Cargo Sweeping in the Great Lakes: A Coherent Regulatory Framework?

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Residents who live along or near the Great Lakes may be surprised to learn that the many bulk dry cargo vessels that ply those waters routinely deposit hundreds of tons of iron ore, limestone, coal, and other residue into the open water of the lakes each year. They may be even more surprised to learn that these discharges have taken place with the long-standing approval of the U.S. Coast Guard. While the practice has taken place out of public view and has largely escaped public attention, it has grown increasingly controversial.

This spring, the Coast Guard announced its intention to revisit the interim nonenforcement framework that has applied to this practice for nearly fifteen years. Seeking to comply with a statutory mandate to place its enforcement practices on a firmer footing, the Coast Guard will finally conduct an environmental impact statement and then develop formal rules to govern cargo sweeping practices. Late though they may be, these recent steps toward regulatory normalcy are a welcome departure from the ad hoc approach that has characterized the way federal agencies and Congress have addressed this issue to date.

The operational discharge of cargo sweepings has been a fact of Great Lakes shipping for more than seventy-five years. The practice is applied to all of the various dry bulk commodities that are shipped on the lakes (including cement, grain, coke, gypsum, slag, and salts), but the vast majority of Great Lakes bulk cargo transports consist of limestone, iron ore, and coal, and these commodities therefore account for most of the incidental discharges as well. Most of these shipments (approximately 80 percent, according to Coast Guard studies) are destined for steel mills. Some U.S.-flagged vessels run standard schedules among limited port destinations in the Great Lakes, but most vessels in the U.S. trade operate on a more flexible schedule, where operators vary their destinations to maximize the value of the ships and minimize empty runs. As a result, these vessels typically handle a variety of different cargos. They operate nearly year-round, with self-unloading equipment that permits rapid turnaround in ports. This equipment consists of systems of conveyer belts to move cargo from the holds up to the deck and into articulating booms that then deposit the cargo into bins or on the dock.

The process of loading and unloading dry bulk cargo with the existing equipment necessarily creates incidental residues, or "cargo sweepings," that are deposited on the ships' decks and other surfaces as the dry cargo is added or removed. These residues can pose occupational hazards to ship crews (e.g., the risk of slippage from dust on decks or in the unloading tunnels in the cargo holds). In addition, when a vessel takes on different cargos, residues from previous shipments in the cargo holds can contaminate subsequent shipments. The crews of these vessels therefore routinely rinse the residue from the ships' decks and storage holds. The water is then washed overboard or pumped out through sumps in the cargo area. Because of no-discharge requirements applicable in port and in near-shore areas (discussed further below), this rinsing typically takes place once the vessel is underway and has reached open water areas. Moreover, because lake vessels normally follow established shipping lanes, deposits of these sweepings tend to be concentrated along those tracking routes.

The amount of residue deposited in the Great Lakes through this practice is relatively small compared to the volume of dry bulk commodities that are shipped through the Great Lakes. A March 2006 study commissioned by the U.S. Coast Guard concluded that during the 2004–2005 shipping season, approximately 548 net tons of such cargo sweepings from iron ore, coal, and limestone shipments were deposited in the Great Lakes by U.S.-flagged carriers, out of roughly 105 million net tons of those commodities that were shipped by U.S.-flagged carriers.

Although the process of washing and discharging residues had been commonplace for decades, it was apparently virtually unregulated in the United States prior to 1987. In that year, Congress amended the Act to Prevent Pollution from Ships (APPS), 33 U.S.C. 1901–1915, to allow the United States to become party to Annex V of the International Convention for the Prevention of Pollution from Ships of 1973 (as modified by a 1978 Protocol and collectively known as MARPOL 73/78). Annex V regulates the discharge of garbage and operational wastes from ships. It defines "garbage" to include most kinds of "victual, domestic and operational waste"

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generated during the normal operation of the ship. Implementation guidelines adopted at the International Maritime Organization (IMO) for Annex V in turn clarify that this operational waste includes cargo residues, and provide that cargo residues are expected to be small in quantity. Annex V generally requires that the discharge of this type of garbage into the sea "is prohibited if the distance from the nearest land is less than . . . 12 nautical miles." Annex V, Regulation 3(1)(b). The term "from the nearest land" is defined under the Annex to mean "from the baseline from which the territorial sea is established in accordance with international law." Annex V, Regulation 1(2). Under international law, baselines are normally drawn at the low-water line along the maritime coast, with special rules applicable to certain bays and heavily indented coastlines.

Although much of the commentary on cargo sweeping—and much of the U.S. Coast Guard's own reference material—refers to the requirements imposed by MARPOL Annex V within the Great Lakes, it is by no means clear that the treaty directly applies to those waters. Notwithstanding their international character, the Great Lakes lie inland of the U.S. baseline and therefore arguably constitute U.S. (and Canadian) internal waters not directly subject to MARPOL 73/78 provisions. Although the treaty is not explicit on this point, and although the United States has to date apparently avoided taking a firm position on this matter, it seems doubtful that such a position would be controversial as a matter of international law. As noted above, for example, Annex V (like other MARPOL provisions) imposes limits on discharges "into the sea." It seems likely, therefore, that the United States need not prohibit or regulate cargo sweeping in the Great Lakes in order to comply with its international obligations under MARPOL.

When Congress adopted the APPS amendments to implement Annex V and allow the United States to ratify the agreement, however, it expressly applied the MARPOL rules to U.S. internal (or "inland") waters. The statute, 33 U.S.C. § 1901(b), provides that "the requirements of Annex V shall apply to the navigable waters of the United States, as well as to all other waters and vessels over which the United States has jurisdiction." Section 1902(a) applies the discharge requirements to U.S.-flagged ships "wherever located" and to foreign-flagged vessels "while in the navigable waters or the exclusive economic zone of the United States." The result of extending the MARPOL Annex V discharge rules to U.S. internal waters is an effective prohibition of *all* discharge in those waters. Why? Because Annex V permits garbage discharges only at certain distances from shore as measured from the baseline of a party. Because the U.S. internal waters lie entirely *within* the U.S. baselines, the incorporation by reference of the MARPOL framework into APPS, read strictly, precludes any garbage discharges within U.S. waters. The Coast Guard's implementing regulations under APPS spell out these consequences clearly, stating that "[n]o person on board any ship may discharge garbage into the navigable waters of the United States." 33 C.F.R. § 151.66.

The Coast Guard's Dilemma

The implementing legislation and the Coast Guard's regulations thus resulted, virtually overnight, in a technical prohibition on the long-standing cargo sweeping discharge practice in the Great Lakes. That prohibition, however, was not enforced on the lakes. The Great Lakes shipping industry raised sharp questions about the logistical feasibility of a "no discharge" rule, which would require that all cargo residues on the deck and in the holds be collected and returned to shore. They also suggested that enforcing such a rule potentially threatened the financial viability of the dry cargo trade in the Great Lakes, given the nature of the loading and unloading process, the tight turnaround times for vessel loading and unloading, and the lack of facilities in ports to collect cargo sweepings.

On the horns of this dilemma, the Coast Guard sought a balanced response that relied first tacitly and then explicitly on its enforcement discretion. In 1993, the Coast Guard issued a Notice to Mariners that set forth "an interim enforcement policy" for cargo sweeping discharges in the Great Lakes. That policy applied the essence of the MARPOL rule by providing a no-enforcement policy for discharges taking place at least twelve miles from shore. Following an informal process of consultation with NOAA that focused on gathering some basic environmental impact information, that policy was reissued in 1997 with minor variations, and it has remained in place ever since.

The 1997 enforcement policy applies to dry cargo residues only: it excludes oily wastes, untreated sewage or other types of garbage, and it excludes residues of "any substance known to be toxic or hazardous, such as nickel, copper, zinc, lead, or materials classified as 'hazardous' in provisions of law or treaty." It covers U.S.-flagged vessels operating anywhere in the Great Lakes and non-U.S. vessels operating in U.S. waters of the Great Lakes. Under the enforcement policy, discharges of cargo residues "will not be penalized under Marpol V and Coast Guard regulations at 33 CFR Part 151" except within specified no-discharge zones, typically indicated by prescribed distances from shore, which vary depending on the substance being discharged.

In 1998, the tenuous legal basis for this nonenforcement policy was shored up, at least temporarily, when Congress adopted a bill that directed the Coast Guard to continue the 1997 policy until either 2002 or the enactment of regulations pursuant to legislation to be enacted subsequently. Pub. L. 105-383, 112 Stat. 3411, § 415 (Nov. 13, 1998). In 2000, Congress enacted subsequent legislation that (1) extended until 2004 the interim enforcement policy; (2) directed the Coast Guard to conduct a study of the effectiveness of the policy by September 30, 2002, and (3) authorized the Coast Guard

to promulgate regulations "to regulate incidental discharges from vessels," specifying that the program shall take into account the findings of the study and that the program shall "be consistent" with the 1997 enforcement policy." Pub. L. 106-554, § 1(a)(4), [Div. A., Section 1117], 114 Stat. 2763 (Dec. 21, 2000).

The Coast Guard ultimately contracted for the required study, which recommended that the Coast Guard develop regulations based on the 1997 enforcement policy. In 2004, Congress further extended the nonenforcement policy until 2008. It also revised its authorization for Coast Guard regulations, providing that "[n]otwithstanding any other law, the Commandant of the Coast Guard may promulgate regulations governing the discharge of dry bulk cargo residue on the Great Lakes." The revised authority no longer requires that the regulations be consistent with the enforcement policy. Finally, it required the Coast Guard to "commence the environmental assessment necessary to promulgate the regulations" by November 2004. Pub. L. 108-293, tit. VI, § 623, 118 Stat. 1063 (Aug. 9, 2004).

On March 9, 2006, the Coast Guard announced that it had completed a supplemental study of dry cargo residue discharge practices in the Great Lakes, and that it intended to prepare an environmental impact statement (EIS) in conjunction with the development of new regulations. 71 Fed. Reg. 12,209 (Mar. 9, 2006). Noting that "current environmental statutes, if strictly enforced, would prohibit these incidental discharges," the Coast Guard solicited comments on environmental issues related to the practice as part of the scoping exercise to guide the EIS process. It also indicated its proposed course of action for new regulations: it would adopt the 1997 interim enforcement policy as the basis for formal regulations, with the addition of new record-keeping requirements for vessels that discharge dry cargo residue.

The Coast Guard's approach to this issue over the years appears to reflect a genuine good-faith effort to make the best of a difficult situation. Its nonenforcement policy is based on the general MARPOL scheme, which does not prohibit cargo residue discharges but expressly permits their discharge in areas distant from shore. The enforcement policy may therefore reflect more accurately what Congress had in mind when it chose to apply the MARPOL framework to internal waters through APPS. Certainly, the fact that Congress has now three times enacted interim statutory authority for the Coast Guard to continue that policy indicates that the agency's general judgment has been largely confirmed. And the shipping industry seems to have fully adopted (and even expanded upon through voluntary guidelines) the Coast Guard's interim policy.

At the same time, there is much about the process to date that has been regrettable. For example, the 1999 NOAA-convened workshop raised no serious red flags about the environmental consequences of this practice, but the participants largely agreed on the need for more data, particularly on the chemical composition of the cargoes, to confirm that impression. It is unfortunate that it has taken seven years for the Coast Guard to initiate the detailed environmental review necessary to inform policymakers as they develop the management measures that will apply to this practice.

Moreover, there are many open questions. For example, what about EPA enforcement under our own, homegrown U.S. environmental laws? And what is to be made of the congressional endorsement of the Coast Guard's non-enforcement policy, and its sudden reversal of course with respect to the relationship between APPS and other U.S. laws? These seemingly simple questions open the door to more intrigue than one would suspect.

EPA Sits One Out

The federal Clean Water Act, 33 U.S.C. §§ 1251 *et seq.*, requires a National Pollutant Discharge Elimination System (NPDES) permit for any activity that results in the addition through a point source of any pollutant to waters of the United States. 33 U.S.C. §§ 1311, 1342(a). "Vessels" are included in the definition of "point sources." 33 U.S.C. § 1362 (14). Exercising its authority to administer the Act, EPA has exempted certain discharges from NPDES permitting. Included among these is an exemption for discharges from vessels, including discharges incidental to the normal operation of the vessel. That exemption, however, and all other exemptions applicable to discharges from vessels, expressly excludes discharges of "rubbish, trash, *garbage* or other such materials discharged overboard; . . . ." 40 C.F.R. § 122.3 (a) (emphasis added).

Thus, according to the plain language of the Clean Water Act, discharges of "trash, garbage or other such material" from a vessel would seem to require authorization by an NPDES permit. Does the agency take the position that "garbage" as defined by the Clean Water Act is different from "garbage" as understood under MARPOL? If so, why does the agency nowhere elucidate the distinction? And, if not, where are the NPDES permits?

EPA may have been reluctant to stake out a position on this point because it has been waiting for the second shoe to drop in another case involving the regulation of discharges from vessels. On March 30, 2005, the U.S. District Court for the Northern District of California struck down the so-called regulatory exclusion of discharges "incidental to the normal operation of a vessel" as itself contrary to the plain language of the Clean Water Act. *Northwest Environmental Advocates v. U.S. Environmental Protection Agency*, No. C 03-05760 SI (N.D. Cal. 2005). The case involved EPA's denial of a petition seeking repeal of that exclusion in order to require permits for the discharge of ballast water in U.S. waters. The court agreed with the plaintiffs that the exclusion of ballast water from the NPDES program was beyond the agency's authority. Thereafter, the case

remained pending while the court considered the appropriate scope of relief. With the court poised to decide whether to limit its holding to ballast water discharges, the agency may have thought it unwise to attempt to argue that discharges of dry cargo residues also fell within the regulatory exclusion.

On September 18, 2006, however, the court finally concluded its remedies deliberations and ordered the entire regulatory exclusion of vessel-source discharges to be vacated as of September 30, 2008. As of this writing, then, discharges of dry cargo residues are arguably subject to NPDES permitting under the Clean Water Act due to the application of the exception to the exclusion (i.e., because they are "garbage or other such material" not covered by the exclusion), and would presumably remain so even if the court's decision results in the elimination of the exclusion itself within two years.

Appeal, regulatory action that excludes cargo sweeping discharges, the creation of a general permit to cover those discharges, and legislative intervention all seem to be available options. EPA may also take the position that its authority over cargo sweeping discharges was effectively displaced by Congress in 2004, when it authorized the Coast Guard to promulgate Great Lakes discharge regulations "[n]otwithstanding any other law." In any event, it is perhaps sufficient for now to suggest that the regulatory status of discharges of dry cargo residues under the Clean Water Act may be determined in the larger context of proceedings relating to *all* discharges incidental to the operations of vessels.

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Ad Hoc Regulation and Ad Hoc Legislation

EPA's nonaction may be understandable under the circumstances. Perhaps more difficult to understand is the long-standing acceptance of nonenforcement as a tool to manage an awkward but clear statutory mandate. Nonenforcement in this case was first employed by the Coast Guard in an effort to rationalize an unworkable and seemingly mistaken expansion of MARPOL Annex V requirements to U.S. waters. The tactic was then endorsed, not once but three times, by Congress in the form of legislative endorsements of the Coast Guard's 1997 enforcement policy.

These are practical acts by practical organizations. Only a stickler would ask whether they are also lawful. Can an agency "elect" not to enforce an otherwise clear law? Agencies frequently allocate scarce enforcement resources in a way that leaves certain statutory mandates unpoliced. And Congress often is aware of these decisions and chooses not to intercede. In this case, however, the Coast Guard developed and published an express and overt nonenforcement policy. Although, as noted, Congress ultimately endorsed the Coast Guard's decision, the Coast Guard's initial approach raises the question whether the executive branch can lawfully write sections out of duly enacted environmental statutes.

Beyond the question of legality is a question of policy and process. Is it wise for Congress to allow an executive agency to refashion the contours of our environmental laws without any guidance or process requirements? For this is what the 2004 statute appears to do: by authorizing the Coast Guard to adopt regulations for cargo sweeping "notwithstanding any other law," Congress appears to be giving the agency *carte blanche* to set the rules as it sees fit. There is a nod in the 2004 statute to the need to conduct an environmental assessment, but there is no direction to the Coast Guard about how to evaluate the assessment or, more importantly, how to apply the results of that assessment in fashioning risk management measures for the practice of dry cargo residue discharges.

Congress has responded to the Coast Guard's ad hoc enforcement approach with ad hoc legislation that raises more questions than it answers. What standards should be applied to balance any environmental impacts with potential costs associated with new protective measures? Should the Coast Guard at least be required to limit these discharges to amounts that are not harmful to the aquatic environment? What tools should be applied to monitor and assess ongoing compliance and environmental impacts in the water column and benthos of the lakes? We do not know, and neither does the Coast Guard, because Congress' piecemeal and poorly drafted response to its ill-considered earlier legislation both takes this issue outside the purview of other environmental decision-making and fails to set the rules to guide the agency's decision-making in this context. More generally, it is not at all clear why this should be so: Is there something so exotic and complex about the pollution from the discharge of dry cargo residue that merits this unique regulatory treatment?

Next Steps

Despite the lack of congressional guidance, the Coast Guard appears to be acting responsibly as it prepares to exercise the regulatory authority Congress has granted it.

The March 9, 2006, notice indicates that the Coast Guard intends to conduct an environmental impact statement in accordance with the National Environmental Policy Act (NEPA). That approach is commendable, particularly since the Coast Guard presumably could have taken the position that Congress in the 2004 dry cargo residue legislation required only that it conduct the less onerous "environmental assessment" referred to in the statute, and that the "notwithstanding" clause in that bill had the effect of removing this regulatory process from NEPA altogether.

Adoption of the NEPA procedures will provide an appropriate administrative framework for the Coast Guard's exercise of regulatory authority, lead for the first time to the development of comprehensive scientific information to evaluate management alternatives for this practice, and provide an opportunity for other regulators, such as the state authorities and EPA itself who to-date have remained silent, to engage in the process going forward. The NEPA regulations expressly invite the participation of "Federal, State and local agencies" as well as those of "any affected Indian tribe" and other interested persons. Whether EPA and the states or tribes take advantage of this opportunity remains to be seen.

Another open question is the degree to which the Coast Guard will take account of the international dimension of this issue in developing new regulations. There is no indication in the recent study, on the Coast Guard's Web site on dry cargo residues, or in the March 2006 *Federal Register* notice that the Coast Guard intends to consult its counterparts in the Canadian government. But given the character of the lakes as a shared ecosystem, and given the transnational character of Great Lakes shipping traffic, there are good reasons to do so.

These reasons include the fact that the United States is arguably legally bound to do so under the Great Lakes Water Quality Agreement of 1978 between the United States and Canada. Art VI(1)(f) of the agreement requires the parties to "continue to develop and implement programs and other measures . . . [including] compatible regulations for the control of discharges of vessel wastes, in accordance with annex 5 [of the Agreement]." Annex 5 in turn provides:

> Compatible regulations shall be adopted governing the discharge into the Great Lakes System of garbage, sewage, and waste water from vessels in accordance with the following principles: (a) the discharge of garbage shall be prohibited and made subject to appropriate penalties; [and] (b) the discharge of waste water in harmful amounts or concentrations shall be prohibited and made subject to appropriate penalties. . . .

"Waste water" is defined in Annex 5 to mean "water in combination with other substances, including ballast water and water used for washing cargo holds. . . ." At a minimum, therefore, the Coast Guard's consultation with Canadian authorities should be in order as part of the process of developing "compatible regulations." (It appears that Canada, which is not a party to MARPOL Annex V, does not have in place regulations on dry cargo residue discharges, although the Canadian Great Lakes shippers have endorsed a 1999 industry policy that gives effect to the Coast Guard's interim enforcement policy throughout the Great Lakes.)

In addition, to the extent that there remains doubt within the Coast Guard or other relevant branches of the U.S. government about whether MARPOL Annex V directly applies to the Great Lakes, then this issue should also be addressed in the regulatory decision-making process. If the Coast Guard takes the position that Annex V *does* apply by its terms directly to the Great Lakes, then adoption of regulations along the lines it has proposed would necessarily place the United States out of compliance with its international obligations. Congress has the authority to enact subsequent statutes that place the United States in violation of international agreements, *see, e.g., Ching Chan Ping v. United States*,130 U.S. 581, 600 (1889), and may arguably have exercised that authority here to the extent that the interim enforcement policy is inconsistent with MARPOL. Nevertheless, it is not clear that Congress understood the enforcement policy to have this effect. If the Coast Guard (which has an honorable tradition of conscientiously executing the numerous U.S. international obligations in other environmental and law enforcement contexts) believes that this is the result, then it should state so explicitly.

Although it has taken many years to get to this point, it appears that the Coast Guard is now moving toward an approach to regulating this long-standing practice based both on statutory authority (however hastily conceived) and on sound environmental impact information. Recent public attention and the potential inclusion of new voices into the debate may result in fresh thinking on the topic. In the absence of any significant developments, it seems likely that the regulatory framework that ultimately will be adopted will look very much like the current one. Whatever the outcome, however, the formal review and policymaking process itself are long overdue. Sometimes it may be necessary for an agency to lead the legislature rather than the other way around. But as Congress recognized when it enacted NEPA in 1969, it is almost never desirable for a regulatory agency to make environmental policy in the absence of basic environmental impact information.