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COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE  
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Good morning, Chairman Hunter, Ranking Member Garamendi, and members of the Subcommittee. I am Michael H. Shapiro, the Principal Deputy Assistant Administrator of the Office of Water at the U.S. Environmental Protection Agency (EPA). Thank you for the opportunity to discuss the EPA's regulation of vessel discharges under the Clean Water Act (CWA)'s National Pollutant Discharge Elimination System (NPDES) program.

My testimony will provide an update on our regulation of vessel discharges, including ballast water, under the 2013 Vessel General Permit, or "VGP," that was finalized in March of this year and will become effective on December 19th of this year. I will highlight the improvements that the 2013 VGP makes to the existing VGP, and discuss the regulation of ballast water discharges by the 2013 VGP and how the EPA's VGP complements the Coast Guard's final rule. I will also provide background and an overview of the draft small Vessel General Permit (sVGP), which was published for comment in December 2011 and on which the Agency has not yet taken final action.

Vessel General Permit (VGP) Background

The EPA had a long-standing regulatory exclusion from NPDES permitting for discharges incidental to the normal operation of a vessel. On March 30, 2005, the U.S. District Court for the Northern District of California (in *Northwest Environmental Advocates et al. v. EPA*) ruled that the exclusion exceeded the

agency's authority under the CWA. While the focus of the case involved the significant impact of aquatic nuisance species (ANS) introduced by ballast water discharges from ships making transoceanic voyages, the district court vacated the vessel incidental discharge exclusion in its entirety. Section 301(a) of the CWA generally prohibits the discharge of a pollutant without an NPDES permit. So after the district court's vacatur, which ultimately went into effect on February 6, 2009, vessels would not have been able to discharge ballast water or other incidental discharges in waters of the U.S. without NPDES permit authorization. Following an unsuccessful appeal of the District Court's decision to the U.S. Court of Appeals for the Ninth Circuit, the EPA issued its first version of the VGP in December 2008 to regulate and authorize incidental discharges from vessels, such as ballast water. Pursuant to the Clean Water Act, the EPA and states may issue general permits for a five-year term, at which time they must be reissued.

#### The 2008 VGP

The 2008 VGP authorizes discharges from approximately 70,000 domestic and foreign vessels, which are subject to the permit's requirements while in waters of the U.S., including the three-mile territorial sea and inland waters, and applies to all non-military, non-recreational vessels greater than or equal to 79 feet in length. The ballast water discharge provisions also apply to commercial fishing vessels of any size that discharge ballast water.

The VGP regulates discharges incidental to the normal operation of vessels operating in a capacity as a means of transportation. The VGP includes general effluent limits applicable to 26 specific discharge streams; narrative water quality-based effluent limits; inspection, monitoring, recordkeeping, and reporting requirements; and additional requirements applicable to certain vessel types. The effluent limits are primarily in the form of Best Management Practices (BMPs), which were developed based upon standard industry practices that were already being performed on vessels.

With respect to ballast water, the 2008 VGP incorporated all of the Coast Guard's mandatory ballast water management and exchange requirements, and offers increased environmental protection with several additional requirements, such as requiring U.S.-bound vessels with empty ballast water tanks to conduct saltwater flushing, and mandating ballast water exchange for vessels engaged in Pacific nearshore voyages that have taken on ballast water in areas less than 50 nautical miles from shore. The VGP also includes a narrative water quality-based effluent limit that requires permittees to control discharges as necessary to meet applicable water quality standards. In addition, the permit contains certain additional conditions imposed by the states under the CWA section 401 certification process.

#### Implementation and Ensuring Compliance with the VGP

The VGP requires that vessel owners and operators assure that vessel discharges meet effluent limits and related requirements; prescribes a corrective action process for fixing permit violations; and includes requirements for inspections, monitoring, recordkeeping and reporting. These provisions have been successfully implemented by permittees over the past four years, resulting in environmental improvements, and have also enabled the EPA to make improvements in the 2013 VGP by refining the permit's requirements to better reflect existing vessel practices. The EPA used information received from the approximately 50,000 Notices of Intent to be covered by the VGP submitted by permittees and other sources of information in order to update permit conditions in a manner that minimizes burden on permittees.

The EPA is fortunate to have strong federal partners in mitigating the threat posed by ballast water discharges, including the Coast Guard. With respect to compliance monitoring, in February 2011, the EPA and the Coast Guard signed a Memorandum of Understanding (MOU) that set up a cooperative federal inspection regime for the VGP. Under the MOU, the Coast Guard has incorporated components of the EPA's VGP into its existing inspection protocols and procedures so that the United States

identifies potential violations of the permit and vessel pollution in U.S. waters in an effective and efficient manner. The MOU creates a framework for improving EPA and Coast Guard collaboration on data tracking, training, compliance monitoring, EPA's enforcement and industry outreach. As a result of the MOU, there is a regular exchange of information regarding potential violations.

It is also important to note the critical role that the Saint Lawrence Seaway Development Corporation (the Seaway) has played in developing and implementing effective ballast water programs for vessels entering the Great Lakes. In 2008, the Seaway was the first U.S. federal government entity to mandate saltwater flushing for vessels entering the Great Lakes from outside the U.S. Exclusive Economic Zone (EEZ). Additionally, the Seaway, in partnership with the Coast Guard and our Canadian partners, implements a 100% inspection regime for all applicable vessels entering the Lakes to assure that they have conducted ballast water exchange or saltwater flushing. Finally, the Seaway continues to play a leadership role in facilitating communication between various stakeholders in the Great Lakes, including the states, to ensure effective ballast water regulation of vessels entering the Great Lakes. Based in part on these efforts, we believe that the Great Lakes have been better protected from invasive species over the last five years, and we look forward to the Seaway's continuing role in effectively implementing ballast water requirements for vessels entering the Great Lakes.

#### The 2013 VGP

The 2008 VGP expires on December 19, 2013, at which time the 2013 VGP will become effective. The 2013 VGP covers the same universe of approximately 70,000 vessels as the current permit. The permit continues to regulate the 26 specific discharge categories that were addressed by the 2008 permit.

The EPA received approximately 5,500 comments on the draft VGP during the 75-day public comment period. We finalized the permit in March of this year so that vessel owners and operators would have time to plan for and implement any new permit conditions. In developing the permit, we focused on

increasing environmental protection based on sound science, ensuring vessel safety, and minimizing burden for permittees with common-sense and easy-to-implement provisions.

The 2013 VGP reduces the administrative burden for vessel owners and operators in several ways, such as eliminating duplicative reporting requirements, clarifying that electronic recordkeeping may be used instead of paper records, and streamlining self-inspection requirements for vessels that are out of service for extended periods. The VGP also increases environmental protection with provisions for mechanical systems that may leak lubricants into the water and for exhaust gas scrubber washwater, which will reduce the quantity and toxicity of oils and other pollutants that enter U.S. waters. In addition, because untreated graywater, especially in large quantities, can cause environmental harm, the 2013 VGP includes a prohibition against the discharge of untreated graywater from cruise ships within 3 nautical miles from shore. The untreated graywater produced by cruise ships may contain high levels of nutrients, pathogens, residual levels of organic material and cleaning chemicals.

#### Development of Ballast Water Provisions in the VGP

In developing ballast water limits for both the current VGP and the new VGP, the EPA considered limits based on both the best technology available economically achievable to treat the pollutants (i.e., technology-based effluent limits), and any more stringent limits necessary to protect water quality (i.e., water quality-based effluent limits). In order to further our scientific understanding of the state of ballast water science, the EPA, with assistance from the Coast Guard, sought advice from the EPA's Science Advisory Board (SAB) on the performance and availability of ballast water treatment technologies. The EPA, again with the Coast Guard's help, also commissioned a report from the National Academy of Sciences (NAS) to inform our understanding of the relationship between the concentration of living organisms in ballast water and the likelihood of nonindigenous organisms successfully establishing populations in U.S. waters. The EPA's primary purpose in requesting the NAS and SAB reports was to

obtain expert input and advice regarding: (1) the derivation of environmentally sound numeric effluent limits for ballast water, and (2) the status and availability of ballast water treatment technologies.

The EPA used the results of these studies to inform the discharge limits in the draft VGP, which are generally consistent with those contained in both the International Maritime Organization's 2004 Ballast Water Management Convention ("IMO Convention") and the Coast Guard's final ballast water rule. In finalizing these limits, the EPA concluded that they would be expected to substantially reduce the risk of introduction and establishment of non-indigenous invasive species in waters of the U.S. via ballast water discharges.. The permit specifies that the limits will be phased in over time during a timeframe that mirrors the schedule outlined in the Coast Guard's final rule.

The 2008 VGP contained a variety of state-specific ballast water conditions, which were included as a result of the CWA's section 401 state certification process. By sharing the results of the scientific studies with states and actively fostering coordination between the states throughout the 2013 permit development process, the EPA facilitated greater consistency among state 401 certification ballast water conditions for the 2013 VGP.

#### Ballast Water Discharge Limits: Comparing the VGP and the Coast Guard's Final Rule

The Administration continues to be deeply concerned about the environmental and economic impacts that can result from the introduction of ANS into U.S. waters. ANS introductions contribute to the loss of aquatic biodiversity and existing ANS introductions have caused significant social, economic, and biological impacts. Economic costs from invasions of ANS range in the billions of dollars annually. To help prevent future ANS introductions and the significant impacts they cause, the Coast Guard and the EPA have worked very closely over the past several years to develop a strong federal ballast water management program that will reduce the risk of new introductions. In administering our respective authorities, the Coast Guard and the EPA have worked closely to harmonize, as appropriate and

permitted by law, the final Coast Guard ballast water discharge standard regulations and the EPA's 2013 VGP.

It is important to note that the Coast Guard and the EPA are implementing different laws. The Coast Guard implements the Non-indigenous Aquatic Nuisance Prevention and Control Act (NANPCA), as amended by the National Invasive Species Act (NISA), and the EPA implements the CWA. As a result of the Coast Guard and the EPA's efforts to coordinate and develop a robust technical and scientific foundation for our decisions, our agencies each have a similar understanding of the technological and ecological factors associated with ballast water discharges, their treatment, and their impacts. As the EPA begins to implement the 2013 VGP, we will continue to work with the Coast Guard to ensure consistency with respect to the regulation of ballast water discharges.

After evaluating the preliminary determinations made in the draft permit regarding best available technology and water quality requirements based on comments received and other information before it in the record, the VGP and the Coast Guard's final rule are generally aligned in terms of numeric ballast water effluent limitations, applicability of those limits, and the implementation schedule. Like the current VGP, in order to fulfill the CWA's statutory mandates, the 2013 VGP has some additional monitoring and other quality control requirements beyond those in the Coast Guard's final rule, one of which I'd like to highlight.

The EPA has finalized in the VGP a requirement to continue existing ballast water exchange practices as water quality-based effluent limits for certain vessels entering the Great Lakes. In addition to meeting the numeric discharge standards in the permit, vessels that enter the Great Lakes after operating beyond the Exclusive Economic Zone are required by the EPA's permit to continue to conduct mid-ocean ballast water exchange when they have taken on ballast water from a non-Great Lakes freshwater or brackish water port in the previous month. The purpose of this requirement, which is not included in the

Coast Guard's final rule, is to add another measure of protection against potential new invasive freshwater species that are transported via ballast tanks to the freshwater environment of the Great Lakes. By requiring ballast water exchange mid-ocean in addition to removal by treatment, any remaining freshwater species that were taken up in the ship's ballast in fresh or brackish waters would either be discharged into the open ocean or shocked by saline water during ballast water exchange before being discharged into the freshwater of the Great Lakes. The EPA finalized this additional measure for the Great Lakes, a unique and valuable resource, based on a recognition that those water bodies have been particularly impacted by the introduction of various invasive species and remain susceptible to future introductions if appropriate measures are not taken. Based on public comments received and clear scientific evidence that this practice would increase protection for the Great Lakes, the EPA limited the requirement to vessels whose voyage patterns are more likely to result in ballast water discharges that may pose a higher risk of invasion. This subset of vessels has conducted exchange safely for years, and the final VGP includes provisions to address safety issues. This provision, as well as the other requirements of the permit, will be reviewed during the 2018 renewal of the general permit, and may be modified or dropped if found to be no longer necessary.

#### The Small Vessel General Permit (sVGP)

As you are aware, Congress passed and the President signed two laws in the summer of 2008 that narrowed the scope of the NPDES permit requirement for incidental vessel discharges. The first law, the Clean Boating Act (Public Law 110-288), exempted recreational vessels from the requirement to obtain an NPDES permit for their incidental discharges and directed the EPA and the Coast Guard to develop uniform national regulations for such discharges under Section 312 of the CWA. The second law (Public Law 110-299) generally imposed a two-year moratorium on NPDES permitting requirements for commercial vessels less than 79 feet and commercial fishing vessels regardless of size, except for their ballast water discharges. This moratorium was subsequently extended to December 18, 2013, by Public



Law 111-215 and to December 18, 2014, by Public Law 112-213. In addition, Public Law 110-299 directed the EPA to conduct a study of vessel discharges and develop a report to Congress. The EPA finalized this Report to Congress, entitled “Study of Discharges Incidental to Normal Operation of Commercial Fishing Vessels and Other Non-Recreational Vessels Less Than 79 Feet,” in August 2010.

The EPA proposed the sVGP in December 2011 to provide CWA permit authorization for commercial vessels less than 79 feet and commercial fishing vessels regardless of size when the moratorium expires. Section 301(a) of the CWA generally prohibits the discharge of a pollutant without an NPDES permit, and as of the December 2014 expiration date of the moratorium, the affected vessels would be prohibited from discharging in waters of the U.S. without NPDES permit coverage. In addition, in the event the P.L. 112-213 moratorium expires the VGP will provide a mechanism for authorizing the discharge of fish hold effluent from fishing vessels greater than 79 feet in length.

We estimate that between 118,000 and 138,000 vessels could be subject to the sVGP’s requirements upon expiration of the current moratorium. Without coverage under the sVGP, owners/operators could face penalties for violating the CWA’s prohibition against the discharge of a pollutant without a permit. Hence, the EPA proposed the draft sVGP to provide the most administratively efficient permit possible consistent with our regulations. As currently proposed, if the owner or operator of a vessel less than 79 feet believes the sVGP to be inappropriate for their vessel, they may seek coverage under the VGP or an individual NPDES permit.

This sVGP would be the first under the CWA to specifically address discharges incidental to the normal operation of commercial vessels less than 79 feet in length. Recognizing that small commercial vessels are substantially different in how they operate than their larger counterparts, the draft sVGP is shorter and simpler than the VGP. The draft permit specifies BMPs for several broad discharge management categories including fuel management, engine and oil control, solid and liquid maintenance, graywater

management, fish hold effluent management, and ballast water management. These BMPs include common-sense management measures to reduce environmental impacts from these discharges, including measures to reduce the risk of spreading invasive species. Based on the types of discharges from these vessels, the draft sVGP also contains simplified paperwork requirements relative to VGP. Instead of submitting a Notice of Intent to EPA to obtain coverage, owners/operators would be required to fill out and maintain onboard a simple one-page permit authorization form. The EPA expects to issue the final sVGP well before the December 2014 expiration of the current moratorium, so that it will be available to small vessel owners and operators at that time if needed.

### Conclusion

The EPA is continuing its hard work of helping to protect our nation's waters from pollution through its Clean Water Act efforts to address vessel discharges. The EPA and the Coast Guard will continue to work closely in the future to minimize the risk of introduction and spread of aquatic nuisance species through cooperative regulation of ballast water discharges.

Once again, Chairman Hunter, Ranking Member Garamendi, and Members of the Subcommittee, thank you for the opportunity to discuss the EPA's VGP and sVGP. I look forward to answering any questions you may have.