

ballast water management methods. Although no ballast water methods have yet been demonstrated to work effectively and consistently on a single vessel, let alone across a range of vessel types and operating conditions, a number of methods are being actively investigated. These methods currently include, among others, mid-ocean exchange; filtration; hydrocyclonic separation; ultraviolet radiation; ultrasonic impulses; oxidizing chemical biocides such as ozone, chlorine dioxide, hypochlorite, and various electrolytically produced ions; non-oxidizing organic chemicals; deoxygenation, and micro-scale shear forces. Some of these methods, such as oxidizing chemicals, have a well known potential to result in unwanted residuals and disinfection-by-products (DBPs), and it is even possible that the physical methods might result in unwanted changes to the quality of discharged water. These residuals, DPBs, and changes to water quality may have adverse environmental impacts. This PEIS will address the potential environmental impacts from the varying levels of remaining organisms in discharged ballast water that meets the BWD standard. However, when BWM methods are developed to meet the BWD standard, follow-on environmental analyses to determine environmental soundness will be conducted on each proposed method brought forward for approval or certification.

This PEIS is being prepared as a "programmatic" EIS since the proposed regulatory action meets CEQ's definition of "a broad Federal action such as the adoption of agency programs or regulations" (40 CFR 1502.4(b)). The PEIS will focus on an evaluation of the general environmental impacts that may result from either taking No Action (defined as not establishing BWD standards) or taking Action (defined as choosing and mandating a BWD standard from among several possible levels of management). The PEIS will be prepared in accordance with NEPA, CEQ's "Regulations for Implementing the Procedural Provisions of NEPA," and the established Coast Guard NEPA procedures and policies, as specified in, "National Environmental Policy Act: Implementing Procedures and Policy for Considering Environmental Impacts," COMDTINST M16475.1D.

The proposed regulatory action is part of a national program of regulations intended to prevent the introduction and spread of NIS via discharged ballast

water. Other active projects in the program include a rule to impose penalties for noncompliance with mandatory aspects of ballast water management (68 FR 523) and a rule that makes the current voluntary BWM program mandatory (68 FR 44691). In order to determine the potential effectiveness of experimental technologies designed to treat ballast water for the removal of NIS aboard ship, the Coast Guard will promote the installation of experimental technologies aboard ships. Each project has been or will be analyzed under NEPA at the appropriate and meaningful point during Coast Guard planning and decision making.

The PEIS will provide general environmental information on the proposed action and alternatives to Coast Guard decision-makers, other agencies, and the interested and affected public, and help to determine whether implementing a regulatory BWD standard has the potential for significant environmental impacts. The PEIS will also look at the potential direct and indirect environmental impacts of each alternative including not implementing a BWD standard (the "No action" alternative). In addition to complying with NEPA, obtaining the information in the PEIS will ensure that the Coast Guard makes fully informed decisions before choosing a final course of action. The Coast Guard intends to continue to involve the public in these later associated actions, as appropriate, and will also prepare further, more specific, environmental analyses and documentation as necessary. The Coast Guard considers this PEIS to be a first-tier environmental review and may prepare subsequent NEPA analyses and documentation for future individual actions and their site-specific impacts if such analyses are not adequately covered by this PEIS.

The U.S. Environmental Protection Agency, U.S. Department of Interior's Fish and Wildlife Service, and U.S. Department of Commerce's National Marine Fisheries Service will be participating in the PEIS preparation as a Cooperating Agencies in accordance with Title 40, Code of Federal Regulations, § 1501.6.

Purpose of Proposed Action

The purpose of the proposed action is to fulfill the need for a ballast water discharge (BWD) standard to prevent the introduction and spread of NIS via discharged ballast water. In the future, this standard will be used to fulfill the Coast Guard authority under NISA to approve BWM methods that are effective at helping to prevent the

introduction and spread of NIS via discharged ballast water.

Under NISA, the minimum for this discharge standard is "at least as effective as ballast water exchange." It is difficult to determine the effectiveness of BWE due in part to the wide variety of vessel designs, ballast tank structures, and voyages. In addition, the Coast Guard believes that to prevent the introduction and spread of NIS, the ballast water discharge standard must relate to biological effectiveness. Therefore, the Coast Guard is working to develop a ballast water discharge (BWD) standard based on the level of protection needed to prevent introductions and spread of NIS.

The development of a BWD standard presents a complex challenge. Technologies for removing NIS from ballast water are in the early stages of development. These technologies need to be complementary with existing vessels as well as future vessel designs. The BWD standard to be achieved by these technologies must be environmentally sound. Development of this BWD standard requires close collaboration between government agencies, the scientific community, water treatment experts, the shipping industry, and a wide range of stakeholders.

Proposed Action

The proposed action is to establish a BWD standard that is effective in preventing the introduction and spread of NIS via discharged ballast water.

Need for Action

Under NISA, Congress mandated that the Coast Guard establish guidelines on BWM. Initially established as voluntary guidelines, Congress directed the Secretary of Transportation to make the actions prescribed in the guidelines mandatory if shipping industry compliance with found to be insufficient.

The next Congressionally required step is making the voluntary BWM guidelines into a mandatory BWM program. The Coast Guard published an NPRM on a mandatory BWM program for all U.S. waters on July 30, 2003 (68 FR 44691). This program would emphasize BWE, due to the lack of availability of other BWM methods. However, most existing vessels are not designed to conduct BWE, and in some cases, depending on vessel design, age, load, and sea conditions, the practice can be unsafe. Further, BWE is not an option for vessels moving along coastlines, since BWE in coastal areas may increase the risk of bioinvasions. Finally, even when conducted, the

¹ "environmentally sound" as described in this footnote pertains to all occurrences of the term in this notice.