



**DEPARTMENT OF HOMELAND SECURITY**

**Coast Guard**

**33 CFR Part 151**

**[Docket No. USCG-2004-19621]**

**RIN 1625-AA89**

**Dry Cargo Residue Discharges in the Great Lakes**

**AGENCY:** Coast Guard, DHS.

**ACTION:** Final rule.

---

**SUMMARY:** The Coast Guard is finalizing its existing interim rule regulating the operation of U.S. and foreign vessels carrying bulk dry cargo such as limestone, iron ore, and coal on the U.S. waters of the Great Lakes, and the operation of U.S. bulk dry cargo vessels anywhere on the Great Lakes. Specifically, the Coast Guard is publishing new requirements for the discharge of bulk dry cargo residue (DCR) on the U.S. waters of the Great Lakes. The rule will continue to allow non-hazardous and non-toxic discharges of bulk DCR in limited areas of the Great Lakes. However, vessel owners and operators will need to minimize DCR discharges using methods they will be required to document in DCR management plans. The rule will prohibit limestone and clean stone DCR discharges in some waters where they are now permitted. The final rule promotes the Coast Guard's maritime safety and stewardship missions.

**DATES:** This final rule is effective **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** except for the management plan

requirement of 33 CFR 151.66(b)(5), which is a collection of information requirement that has not yet been approved by the Office of Management and Budget (OMB). The Coast Guard will publish a document in the Federal Register announcing the effective date of that requirement.

**ADDRESSES:** Comments and material received from the public, as well as documents mentioned in this preamble as being available in the docket, are part of docket USCG-2004-19621 and are available for inspection or copying at the Docket Management Facility (M-30), U.S. Department of Transportation, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. You may also find this docket on the Internet by going to <http://www.regulations.gov>, inserting USCG-2004-19621 in the “Keyword” box, and then clicking “Search.”

**FOR FURTHER INFORMATION CONTACT:** If you have questions on this rule, call or e-mail John A. Meehan, Office of Operating and Environmental Standards (CG-OES-3), U.S. Coast Guard; telephone 202-372-1429, e-mail [John.A.Meehan@uscg.mil](mailto:John.A.Meehan@uscg.mil). If you have questions on viewing or submitting material to the docket, call Ms. Cheryl Collins, Program Manager, Docket Operations, telephone 202-366-9826.

**SUPPLEMENTARY INFORMATION:**

Table of Contents for Preamble

- I. Abbreviations
- II. Basis and Purpose
- III. Background
- IV. Discussion of Comments to SNPRM.
- V. Discussion of Final Rule
- VI. Regulatory Analyses
  - A. Regulatory Planning and Review
  - B. Small Entities

- C. Assistance for Small Entities
- D. Collection of Information
- E. Federalism
- F. Unfunded Mandates Reform Act
- G. Taking of Private Property
- H. Civil Justice Reform
- I. Protection of Children
- J. Indian Tribal Governments
- K. Energy Effects
- L. Technical Standards
- M. Environment

I. Abbreviations

AB	Able Body Seaman
APPS	Act to Prevent Pollution from Ships
CFR	Code of Federal Regulations
COMDTINST	COMMANDANT INSTRUCTION 7310.1M
DCR	Dry Cargo Residue
DEIS	Draft Environmental Impact Statement
EIS	Environmental Impact Statement
E.O.	Executive Order
EPA	Environmental Protection Agency
FEIS	Final Environmental Impact Statement
FR	<u>Federal Register</u>
GLWQA	Great Lakes Water Quality Agreement of 2012
ICR	Information Collection Request
IR	Interim Rule
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships
NAICS	North American Industry Classification System
NOAA	National Oceanic and Atmospheric Administration
NPRM	Notice of proposed rulemaking
OMB	Office of Management and Budget
ROD	Record of Decision
PIC	Person in charge
SBA	U.S. Small Business Administration
SNPRM	Supplemental notice of proposed rulemaking
§	Section symbol
the Act	the Coast Guard and Maritime Transportation Act of 2004
U.S.C.	United States Code

II. Basis and Purpose

This final rule replaces the interim rule (73 FR 56492, Sep. 29, 2008) that has been in effect since 2008. The legal basis for this rulemaking is section 623(b) of the Coast Guard and Maritime Transportation Act of 2004 (“the Act,” Pub. L. 108-293). Section 623(b) of the Act gives the Coast Guard the authority, “notwithstanding any other law... to promulgate regulations governing the discharge of dry bulk cargo residue on the Great Lakes.”

The purpose of this rulemaking, as a whole, is to exercise the authority conferred on the Coast Guard by the Act in a way that appropriately balances the needs of maritime commerce and environmental protection, by determining how, if at all, the discharge of dry cargo residue (DCR) can continue in the Great Lakes within a regulatory framework that imposes environmentally appropriate conditions on DCR discharges. The purpose of this final rule is to provide that regulatory framework.

### III. Background

Prior to opening this rulemaking, we published a notice of inquiry requesting information about the then-current status of dry cargo operations in the Great Lakes (69 FR 77147; correction, 70 FR 1400) on December 27, 2004 and January 7, 2005, respectively. The regulatory history for this rulemaking began with a March 9, 2006 announcement of our intent to prepare an Environmental Impact Statement (EIS) in support of the rulemaking and a request for public comments on the scope of the EIS (“scoping notice,” 71 FR 12209). On June 8, 2006, we published a notice for a public meeting on the scope of the EIS, and again requested public comments (71 FR 33312). We held a scoping meeting in Cleveland, OH, on July 6, 2006. We published a notice of proposed rulemaking (NPRM) and notice of the availability of the accompanying draft

environmental impact statement (DEIS) on May 23, 2008 (73 FR 30014). We announced public meetings on the NPRM and DEIS on June 6, 2008 (73 FR 32273), and held those meetings in Duluth, MN, and Cleveland, OH, on July 15 and 17, 2008, respectively. With the Environmental Protection Agency (EPA), we announced the availability of the final environmental impact statement (FEIS) on August 22, 2008 (EPA at 73 FR 49667; Coast Guard at 73 FR 49694), and the Record of Decision (ROD) adopting the findings of the FEIS was signed September 23, 2008. We published an interim rule on September 29, 2008 (73 FR 56492). On December 29, 2008 (73 FR 79496), we published a second scoping notice announcing our intent to prepare a new “tiered” (updated) EIS in support of a final rule, requested public comments, and announced a public scoping meeting, which was held in Chicago, IL, on January 28, 2009. We published a supplemental notice of proposed rulemaking (SNPRM) on July 30, 2012 (77 FR 44528). With the EPA, we announced the availability of the FEIS for this final rule on November 1, 2013 (78 FR 65643).

A vessel loading or unloading bulk dry cargo often accumulates small amounts of dry cargo residue on its deck, and more substantial amounts in cargo tunnels within the vessel, where the DCR mixes with sump water. If these accumulations are not addressed, the deck residue can adversely affect crew safety, and the tunnel residue can adversely affect vessel stability, which in turn risks the safety of the entire vessel, its crew, and the maritime environment. DCR accumulation can be mitigated or reduced through the use of DCR control equipment or procedures, but it is not always operationally feasible or economically practical to deploy that equipment or procedures only while the vessel is in port. Consequently, a bulk dry cargo vessel may find it advantageous to sweep residue

from the deck, or to discharge tunnel sump water, while the vessel is in transit. For oceangoing vessels on the high seas, this is generally permissible under international maritime law, but it is generally prohibited within each country's navigable waters, including a country's navigable rivers and lakes. For most bulk dry cargo vessels operating on rivers and lakes, the general prohibition against in-transit DCR discharges does not impose special hardships on the vessel operator, because transit time is short and the sheltered river and lake waters limit any risk to the vessel from conducting DCR control measures only while the vessel is in port.

However, Great Lakes vessel operators may experience special difficulties with DCR accumulation. The Great Lakes support a significant volume of bulk dry cargo shipping that remains within the land-locked Great Lakes system. All Great Lakes waters are considered either U.S. or Canadian navigable waters, and hence are subject to the general prohibition against in-transit DCR discharges. Transits on the Great Lakes can be many hours long, through waters that can be very deep, very wide, and subject to severe weather risks. Thus, in some ways Great Lakes bulk dry cargo vessels are more like vessels in oceangoing trade than they are like vessels on most rivers or lakes. In recognition of these special factors, the Coast Guard's Ninth District adopted an "interim enforcement policy" in 1995, which allowed continued and "incidental" discharges of non-toxic, non-hazardous DCR in defined areas of the Great Lakes. On three occasions between 1998 and 2004, Congress required the Coast Guard to continue enforcing the interim enforcement policy.

In 2004, Congress prepared a legislative conference report in support of section 623(b) of the Act, which provides the authority for this rulemaking, expressing

Congress’s expectation that in regulating Great Lakes DCR discharges, given the special characteristics of the Great Lakes, the Coast Guard would adopt an approach “that appropriately balances the needs of maritime commerce and environmental protection.” House Report 108-617.

Our interim rule amended 33 CFR 151.66, a Coast Guard regulation that implements the Act to Prevent Pollution from Ships (APPS) 33 U.S.C. 1901 et seq. That regulation generally prohibits the discharge of DCR—an “operational waste” and, hence, “garbage” as both terms are defined in 33 CFR 151.05—in all U.S. navigable waters. The interim rule amended that prohibition with respect to the U.S. waters of the Great Lakes. It allowed non-hazardous and non-toxic DCR discharges in limited areas of the Great Lakes, provided that carriers observed recordkeeping and reporting requirements, and it encouraged carriers to adopt voluntary control measures for minimizing discharges. The interim rule applied to the owners and operators of U.S., Canadian, and other foreign vessels carrying bulk dry cargo on the U.S. waters of the Great Lakes, and also to the owners and operators of U.S. vessels carrying bulk dry cargo when they are on the Canadian waters of the Great Lakes. Non-self-propelled barges were excluded from the interim rule amendment unless they are part of an integrated tug-and-barge unit.

Our ROD in support of the interim rule concluded that the interim rule’s only adverse environmental impacts would be minor and indirect, and that an outright ban of DCR discharges could cause an adverse economic impact for carriers and related industries in the Great Lakes region. Therefore, we found that allowing DCR discharges in the Great Lakes, under the conditions imposed by the interim rule, struck “the best balance between economic and environmental concerns that can be achieved, given

currently available information.” ROD, p. 4. The conditions the interim rule imposed on DCR discharges were intended to limit even minor and indirect impacts of DCR discharges, and to give us the regulatory tools we needed to monitor discharges in the future.

We stated in the interim rule that, before taking final action in this rulemaking, we would “determine if, in the long term, the optimal balancing of commercial and environmental interests requires the mandatory use of DCR control measures, the adjustment of the geographical boundaries within which those discharges are currently allowed, or other regulatory changes” (73 FR at 56495). We have now made that determination and accordingly, we are issuing this final rule. The final rule’s provisions are identical to those we proposed in the SNPRM, except insofar as we have decided to retain existing reporting and recordkeeping requirements for the final rule’s first year in effect, as a transitional measure. For a detailed discussion, see part V of this preamble.

#### IV. Discussion of Comments to SNPRM

We received eight public comments from seven commenters on the SNPRM. Two of the commenters were individuals, three were industry associations, one was an alliance of advocacy groups with a shared interest in ensuring “that commercial navigation practices in the Great Lakes and St. Lawrence River do not have a deleterious impact on the basin’s freshwater ecosystem and dependent communities and economies,” and one was the Michigan Department of Environmental Quality. The commenters raised the following issues.

Legal basis. The advocacy alliance said our interim rule and our final rule, are inconsistent with APPS and that section 623(b) of the Act does not provide an exception

from APPS. We disagree that the Act provides no exception from APPS. In passing APPS, Congress gave the Secretary of the Department in which the Coast Guard is operating sufficient regulatory authority to implement it (33 U.S.C. 1903(c)(1)) and the Secretary delegated that authority to the Coast Guard (DHS Delegation No. 0170.1(77)). Section 1903(c)(1) was last amended in 1996, and there was no logical reason for Congress to do more if Congress intended the general language of that provision to govern Coast Guard rulemaking on any topic and in any waters to which APPS might be applicable. Nevertheless, on three subsequent occasions, in 1998, 2000, and 2004, the 105<sup>th</sup>, 106<sup>th</sup>, and 108<sup>th</sup> Congresses saw fit to legislate three specific exceptions to section 1903(c)(1) with respect to the discharge of DCR in the Great Lakes: Public Law 105-383, section 415; Public Law 106-554, section 1117; and Public Law 108-293, section 623. Not one of these subsequent specific enactments can be logically explained in any other way than by inferring that Congress intends for the Coast Guard to take into account factors unique to the handling of DCR on the Great Lakes in regulating DCR discharges in those waters, notwithstanding how APPS would apply to other topics involving the Great Lakes, and notwithstanding how APPS would apply to DCR discharges in other waters.

Need for further regulatory measures. The three industry associations questioned the need for further regulatory measures. They said the current interim rule's requirements already achieve the balance between environmental protection and commercial interests that Congress intended. They also reminded us of the relatively small volume of DCR discharges given the volume of bulk dry cargo shipments, and of our previous finding of only minor and indirect adverse environmental impacts from

DCR discharges. We agree with these statements, but we also recognize that in the absence of Coast Guard regulations allowing limited discharges, discharges of any kind would be prohibited and industry would have to bear the cost of eliminating any DCR discharges. In our view, the additional measures imposed by this final rule will help minimize adverse environmental impacts, without exposing industry to unreasonable regulatory costs. One of the three associations commented that effective DCR minimization procedures, including DCR management plans are already in general use. To the extent that is the case, the incremental cost of this final rule will be minimized and will be felt only by parties who are not currently operating at the general level.

Environmental analysis. The advocacy alliance made several comments about the DEIS that accompanied the SNPRM.

First, the alliance said our characterization of the environmental impacts of permitted DCR discharges as “minor and indirect” is not supported with sufficient evidence in the record and should be reconsidered. We disagree with this statement. Our analysis shows that the DCR deposition rate in open Great Lakes waters is within natural deposition rates—0.2 percent or less of the natural deposition rate even in areas of highest DCR discharge activity. Only port and nearshore areas experience deposition rates higher than the natural deposition rate. The DCR-discharge impact in those areas must be mitigated as we described in the DEIS’s preferred alternative. The criteria for determining the effects on environmental and human resources for each of the alternatives were established through collaboration with experienced National Environmental Policy Act practitioners and with the EPA as a cooperating agency. The evaluation of the impacts was based on scientific studies, vetted through expert panels.

The results were published in draft and final environmental impact statements issued prior to publication of the interim rule, resulting in further refinement of the analysis.

Second, the alliance said we should reassess the effects of DCR discharges on the physical sediment of the Great Lakes rather than rely on the findings in the interim rule's FEIS and ROD. The Coast Guard did, in fact, reassess the effects on the physical sediment evaluated in the FEIS based on the analysis of vessel DCR records and direct observations subsequent to publication of the interim rule. We did not find a significant change in the results stated in the interim rule's FEIS.

Third, the alliance said we had not adequately estimated the volume of DCR discharge so as to permit informed decision making on the direct, indirect, and cumulative environmental impacts to the Great Lakes. We disagree with this statement. To determine the volume of DCR discharge we conducted in-depth studies outlined in Appendix N of the interim rule's FEIS. Subsequent to publication of the interim rule, we analyzed vessel DCR records and made direct observations.

Fourth, the alliance said the SNPRM's DEIS predicted DCR discharge reductions that are inconsistent with our statement that the majority of vessels already effectively minimize DCR discharge. There is no inconsistency. The predicted DCR discharge reductions from this rulemaking do not conflict with the already low current discharge rates from vessels. However, further reductions in the discharge rates are feasible with limited impacts to industry.

Finally, the alliance said that, with respect to the potential introduction of toxic components into the Lakes' sediments, the issue is not only whether those sediments are currently contaminated at levels sufficient to adversely affect the natural communities of

the Great Lakes, but also whether those levels might be reached if DCR discharges are allowed to continue. The alliance said this possibility is not fully explored in the SNPRM's DEIS, and that we have ignored the recommendation of the National Oceanic and Atmospheric Administration (NOAA) to undertake a rigorous front-end analysis of the potential for toxic constituents in the types of cargo that produce DCR. We disagree. Under the Clean Water Act, vessels are prohibited from discharging DCR that is toxic, hazardous, or both. The 1995 interim enforcement policy allowed incidental DCR discharges only if the DCR was non-toxic and non-hazardous, and our 2008 interim rule also applied only to non-toxic, non-hazardous DCR. We addressed NOAA's recommendations in the 2008 FEIS. (See U.S. Coast Guard 2002, "A Study of Dry Cargo Residue Discharges in the Great Lakes" and U.S. Coast Guard 2006, "Study of Incidental Dry Cargo Residue Discharges in the Great Lakes" referenced in the 2008 FEIS and posted on the Docket). We have extensively and thoroughly evaluated the direct, indirect, and cumulative effects of DCR discharges, including toxicity. Our FEIS finds that while sediment concentrations exceeded some threshold effect concentrations in DCR sweeping areas and some toxicity was observed, the sediment concentrations were similar to those in areas used as a control group for sampling purposes, and the toxicity does not appear to be associated with any chemical constituent attributable to DCR, indicating that our long-standing restriction of DCR discharges to non-toxic and non-hazardous DCR is being observed. We do not expect the predicted rates and composition of DCR discharges to contribute to raising sediment toxicity levels such that they will adversely affect the ecosystems.

Federalism. All three industry associations and the Michigan Department of Environmental Quality commented on the interaction between the interim rule and final rule, as Federal regulations, and the water quality laws of States in the Great Lakes region. The associations pointed out that we have not preempted States from adopting or enforcing their own laws affecting DCR discharges in their waters. They are concerned that the lack of Federal preemption will lead to a patchwork of different State requirements. One of these associations said that the imposition of more stringent restrictions or even discharge bans by individual States would also result in severe hardship on vessels and economic harm to commerce on the Great Lakes, while providing no additional environmental benefit.

The Michigan agency said that DCR discharges in Michigan waters would be in violation of section 324.9502 of the State's Natural Resources and Environmental Protection Act. While acknowledging that the lack of Federal preemption leaves Michigan free to enforce this statute in its waters, the agency said this could leave industry confused, that it places a significant potential burden for enforcement on Michigan, and is contrary to the Coastal Zone Management Act.

Neither the interim rule nor this final rule expressly preempts State laws relating to DCR discharges. As we stated in the interim rule, 73 FR 56492 at 56497, col. 2, carriers must comply not only with Coast Guard DCR discharge regulations, but with "all applicable Federal and State laws regulating DCR discharges," and we "will work with States and carriers to make sure carriers are informed of any State laws that could impose more restrictions on DCR discharges" than are imposed by our regulations. We do not believe the final rule will confuse the industry because it allows for continuing the current

industry practices with regard to dry cargo residues, which have been in place for decades. It incorporates recordkeeping requirements that are similar to regulations with which industry already must and does comply. This final rule does not frustrate or conflict with the laws of any State; nor is it inconsistent with any State coastal management program that may impose additional restrictions on DCR discharges.

Vessel operations. Two of the industry associations commented on the affected industry's importance to the regional and national economies. Both expressed concern over the cost implications of delaying a vessel's voyage to remove DCR while in port, in light of the high hourly cost of vessel operation and the short Great Lakes shipping season. One of the two associations observed that DCR discharges are not in the industry's interest, since vessels are paid to deliver cargo, not wash it overboard. The other said this places shipping at a disadvantage when compared to rail or road transportation.

We agree that Great Lakes shipping is an important industry and that the cost implications of this rulemaking must be kept as low as possible, consistent with our interpretation of the mandate Congress gave us in the 2004 Act. The new DCR management plan requirement leaves industry free to determine, for each vessel, how best to minimize DCR without compromising a vessel's economics, safety, or other operational considerations. We are confident this can be done without delaying any vessel's operations, because we found from our own direct observations that it is existing industry practice to maintain DCR-free decks and that crew members can retrieve significant amounts of DCR from cargo tunnels while the vessel is under way for later

disposal. We discuss minimization requirements more fully in connection with the comments we received on minimization.

Elimination of DCR discharges. The advocacy alliance and an individual commenter wrote in favor of eliminating DCR discharges in the Great Lakes. As we stated in the SNPRM, 77 FR 44528 at 44533, col. 1, this remains our ideal. The individual commenter remarked that “profiteers... sneak what they dump.” We disagree, at least insofar as the industry affected by this rulemaking is concerned, because they have openly acknowledged their discharges and because we agree with the industry that discharge of DCR is contrary to their profit motive.

The alliance said we should adopt regulations that move industry toward eventual elimination of DCR discharges. They suggested we “reconsider an alternative that incorporates the following measures: a timeline for reaching zero-discharge; periodic review of DCR best management practices followed by regulations that require implementation of such practices; and in the interim, incremental reductions in the volume of DCR discharged by vessels.” They also said the Great Lakes Water Quality Agreement of 2012 (GLWQA) between the U.S. and Canada “directs the attention of each party to the task of developing reasonable regulations minimizing the discharge of cargo residue into the Great Lakes,” and requires “the parties to produce progress reports every three years after implementation,” which would provide a natural timeframe for us to periodically review and improve our DCR regulations.

We decline to adopt the alliance’s suggestion for a timeline to incrementally reduce and eventually eliminate all DCR discharges. We lack any factual basis for establishing such a timeline, of whatever length, without triggering the direct and adverse

socioeconomic impacts that justified our rejecting the imposition of a zero-discharge requirement in our interim rule; see the ROD for the interim rule's FEIS, pp. 2, 3, Sept. 23, 2008. As we stated in the SNPRM, 77 FR at 44533, col. 1, "we continue to believe, as we did when we issued the interim rule, that a 'zero discharge' requirement would be more costly than necessary to protect the environment against adverse impacts, and because the adverse impacts that can be associated with DCR discharges are only minor and indirect."

We disagree with the alliance on setting any schedule specifically for the periodic review of our DCR regulations. This is not required by the GLWQA, which discusses triennial progress reviews in the overall context of Great Lakes water quality rather than with respect to reviewing specific statutes or regulations. Also, as we stated in the SNPRM, 77 FR at 44531, col. 3, we are already "subject to statutes, executive orders, and agency policies that require the periodic reevaluation of existing regulations" including our DCR regulations. However, as we also stated in the SNPRM, 77 FR at 44533, col. 3, "[w]e expect that industry standard practices for the management of dry cargo residue will evolve" and that, as they do, each vessel will have to keep pace or risk a Coast Guard inspector's determination that its DCR management plan no longer compares adequately "with the current industry standard practices employed by the majority of vessels with comparable characteristics, cargoes, and operations."

Minimization of DCR discharges–Decks. All three industry associations commented on our minimization proposals, in particular the "broom clean" standard for decks, and expressed concern over the costly delays in port that attaining broom

cleanliness might entail (costs are addressed in the regulatory analyses section of this final rule).

One of the associations said we should set a “shovel clean” standard instead, because shovels are operationally preferable to brooms and can attain the same performance level (elimination of visible DCR, other than dust, powder, or isolated and random pieces, none of which exceeds 1 inch in diameter). We chose the term “broom clean” because of its descriptive value in conveying an image of the performance level we want vessels to achieve. This final rule does not prescribe the actual tools or procedures by which a vessel achieves it; that information will be set out in the vessel’s DCR management plan.

One association pointed out that “the goal of this provision is standard practice. Spilled cargo is shoveled back into the hold to the degree possible.” We agree that this is standard practice because usually it serves the carrier’s economic interest. This association also mentioned conditions under which it could be difficult or impossible to attain broom cleanliness without unacceptably long and expensive delays in port. We agree that in bad or very cold weather, or because of operational conditions, it may be more difficult than usual to attain broom cleanliness. As the association observed, however, we acknowledged in the SNPRM that cargo is loaded and discharged in different environments: “[w]e assume... an Able Body Seaman (AB) would be tasked with maintaining the broom clean standard ... during loading and unloading operations, to the best of the AB’s ability under current vessel conditions,” 77 FR at 44536, col. 1. The association continued by granting “that it would be difficult to define ‘the best of an individual’s ability under varying vessel conditions,’” but expressed the hope that “Coast

Guard inspectors will agree that what is possible on a summer day is unachievable with snow falling and temperatures below freezing.” We agree. We have tried to design a reasonable requirement that can be executed by people of varying physical capabilities under widely varying conditions, in what is fundamentally an industrial setting., We have also tried to design a regulation that can be easily and fairly enforced by our inspectors without the use of scales or micrometers. As stated in the regulatory definition of “broom clean” adopted by this final rule, 33 CFR 151.66(b)(2), what we want to see on a vessel’s deck is evidence that “care has been taken to prevent or eliminate” deck DCR. We understand and expect that the results of that care will vary, but we expect that the results will indicate that the vessel’s DCR management plan has been written and carried out to obtain the best DCR minimization results across the full range of variables that affect the vessel.

A second association said that maintaining the broom clean standard “is likely to cause vessel delays as compliance with hours-of-rest regulations would prevent critical crew members from participating in departure or navigation tasks.” The association provided no data to show that the interaction of our broom clean requirement with work hour laws will necessarily lead to any appreciable interference with critical crew duties. We know of no reason to assume this will happen, and once again we emphasize that it is up to each vessel to determine, for inclusion in its DCR management plan, what arrangements it chooses to make to comply with our DCR regulations.

This second association also said that “[c]onsidering variability in weather conditions and the requirement to vacate docks as soon as possible for commercial and trade reasons ... the requirement [should] be modified to allow for broom cleaning

operations, if not complete before departure, to continue as soon as work related to departure is completed, or at sunrise the next morning should the vessel depart at night.” As stated in our response to the first association, we understand that a vessel’s ability to attain broom cleanliness will vary according to conditions. However, were we to make the change this association suggests, vessels would have little guidance for distinguishing when in-port compliance is essential from when it can be deferred until the vessel is in transit on the Great Lakes. Since the goal of our final rule is to minimize DCR discharges into the Great Lakes, we think this would undermine the purpose of the broom clean requirement, and we therefore, decline to make the suggested change.

Minimization of DCR discharges–Tunnels. One industry association and the advocacy alliance commented on DCR minimization with respect to vessel tunnels.

The association referred to the safety hazard that can be posed by the accumulation of significant amounts of water in tunnels, and said we should therefore, make it clear that nothing in our minimization requirement or other parts of our DCR regulation “is intended to preclude the master or person-in-charge (PIC) from taking or executing any decision which, in his/her professional judgment, is necessary to maintain the safety of the crew and vessel.” We decline to add the suggested language. We believe that the vessel-specific DCR management plan our rule requires is a more direct and effective way to address the safety concerns posed by the accumulation of excess water in vessel tunnels.

In an apparent reference to our statement in the SNPRM, 77 FR at 44532, col. 3, that “[w]ithin tunnels, large pieces of DCR that remain after unloading should be easy to recover... and to place on the conveyor belt with the rest of the cargo during the vessel’s

next unloading,” the association said that opportunities to do this are “somewhat limited and vary significantly from vessel to vessel.” Therefore, the “current practice of sumping [sump pumping] tunnel DCR will have to continue.” We agree that sump pumping is often necessary and our final rule does not preclude that pumping.

The alliance parenthetically urged us to consider whether the Clean Water Act applies to sump pump discharge of DCR-laden effluent. We take no position on that question, as it is outside the scope of this final rule.

The alliance also said that we should prohibit offshore sump pumping so that vessels can discharge it only at certified shoreside garbage reception facilities. There are two reasons a vessel pumps sump while in transit. One is economy; it is cheaper for the vessel to pump while it is in transit than to spend time in port doing so. However, the second reason is operational—to preserve the vessel’s stability and safety in transit. We agree with the association that offshore pumping of “DCR-laden effluent” for reasons of economy alone would not be consistent with the discharge minimization we will require, but we disagree that offshore pumping can be prohibited altogether because that could interfere with vessel safety. We expect that a vessel’s DCR management plan will describe under what conditions offshore pumping may take place, and what measures the vessel takes to minimize the volume of DCR discharged with the pumped effluent.

DCR management plans. Two industry associations commented on the vessel-specific DCR management plan requirement. Both said that industry has already put in place some sort of current fleet-wide DCR management policies and plans, and one association said that because of this, regulations for written vessel-specific plans are not needed and would only create unnecessary paperwork. The other association agreed with

us that “there are instances when a vessel-specific plan is necessary,” but said “there is so much commonality in terms of general vessel layout, cargo hold configurations and unloading systems” that a single DCR management plan will likely work for all its members.

We believe the additional regulatory cost of documenting policies and practices that already exist in some form will be minimal, will be of benefit to vessel crews in complying with our DCR regulations, and will provide Coast Guard inspectors with an important means of ensuring compliance. The cost of documentation should be further minimized by the “commonality” one association referred to, and we agree some common documentation for similar vessels, cargoes, or operations should be possible. However, the same association also cited many reasons why certain minimization measures will have drawbacks for particular vessels carrying particular cargoes under particular conditions. For that reason, we will require each vessel to have a plan that specifically describes how DCR will be minimized in light of those particularities.

One of the associations said we should specify that a recognized certified management system that accounts for DCR management procedures is acceptable so long as it complies with the version of 33 CFR 151.66(b)(5) promulgated by this final rule. We acknowledge that such a system may provide a useful basis for the required vessel-specific DCR management plan, but we decline the association’s suggestion, and we caution that “turnkey” use of a recognized certified management system’s standards, without specific adaptations made for the specific vessel, may not be enough to meet the section 151.66(b)(5) requirements.

Shoreside facilities. All three industry associations and the advocacy alliance criticized our focusing on vessels even though, as we stated in the SNPRM (77 FR at 44533, col. 2), “shoreside cargo loading and unloading facilities undoubtedly play a role in creating, or limiting the creation of, the shipboard DCR that is eventually discharged into the Great Lakes.”

One of the industry associations correctly pointed out that the Coast Guard has some shoreside regulatory authority, for example under the Maritime Transportation Security Act of 2002. However, whether or not we have legal authority to regulate shoreside facilities in connection with DCR, as a practical matter our marine inspectors lack the resources or training to regulate the relations between vessels and a variety of shoreside facilities.

As one industry association said, industry members also feel they lack “the expertise, time, or authority to implement practices or install equipment on docks.” One of the other associations also made this point. We agree with the first association that “there is little contractual or formal interface between carriers and docks,” that shippers rather than carriers decide where cargo will be shipped and pay shoreside facilities, and that “[d]ocks and vessels are distinct and separate links in the supply chain.” However, they are both components of the same supply chain and are, therefore, interdependent on the smooth and economical operation of that chain. In light of the frequent communication between vessel and dock crews that the association acknowledged, it is reasonable to expect the vessel-specific DCR management plan to outline how those communications will be managed to maximize coordination with shoreside facilities and minimize DCR.

The advocacy alliance said that because we have “made arrangements to consider and issue certificates to reception facilities that meet other aspects” of MARPOL Annex V requirements, we “cannot credibly claim” that we are “not suited to do so as to garbage and DCR.” The Coast Guard makes no such claim. As the alliance goes on to say, we certify garbage reception facilities under 33 CFR part 158 subpart D. If a vessel pumps tunnel sump water at a shoreside garbage reception facility, it must be certified under that subpart.

Enforcement. Two industry associations and one individual commented on how the Coast Guard will enforce this final rule. The associations commented that Coast Guard requirements for DCR discharges are unique to the Great Lakes “and it will be important that inspectors transferred to the Lakes are familiarized with the practice and what constitutes compliance with the final rule before they begin their new duties.” One of the associations also favorably mentioned, in this context, the use of photographs in our DEIS to illustrate shipboard conditions. We agree. Coast Guard inspectors routinely receive training to familiarize them with local conditions and practices. Training often includes, but is not limited to, the use of photographs like those in the DEIS.

The individual commenter asked how we plan to enforce compliance, specifically what happens to the vessel if it does not keep a DCR management plan. The commenter suggested we include more detail about “the implementation of inspections and what penalties the vessels will incur if they do not comply.” Coast Guard inspections are carried out in accordance with detailed protocols contained in our Marine Safety Manual ([http://www.uscg.mil/directives/cim/16000-16999/CIM\\_16000\\_7A.pdf](http://www.uscg.mil/directives/cim/16000-16999/CIM_16000_7A.pdf)), which need not be duplicated in our regulations. Those protocols will likely be supplemented with

additional guidance to inspectors who will enforce our regulations on the Great Lakes. However, as adopted by this final rule, 33 CFR 151.66(b)(6) generally lists the criteria inspectors will apply in determining the adequacy of a vessel's DCR management plan—how closely the vessel has kept up with best practices, how well trained the crew is in operations described in the plan, whether equipment described in the plan is in good working order, and how the crew conforms to plan standards in performing actual loading and unloading operations. Violations of our DCR regulations are subject to the criminal and civil penalties described in 33 CFR 151.04 and could include seizure of a vessel found to be in violation.

Limestone and clean stone. The advocacy alliance and one industry association commented on the SNPRM's proposals for new restrictions on discharges of limestone or clean stone DCR within 3 miles of shore. The alliance said they see the new restrictions "as a major improvement to the interim rule." The association said the new restrictions will impede some operations, "specifically in situations where the vessel must unload a cargo of stone, then load a different cargo in the same port or at a nearby port." The association said these restrictions are unnecessary because limestone or clean stone DCR discharges do not deposit an appreciable quantity of stone over the lake bed, and therefore "it is difficult to believe that it would create a mussel breeding ground."

We disagree that limestone and clean stone discharges do not deposit an appreciable quantity of stone over the lake bed. Observations conducted for this final rule's FEIS revealed that under current regulations, the discharge of limestone and clean stone DCR can occur while vessels are stationary at loading and unloading docks. According to the FEIS, multiple discharges of stone at port and in near shore areas could

create as much as one inch per year of DCR accumulation on the lake floor, which would completely alter the existing sediment's physical structure and potentially affect the ecosystems at the bottom of the lake. Thus, in port and near shore areas, stone DCR deposition could have a significant, long-term, and cumulative impact on sediment structure. Furthermore, in port and near shore areas, limestone and clean stone discharges could create an optimum habitat for invasive mussels. In these shallow waters, which the mussels prefer, depositing bottom substrate that is stone over the native soft bottom sediments creates an optimum anchoring medium for the invasive mussels. In summary, all of the predicted "significant" environmental impacts delineated in our FEIS are the result of limestone and clean stone DCR discharge in port and near shore areas. For this reason, the final rule generally prohibits limestone and clean stone DCR discharges within 3 miles of shore.

Specific regulatory language. One industry association objected to the SNPRM's proposed wording of 33 CFR 151.66(b)(5)(viii). The association said that requiring a vessel's DCR management plan to include the "procedures used and the vessel's operating conditions to be maintained during any unavoidable discharge of bulk dry cargo residue into the Great Lakes" implies that DCR discharge is prohibited, "when in fact the expectation of the rule is that the discharge" need only be minimized. Our final rule retains the SNPRM's language. As other industry associations have commented persuasively, industry has a profit motive not to discharge DCR. Our expectation, therefore, is that it would be illogical, as well as illegal, for vessels to discharge DCR except when doing so is operationally "unavoidable."

## V. Discussion of Final Rule

The context in which we developed this rule. We stated in the interim rule that, before taking final action in this rulemaking, we would “determine if, in the long term, the optimal balancing of commercial and environmental interests requires the mandatory use of DCR control measures, the adjustment of the geographical boundaries within which those discharges are currently allowed, or other regulatory changes.” 73 FR at 56495, col. 2.

To help us achieve that long-term balance, we analyzed the DCR discharge records reported to us in accordance with the interim rule. This helped us describe and quantify DCR discharges, and to determine what control measures were common and effective in controlling DCR discharges. This information is available in the appendices to this final rule’s FEIS. We also observed Great Lakes dry cargo operations firsthand. During the 2009 and 2010 shipping seasons, we visited vessels and facilities in the region, and observed cargo loading and unloading and DCR discharge operations. This enabled us to gather DCR data using a known consistent set of metrics and a process that was completely independent of any used by vessel owners or operators to complete and submit their DCR discharge reports.

From this analysis and observation, we drew the following conclusions:

There is significant variation in the amount of DCR that vessels discharge; a finding that is supported by results reported by the regulated industry. However, most vessels appear to be minimizing the volume of DCR they discharge. They treat their cargo as a commodity to be conserved and not wasted. They deal with shoreside facilities that take the same practical view. These vessels and facilities use best practices to prevent cargo spillage in the first place, and to clean it up when it occurs. Most best

practices are simple, intuitive, and cost little: for example, lining conveyor belts with fabric skirts, communicating with the shoreside facility to shut down loading chutes while moving from one hold to the next, and using brooms and shovels to clean up DCR and return it to the hold before the hold is sealed.

Deck spillage is a relatively minor source of DCR, and easily addressed through simple measures. By far, the greater source of DCR is from cargo hold spillage into vessel tunnels. Tunnel spillage occurs predominantly during cargo unloading.

Within tunnels, large pieces of DCR that remain after unloading should be easy to recover while the vessel is underway, and to place on the conveyor belt with the rest of the cargo during the vessel's next unloading. Dust and small particles, however, inevitably make their way into the vessel's sump water. The sump must be pumped periodically, to preserve the vessel's trim and stability. Sump pumping can take several hours. If performed shoreside, under some conditions the pumping could delay the vessel, increasing its operating costs and making it more economically rational to perform sump pumping while the vessel is underway, though this would likely result in sump discharges being the main contributor to DCR discharges in the Great Lakes.

Our final rule makes the following four general changes to the current interim rule, all of which are supported by the final rule's FEIS, and otherwise finalizes the interim rule. The rule also revises the definitions of "commercial vessel" and "mile" to provide greater clarity.

First, we require the volume of DCR discharges to be minimized. Except for a new, objectively verifiable, "broom clean" standard applying to decks, discharge minimization will be achieved through methods of the vessel owner or operator's choice.

“Broom clean” is defined in 33 CFR 151.66(b)(2) as a condition in which deck residues “consist only of dust, powder, or isolated and random pieces, none of which exceeds 1 inch in diameter.” “Minimization” is also defined, as the “reduction, to the greatest extent practicable, of any bulk dry cargo residue discharge from the vessel.” Reinforcing the concept of minimization, we also redefine “bulk cargo residues” to emphasize that DCR can exist “regardless of particle size.”

Second, we require discharge minimization methods to be documented in a vessel-specific DCR management plan, which is a written plan, subject to Coast Guard inspection, meeting at least the minimum criteria we describe in 33 CFR 151.66(b)(5).

Third, limestone and clean stone DCR discharges are no longer permitted within 3 miles of shore. In the Western Basin of Lake Erie, we provide an exception within the dredged navigation channel between Toledo Harbor Light and the Detroit River Light. This is the only section of the Great Lakes where known Lake carrier track lines for limestone and clean stone transport vessels do not extend more than 3 miles from land and the discharge of stone DCR in the dredged channel would not adversely affect native sediments or underwater life.

Fourth, one year after the remainder of the final rule takes effect, we will remove the requirements of 33 CFR 151.66(c) to record cargo loading and unloading operations and DCR discharge data on a Coast Guard form and to submit copies of those forms to us once each quarter.

Minimization and the DCR management plan. The final rule requires U.S. and foreign carriers conducting bulk dry cargo operations on the Great Lakes to minimize the amount of cargo residue discharged into the Great Lakes. Except for the new broom

clean standard, our focus will be on discharge minimization, not on minimizing DCR. Nor will we require vessels to eliminate DCR discharges because we continue to believe, as we did when we issued the interim rule, that a “zero discharge” requirement would be more costly than necessary to protect the environment against adverse impacts, and because the adverse impacts that can be associated with DCR discharges are only minor and indirect. Nevertheless, the elimination of DCR discharges remains the ideal outcome, and we expect vessels to come as close to that ideal as practicable, given current industry standard practices for vessels of “comparable characteristics, cargoes, and operations”—a term we define in 33 CFR 151.66(b)(2) as meaning “similar vessel design, size, age, crew complement, cargoes, operational routes, deck and hold configuration, and fixed cargo transfer equipment configuration.”

Discharge minimization includes keeping the vessel’s deck in broom clean condition. All vessels should be able to achieve the broom clean standard on deck, by sweeping spilled cargo back into holds before they are sealed, if not by some other method. However, as noted, deck DCR only accounts for a relatively small proportion of overall DCR discharges. For the more significant tunnel sump discharges, it is not possible for us to define a similar standard that could be applied to all vessels. We believe that the degree of minimization that will be practicable for those discharges will depend on the variables of a vessel’s characteristics, cargoes, and operations, and on the technology or procedures used to compensate for those variables.

Rather than mandating the use of specific procedures or technologies that may be ineffective or impracticable for some vessels, each vessel’s owner or operator will select the method or methods best suited for minimizing that vessel’s DCR discharges. We

believe that the great majority of vessels affected by the final rule are already effectively minimizing those discharges. However, by making minimization a regulatory requirement, we level the playing field to ensure that all affected vessels engage in responsible discharge minimization practices.

The requirement for each vessel to carry its own vessel-specific DCR management plan on board, and to have that plan available for inspection, is central to the enforceability of a discharge minimization requirement.

Coast Guard inspectors will enforce discharge minimization by making sure that the vessel has a DCR management plan on board, that the plan is complete and addresses all required items, and that the master or PIC ensures that the vessel and its crew operate according to the plan. The Coast Guard can infer the vessel's failure to minimize discharges from evidence such as:

- A missing plan;
- A plan that fails to address obvious DCR situations on the vessel that raise the probability of an eventual DCR discharge, such as obvious DCR buildup in the vessel's tunnels;
- Discharge minimization equipment that is called for in the plan but is not present on the vessel or is not maintained or operating properly; or
- A crewmember's inability to perform a discharge-minimization task for which the plan makes the crewmember responsible.

To ensure that the vessel's owner and operator exercise due diligence in writing the management plan, we require the plan to describe:

- The equipment and procedures the vessel uses to minimize cargo spillage during loading and unloading;
- The equipment and procedures the vessel uses to recover spilled cargo and place it in holds or on unloading conveyances;
- How the owner or operator ensures crew familiarity with management plan procedures;
- Who has onboard responsibility for the vessel's discharge minimization procedures;
- What arrangements, if any, the vessel has with specific ports or cargo terminals for unloading and disposing of the vessel's DCR ashore; and
- How unavoidable DCR discharges will be conducted.

Our regulatory focus has been, and remains, on the vessels that carry bulk dry cargo—even though shoreside cargo loading and unloading facilities undoubtedly play a role in creating, or limiting the creation of, the shipboard DCR that is eventually discharged into the Great Lakes. Focusing on vessels makes sense because Coast Guard's inspectors are specifically trained and equipped to inspect vessels and not shoreside facilities. We expect each vessel's DCR management plan to describe how the vessel works with shoreside facilities to facilitate the vessel's compliance with the requirements of 33 CFR 151.66.

Another important aspect of the management plan requirement is that the plan must be revised whenever there is a substantive change to the procedures or to the equipment the vessel uses to manage dry cargo residues. Although regular or periodic revisions of the management plan are not required under this rule, vessel owners must

maintain the plan in a manner that assures it accurately reflects the current procedures, practices, and technology employed in managing DCR on the vessel.

We expect that industry standard practices for the management of dry cargo residue will evolve as existing dry cargo conveyance technologies are supplanted by those that are more efficient, effective, and reliable. “Industry standard practices” are specifically defined in 33 CFR 151.66(b)(2) and include practices for installation, maintenance, operation, training, and supervision relating to bulk dry cargo transfer and DCR control measures. A primary premise of this rule is that a vessel owner or operator will employ dry cargo residue management practices that are on par with the current industry standard for vessels of comparable characteristics, cargoes, and operations. “Comparable characteristics, cargoes, and operations” is defined in 33 CFR 151.66 (b)(2) as meaning “similar vessel design, size, age, crew complement, cargoes, operational routes, deck and hold configuration, and fixed cargo transfer equipment configuration.” A vessel’s compliance with this requirement of the rule will be determined in part by how well the vessel’s DCR management practices, as outlined in its management plan, compare with the current industry standard practices employed by the majority of vessels with comparable characteristics, cargoes, and operations. If, for example, a vessel’s plan continues to rely on technology or procedures that have been supplanted by more recent, affordable, and easily implemented industry standard practices, a Coast Guard inspector can consider this as evidence of failure to maintain the plan, failure to minimize DCR discharges, or both.

Limestone and clean stone. While we retain the interim rule’s approach toward the discharge of DCR in general, we are tightening restrictions on limestone and clean

stone DCR discharges. For most substances, DCR discharges have been and remain subject to several geographic limitations, including a flat prohibition on discharges within a certain distance from shore and in special protected areas. For limestone and clean stone, however, the interim rule continued the prior policy, which allowed DCR from limestone and clean stone to be discharged close to shore, except where the nearest shore is in a special protected area or where the discharge would have an “apparent impact” on wetlands, fish spawning areas, or potable water intakes. We believe this standard is too subjective and that it could be difficult for vessel crews to determine whether or not a stone DCR discharge will have an apparent impact on the local environment. Therefore, we are making limestone and clean stone DCR discharges subject to the same 3-mile restriction we impose on other DCR discharges. Our 2009 and 2010 field research and the interim rule’s FEIS indicated that limestone and clean stone vessels already avoid DCR discharges within 3 miles of shore because of near-shore operational hazards. Thus, those vessels should not incur any additional costs from the extension of the exclusion zone. (We will preserve the existing exception for a limited portion of Lake Erie’s Western Basin because some vessels carrying limestone or clean stone never leave that area, and if such a vessel wanted to discharge DCR, it could be unusually and adversely affected by a complete prohibition on DCR discharges in the area.) This change ensures that near-shore wetlands, fish spawning areas, and potable water intakes within the entire Great Lakes ecosystem are protected from DCR discharges, and it simplifies understanding and compliance with the rule for the regulated industry. It should also mitigate an environmental impact identified in the interim rule’s FEIS; that is,

possible changes in the physical structure of the lake bottom sediment, which may cause a less than 10 percent increase in zebra and quagga mussels' attachment rates.

Recordkeeping and reporting. We are retaining the interim rule's requirement, in 33 CFR 151.66(c), for vessels to keep detailed records of their bulk dry cargo loading and unloading operations and their DCR discharges. However, effective [INSERT DATE 13 MONTHS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], we will relax the interim rule's requirement in section 151.66(c)(3)(iv), for these records to be kept on Coast Guard Form CG-33, and for copies of the records to be submitted to the Coast Guard on a quarterly basis. Our SNPRM, 77 FR at 44531, col. 1, stated that “[w]e lack sufficient information to remove the reporting requirement at this time.” Form CG-33 greatly facilitated our research in preparation for issuing this final rule, but we have since concluded that while reporting on Form CG-33 may have value in monitoring the first year of operation under the final rule, after that time it will no longer be necessary to use Form CG-33, and no longer necessary to submit reports. This should reduce industry's recordkeeping and reporting burden. We have also concluded that we have good cause to relieve this burden without additional public notice or opportunity to comment, because after the first year of operation under the final rule it will be unnecessary and contrary to the public interest, within the meaning of 5 U.S.C. 553, to impose that burden.

## VI. Regulatory Analyses

We developed this rule after considering numerous statutes and executive orders related to rulemaking. Below we summarize our analyses based on these statutes or executive orders.

A. Regulatory Planning and Review

Executive Orders (E.O.s) 12866 ("Regulatory Planning and Review") and 13563 ("Improving Regulation and Regulatory Review") direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility.

This rule is not a significant regulatory action under section 3(f) of E.O. 12866 as supplemented by E.O. 13563 and does not require an assessment of potential costs and benefits under section 6(a)(3) of E.O. 12866. The Office of Management and Budget (OMB) has not reviewed it under E.O.12866. Nonetheless, we developed an analysis of the costs and benefits of the rule to ascertain its probable impacts on industry. A final Regulatory Assessment follows:

We received public comments related to this rulemaking, which are summarized in part IV of this preamble. There was one comment addressing the possible costs incurred by vessels due to port delays in order to perform the broom clean standard. As mentioned in part IV, we observed the loading and unloading practices of vessels operating on the Great Lakes, and found their practice is to maintain a clear deck as loading or unloading operations are taking place. Therefore, we do not anticipate vessels having to be burdened with an additional \$2,000 (as stated by the commenter) to perform broom cleaning at dockside.

The final rule will require vessels to minimize their DCR discharges, to document their DCR minimization methods, and to observe new restrictions on limestone and clean stone DCR discharges.

Table 1 compares components of the interim rule (the baseline used for this rulemaking) and the final rule. It summarizes any changes in the component that will be in effect in this final rule.

Table 1—No-Action (IR) and Preferred Alternative Comparison Summary

Provision Description	IR Provision	IR Provision Synopsis	Final Rule Provision	Final Rule Provision Synopsis	Change from IR to Final Rule
Recordkeeping	33 CFR 151.66 (c)(1)(iv)	Vessels must record all DCR loading, unloading, and sweeping on Form CG-33.	NA		Recordkeeping requirement would remain in place. However, after the first year of implementation, vessel operators will have the option of continuing to use Form CG-33. The industry would not incur any change in cost.
Reporting/ Certification	33 CFR 151.66 (c)(1)(iv)	The data collected are used to determine vessel practices in handling DCR, and the amount of DCR that is being managed by the vessels.	NA		Vessels will continue to certify and submit reports on a quarterly basis for 13 months after the publication of the final rule (no cost added to the rule). After the 13 month period, this requirement will be eliminated, thereby giving industry a cost saving.
Limestone and clean stone	33 CFR 151.66 (b)	Limestone and clean stone are exempt from the 3-mile near-shore sweeping boundary. Under the IR, these commodities can be discharged anywhere along the shoreline, provided there is no apparent impact on environmentally-sensitive areas.	33 CFR 151.66(b) (2)	Limestone and clean stone DCR discharges, under the final rule, would not be allowed within 3 miles of shore.	There would be a no-cost change; our research indicates that vessels already avoid DCR discharges within 3 miles of shore because of near-shore operational hazards.
Voluntary minimization	33 CFR 151.66 (b)	Vessels are encouraged to minimize the amount of DCR going into the water and the use of control measures to	NA	The portion of 33 CFR 151.66(b) in the IR dealing with voluntary minimization would be removed in the final rule.	There is no cost associated with the removal of this IR requirement. (See the management plan below for details on mandatory minimization.)

		reduce the amount of DCR falling on the decks and tunnels of vessels.			
Broom clean standard	NA		33 CFR 151.66 (b)(3)	This requirement stipulates that vessels must show that decks have been swept to a standard that is in keeping with the mandatory minimization requirement of this final rule.	Vessels would realize a new cost for this requirement. We anticipate that vessels would see an annual cost increase ranging from \$14,203 to \$53,263 (undiscounted). Foreign vessels would incur an average annual cost of \$28,847 (undiscounted). The benefit of this requirement is a reduction in the amount of discharge going into the waters of the Great Lakes.
Management plan	NA		33 CFR 151.66(b)(4)	The plan must describe the specific measures the vessel's crew employs to ensure the minimization of bulk DCR discharge.	The new requirement would have an initial year cost of \$24,777 (undiscounted) to prepare a management plan. After the initial year, existing U.S. vessels would not incur additional costs (within the 10-year period of analysis) from this new requirement. Foreign vessels would incur a first-year cost of \$17,340 and an annual cost of \$1,530 (all undiscounted) from this new requirement. This requirement would ensure that vessels are minimizing the amount of DCR going into the waters of the Great Lakes, and provide the Coast Guard with the means of policing DCR discharge.

Costs

The final rule has costs associated with having vessel owners and operators develop and maintain a management plan that describes the specific measures the vessel employs to ensure the minimization of bulk DCR discharges in the waters of the Great Lakes. The final rule will not impose any additional capital expenditures on the U.S. bulk dry cargo fleet operating exclusively on the Great Lakes, since we believe that vessels will use equipment already available on board their vessels to comply with this rule (for further information on specific measures currently being used, see FEIS).

We estimated the annualized costs of the final rule for the U.S. fleet to range from \$17,500 to \$56,298 (with a per vessel average cost of \$671), and the annualized costs to the foreign fleet to range from \$13,922 to \$48,697 (with a per-vessel average cost of \$368). All costs are estimated using a 7 percent discount rate. The following table summarizes the affected population of vessels, costs, and benefits of the rule. We also estimated an annualized cost saving of \$11,595 for the U.S. fleet and \$8,442 for the foreign fleet; both costs are reported at 7 percent discount.

Table 2–Summary of Affected Population, Costs and Benefits of the Final Rule

Affected Population	
U.S.	55 Vessels (14 owners)
Foreign	85 Vessels
Total	140 Vessels
Costs <sup>1</sup>	
U.S.	Annualized = \$17,500 - \$56,298 10 year = \$122,916 - \$395,413

Foreign	Annualized = \$13,922 - \$48,697 10 year = \$97,786 - \$342,029
Total	Annualized = \$31,423 - \$104,995 10 year = \$220,701 - \$737,444
Savings <sup>2</sup>	
U.S.	Annualized = \$11,959 9 year cost savings = \$83,992
Foreign	Annualized = \$8,442 9 year cost savings = \$59,295
Benefits	
Minimizing the amount of DCR discharged into the waters of the Great Lakes would improve the aquatic environment	
Promotion of environmental stewardship among owners and operators	

1. Costs are presented as ranges and estimated using a 7 percent discount rate.

2. Savings do not occur until 13 months after the publication of the final rule.

The final rule will require all vessels loading or unloading bulk dry cargo at ports within the U.S. waters of the Great Lakes, and each U.S. bulk dry cargo vessel operating anywhere on the Great Lakes, to have a management plan on board and available for Coast Guard inspection that describes the specific measures the vessel employs to minimize DCR discharges. Foreign vessels greater than 400 GT can meet the management plan requirement under this final rule because they are required to meet the similar waste management plan requirement in Annex V of the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78). However, since Annex V of MARPOL 73/78 does not cover all of the requirements in 33 CFR 151.66(b)(4), foreign vessels would be required to address any additional management plan requirements under this final rule.

We estimate that the final rule will affect 14 entities that currently manage the 55 U.S. dry bulk carrier vessels, and 85 foreign dry bulk carrier vessels (70 Canadian and 15 non-Canadian) operating within U.S. jurisdictional waters of the Great Lakes in any given year. We anticipate that the controlling entities of U.S. vessels would write the management plans. We assume that a management plan for a foreign vessel operating in the U.S. waters of the Great Lakes would be written by the vessel master.

We estimate the affected population of foreign dry bulk carriers to be 85 vessels based on the data obtained from reporting requirements established by the 2009 interim rule. We originally estimated the foreign vessel population to be 219 vessels for the 2008 NPRM and the 2009 interim rule. Our revised estimate of the foreign vessel population is based on recent data on foreign vessel dry cargo operations that was not available for the NPRM or the interim rule publications.

To maintain consistency with the cost methodology used in the interim rule, we continue to use Coast Guard reimbursable standard rates found in COMMANDANT INSTRUCTION 7310.1M (“COMDTINST”) to analyze the changes in wages for this rulemaking.<sup>1</sup> We have verified that the wages found in the COMDTINST are comparable to the loaded wages found in the Bureau of Labor Statistics. Therefore, that comparison between the interim rule and the final rule is straightforward.

---

<sup>1</sup> COMMANDANT INSTRUCTION 7310.1M, “COAST GUARD REIMBURSABLE STANDARD RATES”, Feb. 28, 2011, [http://www.uscg.mil/directives/ci/7000-7999/CI\\_7310\\_1M.PDF](http://www.uscg.mil/directives/ci/7000-7999/CI_7310_1M.PDF) (begins on page 3).

Table 3 shows estimated costs for developing the management plan required by 33 CFR 151.66(b)(4) and for having a hard copy of the plan on board and available for Coast Guard inspection.

Table 3—Cost of Company Development of a Management Plan (non–discounted)

33 CFR 151.66 (b)(4)	Developer Rating	Labor Rate (loaded)	Time in Hours	Cost per Plan	Number of Plans	Total Initial Cost	Recurring Cost
<b>U.S.</b>							
Company management plan	GS-12	\$69	25	\$1,725	14	\$24,150	
Cost of copies	GS-3	\$28	.05	\$11.40 <sup>a</sup>	55	\$627	
<b>Foreign</b>							
Canadian vessels	O-6	\$136	1.5 <sup>b</sup>	\$204	70	\$14,280	
Non-Canadian foreign vessels	O-6	\$136	1.5 <sup>b</sup>	\$204	15	\$3,060	\$1,530 <sup>c</sup>
<b>Total</b>						<b>\$42,117</b>	<b>\$1,530</b>

Note: Values may not total due to rounding

(a) Assumes that companies would spend \$10 on supplies for each copy of the management plan. The \$10 is added to the labor and time estimated to be \$1.40 (\$28 \* 0.05 hrs), therefore the total cost of copies per plan is \$11.40.

(b) We assume that foreign vessels greater than 400 GT would develop a modified management plan, since foreign vessels greater than 400 GT are required to have a waste management plan in accordance with Annex V of MARPOL 73/78. Therefore, the time required by foreign vessels greater than 400 GT to develop a management plan would be less than the time estimated for the U.S. fleet. Time required for foreign vessels developing a management plan was provided by the USCG Environmental Standards Division.

(c) The recurring cost of the management plan is only for half of the non-Canadian foreign vessels entering the Great Lakes in any given year. We anticipate that half the number of these vessels would return the following year, while the other half would be new visitors to the Great Lakes.

In addition to the management plan, the final rule will require that the deck be maintained in a broom clean condition whenever a vessel is in transit (33 CFR 151.66(b)(4)). We assume for the purpose of this regulatory analysis that an AB would be tasked with maintaining the broom clean standard as required under this rule during loading and unloading operations, to the best of the AB’s abilities under current vessel conditions. The requirement is intended to ensure that vessels are active in reducing the amount of DCR going into the waters of the Great Lakes. We

do not expect that vessels would need to purchase additional brooms, shovels, etc., since these items are standard equipment on those vessels.

In order to determine the cost of maintaining decks in broom clean condition, we established that the surface area requiring broom cleaning would be those areas around the cargo hatches. During a site visit to the Great Lakes to observe vessel loading and unloading operations, we recorded the number of hatches for each vessel visited. We extrapolated the observed data to obtain an estimated number of total hatches for the Great Lakes bulk dry cargo fleet. We estimated the total number of hatches for the 55 U.S. vessels to be 1,169, while the total number of hatches for the 70 Canadian and 15 non-Canadian foreign vessels was estimated at 1,672. We estimate that 15 to 56 percent of the hatches would be affected by the broom clean standard after every loading and unloading event, and that it would take an AB three minutes per hatch (at a wage rate of \$27 per hour) to meet the broom clean standard. Table 4 shows the annual estimated cost to the U.S. fleet for maintaining the broom clean standard. The cost range for this requirement is \$14,203 to \$53,001 (undiscounted). Costs are based on all vessels making an average of 60 trips per year<sup>2</sup>.

Table 4—U.S. Fleet Cost for Meeting the Broom Clean Standard

33 CFR 151.66 (b)(3)	Crew- member	Labor Rate	Time Req'd (%/Hr)	Total No. of Fleet Hatches	% of Hatches Swept	% Vessels Broom Clean	Avg No. of Trips/ Yr.	No. of Crew	Total Hrs /Yr.	Total Cost
Broom Clean	Deckhand (AB)	\$27	0.05	1,169	15%	100%	60	1	526	\$14,203

<sup>2</sup> Annual vessel trip information comes from the DEIS.

(Low)										
Broom Clean (High)	Deckhand (AB)	\$27	0.05	1,169	56%	100%	60	1	1,963	\$53,001

Note: Values may not total due to rounding

The cost to Canadian and non-Canadian foreign vessels is shown in Tables 5(a) and (b). The combined cost of the broom clean standard for foreign vessels is estimated to range from \$69 to \$45,247 (undiscounted). Costs are based on Canadian vessels making an average of 45 trips per year and non-Canadian foreign vessels averaging only one trip per year.

Table 5(a)—Canadian fleet cost for meeting the Broom Clean Standard

33 CFR 151.66 (b)(3)	Crew Member	Labor Rate	Time Req'd (%/Hr)	Total No. of Fleet Hatches	% of Hatches Swept	% Vessels Broom Clean	Avg No. of Trips/ Yr.	No. of Crew	Total Hrs /Yr.	Total Cost
Broom Clean (Low)	Deckhand (AB)	\$27	0.05	1,330	15%	100%	45	1	449	\$12,120
Broom Clean (High)	Deckhand (AB)	\$27	0.05	1,330	56%	100%	45	1	1676	\$45,247

Note: Values may not total due to rounding

Table 5(b)—Non-Canadian Foreign Fleet Cost for Meeting the Broom Clean Standard

33 CFR 151.66 (b)(3)	Crew member	Labor Rate	Time Req'd (%/Hr)	Total No. of Fleet Hatches	% of Hatches Swept	% Vessels Broom Clean	Avg No. of Trips/ Yr.	No. of Crew	Total Hrs /Yr.	Total Cost
Broom Clean (Low)	Deckhand (AB)	\$27	0.05	342	15%	100%	1	1	3	\$69
Broom Clean (High)	Deckhand (AB)	\$27	0.05	342	56%	100%	1	1	10	\$259

Note: Values may not total due to rounding

The cost of complying with the management plan and broom clean requirements for the U.S. fleet is estimated to have a first-year cost range of \$38,982 to \$77,778 (undiscounted) and recurring annual costs ranging from \$14,203 to

\$53,001 (undiscounted). Table 6 shows the U.S. fleet cost estimate for the 10-year period of analysis.

Table 6—U.S. Vessels High and Low Cost Estimates

Year	High Cost Estimate			Low Cost Estimate		
	Undiscounted	3%	7%	Undiscounted	3%	7%
1	\$77,778	\$75,513	\$72,690	\$38,982	\$37,846	\$36,432
2	\$53,001	\$49,959	\$46,293	\$14,203	\$13,388	\$12,406
3	\$53,001	\$48,503	\$43,265	\$14,203	\$12,998	\$11,594
4	\$53,001	\$47,091	\$40,434	\$14,203	\$12,619	\$10,836
5	\$53,001	\$45,719	\$37,789	\$14,203	\$12,252	\$10,127
6	\$53,001	\$44,388	\$35,317	\$14,203	\$11,895	\$9,464
7	\$53,001	\$43,095	\$33,006	\$14,203	\$11,549	\$8,845
8	\$53,001	\$41,839	\$30,847	\$14,203	\$11,212	\$8,266
9	\$53,001	\$40,621	\$28,829	\$14,203	\$10,886	\$7,726
10	\$53,001	\$39,438	\$26,943	\$14,203	\$10,569	\$7,220
<b>Total Cost</b>	<b>\$554,787</b>	<b>\$476,165</b>	<b>\$395,413</b>	<b>\$166,812</b>	<b>\$145,214</b>	<b>\$122,916</b>
<b>Annualized Cost</b>		<b>\$55,821</b>	<b>\$56,298</b>		<b>17,024</b>	<b>\$17,500</b>

Note: Values may not total due to rounding

In addition, we estimate that foreign vessels would incur a first-year cost that ranges from \$15,249 to \$59,527 (undiscounted). All foreign vessels would incur an annual cost due to the broom clean standard; however, half of the 15 non-Canadian foreign vessels entering the U.S. waters of the Great Lakes would be anticipated to incur an additional cost for developing a management plan since the same non-Canadian foreign vessel is not expected to make the same trip every year. We estimate the recurring cost of all foreign vessels to range from \$13,719 to \$47,035 (undiscounted). Table 7 shows the U.S. fleet cost estimate for the 10-year period of analysis.

Table 7—Foreign Vessels High and Low Cost Estimates

Year	High Cost Estimate			Low Cost Estimate		
	Undiscounted	3%	7%	Undiscounted	3%	7%
1	\$59,527	\$57,793	\$55,632	\$15,249	\$14,805	\$14,251
2	\$47,035	\$44,335	\$41,082	\$13,719	\$12,391	\$11,983
3	\$47,035	\$43,044	\$38,395	\$13,719	\$12,555	\$11,199
4	\$47,035	\$41,790	\$35,883	\$13,719	\$12,189	\$10,466
5	\$47,035	\$40,573	\$33,535	\$13,719	\$11,834	\$9,781
6	\$47,035	\$39,391	\$31,342	\$13,719	\$11,489	\$9,141
7	\$47,035	\$38,244	\$29,291	\$13,719	\$11,155	\$8,543
8	\$47,035	\$37,130	\$27,375	\$13,719	\$10,830	\$7,985
9	\$47,035	\$36,049	\$25,584	\$13,719	\$10,514	\$7,462
10	\$47,035	\$34,999	\$23,910	\$13,719	\$10,208	\$6,974
<b>Total Cost</b>	<b>\$482,843</b>	<b>\$413,347</b>	<b>\$342,029</b>	<b>\$138,719</b>	<b>\$118,510</b>	<b>\$97,786</b>
<b>Annualized Cost</b>		<b>\$48,457</b>	<b>\$48,697</b>		<b>\$13,893</b>	<b>\$13,922</b>

Note: Values may not total due to rounding

The final rule will also prohibit all near-shore limestone and clean stone DCR discharges, except in the Western Basin of Lake Erie. Our research found that vessels carrying limestone and clean stone already avoid DCR discharges within 3 miles of shore because of near-shore operational hazards. Therefore, the prohibition of these discharges will not incur any additional cost to the fleet.

### Savings

The costs estimated in the final rule will be offset by eliminating (13 months after the publication of the final rule) the requirement for vessel owners or operators to submit a master-certified report to the Coast Guard on a quarterly basis. The submission of the reports was a temporary requirement that provided needed information throughout the rulemaking process. Now that the final rule is being

published, there is no need to continue having vessel owners or operators submit these documents to the Coast Guard. However, information regarding DCR discharge will still be maintained on board all vessels as part of the recordkeeping requirement. In addition, the vessel owner or operator will have the option of using or not using Form CG-33 to record DCR discharges.

We estimated an annual savings to the U.S. fleet at \$13,794 (undiscounted), and a foreign savings of \$9,738 (undiscounted). The total 9-year<sup>3</sup> savings for the U.S. fleet is estimated at \$83,992 and foreign at \$59,295, both discounted at 7 percent. The annualized savings for the U.S. fleet and foreign fleet is estimated at \$11,959 and \$8,442 respectively; both are discounted at 7 percent. Table 8 shows anticipated savings for both U.S. and foreign fleets.

Table 8—Anticipated Savings for U.S. and Foreign Fleet

Year	U.S. Flag Fleet			Foreign Flag Fleet		
	Undiscounted	3%	7%	Undiscounted	3%	7%
1	\$-	\$-	\$-	\$-	\$-	\$-
2	\$13,794	\$13,002	\$12,048	\$9,738	\$9,179	\$8,506
3	\$13,794	\$12,623	\$11,260	\$9,738	\$8,912	\$7,949
4	\$13,794	\$12,256	\$10,523	\$9,738	\$8,652	\$7,429
5	\$13,794	\$11,899	\$9,835	\$9,738	\$8,400	\$6,943
6	\$13,794	\$11,552	\$9,192	\$9,738	\$8,155	\$6,489
7	\$13,794	\$11,216	\$8,590	\$9,738	\$7,918	\$6,064
8	\$13,794	\$10,889	\$8,028	\$9,738	\$7,687	\$5,668
9	\$13,794	\$10,572	\$7,503	\$9,738	\$7,463	\$5,297
10	\$13,794	\$10,264	\$7,012	\$9,738	\$7,246	\$4,950
Total	<b>\$124,146</b>	<b>\$104,273</b>	<b>\$83,992</b>	<b>\$87,642</b>	<b>\$73,613</b>	<b>\$59,295</b>
Annualized		<b>\$12,224</b>	<b>\$11,959</b>		<b>\$8,630</b>	<b>\$8,442</b>

<sup>3</sup> The decision to remove the requirement for submitting DCR discharge reports to the Coast Guard (13 months after the publication of this rule), causes the estimated industry saving to start in year 2. Hence, estimated cost savings are done using a 9-year estimate with the exception of the annualized cost which is taken over a 10-year period of analysis. Annualized savings uses a 10-year approach to appropriately measure total effective cost of this rulemaking on industry.

We estimate total annualized cost to industry (U.S. and foreign) of the final rule to be \$9,206 to \$66,551, and the total discounted 10-year costs to industry to be \$64,656 to \$467,427 (values discounted at 7 percent). We do not expect that there will be additional government costs required to implement the changes from this final rule.

### Benefits

We examined the benefits of the rule and concluded that the benefits are qualitative. The requirement of the management plan causes all vessel owners and operators to become more active in preserving the Great Lakes' aquatic environment. The final rule sets a performance standard that allows the industry to determine its most efficient methods to minimize DCR discharges.

We anticipate that the final rule will change the current industry behavior of discharging DCR into the waters of the Great Lakes. The requirement for vessels to have and follow DCR management plans should increase overall compliance levels with today's industry best practices for preventing or minimizing DCR discharges. In enforcing the DCR management plan requirement, the Coast Guard will be able to consider how well a vessel's plan reflects then-current industry standard practices. This will ensure that if, over time, there is an improvement in most vessels' ability to manage DCR, all vessels will be measured against the improved standard. Although our environmental analysis has shown only minor and indirect adverse environmental impacts from DCR discharges, we assume that any reduction in those impacts will provide at least a qualitative benefit. In addition, the vessel owners and operators

themselves could realize efficiency gains from maintaining and gradually improving their DCR management practices. The final rule will not impose a rigid prescriptive standard, but will give the industry the flexibility to develop vessel-specific performance standards that achieve the regulatory objectives in the most cost-effective way.

### Alternatives

Alternative 1—no action. This alternative would simply keep the current DCR interim rule in place. We have re-evaluated the interim rule and concluded that our final rule will do more to minimize the volume of DCR discharge going into the waters of the Great Lakes and reduce the interim rule’s regulatory costs. Therefore, we reject this alternative.

Alternative 2—modified regulations with DCR management plan requirement. This is the preferred alternative described in this final rule and evaluated here.

Alternative 3—baseline control measures. This alternative would enforce the existing DCR management baseline. Each vessel would be required to maintain its current practices or equipment for managing DCR. We closely evaluated this alternative, but rejected it because over time a vessel’s baseline operational equipment will wear out and need replacement. Also, it would be difficult for inspectors to gauge how well the replacement equipment replicates the operational state attained by the original equipment. Moreover, this alternative provides inferior environmental protection by locking vessels into today’s baseline. By contrast, the

preferred alternative assumes that DCR management practices and technology will improve over time, and we want the regulatory compliance of vessels in the future to be measured against the best practices and technology then available, and not against today’s baseline, which we assume will represent a lower level of DCR management capability.

B. Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601-612), we have considered whether this rule would have a significant economic impact on a substantial number of small entities. The term “small entities” comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

The Coast Guard analysis did not find any non-profit or governmental small entities. However, we did find nine small entities affected by this rule classified under one of the following North American Industry Classification System (NAICS) 6-digit codes for water transportation. We have provided a summary table with all NAICS codes impacted by this rulemaking with a description of the NAICS codes and what constitutes a small business as per the U.S. Small Business Administration’s (SBA) guidelines .

Table 9—Summary of SBA Small Business Standards by NAICS Codes

NAICS Codes	Descriptions	Small Business by Revenue	Small Business by Employee
238910	Site Preparation Constructor	\$14 million	
483113	Coastal and Great Lakes Freight Transportation		500
484110	General Freight Trucking Local	\$25 million	
487210	Scenic & Sightseeing Transportation Water	\$7 million	

483212	Inland Water Passenger Transportation		500
483211	Inland Water Freight		500

According to the SBA’s size standards, a U.S. company classified under one of the above mentioned NAICS codes with annual revenues not to exceed, as indicated in Table 9, \$14 million, \$25 million, and \$7 million respectively, and have fewer than 500 employees is considered a small business. We estimate the cost of this final rule to be less than 1 percent of revenue for 100 percent of the small entities for both initial and recurring costs. The average estimated annual costs per small entity complying with the final rule is \$4,797 discounted at 7 percent.

Therefore, the Coast Guard certifies under 5 U.S.C. 605(b) that this final rule will not have a significant economic impact on a substantial number of small entities.

C. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Public Law 104-121), we offered to assist small entities in understanding the rule so that they could better evaluate its effects on them and participate in the rulemaking. The Coast Guard will not retaliate against small entities that question or complain about this rule or any policy or action of the Coast Guard.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates

these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1-888-REG-FAIR (1-888-734-3247).

D. Collection of Information

The final rule calls for a revision to an existing collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501–3520). As defined in 5 CFR 1310.3(c), “collection of information” comprises reporting, recordkeeping, monitoring, posting, labeling, and other, similar actions. The title and description of the information collection, a description of those who must collect the information, and an estimate of the total annual burden follow. The estimate covers the time for reviewing instructions, searching existing sources of data, gathering and maintaining the data needed, and completing and reviewing the collection.

This rulemaking relates to an existing OMB–approved collection of information, 1658 – 0072, revisions for which are pending OMB approval.

OMB Control Number: 1625 – 0072.

TITLE: Waste Management Plans, Refuse Discharge Logs, Letters of Instruction for Certain Persons in Charge (PIC), and Great Lakes Dry Cargo Residue Recordkeeping.

SUMMARY OF THE COLLECTION OF INFORMATION:

The Information Collection Request (ICR) is a collection of recordkeeping requirements that documents management of waste on board vessels. It also requires that persons on non–inspected vessels must carry a letter verifying the credential of

the PIC, and that they have had instruction on the management of waste. Currently, the ICR covers waste management plans and refuse discharge logs for MARPOL 73/78 from ships' letters of instruction for certain PIC and the DCR recordkeeping.

This rule deals with section D of the current ICR, which addresses all dry bulk carrier vessels (foreign and domestic) operating on the Great Lakes. Under the interim rule, this population is required to report DCR quantities and the location of discharges into U.S. waters of the Great Lakes, in accordance with 33 CFR 151.66(c). We used the information collected from these reports to analyze and determine how best to regulate vessels in handling/managing DCR. The rule will require U.S. and foreign vessels to develop and maintain a management plan that describes the specific measures the vessel employs to ensure the minimization of bulk DCR discharges.

**NEED FOR INFORMATION:** Since there is no uniformity as to the types of equipment used throughout the fleet, the management plan would provide a description of how the individual vessel ensures the minimization of DCR discharges.

**USE OF INFORMATION:** The information in the management plan would provide the Coast Guard with the means to monitor how individual operators are effectively managing and minimizing their DCR discharges. In addition, the management plan would be used by Coast Guard inspectors to enforce the minimization requirement.

**DESCRIPTION OF THE RESPONDENTS:** We estimate that all U.S. bulk dry cargo vessels operating anywhere in the Great Lakes, and foreign commercial

bulk dry cargo vessels operating on the U.S. waters of the Great Lakes, will be affected by the management plan requirement.

NUMBER OF RESPONDENTS: The management plan would have a total number of 99<sup>4</sup> (14 U.S. Firms + 70 Canadian vessels + 15 non-Canadian foreign vessels) respondents, which account for the total number of bulk dry cargo vessels operating on the waters of the Great Lakes in any given year.

FREQUENCY OF THE RESPONSE: All vessels carrying bulk dry cargo on the Great Lakes are required to develop a management plan. The frequency in the development of the management plan would be subject to vessels modifying their vessels and/or equipment. We do not anticipate vessels modifying or adding a major equipment during the 10-year period of this analysis. We therefore assume that the development of the management plan would occur once for U.S. and Canadian vessels. However, 50 percent of non-Canadian foreign vessels would be required to develop a management plan each year, since we estimate that this percentage of vessels would be entering the Great Lakes for the first time. Therefore, we estimate that in the first year there would be 140 (55 U.S. vessels + 70 Canadian vessels + 15 non-Canadian foreign vessels) total management plans developed by all bulk dry cargo vessels operating in U.S. waters, and 8 (rounded) reoccurring responses by non-Canadian foreign vessels.

---

<sup>4</sup> The number of foreign vessels affected has been updated (from the interim rule) due to information being provided to the Coast Guard by Form CG-33.

**BURDEN OF RESPONSE:** We estimate that there would be 55 management plans developed for the entire U.S. dry cargo vessel fleet operating on the Great Lakes, and that it would only affect the burden of response in the first year that the rule is in effect. The total estimated burden hours for the U.S. fleet is 352.75 (350 hours company section + 2.75 hours copies), at a cost to the fleet of \$24,150 (undiscounted). The total foreign vessel fleet would have a burden of response in the first year of 128 hours (1.5 hours for management plan x 85 vessels), at a cost of \$17,340 (undiscounted).

**ESTIMATE OF TOTAL ANNUAL BURDEN:** The rule will not have an annual cost burden for U.S. and Canadian vessels after the rule's first year of implementation (see "BURDEN OF RESPONSE," earlier in this final rule). After the first year, non-Canadian foreign vessels will incur an annual burden. We anticipate non-Canadian vessels will incur an annual burden of 11 hours for management plan development at a cost of \$1,530 (undiscounted).

After [INSERT DATE 13 MONTHS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], we will no longer require vessels to submit DCR discharge records to the Coast Guard each quarter, which will reduce the industry annual reporting burden by 18 hours.

As required by the Paperwork Reduction Act of 1995, we have submitted a copy of this rule to OMB for its review of the collection of information.

You need not respond to a collection of information unless it displays a currently valid control number from OMB. Before the Coast Guard can enforce the

collection of information requirements in this rule, OMB must approve the Coast Guard's request to collect this information.

E. Federalism

A rule has implications for federalism under E. O. 13132 ("Federalism") if it has a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this rule under E.O. 13132 and have determined that it does not have implications for federalism.

As we discussed at length in part V of this preamble, we received comments from several States in response to our interim rule and are aware that some agencies in some States bordering the Great Lakes disagree with the Coast Guard's approach to the discharge of DCR in those waters. We encourage all such States, and any of their agencies with a stake in the outcome of this rulemaking, to continue sharing their input with us. We believe neither the interim rule nor this final rule necessarily preempts or conflicts with State laws that may prohibit DCR discharges or impose conditions on those discharges that differ from those imposed by the Coast Guard. We do not take the position that such State laws facially frustrate an overriding Federal purpose. Until such time as a cognizant court rules to the contrary, we caution carriers that they must comply with all applicable Federal and State laws regulating DCR discharges. We encourage States to make us aware of laws they think are applicable. As we are so informed, we will share that information with the public by placing it in the docket for this rulemaking.

F. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531-1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Though this rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble

G. Taking of Private Property

This rule will not cause a taking of private property or otherwise have taking implications under E.O. 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

H. Civil Justice Reform

This rule meets applicable standards in sections 3(a) and 3(b)(2) of E.O. 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

I. Protection of Children

We have analyzed this rule under E.O. 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and will not create an environmental risk to health or risk to safety that might disproportionately affect children.

J. Indian Tribal Governments

This rule does not have tribal implications under E.O. 13175, Consultation and Coordination with Indian Tribal Governments, because it does not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. However, a group representing tribal interests requested consultation, and the Coast Guard agreed to brief that group on the rulemaking. The briefing is described in the docket (see docket item USCG-2004-19621-0182).

K. Energy Effects

We have analyzed this rule under E.O. 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use. We have determined that it is not a “significant energy action” under that order because it is not a “significant regulatory action” under E.O. 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

L. Technical Standards

The National Technology Transfer and Advancement Act (15 U.S.C. 272 note) directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through OMB, with an explanation of why using these standards would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted

by voluntary consensus standards bodies. This rule does not use technical standards.

Therefore, we did not consider the use of voluntary consensus standards.

M. Environment

We have analyzed this rule under Department of Homeland Security Management Directive 023-01 and Commandant Instruction M16475.ID, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (NEPA)(42 U.S.C. 4321-4370f). The FEIS and ROD appear in the docket.

List of Subjects in 33 CFR part 151

Administrative practice and procedure, Oil pollution, Penalties, Reporting and recordkeeping requirements, Water pollution control.

For the reasons discussed in the preamble, the Coast Guard amends 33 CFR part 151 as follows:

PART 151—VESSELS CARRYING OIL, NOXIOUS LIQUID SUBSTANCES, GARBAGE, MUNICIPAL OR COMMERCIAL WASTE, AND BALLAST WATER

1. The authority citation for part 151 continues to read as follows:

Authority: 33 U.S.C. 1321, 1902, 1903, 1908; 46 U.S.C. 6101; Pub. L. 104-227 (110 Stat. 3034); Pub. L. 108-293 (118 Stat. 1063), § 623; E.O. 12777, 3 CFR, 1991 Comp. p. 351; DHS Delegation No. 0170.1, sec. 2(77).

2. Revise § 151.66 to read as follows:

**§ 151.66 Operating requirements: Discharge of garbage in the Great Lakes and other navigable waters.**

(a) Except as otherwise provided in this section, no person on board any ship may discharge garbage into the navigable waters of the United States. Cleaning agents or additives contained in deck and external surface wash water may be discharged only if these substances are not harmful to the marine environment.

(b)(1) On the U.S. waters of the Great Lakes, commercial vessels may discharge bulk dry cargo residues in accordance with and subject to the conditions imposed by this paragraph.

(2) As used in this paragraph and in paragraph (c) of this section—

Apostle Islands National Lakeshore means the site on or near Lake Superior administered by the National Park Service, less Madeline Island, and including the Wisconsin shoreline of Bayfield Peninsula from the point of land at 46°57'19.7" N. 090°52'51.0"W southwest along the shoreline to a point of land at 46°52'56.4" N. 091°3'3.1"W.

Broom clean means a condition in which the vessel's deck shows that care has been taken to prevent or eliminate any visible concentration of bulk dry cargo residues, so that any remaining bulk dry cargo residues consist only of dust, powder, or isolated and random pieces, none of which exceeds 1 inch in diameter.

Bulk dry cargo residues means non-hazardous and non-toxic residues, regardless of particle size, of dry cargo carried in bulk, including limestone and other clean stone, iron ore, coal, salt, and cement. It does not include 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.

Caribou Island and Southwest Bank Protection Area means the area enclosed by rhumb lines connecting the following coordinates, beginning on the northernmost point and proceeding clockwise:

47°30.0'N 085°50.0'W

47°24.2'N 085°38.5'W

47°04.0'N 085°49.0'W

47°05.7'N 085°59.0'W

47°18.1'N 086°05.0'W.

Commercial vessel means a commercial vessel loading, unloading, or discharging bulk dry cargo in the U.S. waters of the Great Lakes, or a U.S. commercial vessel transporting bulk dry cargo and operating anywhere on the Great Lakes; but the term does not include a non-self-propelled barge unless it is part of an integrated tug and barge unit.

Comparable characteristics, cargoes, and operations means similar vessel design, size, age, crew complement, cargoes, operational routes, deck and hold configuration, and fixed cargo transfer equipment configuration.

Detroit River International Wildlife Refuge means the U.S. waters of the Detroit River bound by the area extending from the Michigan shore at the southern outlet of the Rouge River to 41°54.0' N., 083°06.0' W. along the U.S.-Canada boundary southward and clockwise connecting points:

42°02.0'N 083°08.0'W

41°54.0'N 083°06.0'W

41°50.0'N      083°10.0'W

41°44.52'N      083°22.0'W

41°44.19'N      083°27.0'W.

Dry cargo residue (or DCR) management plan means the plan required by paragraph (b)(5) of this section.

Grand Portage National Monument means the site on or near Lake Superior, administered by the National Park Service, from the southwest corner of the monument point of land at 47°57.521'N    089°41.245' W. to the northeast corner of the monument point of land, 47°57.888'N    089°40.725'W.

Indiana Dunes National Lakeshore means the site on or near Lake Michigan, administered by the National Park Service, from a point of land near Gary, Indiana at 41°42'59.4"N    086°54'59.9"W eastward along the shoreline to 41°37'08.8"N 087°17'18.8"W near Michigan City, Indiana.

Industry standard practices means practices that ensure the proper installation, maintenance, and operation of shipboard cargo transfer and DCR removal equipment, proper crew training in DCR minimization procedures and cargo transfer operations, and proper supervision of cargo transfer operations to minimize DCR accumulation on or in a commercial vessel.

Integrated tug and barge unit means any tug-barge combination which, through the use of special design features or a specially designed connection system, has increased sea-keeping capabilities relative to a tug and barge in the conventional pushing mode.

Isle Royale National Park means the site on or near Lake Superior, administered by the National Park Service, where the boundary includes any submerged lands within the territorial jurisdiction of the United States within 4 1/2 miles of the shoreline of Isle Royale and the surrounding islands, including Passage Island and Gull Island.

Mile means a statute mile.

Milwaukee Mid-Lake Special Protection Area means the area enclosed by rhumb lines connecting the following coordinates, beginning on the northernmost point and proceeding clockwise:

43°27.0'N 087°14.0'W

43°21.2' N 087°02.3'W

43°03.3'N 087°04.8'W

42°57.5'N 087°21.0'W

43°16.0'N 087°39.8'W.

Minimization means the reduction, to the greatest extent practicable, of any bulk dry cargo residue discharge from the vessel.

Northern Refuge means the area enclosed by rhumb lines connecting the coordinates, beginning on the northernmost point and proceeding clockwise:

45°45.0'N 086°00.0'W,

western shore of High Island, southern shore of Beaver Island:

45°30.0'N 085°30.0'W

45°30.0'N 085°15.0'W

45°25.0'N 085°15.0'W  
45°25.0'N 085°20.0'W  
45°20.0'N 085°20.0'W  
45°20.0'N 085°40.0'W  
45°15.0' N. 085°40.0'W  
45°15.0'N 085°50.0'W  
45°10.0'N 085°50.0'W  
45°10.0'N 086°00.0'W.

Pictured Rocks National Lakeshore means the site on or near Lake Superior, administered by the National Park Service, from a point of land at 46°26'21.3"N086°36'43.2"W eastward along the Michigan shoreline to 46°40'22.2"N085°59'58.1"W.

Six Fathom Scarp Mid-Lake Special Protection Area means the area enclosed by rhumb lines connecting the following coordinates, beginning on the northernmost point and proceeding clockwise:

44°55.0'N 082°33.0'W  
44°47.0'N 082°18.0'W  
44°39.0'N 082°13.0'W  
44°27.0'N 082°13.0'W  
44°27.0'N 082°20.0'W  
44°17.0'N 082°25.0'W  
44°17.0'N 082°30.0'W

44°28.0'N 082°40.0'W

44°51.0'N 082°44.0'W

44°53.0'N 082°44.0'W

44°54.0'N 082°40.0'W.

Sleeping Bear Dunes National Lakeshore means the site on or near Lake Michigan, administered by the National Park Service, that includes North Manitou Island, South Manitou Island and the Michigan shoreline from a point of land at 44°42'45.1"N 086°12'18.1"W north and eastward along the shoreline to 44°57'12.0"N 085°48'12.8"W.

Stannard Rock Protection Area means the area within a 6-mile radius from Stannard Rock Light, at 47°10'57"N 087°13'34"W.

Superior Shoal Protection Area means the area within a 6-mile radius from the center of Superior Shoal, at 48°03.2'N 087°06.3'W.

Thunder Bay National Marine Sanctuary means the site on or near Lake Huron designated by the National Oceanic and Atmospheric Administration as the boundary that forms an approximately rectangular area by extending along the ordinary high water mark between the northern and southern boundaries of Alpena County, cutting across the mouths of rivers and streams, and lakeward from those points along latitude lines to longitude 83 degrees west. The coordinates of the boundary are:

45°12'25.5"N 083°23'18.6"W

45°12'25.5"N 083°00'00"W

44°51'30.5"N 083°00'00"W

44°51'30.5"N 083°19'17.3"W.

Waukegan Special Protection Area means the area enclosed by rhumb lines connecting the following coordinates, beginning on the northernmost point and proceeding clockwise:

42°24.3'N 087°29.3'W

42°13.0'N 087°25.1'W

42°12.2'N 087°29.1'W

42°18.1'N 087°33.1'W

42°24.1'N 087°32.0'W.

Western Basin means that portion of Lake Erie west of a line due south from Point Pelee.

(3) Discharges of bulk dry cargo residue under paragraph (b) of this section are allowed, subject to the conditions listed in Table 151.66(b)(3) of this section.

Table 151.66(b)(3)—Bulk Dry Cargo Residue Discharges Allowed on the Great Lakes.

<b>Location</b>	<b>Cargo</b>	<b>Discharge Allowed Except As Noted</b>
Tributaries, their connecting rivers, and the St. Lawrence River	Limestone and other clean stone	Prohibited within 3 miles from shore.
	All other cargoes	Prohibited.
Lake Ontario	Limestone and other clean stone	Prohibited within 3 miles from shore.
	Iron ore	Prohibited within 6 miles from shore.
	All other cargoes	Prohibited within 13.8 miles from shore.
Lake Erie	Limestone and other clean stone	Prohibited within 3 miles from shore; prohibited in the Detroit River

		International Wildlife Refuge; prohibited in Western Basin, except that a vessel operating exclusively within Western Basin may discharge limestone or clean stone cargo residues over the dredged navigation channels between Toledo Harbor Light and Detroit River Light.
	Iron ore	Prohibited within 6 miles from shore; prohibited in the Detroit River International Wildlife Refuge; prohibited in Western Basin, except that a vessel may discharge residue over the dredged navigation channels between Toledo Harbor Light and Detroit River Light if it unloads in Toledo or Detroit and immediately thereafter loads new cargo in Toledo, Detroit, or Windsor.
	Coal, salt	Prohibited within 13.8 miles from shore; prohibited in the Detroit River International Wildlife Refuge; prohibited in Western Basin, except that a vessel may discharge residue over the dredged navigation channels between Toledo Harbor Light and Detroit River Light if it unloads in Toledo or Detroit and immediately thereafter loads new cargo in Toledo, Detroit, or Windsor.
	All other cargoes	Prohibited within 13.8 miles from shore; prohibited in the Detroit River International Wildlife Refuge; prohibited in Western Basin.
Lake St. Clair	Limestone and other clean stone	Prohibited within 3 miles from shore.
	All other cargoes	Prohibited.
Lake Huron, except Six Fathom Scarp Mid-Lake Special Protection Area	Limestone and other clean stone	Prohibited within 3 miles from shore; prohibited in the Thunder Bay National Marine Sanctuary.
	Iron ore	Prohibited within 6 miles from shore and in Saginaw Bay; prohibited in the Thunder Bay National Marine Sanctuary; prohibited for vessels upbound along the Michigan thumb as

		<p>follows:</p> <p>(a) Between 5.8 miles northeast of entrance buoys 11 and 12 to the track line turn abeam of Harbor Beach, prohibited within 3 miles from shore.</p> <p>(b) For vessels bound for Saginaw Bay only, between the track line turn abeam of Harbor Beach and 4 nautical miles northeast of Point Aux Barques Light, prohibited within 4 miles from shore and not less than 10 fathoms of depth.</p>
	Coal, salt	Prohibited within 13.8 miles from shore and in Saginaw Bay; prohibited in the Thunder Bay National Marine Sanctuary; prohibited for vessels upbound from Alpena into ports along the Michigan shore south of Forty Mile Point within 4 miles from shore and not less than 10 fathoms of depth.
	All other cargoes	Prohibited within 13.8 miles from shore and in Saginaw Bay; prohibited in the Thunder Bay National Marine Sanctuary.
Lake Michigan	Limestone and other clean stone	Prohibited within 3 miles from shore; prohibited within the Milwaukee Mid-Lake and Waukegan Special Protection Areas; prohibited within the Northern Refuge; prohibited within 3 miles of the shore of the Indiana Dunes and Sleeping Bear National Lakeshores; prohibited within Green Bay.
	Iron ore	Prohibited in the Northern Refuge; north of 45° N., prohibited within 12 miles from shore and in Green Bay; south of 45° N., prohibited within 6 miles from shore, and prohibited within the Milwaukee Mid-Lake and Waukegan Special Protection Areas, in Green Bay, and within 3 miles of the shore of Indiana Dunes and Sleeping Bear National Lakeshores; except that discharges are allowed at: (a) 4.75 miles off Big Sable Point Betsie, along established Lake Carriers

		Association (LCA) track lines; and (b) Along 056.25° LCA track line between due east of Poverty Island to a point due south of Port Inland Light.
	Coal	Prohibited in the Northern Refuge; prohibited within 13.8 miles from shore and prohibited within the Milwaukee Mid-Lake and Waukegan Special Protection Areas, in Green Bay, and within 3 miles of the shore of Indiana Dunes and Sleeping Bear National Lakeshores; except that discharges are allowed— (a) Along 013.5 ° LCA track line between 45° N. and Boulder Reef, and along 022.5° LCA track running 23.25 miles between Boulder Reef and the charted position of Red Buoy #2; (b) Along 037° LCA track line between 45°20' N. and 45°42' N.; (c) Along 056.25° LCA track line between points due east of Poverty Island to a point due south of Port Inland Light; and (d) At 3 miles from shore for coal carried between Manistee and Ludington along customary routes.
	Salt	Prohibited in the Northern Refuge; prohibited within 13.8 miles from shore and prohibited within the Milwaukee Mid-Lake and Waukegan Special Protection Areas, in Green Bay, and within 3 miles of the shore of Indiana Dunes and Sleeping Bear National Lakeshores, and in Green Bay.
	All other cargoes	Prohibited in the Northern Refuge; prohibited within 13.8 miles from shore and prohibited within the Milwaukee Mid-Lake and Waukegan Special Protection Areas, in Green Bay, and within 3 miles of the shore of Indiana Dunes and Sleeping Bear National Lakeshores.
Lake Superior	Limestone and	Prohibited within 3 miles from shore;

	other clean stone	and prohibited within Isle Royale National Park and the Caribou Island and Southwest Bank, Stannard Rock, and Superior Shoal Protection Areas, and within 3 miles of the shore of the Apostle Islands and Pictured Rocks National Lakeshores or the Grand Portage National Monument.
	Iron ore	Prohibited within 6 miles from shore (within 3 miles off northwestern shore between Duluth and Grand Marais); and prohibited within Isle Royale National Park and the Caribou Island and Southwest Bank, Stannard Rock, and Superior Shoal Protection Areas, and within 3 miles of the shore of the Apostle Islands and Pictured Rocks National Lakeshores or the Grand Portage National Monument.
	Coal, salt	Prohibited within 13.8 miles from shore (within 3 miles off northwestern shore between Duluth and Grand Marais); and prohibited within Isle Royale National Park and the Caribou Island and Southwest Bank, Stannard Rock, and Superior Shoal Protection Areas, and within 3 miles of the shore of the Apostle Islands and Pictured Rocks National Lakeshores or the Grand Portage National Monument.
	Cement	Prohibited within 13.8 miles from shore (within 3 miles offshore west of a line due north from Bark Point); and prohibited within Isle Royale National Park and the Caribou Island and Southwest Bank, Stannard Rock, and Superior Shoal Protection Areas, and within 3 miles of the shore of the Apostle Islands and Pictured Rocks National Lakeshores or the Grand Portage National Monument.
	All other cargoes	Prohibited within 13.8 miles from shore; and prohibited within Isle Royale National Park and the Caribou Island

		and Southwest Bank, Stannard Rock, and Superior Shoal Protection Areas, and within 3 miles of the shore of the Apostle Islands and Pictured Rocks National Lakeshores or the Grand Portage National Monument.
--	--	---

(4) The master, owner, operator, or person in charge of any commercial vessel must ensure that the vessel’s deck is kept broom clean whenever the vessel is in transit.

(5) The master, owner, operator, or person in charge of any commercial vessel must ensure that a dry cargo residue management plan is on board the vessel, is kept available for Coast Guard inspection, and that all operations are conducted in accordance with the plan. A waste management plan meeting the requirements of 33 CFR 151.57 satisfies this requirement, so long as it provides all the information required by this paragraph (b)(5). If the plan is maintained electronically, at least one paper copy of the plan must be on board for use during inspections. The plan must describe the specific measures the vessel employs to ensure the minimization of bulk dry cargo residue discharges, and, at a minimum, must list or describe—

(i) Equipment on board the vessel that is designed to minimize bulk dry cargo spillage during loading and unloading;

(ii) Equipment on board the vessel that is available to recover spilled cargo from the decks and transfer tunnels and return it to the holds or to unloading conveyances;

(iii) Operational procedures employed by the vessel's crew during the loading or unloading of bulk dry cargoes to minimize cargo spillage onto the decks and into the transfer tunnels and to achieve and maintain the broom clean deck condition required by paragraph (b)(4) of this section;

(iv) Operational procedures employed by the vessel's crew during or after loading or unloading operations to return spilled bulk dry cargo residue to the vessel's holds or to shore via an unloading conveyance;

(v) How the vessel's owner or operator ensures that the vessel's crew is familiar with any operational procedures described by the plan;

(vi) The position title of the person on board who is in charge of ensuring compliance with procedures described in the plan;

(vii) Any arrangements between the vessel and specific ports or terminals for the unloading and disposal of the vessel's bulk dry cargo residues ashore; and

(viii) The procedures used and the vessel's operating conditions to be maintained during any unavoidable discharge of bulk dry cargo residue into the Great Lakes.

(6) In determining whether a commercial vessel or person is in compliance with paragraph (b) of this section, Coast Guard personnel may consider—

(i) The extent to which the procedures described in the vessel's DCR management plan reflect current industry standard practices for vessels of comparable characteristics, cargoes, and operations;

(ii) The crew's demonstrated ability to perform tasks for which the DCR management plan holds them responsible;

(iii) Whether equipment described in the DCR management plan is maintained in proper operating condition; and

(iv) The extent to which the crew adheres to the vessel's DCR management plan during actual dry cargo loading and unloading operations and DCR discharge operations.

(c)(1) The master, owner, operator, or person in charge of any commercial ship loading, unloading, or discharging bulk dry cargo in the United States' waters of the Great Lakes and the master, owner, operator, or person in charge of a U.S. commercial ship transporting bulk dry cargo and operating anywhere on the Great Lakes, excluding non-self propelled barges that are not part of an integrated tug and barge unit, must ensure that a written record is maintained on the ship that fully and accurately records information on:

(i) Each loading or unloading operation on the United States' waters of the Great Lakes, or in the case of U.S. commercial ships on any waters of the Great Lakes, involving bulk dry cargo; and

(ii) Each discharge of bulk dry cargo residue that takes place in United States' waters of the Great Lakes, or in the case of U.S. commercial ships on any waters of the Great Lakes.

(2) For each loading or unloading operation, the record must describe:

(i) The date of the operation;

(ii) Whether the operation involved loading or unloading;

(iii) The name of the loading or unloading facility;

(iv) The type of bulk dry cargo loaded or unloaded;

(v) The method or methods used to control the amount of bulk dry cargo residue, either onboard the ship or at the facility;

(vi) The time spent to implement methods for controlling the amount of bulk dry cargo residue; and

(vii) The estimated volume of bulk dry cargo residue created by the loading or unloading operation that is to be discharged.

(3) For each discharge, the record must describe:

(i) The date and time the discharge started, and the date and time the discharge ended;

(ii) The ship's position, in latitude and longitude, when the discharge started and when the discharge ended; and

(iii) The ship's speed during the discharge.

(iv) Until February 28, 2015, records must be kept on Coast Guard Form CG-33, which can be found at [http://www.uscg.mil/hq/cg5/cg522/cg5224/dry\\_cargo.asp](http://www.uscg.mil/hq/cg5/cg522/cg5224/dry_cargo.asp). Copies of the records must be forwarded to the Coast Guard at least once each quarter, no later than the 15th day of January, April, July, and October. The record copies must be provided to the Coast Guard using only one of the following means:

(A) E-mail to [DCRRecordkeeping@USCG.mil](mailto:DCRRecordkeeping@USCG.mil);

(B) Fax to 202-372-1928, ATTN: DCR RECORDKEEPING; or

(C) Mail to U.S. Coast Guard: Commandant (CG-OES), ATTN: DCR RECORDKEEPING, 2703 Martin Luther King Jr. Avenue SE., Stop 7126, Washington, DC 20593-7126.

(v) After February 28, 2015, the use of Form CG-33 is optional. However, records must still be certified by the master, owner, operator, or person in charge; must be kept in written form on board the ship for at least 2 years; and must be made available for Coast Guard inspection upon request.

Dated: January 24, 2014.

J.G. Lantz,  
Director of Commercial Regulations and Standards,  
U.S. Coast Guard.

[FR Doc. 2014-01927 Filed 01/30/2014 at 8:45 am; Publication Date: 01/31/2014]