

INITIAL STATEMENT OF REASONS

TITLE 2. ADMINISTRATION DIVISION 3. STATE PROPERTY OPERATIONS CHAPTER 1. STATE LANDS COMMISSION ARTICLE 4.7 PERFORMANCE STANDARDS AND COMPLIANCE ASSESSMENT FOR THE DISCHARGE OF BALLAST WATER FOR VESSELS OPERATING IN CALIFORNIA WATERS

BACKGROUND

Nonindigenous species are organisms that pose significant risks to the economy, the environment, and human health. Nonindigenous species can be introduced to new habitats through human activity such as shipping, which is the most significant pathway for the transport and introduction in coastal environments. To prevent the introduction of aquatic nonindigenous species from vessels, the California Legislature established the Marine Invasive Species Program (MISP), a statewide program that regulates ballast water discharges and biofouling on vessels arriving at California ports.

The California State Lands Commission (Commission) is authorized by statute to implement ballast water discharge performance standards to limit the allowable concentration of living organisms in ballast water discharged in California waters.

California's ballast water discharge performance standards were codified in 2006. These standards are based on recommendations from the majority of members of a technical advisory panel consisting of scientists, regulators, representatives from the shipping industry, and environmental organizations. California's standards were aspirational and set to be phased in over time to allow for the development of technologies that would enable vessels to meet them.

California's interim performance standards, which are more stringent than federal discharge standards, were required to be implemented in January 2020. Prior to implementing the performance standards, the Commission is required to report to the Legislature on the efficacy, availability, and environmental impacts of currently available ballast water management technologies (Pub. Resources Code, § 71205.3). Thus far, six reports have been prepared and submitted to the Legislature demonstrating that there is no technology available yet that would enable the regulated community to meet the California ballast water discharge performance standards (Commission, 2018).

Because there are no available ballast water treatment technologies to enable implementation of the interim California ballast water discharge performance standards, the Legislature passed AB 912 (Chapter 433, Statutes of 2019), which delayed implementation of the interim and final California ballast water discharge performance standards until January 1, 2030, and January 1, 2040, respectively. Further, AB 912 mandated that the Commission adopt regulations requiring vessels to comply with the national ballast water discharge standards set by the U.S. Coast Guard so that the Commission could enforce the federal standards once adopted into California regulations. California's current lack of enforceable ballast water discharge standards prevents California from being able to assess compliance and to successfully protect California waters against nonindigenous species introductions. AB 912 was also driven by the need to provide the Commission the authority to sample vessel's ballast water and sediments for research purposes to help address the current lack of information about the performance of approved treatment systems.

PROBLEM STATEMENT

On January 1, 2020, AB 912 (Chapter 433, Statutes of 2019) became effective, amending sections of the Public Resources Code governing the Marine Invasive Species Program. The amendments direct the Commission to adopt regulations that require a master, owner, operator, or person in charge of a vessel carrying, or capable of carrying, ballast water that arrives at a California port (hereafter "vessel") to implement the ballast water discharge performance standards set forth in section 151.2030, subdivision (a), Title 33 of the Code of Federal Regulations, or as that regulation may be amended. Public Resources Code section 71205.3 also requires the Commission to adopt regulations requiring a master, owner, operator or person in charge of a vessel to comply with the implementation schedule set forth in section 151.2035, subdivision (b), Title 33 of the Code of Federal Regulations or as that regulation may be amended, except as prescribed in section 151.2036 of Title 33 of the Code of Federal Regulations, or as that regulation may be amended.

The purpose of these proposed regulations is to amend Article 4.7 of Title 2, Division 3, Chapter 1 of the California Code of Regulations. These proposed regulatory amendments would change the compliance dates for the California interim and final ballast water discharge performance standards, incorporate the federal ballast water discharge standards into California regulation, establish requirements to monitor the functionality of ballast water treatment systems, and ensure that the Commission has authority to obtain ballast water and sediment samples for research purposes and compliance assessment.

ECONOMIC IMPACT ASSESSMENT

Commission staff prepared an Economic and Fiscal Impact Statement pursuant to Government Code section 11346.3, subdivision (b). The Commission has determined that the proposed regulations will have no significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states.

EVIDENCE SUPPORTING FINDING OF NO SIGNIFICANT ADVERSE ECONOMIC IMPACT ON BUSINESS

A. The creation or elimination of jobs within the State of California:

The proposed regulations primarily impact businesses in the maritime shipping industry, such as vessel owners and operators. These businesses are already required by federal law and regulation to comply with the federal performance standards for ballast water discharge, so the proposed regulations do not require them to meet different standards. The proposed regulations do not implement any requirements that would require the creation or elimination of certain positions. Requiring adherence to the System Design Limitations (proposed section 2295) would not impose an additional cost because federal law and regulation already require vessel operators to operate treatment systems according to these specifications and terms of approval. Therefore, staff does not expect that businesses within the maritime shipping industry will need to hire additional crew members or invest in training or new equipment to comply. Similarly, because there are no expected additional costs to the maritime shipping industry, Commission staff does not anticipate that any jobs would be eliminated as a result of the proposed regulations.

Scientific laboratories and testing instrument manufacturers may be incidentally benefitted by the proposed regulations. Once the proposed regulations are adopted, Commission staff plans to acquire rapid assessment tools, also known as compliance monitoring devices (CMDs) for testing the concentration of organisms in ballast water from vessels and expects to send some samples to laboratories for detailed analysis. Staff plans to acquire between two and four CMDs (with an estimated maximum cost of \$20,000 per unit) to perform rapid indicative sampling during onboard inspections before sending samples for detailed analysis to an external laboratory. Additionally, staff expects to send between one and twelve samples per year for detailed lab analysis. Staff does not believe that the acquisition of these few products and lab services is likely to

result in the creation of a significant number of new jobs within the scientific instrument and scientific laboratory industries.

Overall, the proposed regulations are not expected to eliminate any jobs or to create a significant number of new jobs within the State of California.

B. The creation of new businesses or the elimination of existing businesses within the State of California, including impacts to small businesses:

The proposed regulations are not expected to impact the creation or elimination of businesses associated with the maritime shipping industry, mainly vessel owners and operators. Staff does not have data to indicate that any of these vessel owners and operators are small businesses but assumes for the purposes of this analysis that at least some may be considered small businesses. Staff does not expect there to be significant impacts on these businesses, small or not, because these businesses are already required by federal law and regulation to comply with the federal performance standards for ballast water discharge. Requiring adherence to the manufacturer's specifications and terms of treatment system approval would not impose an additional cost because federal law already requires vessel operators to operate treatment systems according to the specifications and terms of approval. Therefore, there is not expected to be a need for the maritime industry to invest in new equipment or crew training. Because the proposed regulations are not expected to result in an increase or decrease in vessel traffic, Commission staff does not anticipate business closures or creation within the maritime shipping industry as a result of the proposed regulations.

Scientific laboratories and testing instrument manufacturers, some of which may be small businesses, may be incidentally benefitted by the proposed regulations. Once the proposed regulations are adopted, Commission staff expects to acquire CMDs for testing the concentration of organisms in ballast water from vessels and to send some samples to laboratories for detailed analysis. Staff plans to acquire between two and four CMDs (with an estimated maximum cost of \$20,000 per unit) to perform rapid indicative sampling during onboard inspections before sending samples for detailed analysis to an external laboratory. Due to the high cost of lab analysis, staff expects to send between one and twelve samples per year for detailed lab analysis. Staff does not believe that the small increase in demand for scientific laboratory services and scientific instruments that will result from the proposed regulations is likely to have a significant market contribution such that it would result in the creation of new businesses within these industries.

Overall, the proposed regulations are not expected to create or eliminate any existing businesses within the State of California, including small businesses.

(C) The expansion of businesses currently doing business within the State of California:

As described above, the proposed regulations require compliance with federal performance standards already under federal law. The proposed regulations also require adherence to the manufacturer's specifications and terms of treatment system approval, which vessel operators are also already required to adhere to pursuant to federal law. The proposed recordkeeping requirements are not cost or time intensive, nor is the requirement to allow staff to take samples, since vessels are already subject to inspections; the proposed regulations are not expected to add significant time to those routine inspections. Because these proposed regulations do not significantly change the regulatory scheme that the regulated industry is already subject to, staff does not expect that either an expansion or contraction of businesses in the maritime shipping industry operating within the State of California would result. While scientific laboratories and instrument manufacturers may see some increased demand, it is unlikely to result in the creation of a significant number of new positions.

Overall, the proposed regulations are not expected to expand businesses within the maritime shipping industry or scientific instrument manufacturers and scientific labs within the State.

(D) Benefits to the health and welfare of California residents, worker safety, and the State's environment:

The proposed regulations would incorporate the federal ballast water performance standards into California law, delay the compliance dates for California's interim and final performance standards, prohibit discharge from vessels that do not operate their ballast water treatment systems according to the System Design Limitations and manufacturer's instructions, require that Commission staff be given access to sampling ports and ballast water tanks to take samples for research and compliance purposes, and impose recordkeeping requirements. The proposed regulations do not make changes to existing worker safety requirements, and the proposed requirement related to allowing Commission staff to take ballast water samples is subject to an exception for safety concerns.

The proposed regulations are expected to benefit both the State's environment and the health and welfare of California residents. Promulgation of the federal ballast water discharge standards into the Commission's regulations and prohibiting discharge from vessels which are not operating their ballast water treatment systems properly will promote the Marine Invasive Species Act's goal of moving the state expeditiously toward elimination of the discharge of nonindigenous species into the waters of the state or into water that may impact the waters of the state, based on the best available technology economically achievable. Nonindigenous species cause significant impacts to California's economy, human health, and the environment, and commercial shipping is a primary pathway for the introduction of nonindigenous species into California's waters. While the U.S. Coast Guard is authorized to enforce the federal ballast water standards, it may not have the resources to inspect as many vessels for compliance with ballast water requirements as the Commission. Therefore, the Commission's ability to enforce the federal performance standards for the discharge of ballast water is expected to reduce the introduction of nonindigenous species by increasing inspection rates and promoting compliance with the performance standards.

In addition, the proposed regulations will allow the Commission to collect samples for research and therefore be able to compile data that will increase the current knowledge about the functionality of ballast water treatment systems and the ability of these systems to meet discharge standards. Currently, there is very limited published data available, so the Commission's ability to collect this data would significantly aid with refining ballast water discharge standards in the future.

TECHNICAL, THEORETICAL, AND/OR EMPIRICAL STUDIES REPORTS, OR DOCUMENTS RELIED UPON:

Carlton, J.T. 2001. Introduced Species in U.S. Coastal Waters: Environmental Impacts and Management Priorities. Arlington, VA: Pew Oceans Commission. 28 pp.

Commission (California State Lands Commission). 2018. 2018 Assessment of the Efficacy, Availability, and Environmental Impacts of Ballast Water Treatment Technologies for use in California Waters. Produced for the California State Legislature. 81 pp.

Johengen, T., D. Reid, G. Fahnenstiel, H. MacIsaac, F. Dobbs, M. Doblin, G. Ruiz, P. Jenkins. 2005. Assessment of Transoceanic NOBOB Vessels and Low-Salinity Ballast Water as Vectors for Non-indigenous Species Introductions to the Great Lakes. 287 pp.

Kimmerer, W. J. and J. K. Thompson. 2014. Phytoplankton growth balanced by clam and zooplankton grazing and net transport into the low salinity zone of the San Francisco Estuary. *Estuaries and Coasts* 37: 1202-1218.

Mac Nally, R., J. R. Thompson, W. J. Kimmerer, F. Feyrer, K. B. Newman, A. Sih, W. A. Bennett, L. Brown, E. Flushman, S. D. Culberson, and G. Castillo. 2010. An analysis of pelagic species decline in the upper San Francisco Estuary using multivariate autoregressive modeling (MAR). *Ecological Applications* 20: 167-180.

Marine Environmental Protection Committee. 2019. 74th session, Agenda item 4. International Maritime Organization. 10 pp.

Pimentel, D., R. Zuniga, and D. Morrison. 2005. Update on the environmental and economic costs associated with alien-invasive species in the United States. *Ecological Economics* 52: 273-28.

Revilla-Castellanos, V. J., A. Guerrero, B. Gomez-Gill, E. Navarro-Barron, and M. L. Lizarraga-Partida. 2015. Pathogenic *Vibrio parahaemolyticus* isolated from biofouling on commercial vessels and harbor structures. *Biofouling* 31: 275-282.

Rothlisberger, J., D. Finnoff, R. Cooke, and D. Lodge. 2012. Ship-borne nonindigenous species diminish Great Lakes ecosystem services. *Ecosystems* 15: 463-476.

Ruiz, G. M., T. K. Rawlings, F. C. Dobbs, L. A. Drake, T. Mullady, S. Schoenfeld, A. Hug, and R. R. Colwell. 2000. Global spread of microorganisms by ships. *Nature* 408: 49-50.

Takahashi, C. K., N. G. G. S. Lourenco, T. F. Lopes, V. L. M. Rall, and C. A. M. Lopes. 2008. Ballast water: A review of the impact on the world public health. *Journal of Venomous Animals and Toxins Including Tropical Diseases* 14: 393-408.

U.S. Environmental Protection Agency. 2013. National Pollutant Discharge Elimination System Vessel General Permit for Discharges Incidental to the Normal Operation of a Vessel.

Volkoff, M. Personal communication, May 2020.

ALTERNATIVES:

The Commission did not identify any alternatives that would be less burdensome to the regulated community and equally effective in achieving the purpose of the proposed regulation.

Discharge Standards (Proposed Section 2293):

- There are no alternatives to the performance standards or compliance dates in proposed section 2293 because these are mandated by statute.

Collection and Analysis of Ballast Water and Sediment Samples (Proposed Section 2294):

- The alternative of requiring vessel owners or operators to collect samples themselves on board and submit to the Commission or to a lab designated by the Commission was rejected. More reliable and consistent analysis will likely be achieved by Commission staff performing sample collection on board during routine inspections, and this will be less burdensome to the vessel owners and operators. Further, requiring vessel owners or operators to collect samples and submit to labs would result in a need for the Commission to designate approved labs, creating an administrative burden on the Commission. Overall, this alternative would be more burdensome and less likely to yield reliable results compared to the proposed regulation.

Monitoring, Calibration, and Functionality of Shipboard Ballast Water Treatment Systems (Proposed Section 2295):

- There are no feasible alternatives to prohibiting discharge of ballast water unless the treatment system is maintained and operated in accordance with the manufacturer requirements, approval certification, and other performance

parameters, that would be as effective at preventing the introduction of nonindigenous species to California waters. For example, while sampling and analyzing the ballast water from every tank to be discharged prior to discharge would likely be at least as effective, that is not feasible as it would be too costly and too time consuming. The only assessment that could be done onboard would be a rapid indicative assessment using a CMD, which would only be able to detect gross noncompliance, and would require staff with the expertise to use the tool to be onboard. To accurately determine compliance with the performance standards would require lab analysis, which would be prohibitively expensive and could not be timely conducted prior to discharge.

Alternative Ballast Water Management Methods (Proposed Section 2296):

- There are no reasonable alternatives to the option to ballast with water from a Public Water System because this regulation is designed to mirror federal regulation so that vessels that would be considered by the federal government to be compliant with federal ballast water discharge performance standards are also considered compliant with these standards as incorporated into California law. An alternative approach could create conflict or inconsistency with federal law.

Recordkeeping (Proposed Section 2297):

- Alternative 1: Requiring submission of forms rather than maintaining the proposed documentation on board. This was rejected as not cost effective to the Commission due to the administrative burden that would result from having to process and maintain these records. Because the Commission needs to be able to view records going back 2 years where available, if these forms were submitted, staff would have to maintain records from each vessel to assess whether a vessels' ballast water treatment system is being operated according to the correct specifications and maintained according to the manufacturer's instructions.
- Alternative 2: No required documentation or retention of documents on board. Although the least burdensome approach for vessels, this was rejected because it would not encourage compliance with the ballast water discharge standards, and it fails to provide Commission staff with a way of determining whether a vessel owner or operator has actually satisfied the requirements.
- Alternative 3: Require the vessel owners or operators to certify on an annual or other basis that they have complied with required maintenance and operational

specifications for the ballast water treatment system. This alternative was rejected for the same reasons as Alternative 2.

EFFORTS TO AVOID UNNECESSARY DUPLICATION OR CONFLICTS WITH FEDERAL LAW

The federal Vessel Incidental Discharge Act (VIDA), included as part of the Frank Lobiando Coast Guard Reauthorization Act of 2018 (S. 140), was signed into law by the President on December 4, 2018. VIDA will preempt states from establishing and implementing state-specific ballast water management requirements, including the implementation of ballast water discharge standards. Although the bill was signed in December 2018, preemption of state authority will not occur until after adoption and implementation of regulations by the U.S. Environmental Protection Agency (U.S. EPA) (setting national discharge standards) and the U.S. Coast Guard (establishing processes for implementation and enforcement). These regulatory actions may take 4 years or more to accomplish because the U.S. EPA and the U.S. Coast Guard, in that order, must sequentially adopt their regulations. Therefore, there is not a current conflict between federal law and the proposed regulations. Additionally, the compliance dates set by proposed section 2293, subdivisions (b) and (c), (January 1, 2030, and January 1, 2040, respectively) are so far in the future that there will not be a conflict with federal law for the foreseeable future, providing time for the Legislature to develop a solution to avoid conflict with federal law. However, even in the event of an imminent conflict, the Commission's options are limited because the Marine Invasive Species Act requires the Commission to adopt these regulations.

Proposed section 2293, subdivision (a) duplicates the current federal ballast water discharge standards, but this is necessary not solely because Public Resources Code section 71203.5 mandates adoption of these standards, but because absent these regulations the Commission is not able to assess compliance with any discharge standard, limiting its ability to protect California waters against nonindigenous species. The proposed regulations also make it easier for vessel owners, operators, and others in charge of a vessel subject to the Commission's regulations to comply with both federal and state law.

Section 2291. Purpose, Applicability, and Date of Implementation.

PURPOSE:

The purpose of amending subdivision (b) of section 2291 is to clarify that the provisions of this Article apply to vessels that carry or are capable of carrying ballast water, not only to those that discharge ballast water, consistent with Public Resources Code section 71201. This amendment also clarifies that the provisions apply only to vessels 300 gross registered tons or more.

The purpose of adding subdivision (c) to section 2291 is to establish the effective date for these proposed regulations.

NECESSITY:

It is necessary to make the provisions of 4.7 applicable to all vessels 300 gross registered tons or more that carry or are capable of carrying ballast water rather than vessels that discharge, because some of the provisions in 4.7 are applicable not just when a vessel discharges. For example, the recordkeeping requirements apply whether or not a vessel is discharging.

While vessels are already subject to the discharge standards pursuant to federal law, the Commission proposes a later effective date for the regulations to provide the regulated community with time to prepare to comply with the recordkeeping requirements. The regulated community will need time to ensure their systems are set up to maintain records of functionality monitoring and to ensure their crews are aware of the requirements to keep records of functionality monitoring and biological monitoring performed within the previous 2 years on board and available for commission staff to inspect.

Section 2292. Definitions

PURPOSE:

The purpose of the amendments to section 2292 is to define several key terms that are used throughout Article 4.7 and repeal definitions that are no longer applicable. These definitions ensure that the performance standards, implementation schedule, and sampling requirements are clear to the regulated community. The purpose of renumbering the provisions is to maintain proper format and account for the new definitions added through this proposed amendment.

NECESSITY:

Specific terms are used in the regulatory text to describe fundamental components of the regulations. Without clarification, these terms might be subject to differing interpretations. These definitions, therefore, are necessary to ensure that these regulations precisely convey the intended interpretation of these specific terms in Article 4.7.

Proposed Repeals:

- Repealing “Board,” defined in current subdivision (c), is necessary because the regulation text referring to the State Water Resource Control Board in existing section 2296 is proposed to be repealed, and thus this definition is no longer applicable.
- Repealing “Constructed,” defined in current subdivision (f), is necessary because the related content in existing section 2294 is proposed to be repealed.
- Repealing “Isokinetic Sampling Facility” and “Isokinetic Diameter,” defined in current subdivisions (g) and (h), respectively, is necessary because the associated text in section 2297 is proposed to be repealed and the proposed new section 2297 does not use these terms; therefore these definitions are no longer applicable.
- Repealing “Major Conversion,” defined in current subdivision (i), is necessary because this term appeared only in the definition of “Constructed,” which is proposed to be repealed.
- Repealing “Sampling Facilities,” defined in current subdivision (j), is necessary because the associated text in section 2297 is proposed to be repealed, and the proposed new regulation text does not use this term.

Proposed Additions/Modifications:

- Modifying “Ballast Water Sample,” in subdivision (b) is necessary to reflect the change in the underlying statute that now allows the Commission to sample ballast water for research as well as compliance assessment purposes.
- Defining “Ballast Water Treatment System,” in proposed subdivision (c) is necessary to improve the clarity of the requirements in proposed sections 2295 for monitoring, calibrating, and operating treatment systems according to certain specifications, and with section 2297’s requirements for recordkeeping associated with this monitoring.
- Modifying the definition of “Colony Forming Unit” in current subdivision (d) is necessary to improve the clarity of proposed section 2293 which sets out the performance standards.
- Defining “Detailed Analysis” in proposed subdivision (f) is necessary to improve the clarity of proposed section 2294 regarding compliance assessment.
- Defining “Functionality Monitoring” in proposed subdivision (g) is necessary to improve the clarity of the requirements in proposed section 2297 regarding keeping records of functionality monitoring of ballast water treatment systems
- Defining “Indicative Analysis” in proposed subdivision (h) is necessary to improve the clarity of proposed section 2294 regarding compliance assessment.
- Defining “Public Water System” in proposed subdivision (j) is necessary to provide clarity to the proposed section 2296.
- Defining “Sampling Port,” in proposed subdivisions (k), is necessary to improve the clarity of proposed section 2294 regarding sample collection.
- Defining “System Design Limitations” in proposed subdivision (l) is necessary to clarify the requirements in the proposed section 2295 regarding monitoring, calibration, and functionality of shipboard ballast water treatment systems.

Section 2293. Performance Standards for Ballast Water Discharges

Section 2293, subdivision (a). Federal Performance Standards for Ballast Water Discharges.

PURPOSE:

The purpose of this amendment is to adopt the performance standards for the discharge of ballast water in section 151.2030(a) of title 33 of the Code of Federal Regulations in accordance with the implementation schedule in section 151.2035(b) of title 33 of the Code of Federal Regulations.

NECESSITY:

Adopting these federal performance standards for the discharge of ballast water into the Commission's regulations is necessary to fulfill the statutory mandate in Public Resources Code section 71205.3.

Section 2293, subdivision (b). Interim California Performance Standards for Ballast Water Discharges.

PURPOSE:

Proposed section 2293, subdivision (b), would repeal and replace existing section 2294 of title 2 of the California Code of Regulations. The purposes of the proposed amendments are:

- 1) Repeal the implementation schedule in current section 2294 and change the effective date of the interim performance standards for ballast water discharge to January 1, 2030.
- 2) Correct an unintentional error made during the original codification of the California performance standards regulations. Currently, organisms greater than 50 micrometers are included in subdivision (b)(1), and organisms less than 50 micrometers are included in subdivision (b)(2), but organisms equal to 50 micrometers are not covered in any of the current organism size categories. The proposed amendment closes this regulatory gap by including organisms equal to 50 micrometers in subdivision (b)(1).
- 3) Correct a second unintentional error made during the original codification of the California performance standards regulations. Currently, organisms greater than 10 micrometers are included in subdivision (b)(2), and organisms less than 10 micrometers are included in subdivision (b)(3), but organisms equal to 10 micrometers are not covered in any of the current organism size categories. The proposed amendment closes this regulatory gap by including organisms equal to 10 micrometers in subdivision (b)(2).
- 4) Correct an error in the serotype identification codes in subdivision (b)(3)(C) to O1 and O139, instead of 01 and 0139.

NECESSITY:

Repealing existing Section 2294 and adopting proposed Section 2293, subdivision (b), is necessary because:

- 1) Public Resources Code section 71205.3 requires the Commission to adopt an implementation schedule for the California ballast water discharge performance standards that is inconsistent with the schedule currently established by existing Section 2294. Leaving existing Section 2294 in effect

would create a legal conflict and undermine the clarity of the Commission's regulations. Therefore, it is necessary to change the compliance date.

- 2) The interim implementation schedule is renumbered to Section 2293, subdivision (b), so that all the performance standards for ballast water discharges are within the same section.
- 3) The modification to section 2293, subdivision (b)(1), fixes an unintentional loophole in the standards that was created during the original codification of the standards. It was never the Commission's intent to exclude organisms equal to 50 micrometers from regulation. Inclusion of organisms equal to 50 micrometers in diameter in subdivision (b)(1) is necessary to promote the Marine Invasive Species Act's purpose of moving the State expeditiously toward elimination of the discharge of nonindigenous species into the waters of the State.
- 4) The modification to section 2293, subdivision (b)(2), fixes an unintentional loophole in the standards that was created during the original codification of the standards. It was never the Commission's intent to exclude organisms equal to 10 micrometers from regulation. Inclusion of organisms equal to 10 micrometers in diameter in subdivision (b)(2) is necessary to promote the Marine Invasive Species Act's purpose of moving the State expeditiously toward elimination of the discharge of nonindigenous species into the waters of the State.
- 5) The use of "01" and "0139" in subdivision (b)(3)(C) is incorrect; the correct identifiers of these serotypes are "O1" and "O139." The proposed change to this subdivision corrects this error.

Section 2293, subdivision (c). Final California Performance Standards for Ballast Water Discharge.

PURPOSE:

Proposed Section 2293, subdivision (c), would repeal and replace existing section 2295 of title 2 of the California Code of Regulations. The purpose of this amendment is to change the compliance date of the California final performance standards for ballast water discharge to January 1, 2040.

NECESSITY:

This amendment is necessary to comply with Public Resources Code section 71205.3, which directs the Commission to set the compliance date for the final California performance standards for ballast water discharge to no later than January 1, 2040. Currently, since there is no technology available to meet these standards, there is no basis to set an earlier implementation date. The final implementation schedule is renumbered to Section 2293, subdivision (c), so that all the performance standards for ballast water discharges are within the same section.

Section 2294. Collection and Analysis of Ballast Water and Sediment Samples.

PURPOSE:

The purpose of this amendment is to repeal existing section 2297 of title 2, California Code of Regulations and replace it with proposed section 2294. More specifically:

1. The purpose of proposed section 2294, subdivision (a)(1), is to provide that the Commission may collect ballast water samples to assess compliance with the performance standards in proposed section 2293 to enable fulfillment of the statutory directive in Public Resources Code section 71206 that the Commission sample ballast water from arriving vessels to assess compliance with the performance standards.
2. The purpose of proposed section 2294, subdivision (a)(2), is to require staff to be given access to all sampling ports unless there is a safety-related reason why access to sampling ports is not possible at the time of the Commission's request.
3. The purpose of proposed section 2294, subdivisions (a)(3)(A) and (a)(3)(B), is to specify that indicative analysis may be performed prior to detailed analysis.
4. The purpose of proposed section 2294, subdivision (a)(4), is to ensure that methods used to determine noncompliance are scientifically valid and defensible.
5. The purposes of proposed section 2294, subdivisions (b)(1) and (b)(2), are to provide notice to the regulated community that the Commission may take samples of ballast water and sediment from arriving vessels for research purposes, as permitted by Public Resources Code 71213, and to clarify the circumstances under which the Commission must be granted permission. Feasibility is meant to be a more lenient standard and to account for logistical or other limitations as well as safety concerns, as opposed to sampling for compliance purposes, which must be permitted unless there are safety reasons limiting access.

NECESSITY:

1. Proposed section 2294, subdivisions (a)(1) and (a)(2), are necessary to carry out the mandate in Public Resources Code section 71206 that the Commission sample ballast water from arriving vessels to assess compliance with the performance standards. To effectively conduct sampling, the Commission must

be able to access sampling ports at all times unless there are legitimate safety reasons that prevent accessing the sampling port.

2. Proposed section 2294, subdivisions (a)(3)(A) and (a)(3)(B), are necessary due to cost and time constraints associated with conducting detailed analysis, as further detailed in the Economic and Fiscal Impact Statements. For economic efficiency, the Commission must be able to use indicative analysis as a first indicator of potential compliance. If indicative analysis shows that the ballast water may be noncompliant, then a detailed analysis may be performed. No specific method of detail analysis is proposed because it is not possible for the Commission to prescribe a particular method or methods to be used to assess compliance in all cases, as there are many types of analysis, some of which may be better suited to particular circumstances than others. Further, methods of determining organism concentrations for different size classes are still being developed and refined. At this point, there is not a single standardized method that is appropriate for every case. Therefore, it is necessary to preserve the Commission's discretion to choose between different types of analysis method for every case.
3. Proposed section 2294, subdivision (a)(4), is necessary because it is not feasible to set out specific methods of analysis in regulations. Subdivision (a)(4) is necessary to ensure that no matter what method is used, it will be scientifically validated, and any enforcement actions based on sampling will be defensible. Any method used to determine noncompliance with the applicable discharge standards should provide a direct measurement of viable organism concentration in the ballast water discharge that is directly comparable to the discharge standards (number of viable organisms per volume), use a ballast water sample of sufficient quality and quantity to provide a precise measurement of organism concentration, within an appropriate margin of error, for the size category or categories in the discharge standard being assessed, and use a measurement method with an adequate detection limit for the purpose for which it is applied.
4. Proposed section 2294, subdivisions (b)(1) and (b)(2), are necessary because Public Resources Code section 71213 was amended to clarify that the Commission may take samples of ballast water and sediment from arriving vessels for research purposes.

Section 2295. Monitoring, Calibration, and Functionality of Shipboard Ballast Water Treatment Systems.

PURPOSE:

The purpose of repealing existing section 2295 is to remove compliance dates that are no longer consistent with statute. The purpose of the proposed new section 2295 is to ensure that the ballast water treatment systems onboard vessels are maintained, monitored, and operated in accordance with the manufacturer's specifications and U.S. Coast Guard terms of approval.

NECESSITY:

It is necessary to repeal existing section 2295 because it contains ballast water discharge compliance dates inconsistent with the current statutory mandate in Public Resources Code section 71205.3.

Adoption of the proposed provisions is necessary to assess if ballast water treatment systems are being properly maintained onboard vessels. Because the Commission does not have the resources to test the ballast water discharged from all vessels, it is imperative that vessels' ballast water treatment systems are operated according to the System Design Limitations, which will increase the likelihood that the systems are effective at removing nonindigenous species. The System Design Limitations are parameters identified by the ballast water treatment system's manufacturer and specified in the manual to the ballast water treatment system. If the system is approved by the U.S. Coast Guard or accepted by the Coast Guard as an "Alternate Management System" (AMS), these operational limitations are validated during the system's testing and specified on the Coast Guard approval certificate or the Coast Guard AMS acceptance letter. Ballast water treatment systems are proven to be effective at treating ballast water only when they are operated and calibrated regularly according to these specific parameters. Prohibiting discharge from vessels with ballast water treatment systems that have not been maintained and calibrated according to their System Design Limitations is necessary to prevent the discharge of nonindigenous species.

Section 2296. Alternative Ballast Water Management Methods.

PURPOSE:

Current section 2296 of title 2, California Code of Regulations, is proposed to be repealed and replaced with the proposed section 2296. The purpose of repealing existing section 2296 is to remove the language related to experimental ballast water treatment systems, because the Commission is no longer approving applications for participation in experimental treatment systems. The purpose of the proposed section is to clarify that, consistent with federal law, water from a Public Water System can be used as a management alternative to comply with the ballast water discharge performance standards only if used as described in the proposed Section 2296.

NECESSITY:

It is necessary to repeal existing section 2296 because it is no longer relevant. The underlying statute authorizing and directing the Commission to promulgate regulations for the approval of experimental ballast water treatment systems, Public Resources Code section 71204.7, was repealed by Statutes of 2019, Chapter 443 (AB 912), effective January 1, 2020; therefore, there is no longer any statutory basis for the existing section 2296.

Public Resources Code section 71205.3 requires the Commission to adopt regulations implementing the federal ballast water discharge performance standards. Because the federal ballast water discharge standards set out in title 33, Code of Federal Regulations, section 151.2035(a) include an allowance for vessels to discharge if they ballast exclusively with water from a Public Water System as an alternative management method, it is necessary to adopt this alternative method of compliance into the Commission's regulations as well. Additionally, because the U.S. Environmental Protection Agency's Final 2013 Vessel General Permit (VGP) also allows vessels to ballast with water from a Canadian drinking water system that meets Health Canada's "Guidelines on Canadian Drinking Water Quality," (VGP Part 2.2.3.5.1.3) it is necessary to include water from a Canadian drinking water system that meets these requirements into the Commission's regulations. Proposed section 2296 provides clarity to regulated parties that they can use this federally approved alternative method of ballast water management in California waters and remain compliant with the federal ballast discharge performance standards as adopted into the Commission's regulations through this rulemaking. This management method also benefits the State because water from a Public Water System does not contain invasive marine species, and therefore its use as ballast will successfully prevent the introduction of nonindigenous species into California waters.

Section 2297. Recordkeeping.

PURPOSE:

The purpose of this amendment is to require regulated parties to keep documentation of ballast water system functionality monitoring, biological monitoring, the U.S. Coast Guard system approval certificate or Alternate Management System acceptance letter, and procedures in case of equipment malfunction onboard and available for inspection by the Commission.

NECESSITY:

Requiring these records and documentation to be kept on board the vessel is necessary for the following reasons:

1. Requiring documentation of functionality monitoring, including calibration records, (proposed subdivision (a)) is necessary to enable Commission staff to confirm that the functionality and calibration is consistent with the manufacturer's specifications and terms of approval.
2. Requiring biological monitoring records (proposed subdivision (b)) is necessary because this information will allow staff to monitor the system's performance. Only biological monitoring within the past 2 years is likely to be relevant to the system's performance at the time of inspection.
3. Requiring the type approval certificate or Alternate Management System letter to be kept on board (proposed subdivision (c)) is necessary because these documents state the parameters that the system should be operated according to and therefore are needed to compare against the functionality monitoring.
4. Requiring procedures in case of equipment malfunction (proposed subdivision (d)), such as protocols for recording and reporting the unexpected event, will facilitate responsible operation of the treatment system and reduce the likelihood of release of nonindigenous species.

Keeping these records on board the vessel makes it easier for Commission staff who inspect vessels to quickly determine if the ballast water treatment system is being operated properly.