#### State of Oregon

Department of Environmental Quality Memorandum

**Date:** July 8, 2016

**To:** Environmental Quality Commission

**From:** Pete Shepherd, Interim Director

**Subject:** Informational item: Background and Issues related to pending Ballast Water Management Rulemaking. August 17-18, 2016, EQC meeting

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| **Why this is important** | DEQ will propose amendments to ballast water rules for consideration of approval by the EQC at its November 2016 meeting. The purpose of this informational item is to provide EQC with background on i) DEQ’s ballast water management strategies aimed at preventing the introduction of aquatic invasive species (AIS) to Oregon waters, ii) recent changes to federal ballast management policies, iii) objectives of the proposed rules, and iv) stakeholder engagement activities that have contributed to the rule development process. |
| **Key information** | Recent changes to federal policy and Oregon ballast water management law (HB 2207; ORS 783.620-992) have prompted the needed rule amendments under 340-143. New US Coast Guard and EPA regulations require vessels to manage ballast water using first generation shipboard ballast treatment systems instead of conducting mid-ocean ballast water exchange (BWE), a strategy that has proven to be highly effective for preventing AIS introductions to low-salinity ports such as those in Oregon. |
| **Background**  **Ballast water management and**  **AIS prevention** | Commercial ships are designed to travel at full cargo capacity and routinely transfer water from ambient surroundings into dedicated ballast tanks in order to maintain optimal stability and trim. The transfer - and subsequent discharge - of ballast water from one port of call to another is a leading cause for non-indigenous species introductions to coastal and inland waters. Free of their natural suite of predators and pathogens, these non-indigenous species can become invasive, threatening native species and causing significant disruption to ecosystem processes and regional economies.  International and federal efforts to curb invasive species threats posed by ballast water discharge have been underway for nearly 30 years. However, inadequate prevention efforts and urgency prompted the 2001 Oregon Legislature to coordinate with other west coast states in establishing mandatory ballast water management practices.  For the past 15 years, ballast management practices have primarily relied upon a stop-gap measure of requiring vessels to flush their ballast tanks with mid-ocean water when transiting between ports. This strategy significantly reduces the density of viable organisms that may be capable of establishing a new population upon discharge to a new location. This practice of mid-ocean ballast exchange (BWE) can be particularly effective at preventing species introductions to low-salinity ports (such as the Columbia River) because introducing high-salinity ocean water to ballast tanks acts as a natural biocide against low-salinity organisms that otherwise might find a match between source and receiving environments.  Mid-ocean ballast exchange has long been considered to be an interim strategy because it is not as effective for preventing AIS introductions to marine ports. Instead, international and federal efforts have been focused on the development of shipboard ballast water treatment systems as a one-size-fits all solution.  Since Oregon established regulations in 2001, ballast discharge to state waters has been prohibited unless it meets one of the prescribed management options. Currently, vessels may discharge ballast by first conducting BWE, by using shipboard ballast treatment technology approved by the US Coast Guard, or by meeting one of multiple exemption criteria. Until recently, the option to use shipboard treatment technology was only a theoretical possibility since technology standards and certification processes had not yet been established.  Since 2008 (when the U.S. Court of Appeals ruled that incidental discharges from vessels must be regulated under the Clean Water Act) both the EPA and the USCG (under authorities of the National Invasive Species Act) have held parallel/independent responsibilities to regulate ballast water discharges.  In 2012, USCG established ballast water discharge standards (BWDS) limiting the number of viable organisms per unit discharge by adopting standards based on the International Maritime Organization’s 2004 Ballast Water Convention (not yet ratified), despite concerns that these standards may not be adequately stringent to prevent new AIS introductions. For example, California adopted a target BWDS in 2007 that is roughly 100x more stringent than the IMO/USCG standard. EPA established consistency with the USCG BWDS and implementation timeline in the 2013 NPDES Vessel General Permit. However, rather than replacing exchange with treatment (as prescribed under USCG regulations), EPA opted to retain mid-ocean ballast exchange requirements (in addition to treatment) for vessels/voyages that had sourced ballast from low-salinity environments and are discharging to the low-salinity environments of the Great Lakes. Despite comments from Oregon in 2012 requesting that EPA apply the ‘exchange plus treatment’ requirement to ballast discharge in other important low-salinity ports of the country (e.g. Columbia River, see attachment C), the EPA permit only applies this prevention strategy to waters of the Great Lakes.  In addition to the ‘exchange plus treatment’ strategy established by EPA for vessels operating in the Great Lakes, multiple states (MA, MI, MN, RI, NY, WI) have applied a more stringent version of the strategy (i.e. for all ballast discharge) as a 401 certification condition under EPA’s Vessel General Permit. Moreover, Canadian authorities have indicated that, upon ratification of the IMO BWM Convention, they will establish a federal ‘exchange plus treatment’ policy requirement for vessels operating in low-salinity ports.  The Oregon Legislature established the Task Force on Shipping Transport of Aquatic Invasive Species (STAIS) to make recommendations on issues related to vessel AIS management. In recent years discussion has focused on concerns about the adequacy of federal BWDS, the suitability of treatment technology to operate effectively under both marine and freshwater conditions, and the reliability of first generation shipboard treatment systems. In particular – as a state with shipping operations that are primarily in low-salinity ports of call – there has been significant concern over replacing BWE with federally approved treatment strategies that may – under some circumstances - represent a step backwards in our ability to prevent AIS introductions.  A majority of task force members recommended that the 2015 Legislature retain ballast exchange requirements – in addition to treatment - for i) vessels using shipboard treatment systems only certified to meet the lower (less stringent) BWDS and ii) vessel arrivals deemed to be high-risk that had sourced ballast from low-salinity environments and are discharging to low-salinity environments in Oregon. In response to dissenting opinion from maritime industry representatives who deemed the proposal to be premature, however, the legislature instead passed HB 2207 to clarify DEQ authority to adopt such policies by administrative rule.  In response to HB 2207, DEQ formed a rulemaking advisory committee in October 2015 with membership primarily derived from the STAIS Task Force. The committee met three times between December 2015 and March 2016 to further discuss policy options for preventing high-risk ballast discharge. Based on the guidance provided by advisory committee members, DEQ developed a notice of proposed rulemaking with an open public comment period between April 15th and May 25th. Based on comments received May 24th from maritime industry representatives that were somewhat inconsistent with the tenor of the advisory committee proceedings - and also suggested a potential misunderstanding of rule intent – DEQ re-opened the public comment period between June 20th and July 8th in order to provide an opportunity for further dialogue and clarification of proposed rules and potential revisions. |
| **Federal Policy Development** |
| **Stakeholder Engagement** |
| **Next steps and commission involvement** | DEQ will prepare a final rule based on comments received on the proposed rulemaking and then request EQC adoption at the November 2016 commission meeting. |
| **Attachments** | Fact Sheet: Oregon Ballast Water Program  Fact Sheet: Oregon Task Force on Shipping Transport of Aquatic Invasive Species  Oregon DEQ Letter 2/21/2012: Comments on EPA 2013 Draft Vessel General Permit |
| **Available upon**  **request** | Oregon Task Force on Shipping Transport of Aquatic Invasive Species Report to the 2015 Legislature |
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Approved:

Division: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lydia Emer

*Operations Division administrator*

Section: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Bruce Gilles

*Emergency Response Program, manager*

Report prepared by Rian Hooff

*Ballast Water Program Coordinator*