



Environmental Standards Update



Ballast Water Discharge Standard Rulemaking in Progress

By Mr. Bivan Patnaik

The Coast Guard is the Federal agency authorized by Congress to develop a national regulatory program to prevent the introduction and spread of aquatic non-indigenous species (NIS) into U.S. waters via ballast water discharges from vessels. Under the *Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990* (NANPCA) and the *National Invasive Species Act of 1996* (NISA), the Coast Guard has promulgated several regulations and continues to develop future regulations to address this issue.

Current Regulations and Policies

Following the invasion of the Great Lakes by zebra mussels, NANPCA was enacted and authorized the Coast Guard to develop regulations for a mandatory ballast water management (BWM) program for the Great Lakes and Hudson River. The Coast Guard established these regulations in 1993 and 1994, respectively. These regulations appear in Title 33, Part 151, Subpart C of the Code of Federal Regulations. Subsequent high profile invasions around the U.S., prompted Congress to reauthorize

and amend NANPCA with NISA.

Under NISA, national voluntary BWM guidelines for vessels entering all other U.S. regions after operating outside the U.S. Exclusive Economic Zone were promulgated by the Coast Guard in 1999. NISA required the Coast Guard to assess compliance with the voluntary guidelines with the stipulation to convert them into a mandatory BWM program if the Coast Guard determined that the voluntary guidelines were inadequate. In 2002, the Coast Guard submitted a report to Congress stating that compliance with the guidelines was too low to determine its adequacy, and therefore the Coast Guard intended to develop regulations to address these issues.

In 2004, the Coast Guard established regulations for penalty provisions for vessels bound for U.S. ports who fail to comply with the Great Lakes BWM Program and/or that fail to submit their ballast water reporting forms. These regulations also expanded the BWM reporting and recordkeeping requirements. Later in 2004, regulations were promulgated converting the national voluntary guide-



Vessel discharges ballast. (Photo courtesy of the Smithsonian Environmental Research Center)

lines into a national mandatory BWM program. These regulations appear in Title 33, Part 151, Subpart D of the Code of Federal Regulations.

A large number of vessels calling on the Great Lakes declare No Ballast Onboard (NOBOBs). However, these vessels may contain residual ballast water and/or sediments and have the potential to carry NIS. As these vessels transit the Great Lakes, they offload their cargo and take on Great Lakes water as ballast water. Once NOBOB vessels take on new cargo, and discharge the mixed (residual and

(Continued on page 2)

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(Continued from page 1)

Great Lakes) ballast water, the potential exists for the introduction of NIS into the Great Lakes. In 2005, The Coast Guard established a policy of best management practices for NOBOB vessels entering the Great Lakes. This policy, which strongly encourages NO-BOBS to conduct saltwater flushing, was established to reduce the introductions of aquatic NIS into the Great Lakes.

Rulemaking in Progress: Ballast Water Discharge Standard

In addition to the current regulations and policies, the Coast Guard is engaged in a rulemaking that would set a water quality standard for ballast water discharged in U.S. waters. This rulemaking is being carried out under NANPCA and NISA, which authorize the Coast Guard to approve alternative ballast water management systems (BWMS) that are found to be at least as effective as mid-ocean ballast water exchange (BWE) in preventing NIS introductions. As the effectiveness of BWE varies from vessel to vessel, the Coast Guard believes that setting a performance standard would be the most effective way for approving BWMS that are environmentally protective and scientifically sound.

Ultimately, the approval of BWMS would require procedures similar to those in Title 46, Subchapter Q of the Code of Federal Regulations to ensure that the BWMS works, not only in the laboratory, but under shipboard conditions. These would include:

- Pre-approval requirements;

- Application requirements;
- Land-based/shipboard testing requirements;
- Design and construction requirements;
- Electrical requirements;
- Engineering requirements; and
- Piping requirements.

As a first step in approving BWMS, the Coast Guard has proposed defining a ballast water discharge (BWD) standard that would enable the Coast Guard to assess a BWMS's ability to be environmentally protective. We did this via an Advanced Notice of Proposed Rulemaking, published March 4, 2002, in which we began our rulemaking process by asking for comments to help define a ballast water treatment goal and standard. The rulemaking entitled *Standards for Living Organisms in Ships' Ballast Water Discharged in U.S. Waters*, and the documents and public comments relating to the rulemaking can be found at <http://dms.dot.gov> under docket number USCG-2001-10486.

Since September 2003, the Coast Guard has been conducting essential environmental impact analyses to support this rulemaking, as required by the National Environmental Policy Act, the Endangered Species Act, and various other environmental statutes. The Coast Guard has held public workshops across the nation to engage interested stakeholders in discussing the environmental impacts the Coast Guard must consider. The Environmental Protection Agency, the National Oceanic and Atmospheric Administration, the U.S.

Fish and Wildlife Service, and the U.S. Department of Agriculture's Animal and Plant Health Inspection Service are assisting us as co-operating agencies.

In addition to considering a "no action" alternative that would avoid using a BWD standard to evaluate BWMS, the environmental analysis will also assess the impact of establishing a stringent "virtual sterilization" standard that would require the elimination of all living organisms larger than 0.1 micron. Also, the Coast Guard is considering several less stringent standards that would establish maximum acceptable discharge concentrations for various types of potential NIS. An example of the type of standard the Coast Guard is evaluating is the standard set forth in the International Maritime Organization's *Convention for the Control and Management of Ships' Ballast Water and Sediments* which was adopted in 2004.

The results of these analyses will be published in a Draft Programmatic Environmental Impact Statement (DPEIS), which the Coast Guard is developing in conjunction with the NPRM. The Coast Guard is working to publish these documents as soon as possible, possibly as early as this summer.

Not only must the Coast Guard conduct environmental analyses for implementing a BWD standard, the Coast Guard must also conduct economic analyses. Under Executive Order 12866, any agency engaged in significant rulemaking action must conduct an assessment of potential costs and

(Continued on page 3)

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(Continued from page 2)

benefits, including an explanation of how the rulemaking is consistent with the statutory mandate and Presidential policies. This assessment is called a Regulatory Impact Analysis (RIA). The RIA, along with Federalism analysis, will also

explain how the rulemaking avoids undue interference with the functions of state, local, and tribal governments.

The Coast Guard has made considerable progress on the development of a complex and technically challenging regulation where

there is a significant level of uncertainty. The Coast Guard would like to propose the BWD standard as soon as possible for public review and comment. However, the specific date when this proposal takes place may change due to unforeseen circumstances.

USCG to Prepare Draft Environmental Impact Statement on Dry Cargo Residues

By Mr. Ronald P. Jackson, J.D. and LCDR Mary Sohlberg, USCG

The practice of bulk dry cargo vessels on the Great Lakes has historically been, and continues to be, to wash cargo residues (“dry cargo residue” or “cargo sweepings”) overboard. Those residues include limestone and other clean stone, iron ore (such as taconite), coal, salt, and cement. Washing these residues off the decks and other working spaces eliminates unsafe conditions on-board the vessels and does not cause undue delay to the vessel; alternative practices could involve time delays or added cost. The implementing regulations for the *International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL) Annex V*, which is implemented domestically by the *Act to Prevent Pollution from Ships*, is codified at subpart A, is section 151 in Title 33 of the Code of Federal Regulations. These regulations prohibit the discharge of “garbage,” which these sweepings are considered, into the navigable waters of the United States. Hence, the current U.S. environmental regulations, if strictly enforced, would prohibit these incidental discharges.



Coal residue, a dry cargo residue, collects on a ship's deck during loading operations.

The Coast Guard is exercising its statutory authority to regulate incidental dry cargo residue discharges on the Great Lakes. Under the “interim enforcement policy” (IEP) first adopted by the Coast Guard’s Ninth District in 1993, 33 CFR section 151.66 has been applied in the Great Lakes to allow the continuation of cargo sweeping in designated areas that are relatively far from shore, and that meet depth and other restric-

tions. Moreover, Congress has expressly endorsed the IEP and given the Coast Guard the power to regulate incidental dry cargo residue discharges in the Great Lakes “notwithstanding any other law.” *Coast Guard and Maritime Transportation Act of 2004*, Pub. L. No. 108-293, § 623 (2004). Nevertheless, the IEP will expire on September 30, 2008, unless the Coast Guard implements new

(Continued on page 4)

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(Continued from page 3)

regulations to replace the IEP before its expiration date. The Coast Guard will enforce the existing statutes, commencing October 1, 2008, if the new regulations are not in effect.

The Coast Guard is striving to issue new regulations before the IEP expires. Thus, the Coast Guard completed the public scoping phase for the National Environmental Policy Act (NEPA) analysis of the regulatory project during the summer of 2006. The Coast Guard also procured the services of an expert in the field of NEPA analysis and Great Lakes ecology to develop a sampling and analysis plan. The sampling and analysis plan was designed to gather needed physi-

cal, chemical and biological data on dry cargo residues and their effects on the water quality, sediments, and aquatic biota of the Great Lakes. In September 2006, the Coast Guard—to gather data for the NEPA analysis—initiated the sampling of certain areas of the Great Lakes that are associated with discharges of dry cargo residues. Subsequently, the Coast Guard completed the sonar mapping and water sampling of discharge areas in Lakes Erie, Michigan, and Superior, respectively, in October 2006.

The Coast Guard is using the sonar mapping data to determine specific areas where sediment samples will be collected when sampling of the Great Lakes resumes in April 2007. The data

gathered during the entire sampling phase will be analyzed to determine the environmental effects from dry cargo residue discharged on the Great Lakes. Finally, the Coast Guard will prepare a Draft Environmental Impact Statement (DEIS) that will include the data analysis. The Coast Guard aims to have the DEIS available for public comment possibly as soon as fall 2007.

Additional information on the Dry Cargo Residues regulatory project can be found on the Coast Guard Environmental Standards Division's homepage at http://www.uscg.mil/hq/g-m/mso/dry_cargo.htm

Coast Guard to Hold Public Meetings on Ballast Water Reporting and Recordkeeping Requirements

By LT Heather St. Pierre, USCG

The Coast Guard is currently seeking public comment on our ballast water management reporting and recordkeeping requirements contained in 33 C.F.R. part 151, subparts C and D. These reporting requirements are currently being reviewed to determine if any appropriate revisions are required. During this review process, we are interested in receiving comments on current reporting and recordkeeping requirements contained in the mandatory ballast water management regulations in 33 C.F.R. part 151, subparts C and D. Specifically, we are seeking public comments on the current ballast water management reporting submission re-

quirements, including comments on vessel types currently required to submit ballast water management reporting forms. Finally, we are seeking comments on the ballast water reporting form itself to determine whether or not the form should be updated.

To provide the public additional opportunities to provide comments, public meetings will be held in Chicago, IL and in New Orleans, LA. On January 19th, the Coast Guard published a notice in the *Federal Register* advertising the dates and locations for the upcoming public meetings (72 FR 2536). The meeting in Chicago will be held March 13, 2007 from

1 – 5 p.m. at the Radisson Chicago Hotel and Suites at 160 East Huron Street, Chicago, IL, 60611. The meeting in New Orleans will be held March 15, 2007 from 1 – 5 p.m. at the Hotel Monteleone at 214 Royal Street, New Orleans, LA 70130. Please note that the meetings will not extend beyond 5 p.m. and may conclude early if all oral comments on the subject have been received. Additional information on reservations can be found in the Notice.

All stakeholders and interested parties are encouraged to submit comments to the docket and to attend one of these public

(Continued on page 5)

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(Continued from page 4)

meetings. If you have specific questions about the public meeting, please contact LT Heather St.Pierre at :

Heather.J.St.Pierre@uscg.mil or by phone at 202-372-1432.

This Notice and the Notice with the request for comments can be found by visiting the Federal Register web site at <http://www.gpoaccess.gov/fr/index.html>, and can also be viewed by visiting the Docket Management System at <http://dms.dot.gov>. Upon accessing the Docket Management System web site, proceed to simple search, and under docket number, enter 26136. System web site, proceed to simple search, and under docket number, enter 26136.

Draft Agenda for March 13, 2007
1:00-5:00 p.m.
Chicago, IL

- 1) **Welcome/Introduction**
(Mr. Joe Zabel, Potomac Management Group, Inc.)
- 2) **Great Lakes BWM Program**
(CDR Karen Phillips, U.S. Coast Guard's Ninth District)
- 3) **Update on the BWD Standard Rulemaking**
(Mr. Bivan Patnaik, U.S. Coast Guard Headquarters)
- 4) **Overview of the BWM Reporting Requirements**
(LT Heather St. Pierre, U.S. Coast Guard Headquarters)
- 5) **Public Comment Period**

Draft Agenda for March 15, 2007
1:00-5:00 p.m.
New Orleans, LA

- 1) **Welcome/Introduction**
(Mr. Joe Zabel, Potomac Management Group, Inc.)
- 2) **Update on the BWD Standard Rulemaking**
(Mr. Bivan Patnaik, U.S. Coast Guard Headquarters)
- 3) **Overview of the BWM Reporting Requirements**
(LT Heather St. Pierre, U.S. Coast Guard Headquarters)
- 4) **Public Comment Period**

The Marine Debris Research, Prevention and Reduction Act

By Mr. Ronald P. Jackson, J.D

In response to the issue of marine debris, President George W. Bush signed the *Marine Debris Research, Prevention and Reduction Act* (Sen. 362, 109th Cong. (2005)) into law (Pub. L. No. 109-449) on December 22, 2006. The Act establishes programs within the National Oceanic and Atmospheric Administration (NOAA) and the United States Coast Guard "to identify, reduce, and prevent marine debris and its effects on the environment and navigational safety." Second, the Act re-

establishes the Interagency Marine Debris Coordinating Committee (IMDCC) to ensure the government's response is coordinated among Federal agencies. Finally, the Act requires NOAA and the Coast Guard, through consultation with the Interagency Committee, to develop and promulgate a definition for the term "marine debris."

The Coast Guard, in consultation with the IMDCC shall:

- Take actions to reduce violations of the *International Con-*

vention for the Prevention of Pollution from Ships (MARPOL) Annex V and the *Act to Prevent Pollution from Ships* (APPS) (33 U.S.C. § 1901 *et seq.*) pertaining to the discarding of plastics and other garbage from vessels.

- Take actions to cost-effectively monitor and enforce compliance with MARPOL Annex V and APPS including through cooperation and coordination with other

(Continued on page 6)

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(Continued from page 5)

Federal and State enforcement programs

- Take actions to improve compliance with requirements under MARPOL Annex V and section 6 of APPS that all United States ports and terminals maintain and monitor the adequacy of receptacles for the disposal of plastics and other garbage, including through promoting voluntary government-industry partnerships;
- Develop and implement a plan, in coordination with industry and recreational boaters, to improve shipboard

waste management, including recordkeeping, and access to waste reception facilities for shipboard waste plastics and other garbage;

- Take actions to improve international cooperation to reduce marine debris; and
- Establish a voluntary reporting program for commercial vessel operators and recreational boaters to report incidents of damage to vessels and disruption of navigation caused by marine debris, and observed violations of laws and regulations relating to the disposal of plastics and other marine debris.

Within six months of the enactment of this legislation, the Coast Guard must submit a report that evaluates its progress in implementing its strategy on the previous bulleted items. Within 18 months, the National Research Council, in cooperation with the Coast Guard, must submit a report evaluating the overall effectiveness of both national and international programs to prevent and reduce marine debris.

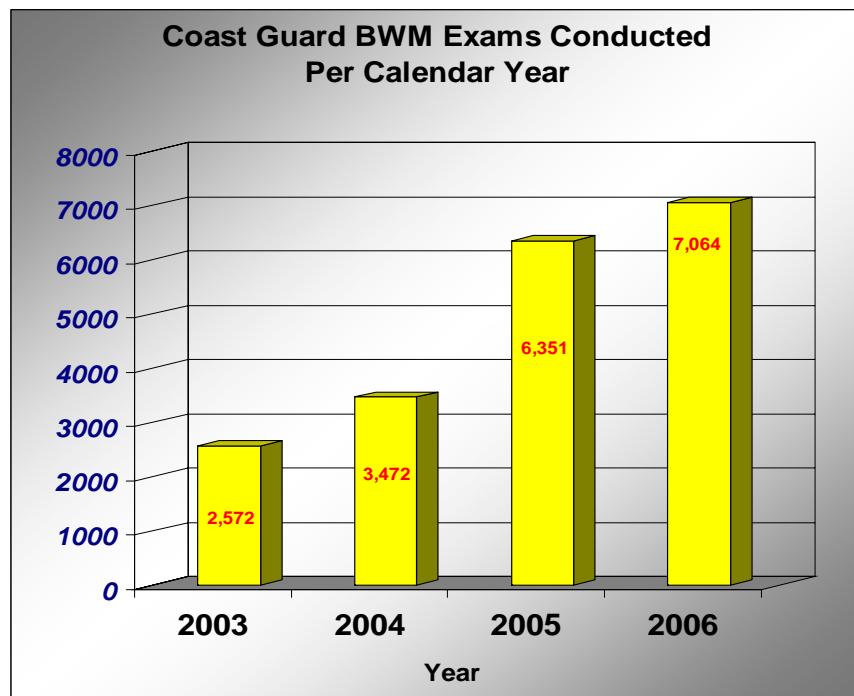
The *Marine Debris Research, Prevention and Reduction Act* is codified at section 1951 *et seq.* of Title 33, the United States Code (2007).

Ballast Water Management (BWM) Enforcement and Compliance in 2006

By LT Keith Donohue

Compliance with the Coast Guard's mandatory ballast water management (BWM) regulations continued to improve as Coast Guard enforcement efforts increased in 2006. Over 7,000 BWM Examinations were conducted by Coast Guard personnel nationwide in 2006, up from 6,351 in 2005 and 3,472 in 2004 when the national mandatory regulations went into effect. During the course of these examinations, Coast Guard Marine Inspectors and Boarding Officers issued 194 deficiencies, mostly for ballast water reporting, recordkeeping and management plan related issues. Over \$9,000 in penalties were issued on

(Continued on page 7)



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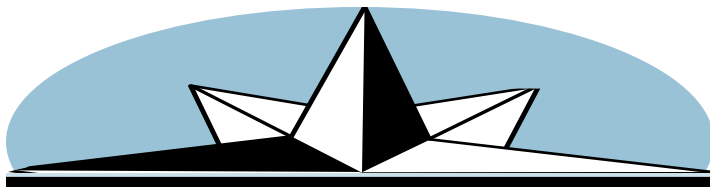
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scene to vessel owners and operators via Coast Guard Notices of Violation due to non-compliance with these regulations.

In calendar year 2006, the number of BWM deficiencies issued has decreased by 12 percent for each 1,000 BWM examinations conducted compared to 2005. These data also show that, of those vessels examined, 97.2 percent are compliant with the mandatory requirements, which has increased slightly from 96.8 percent in 2005.

Using the required ballast water report forms collected by the National Ballast Information Clearinghouse (NBIC), the Coast Guard is also able to better monitor the actual movement

of ballast water throughout the waters of the U.S. With improved electronic reporting methods, return receipts, and feedback to those submitting reports (all of which have been developed by NBIC) higher quality data is being received. In 2006 alone, NBIC received and processed over 119,000 ballast water reports from vessels arriving to ports and places of the U.S. Of those reports submitted to NBIC, 80 percent are now being submitted via e-mail and web-based methods currently available at the NBIC website: <http://invasions.si.edu/nbic/submit.html>. These data will continue to help the Coast Guard implement appropriate measures for preventing the introduction and spread of aquatic invasive species.



**Environmental Standards Division
(CG-3PSO-4)**

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Calendar of Events

- 📅 **Feb 27-28, 2007**
Marine Community Day
 Crowne Plaza City Centre Hotel,
 777 St. Clair Avenue
 Cleveland, OH,
 POC: Dave Knight, dknight@glc.org
- 📅 **March 13, 2007**
Public Meeting on Ballast Water Reporting and Recordkeeping Requirements
(Great Lakes Region)
 Radisson Chicago Hotel and Suites
 160 East Huron Street
 Chicago, IL 60611
 POC: LT Heather St. Pierre
Heather.J.St.Pierre@uscg.mil
- 📅 **March 15, 2007**
Public Meeting on Ballast Water Reporting and Recordkeeping Requirements
(Gulf of Mexico Region)
 Hotel Monteleone
 214 Royal Street
 New Orleans, LA 70130
 POC: LT Heather St. Pierre
Heather.J.St.Pierre@uscg.mil
- 📅 **April 16-20, 2007**
BLG 11
 Royal Horticultural Halls
 and Conference Centre
 80 Vincent Square
 London SWP1P 2PE

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