

# THE MANAGEMENT AND REGULATION OF DREDGING ACTIVITIES AND DREDGED MATERIAL IN NEW JERSEY'S TIDAL WATERS

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## Chapter I - Purpose of Document

This Technical Manual establishes the policies and procedures under which the New Jersey Department of Environmental Protection will conduct regulatory reviews of dredging activities in tidal waters of the State of New Jersey and the management of the dredged material. This document also provides Departmental staff and project applicants with general guidance and criteria for the required sampling, testing, and permitting of dredged material for various identified management alternatives, including potential use options. These policies and procedures have been developed to ensure that proposed dredging projects and the management of dredged material are conducted so as to minimize the potential for adverse impacts to the environment and public health. This Technical Manual has been developed by the Department under the requirements of the Environmental Management Accountability Plan (P.L. 1991, Chapter 422) with the goal of making the permit application process more consistent and predictable.

## Chapter II - Overview

A: Introduction - Given the shallow natural depths of many tidal waterbodies and high rates of sedimentation/shoaling, dredging is needed to provide safe navigation conditions and to maintain vessel berthing areas. Many components of New Jersey's economy including marine commerce, commercial and recreational fishing, boating, and tourism are dependent on dredging.

In many areas of the state sediments have become contaminated with a variety of toxic substances, including dioxin, polychlorinated biphenyls (PCBs), heavy metals, pesticides, and polycyclic aromatic hydrocarbons (PAHs). Sediments in tidal water bodies may be contaminated as a result of discharges from industrial, municipal, and storm sewer sources, marina and boating operations, and atmospheric deposition. The dredging and subsequent disposal or use of these sediments, if not properly managed and regulated, could result in adverse impacts to the environment and public health.

In contrast, tidal waters in some areas of New Jersey (particularly along the Atlantic Ocean coast) have been impacted to a lesser degree by pollutant discharges. As a result, sediments in these water bodies have a lower potential to be contaminated at levels warranting a high degree of regulatory concern. Likewise, coarser-grained sediments do not bind contaminants as strongly as finer-grained and more organic sediments. Finally, all else being equal, the potential for adverse impacts from smaller dredging and dredged material management projects can be comparatively lower than that from larger projects.

B: Authorities - The New Jersey Department of Environmental Protection (NJDEP) is responsible for the evaluation and permitting of all dredging-related activities that occur in the waters of the State of New Jersey. As part of that review the Department evaluates the proposed dredged material management option. Existing management options include in-water disposal, upland containment/disposal, and/or various potential uses of the dredged material. The objectives of the Department's regulatory programs overseeing dredged material management activities include:

- (1) the identification of potential adverse impacts to the environment and public health which could result from a proposed activity;
- (2) the regulation/management of a proposed activity to ensure that any potential adverse impacts are minimized;
- (3) the development of appropriate programs to monitor for potential adverse impacts.

The authority to regulate proposed dredging activities and the management of dredged material is derived from the following statutes:

Waterfront Development Law (N.J.S.A. 12:5-3 *et seq.*)  
Riparian Interests (N.J.S.A. 12:3-1 *et seq.* & 18:56-1 *et seq.*)  
New Jersey Water Pollution Control Act (N.J.S.A. 58:10A-1 *et seq.*)  
Federal Water Pollution Control Act (Clean Water Act Amendments of 1977; 33 U.S.C. 1251, Section 401)  
Federal Coastal Zone Management Act (16 U.S.C. 1451 *et seq.*)

The siting of upland confined disposal facilities may also be regulated by the following:

Flood Hazard Area Control Act (N.J.S.A. 58:16A-50 *et seq.*)  
Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 *et seq.*)  
Wetlands Act of 1970 (N.J.S.A. 13:9A-1 *et seq.*)  
Coastal Area Facility Review Act (N.J.S.A. 13:19-1 *et seq.*)

C: Permit Review Process - The regulatory review of permit applications for dredging operations and the management of dredged material will be coordinated by the Department's Land Use Regulation Program. **Pre-application discussions with the Land Use Regulation Program are required prior to the actual submittal of a permit application, to discuss the proposed project, required permits, sampling and testing protocols, and other information which must be submitted with the application.**

In most cases, dredging projects in New Jersey's navigable tidal waters will require a Waterfront Development Permit and a Water Quality Certificate (WQC; pursuant to Section 401 of the Clean Water Act Amendments of 1977); the WQC is issued jointly with the Waterfront Development Permit. While a WQC is not required for the actual dredging operation, it is required for any discharge of dredged material into "Navigable Waters of the United States" associated with the dredging operation. Any such discharge will also require a permit from the US Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act; the Section 404 Permit triggers the requirement for a WQC. Federally-conducted, funded, or permitted activities, including federal navigation projects, which have a direct impact on New Jersey's Coastal Zone, will require a federal consistency determination from the Department, pursuant to the Coastal Zone Management Act. The U.S. Army Corps of Engineers also has authority over dredging

activities conducted in "Navigable Waters of the United States" pursuant to Section 10 of the Rivers and Harbors Act of 1899.

Disposal of dredged material in ocean waters is regulated by the U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (USEPA) pursuant to the Marine Protection, Research, and Sanctuaries Act (MPRSA). Ocean waters are located offshore of the "baseline" established by the USEPA pursuant to the MPRSA -- offshore of Long Island and New Jersey connected by the transect between Rockaway Point and Sandy Hook, offshore of New Jersey and Delaware connected by the transect between Cape May Point and Cape Henlopen Point. Dredged material may be disposed of in ocean waters only at sites designated by the USEPA, with permits issued by the USACE pursuant to Section 103 of the MPRSA. The State of New Jersey has discretionary authority to review disposal activities at ocean disposal sites pursuant to the Federal Coastal Zone Management Act. The review of proposed ocean disposal operations at currently designated ocean disposal sites will be coordinated with the USACE and USEPA. In inland (i.e. "non-ocean") waters the actual dredging operation, or any associated dredged material disposal/management/use alternative, which results in the placement of dredged material into "Navigable Waters of the United States" requires a Clean Water Act Section 404 permit from the USACE.

The Department will regulate the management of dredged material from out-of-state waters pursuant to the permits issued for the New Jersey facility which will handle the dredged material. These permits identify the dredged material suitable for management at the facility (locations of origin, sediment quality characteristics, quantities, etc.). Any dredged material originating in out-of-state waters would have to meet the requirements specified in the permits for the New Jersey management facility. The sediments to be dredged must comply with all of the sampling and testing requirements and protocols applicable to projects in New Jersey waters. However, note that only Testing Exclusion Case #1 (see Section III-C) will be applicable to dredged material originating in out-of-state waters. The specific evaluative criteria applied will vary with the proposed disposal/management/use alternative and its location. Likewise, dredged material from out-of-state waters proposed to be used in New Jersey would have to meet the same regulatory, sampling, and testing requirements as that of dredged material from New Jersey waters. **Given these requirements, any out-of-state applicant(s) proposing to dispose/manage or use dredged material in New Jersey must contact the Land Use Regulation Program to discuss the project prior to the submittal of permit applications. The background information listed in Section III-A must be submitted to the Department prior to this discussion.**

In general, an applicant proposing to dispose of or use dredged material originating in New Jersey at an out-of-state location would have to demonstrate to the Department that this option is approved by the State-in-question. This would consist of a letter from the appropriate regulatory agencies of the state where the disposal facility or use option is located, or copies of current facility permits, verifying that the facility is operating in accordance with applicable rules and regulations and can lawfully accept the dredged material for the declared disposal or use option. Note that the State-in-question may have different sediment sampling and testing requirements and evaluative criteria than those of the Department.

A number of factors are considered by the Department in its evaluation of a dredging project and proposed dredged material management alternatives. In general, each proposed project has its own set of potential problems and impacts to the environment and public health. Thus, not all of the concerns or regulatory requirements discussed in this Technical Manual are applicable to all projects. To some degree, each proposed project will be evaluated by the Department on a "case-by-case" basis.

The Department will ensure the logical application of this Technical Manual in its regulatory reviews. For example, the Department has divided the tidal waters of New Jersey into three geographical regions based on the expected degree and type of sediment contamination, and historic/potential dredged material management alternatives (see Figure 1 and Section III-B). In general, the applicable regulatory requirements vary between these regions, but are similar for projects located within any one region.

Finally, the Department will periodically revise the Technical Manual as its knowledge and experience increases, additional research is completed, new dredging and dredged material management alternatives become available, and in response to comments from the public. These revisions will also consider the Department's regulatory decisions to further ensure consistency in the Department's regulatory program. In the future, it is expected that many of the case-by-case decisions now required of the Department will be eliminated, and more specific regulatory criteria will be developed for various types of dredging projects and dredged material management alternatives.

#### D - Solid Waste Issues

The Department has carefully reviewed the issue of whether dredged material constitutes "solid waste" and whether dredging activities/disposal should be regulated under the provisions of the New Jersey Solid Waste Management Act (NJSWMA). The term "solid waste" is defined broadly to include "garbage, refuse and other discarded materials resulting from industrial, commercial and agricultural operations, and from domestic and community activities...".

In order to address the appropriateness of regulating dredging activities and dredged material under the solid waste regulatory program at N.J.S.A. 13:1E-1 *et seq.* and N.J.A.C. 7:26-1 *et seq.*, the Department carefully evaluated the implications of such a decision. Historically, as a result of Administrative Order No. 36, issued in 1983 by former NJDEP Commissioner Robert E. Hughey, permitting and regulatory control of dredging activities and associated in-water and upland disposal of dredged material has been managed under the provisions of the New Jersey Water Pollution Control Act. Dredging has not been regulated under solid waste law for over 14 years and has never been a component of the NJSWMA district planning process.

Following a careful review of solid waste regulatory issues, the Department has concluded that the NJSWMA does not apply, and it will continue to regulate upland containment/disposal of dredged material under the provisions of the New Jersey Water Pollution Control Act, Waterfront Development Law, and the other relevant statutory and regulatory authorities listed in Section II-B. The Department will propose an amendment to N.J.A.C. 7:26-1 *et seq.* to codify the class exemption of upland containment/disposal facilities. The use of dredged material will be authorized on a case-by-case basis in accordance with the Acceptable Use Determination Process presented in Appendix E.

Since the Department will not regulate dredged material as a solid waste pursuant to the Solid Waste Management Act, it will not regulate dredged material processing or staging/transfer facilities as it would analogous solid waste facilities. These facilities will most likely require a Waterfront Development permit and an Acceptable Use Determination (AUD) in accordance with the requirements of Appendix E. Depending on the type of dredged material management activities undertaken at the facility (for example, dewatering), additional permits -- such as NJPDES-Discharge to Surface Water and/or Ground Water, Air Quality -- may be required.