

Ocean Dumping Management Program Evaluation

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Fact Sheet

Introduction

- The Marine Pollution, Research, and Sanctuaries Act (MPRSA) strictly limits the dumping into ocean waters of any material that would adversely affect human health, welfare, or amenities; or the marine environment, ecological systems, or economic potentialities. The primary source of material that may be dumped in the ocean, with appropriate oversight and permitting, is sediment from navigational dredging. Other items that may be disposed in the ocean include vessels that are no longer in operation, fish wastes, and human remains.
- EPA's Marine Pollution Control Branch, within the Office of Water (OW), administers the Ocean Dumping Management Program in coordination with each of EPA's seven coastal Regions (Regions 1, 2, 3, 4, 6, 9, and 10). EPA is responsible for designating ocean disposal sites (both for dredged and non-dredged material), establishing and managing Site Management and Monitoring Plans for all ocean disposal sites, and establishing environmental criteria for the evaluation of permit applications. The U.S. Army Corps of Engineers (USACE) issues ocean dumping permits for dredged material, subject to EPA review and concurrence. EPA is responsible for issuing ocean dumping permits (special, general, or emergency) for all other substances.
- Ocean Dumping Management Program managers applied for and were awarded resources to evaluate the program in order to provide information that will help managers better align resources and activities with intended outcomes. EPA's Evaluation Support Division (ESD) worked with Industrial Economics, Inc., (IEc) and its subcontractor, Eastern Research Group (ERG), to complete the evaluation.

Evaluation Questions

- 1. What is the program's theory of change?
- 2. What are emerging issues, challenges and opportunities for improving national and Regional implementation of the program?
- 3. Given stable or reduced program resources, what are the opportunities for improving the alignment between resource deployment and the program's intended or desired outcomes?
- 4. How can OD measure its success?

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Evaluation Methods

To answer the evaluation questions, the evaluators and EPA used a variety of methods, including:

- A literature review of publicly available and EPA-provided program data;
- A survey of program staff;
- Interviews with Ocean Dumping Management Program staff and managers from EPA HQ and the Regions
 along with a retired program manager, staff from EPA's Clean Water Act Section 404 Program and EPA's
 Office of Research and Development, USACE, and an interested environmental group; and
- Focus groups with EPA Ocean Dumping Management Program staff and managers.

Key Findings

Question 1- Theory of Change

- The program theory appears well structured to lead to desired outcomes, and the program's planned resource prioritization is appropriate and consistent with EPA's mission, since environmental protection is the top priority.
- The program results on several assumptions, including assumptions that there are current regulations in
 place; adequate information to establish program criteria, assess the suitability of material proposed for
 ocean dumping, and determine whether ocean dumping sites are meeting environmentally acceptable
 conditions; clear communication from HQ to Regions, customers, and partners, and adequate program
 resources. In practice these assumptions do not always hold true, and this is impeding program
 effectiveness.
- The Ocean Dumping Management Program could improve its information flows and coordination mechanisms, for example by establishing more focused regular meetings between the EPA Regions and HQ.
- While some misalignment amongst agency and organizational missions is typical, tension with USACE is
 posing a serious challenge for the Ocean Dumping Management Program, even though some Regions have a
 positive working relationship with USACE.

Question 2- Historical and Emerging Issues, Opportunities, and Challenges

- Historical ocean dumping trends and emerging issues include:
 - 1. Decreases in ocean dumping nationwide, and an increased focus on beneficial reuse;
 - 2. Advances in science and understanding of contaminants;
 - 3. Changes in program resources;
 - 4. Staff turnover; and
 - 5. Region specific issues such restoration in the Gulf of Mexico and tsunami debris on the west coast.
- Program staff and stakeholders express concern that the regulations and guidance documents have not kept pace with advances in science and therefore need to be updated.
- Regions request guidance and coordination on emerging issues such as contaminants (e.g., pyrethroids and pharmaceuticals) and issues related to climate change.
- Regions seek support from HQ establishing consistent expectations for USACE Districts.

Question 3- Opportunities for Resource Deployment

- Resources cannot be allocated away from program without reducing program responsibilities. However, interviewees generally agree that the program could do a better job of focusing its efforts and working more efficiently.
- Several interviewees suggested changes to how resources are allocated across Regions, though there was no clear consensus on how to improve this allocation.

• The act of disinvestment from the Bold has taken resources and has been a distraction for the program in recent years.

Question 4-Performance Measures

- The current strategic measure focuses on the percent of active dredged material Ocean Dumping sites that have achieved environmentally acceptable conditions. In order for this measure to be valid (i.e., for it to accurately represents the condition or phenomenon that it is purporting to represent) the key term "environmentally acceptable conditions" should be defined and interpreted consistently.
- There are supplementary outcome and output measures that could help measure program results. Key
 criteria for assessing measures are the extent to which the program has control over the measure and the
 extent to which the measure reflects program goals. Potential measures include:
 - o Volume of material dumped at ocean dumping sites;
 - Volume and percentage of contaminated material proposed for ocean disposal that is *not* allowed to be ocean dumped;
 - Percentage of monitored sites found to be in compliance;
 - Percentage of projects where material is diverted to beneficial reuse rather than ocean dumping;
 - o Average number (and range) of years since site monitoring has occurred;
 - Average number (and range) of years since Site Management and Monitoring Plans (SMMPs) that have been reviewed and updated;
 - o Average time to complete specific EPA activities; and
 - o Count of EPA activities.

Evaluator Recommendations to EPA

Based on the findings, the evaluators recommend that EPA:

- 1. Clarify and communicate the importance of the program, focusing on why this program is essential to protecting ocean ecosystems.
- 2. Seek to foster improved communication and partnership with USACE.
- 3. Update program guidance and use the London Protocol ratification process as an opportunity to update the regulations.
- 4. Strengthen program feedback mechanisms, building on a suite of performance measures that encompass both outcome and output measures.
- 5. Define the minimum requirements that HQ and the Regions must fulfill, and the resources needed to complete those tasks.

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