee | The Oregon Task Force on the Shipping Transport of Aquatic Invasive Species (ORS 783.630) served in an advisory capacity for this rulemaking effort and was actively engaged in the development of these rules. Of the 13 members appointed to the task force, four members specifically represent maritime industry interests in the Columbia River and other Oregon waterways. These members were actively involved in rule development. In recognition that Oregon-owned tug and barge companies could be more vulnerable than other vessel operators to potential costs associated with safety exemption circumstances, DEQ staff worked with industry representatives to develop rule language that would allow current business practices while also allowing DEQ increased opportunity to propose alternative management strategies, if warranted and feasible. | | |
| Prepared by | | rinted name | Date |
| Approved by DEQ Budget Office | | rinted name | Date |

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State of Oregon DEPARTMENT OF ENVIRONMENTAL QUALITY Land Use Evaluation Statement

Rulemaking Proposal for

Ballast water management: Revise and adopt rules to align with Oregon Revised Statutes

1. Explain the purpose of the proposed rules.

Ballast water management rules have not been aligned in response to applicable statutory revisions in 2003 (HB 3620), 2005 (HB 2170), 2007 (SB 643), or 2009 (HB 2625, HB 2714). Enhanced ballast water regulations reduce the risk of introducing harmful aquatic invasive species to Oregon waterways from commercial shipping transport activities.

The proposed rules establish greater protection for our water resources and aquatic ecosystems by i) articulating shipboard recordkeeping requirements to enhance regulatory enforceability, ii) describing DEQ's authority to inspect vessels for compliance verification, iii) allowing DEQ to require implementation of an acceptable emergency management alternative for vessels declaring safety exemption if the vessel is carrying high-risk ballast water into the state, iv) authorizing use of acceptable ballast water treatment systems as an alternative to otherwise applicable ballast water exchange requirements, and v) establishing limitations on the disposal of sediments that accumulate at the bottom of ballast water tanks.

| 2. | Do the proposed rules affect existing rules, programs or activities that are considered land |
|----|--|
| | use programs in the DEQ State Agency Coordination (SAC) Program? |
| | |

Yes___ No_X

- a. If yes, identify existing program/rule/activity:
- b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?

Yes No (if no, explain):

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c. If no, apply the following criteria to the proposed rules.

Staff should refer to Section III, subsection 2 of the SAC document in completing the evaluation form. Statewide Goal 6 - Air, Water and Land Resources is the primary goal that relates to DEQ authorities. However, other goals may apply such as Goal 5 - Open Spaces, Scenic and Historic Areas, and Natural Resources; Goal 11 - Public Facilities and Services; Goal 16 - Estuarine Resources; and Goal 19 - Ocean Resources. DEQ programs and rules that relate to statewide land use goals are considered land use programs if they are:

- 1. Specifically referenced in the statewide planning goals; or
- 2. Reasonably expected to have significant effects on
 - a. resources, objectives or areas identified in the statewide planning goals, or
 - b. present or future land uses identified in acknowledged comprehensive plans.

In applying criterion 2 above, two guidelines should be applied to assess land use significance:

- The land use responsibilities of a program/rule/action that involved more than one agency, are considered the responsibilities of the agency with primary authority.
- A determination of land use significance must consider the Department's mandate to protect public health and safety and the environment.

In the space below, state if the proposed rules are considered programs affecting land use. State the criteria and reasons for the determination.

The proposed rules do not directly affect existing rules or programs that are land use programs.

3. If the proposed rules have been determined a land use program under 2. above, but are not subject to existing land use compliance and compatibility procedures, explain the new procedures the Department will use to ensure compliance and compatibility.

Not applicable.