



**U.S. Environmental Protection Agency**



**U.S. Maritime Administration**

This document is one section from the “National Guidance: Best Management Practices for Preparing Vessels Intended to Create Artificial Reefs,” published in May 2006. The reference number is EPA 842-B-06-002. You can find the entire document at <http://www.epa.gov/owow/oceans/habitat/artificialreefs/index.html>.

# **National Guidance: Best Management Practices for Preparing Vessels Intended to Create Artificial Reefs**

## **Appendix B**

May 2006

## Appendix B

### *Federal Environmental Laws Relevant for Consideration in the Preparation of a Vessel for Use as an Artificial Reef*

This Appendix identifies selected federal statutes relevant for consideration in preparation of a vessel for use as an artificial reef. For these statutes, the Appendix explains their potential relevance and briefly summarizes the relevant provisions. The first set of statutes briefly summarized are environmental laws administered by EPA which may be relevant to the removal of material from vessels or the disposal of such removed material. In addition, although this document focuses on environmental best management practices for vessel preparation, for the reader's convenience the Appendix also briefly summarizes federal statutes establishing permit requirements for the actual placement of the vessel as an artificial reef. Finally, the Appendix briefly describes a number of other significant federal environmental statutes that may affect issuance of such permits or the actual conduct of placement activities.

The information in this Appendix is intended only for the convenience of the reader in order to provide a useful starting point for identifying the principal environmental statutes of interest. The Appendix is not intended to be an exhaustive list of every conceivably relevant statute, nor do the brief summaries in this list alter or replace any requirements, regulations, or applicable guidance under those statutes that are summarized. Readers also should be aware that in 2000, EPA published tips for regulatory compliance for ship scrapping, and that document contains additional guidance that may be useful in preparation of a vessel for use as an artificial reef. See [www.epa.gov/oecaerth/resources/publications/civil/federal/shipscrapguide.pdf](http://www.epa.gov/oecaerth/resources/publications/civil/federal/shipscrapguide.pdf).

State and local laws also may apply to vessel preparation or placement for use as an artificial reef, and interested readers should consult with appropriate State and local authorities to identify such further requirements.

#### *EPA-Administered Federal Environmental Laws Relevant to Vessel Preparation*

- The Clean Air Act (CAA), 42 U.S.C. §§ 7401, et seq., generally addresses the emission of air pollutants. Among other things, it directs EPA to establish minimum national standards for air quality, and assigns primary responsibility to the states to assure compliance with the standards through State Implementation Plans (SIPs). State-specific SIPs may impose requirements that are more prescriptive, more stringent, or more specific than the minimum national standards. Among national standards relevant for vessel preparation, EPA has established a National Emissions Standards for Hazardous Air Pollutants (NESHAP) for asbestos at 40 CFR Part 61 Subpart M. The asbestos NESHAP is intended to minimize the release of asbestos fibers during demolition and renovation activities, which would include asbestos removal when preparing a vessel for use as an artificial reef. EPA has delegated authority to inspect and enforce the asbestos NESHAP to most states, which, as noted, may have requirements that are more stringent than federal requirements. Other NESHAPs also may be relevant to removal of other materials on vessels, and may be found at 40 CFR Parts 61 and 63. In addition, Title VI of the Act directs EPA to establish requirements for the control of substances that contribute to stratospheric ozone depletion, which include substances such as halons used

in fire suppression systems and certain refrigerants, that the best management practices in this guidance recommend be removed from a vessel in preparation for its use as an artificial reef. The recovered ozone-depleting refrigerants and halons should be delivered to an EPA-approved refrigerant and/or halon reclaimer for proper handling. Regulations addressing recycling and reuse of such removed refrigerants and halons, including chlorofluorocarbons and hydrofluorocarbons (sometimes referred to under the trade name Freon), appear at 40 CFR Part 82.

- The Clean Water Act (CWA), 33 U.S.C. §§ 1251, et seq., generally regulates the addition of pollutants from a point source to waters of the United States. The definition of point source includes a “vessel or other floating craft.” CWA requirements are implemented, among other things, through permits under either section 402 (the National Pollutant Discharge Elimination System (NPDES) permitting program) or section 404 (the permitting program for dredged and fill material). Pollutants generated in the preparation of a vessel for use as an artificial reef that are discharged to waters of the U.S., including via contaminated storm water, require NPDES permit authorization. The NPDES permitting program is primarily administered by states, with EPA oversight. In addition to the CWA’s NPDES permitting program, section 311 establishes a program for the prevention and abatement of, and remedial response to, oil and hazardous substance spills. See 40 CFR Parts 110, 112, 116, and 117. Section 311 imposes requirements for reporting the release of oil and hazardous substances, which might be relevant to the preparation of a vessel for use as an artificial reef should preparation result in such a release. Section 311 is jointly administered by EPA and the U.S. Coast Guard, depending on the location of the source. (For discussion of CWA section 404 permitting and the placement of vessels as artificial reefs, refer to the section of this Appendix describing federal laws that establish permitting requirements for placement of artificial reefs).
- The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601, et seq., better known as the "Superfund Act," addresses cleanup of hazardous substances. CERCLA and its implementation documents empower EPA and other agencies to identify and prioritize sites for cleanup, and to order or carry out environmental remediation. Subject to limited defenses, CERCLA imposes strict liability for environmental cleanup on persons connected to facilities from which there are releases into the environment. CERCLA also mandates reporting to the National Response Center of hazardous substance releases. In conjunction with CWA section 311, CERCLA provides for federal preparation of the National Contingency Plan for responding to a hazardous substances release. As noted regarding CWA section 311, CERCLA is relevant to the preparation of a vessel for use as an artificial reef in its release reporting requirements, particularly for oil and hazardous substances. CERCLA is administered by federal agencies, not states.
- The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. §§ 136, et seq., generally regulates the registration, labeling, distribution, sale, and use of pesticides. EPA regulates anti-foulant paints, including those containing organotins, copper, and other pesticidal compounds under FIFRA. EPA has relied on FIFRA and the Organotin Anti-fouling Paint Control Act of 1988 (33 U.S.C. §§ 2401, et seq.) for authority to impose requirements, such as certification and training for applicators and label

requirements dealing with tributyl tin (TBT) application and disposal. TBT anti-fouling paint label requirements include provisions directing that all paint chips, spent abrasives, and any other waste products from paint removal be disposed of in a sanitary landfill. 53 Fed. Reg. 39022, 39038, col. 3 (October 4, 1988). In addition, use of any pesticide in the preparation of a vessel for use as an artificial reef must comply with label requirements. For the most part, FIFRA is administered by EPA, though some states have primary enforcement responsibility for FIFRA use violations.

- The Marine Protection, Research and Sanctuaries Act (MPRSA), 33 U.S.C. §§ 1401, et seq., prohibits, unless authorized by an MPRSA permit, (1) transportation of material from the United States for the purpose of ocean dumping; (2) transportation of material from anywhere for the purpose of ocean dumping by federal agencies or U.S. flagged vessels; and (3) dumping of material transported from outside the United States into the territorial sea of the United States. If any materials removed from vessels being prepared for use as an artificial reef were subsequently proposed for ocean dumping, a permit under the MPRSA would be necessary. Denial of such a permit request, however, would be highly likely because land-based alternatives (the consideration of which are required for MPRSA permit issuance) typically would be available. In addition, it would seem improbable that such a proposal could satisfy the other applicable environmental criteria of the MPRSA and implementing regulations. The MPRSA is administered by EPA and the U.S. Army Corps of Engineers, not states.<sup>5</sup>
- The Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901, controls the management of hazardous wastes “from cradle to grave.” If, in the preparation of a vessel for use as an artificial reef, a waste is generated that is specifically listed as hazardous or exhibits any hazardous characteristics, e.g. toxicity, and the waste is not excluded or exempt from the RCRA Subtitle C regulations, then this waste would be considered hazardous waste and subject to all applicable RCRA regulations. See 40 CFR Parts 260 and 261. Depending upon the volume of hazardous wastes that are generated and the length of time the hazardous wastes are accumulated, RCRA regulations provide conditional exemptions from some of the regulatory requirements. In most states, EPA has authorized the State to administer some or all of RCRA requirements under state law in lieu of federal law and, depending on the state, state law may include requirements that are more stringent or prescriptive than federal law. Hazardous waste and used oil must be managed according to RCRA regulations.
- The Toxic Substance Control Act (TSCA), 15 U.S.C. §§ 2601, et seq., bans the manufacture, processing, use, and distribution in commerce of polychlorinated biphenyls (PCBs) and directs EPA to set regulations for the disposal of PCBs. TSCA requirements generally determine the degree of necessary PCB removal from vessels being prepared for use as an artificial reef. Although TSCA imposes requirements for toxic substances other than PCBs, TSCA’s PCB requirements are uniquely relevant to preparation of a

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<sup>5</sup> The MPRSA definition of “dumping” excludes the construction of fixed structures or artificial islands, as well as deposits of materials for the purpose of developing or maintaining fisheries resources, when otherwise regulated by federal or state law (or occurring pursuant to authorized federal or state programs). Because the placement of a vessel to create an artificial reef in waters subject to jurisdiction of the United States is regulated under other federal laws, the actual placement of vessels for use as an artificial reef is not subject to regulation under the MPRSA.

vessel for use as an artificial reef because of the likely presence of PCBs on many obsolete vessels. More specific guidance on the applicability of TSCA's PCB requirements to vessels being prepared for use as an artificial reef is provided in the section of the environmental best management practices addressing PCBs, and readers should refer to that section for further information.

### ***Federal Environmental Laws Establishing Permit Requirements for Placement of Vessels as Artificial Reefs***

- Section 404 of the CWA, 33 U.S.C. § 1344, establishes a permitting program for the discharge of dredged or fill material to waters of the United States. Placement of a vessel in waters of the United States as an artificial reef would constitute a discharge of fill material, and therefore would require a CWA section 404 permit. 33 CFR 323.2(e) & (f). For CWA purposes, "waters of the United States" include most inland waters as well as the waters of the territorial sea, which, under the CWA, is measured from the baseline (i.e., the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters) in a seaward direction a distance of three miles. Section 404 permitting is primarily administered by the U.S. Army Corps of Engineers (Corps), using environmental guidelines set out in EPA regulations appearing at 40 CFR Part 230. Among other things, except as provided by 40 CFR 230.5(b) and 230.7(b)(1) (relating to activities covered by an applicable general permit), these guidelines require consideration of practicable alternatives to the proposed discharge, and in the case of proposed discharges to special aquatic sites, presume that all practicable alternatives not involving a discharge into a special aquatic site have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise. 40 CFR 230.5(c); 230.10(a). Special aquatic sites are identified at 40 CFR Part 230 Subpart E and include, among other things, marine sanctuaries and coral reefs. In addition to evaluation for compliance with these guidelines, section 404 permits are also subject to the Corps' public interest review under 33 CFR 320.4. Corps regulations relevant to the CWA section 404 permitting program appear at 33 CFR Parts 320, 323, 325, 328, and 331. Though EPA has authorized two States to administer the section 404 permitting program for certain waters in those States, these State programs probably would not be relevant to the placement of a vessel for use as an artificial reef because states may not assume section 404 permitting authority for discharges of fill material to waters supporting commercial navigation, waters subject to the ebb and flow of the tide, or waters of the territorial seas, where a former vessel/artificial reef would likely be sited.
- Section 10 of the Rivers and Harbors Act of 1899 (RHA), 33 U.S.C. §§ 403, requires a permit from the Corps for, among other things, the construction of any structure (including artificial reefs) in or over any "navigable water of the United States" as that term is defined at 33 CFR Part 329.<sup>6</sup> Structures or work outside the limits of "navigable waters of the United States" also require a section 10 permit if the structure or work

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<sup>6</sup> In cases where the waters in which the vessel is being placed for use as an artificial reef are subject to both RHA section 10 and CWA section 404 permitting (e.g., the 3 mile territorial sea), Corps practice is to issue a single consolidated permit satisfying the requirements of both these statutes.

affects the course, location, or condition of the waterbody in such a manner as to impact on navigational capacity. Under section 4(e) of the Outer Continental Shelf Lands Act, 43 U.S.C. § 1333(e), RHA section 10 permit requirements also apply to the creation of structures on the Outer Continental Shelf of the United States, including artificial reefs. 33 CFR 322.3(b). Issuance of permits under RHA section 10 involves a public interest review by the Corps in accordance with 33 CFR 320.4. To help safeguard navigational and other marine uses, Corps permits for artificial reefs have required that permittees notify the National Oceanic & Atmospheric Administration (NOAA) prior to, and upon completion of, the reefing activity, including a drawing certifying the location and configuration of the completed activity. 33 CFR Part 325, Appendix A, special condition B.5. Corps regulations relevant to the RHA section 10 permitting program appear at 33 CFR Parts 320, 322, 325, 329, and 331.

***Other Significant Federal Environmental Statutes That May Affect Issuance of Permits or Licenses for Artificial Reefs or the Conduct of Placement Activities.***

- The Liberty Ship Act, 16 U.S.C. §§ 1220, et seq., authorizes states to apply to the Secretary of the Department of Transportation (DOT) for the use of DOT-owned obsolete vessels, including obsolete vessels of the Maritime Administration, as an artificial reef for the conservation of marine life. The Liberty Ship Act requires that the state application to DOT include a certification from EPA that the proposed use of the vessel will be compatible with “applicable water quality standards and other appropriate environmental protection requirements.” 16 U.S.C. § 1220 (b). The ability to meet such standards and requirements will be affected by what materials are onboard the vessel.
- The National Fishing Enhancement Act of 1984 (NFEA), 33 U.S.C. §§ 2101, et seq., applies to all artificial reefs in waters of the United States or on the Outer Continental Shelf for the purpose of enhancing fishery resources. Section 204 of NFEA obligates NOAA to issue a national artificial reef plan that addresses issues such as siting and design criteria. Additionally, NFEA section 205 establishes further requirements to be applied by the Corps in the exercise of its previously described permitting authority for placement of artificial reefs under RHA section 10 or CWA section 404. Such requirements are reflected in the previously identified Corps permitting regulations for artificial reefs (e.g., 33 CFR 320.3(o), 322.5(b), and 325.1(d)(8)).
- The Coastal Zone Management Act (CZMA), 16 U.S.C. 1451, et seq., establishes a federal/state partnership to provide for the comprehensive management of coastal resources. Under CZMA section 307(c)(3), applicants for a required federal license or permit to conduct an activity affecting the coastal zone of a state with an approved coastal management program need to provide the federal permitting agency and the relevant state with a certification that the proposed activity complies with the enforceable policies of the state’s approved program and will be conducted in a manner that is consistent with the program. Under CZMA section 307(c)(1), a federal agency activity that affects the coastal zone must be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of an approved coastal management program. Relevant implementing regulations established by NOAA (which is responsible for federal administration of the CZMA) appear at 15 CFR Part 930,

Subpart C (consistency for federal agency activities) and Subpart D (consistency for activities requiring a federal license or permit). NOAA's CZMA regulations were recently amended. 71 Fed. Reg. 788 (Jan. 5, 2006). The regulations provide that in the case of federal agency applications for federal licenses or permits, as well certain general permits proposed by a federal agency, review will be conducted under the Subpart C regulations. See 15 CFR 930.31(d) & 930.52. Corps regulations implementing the CZMA for its RHA section 10 and CWA section 404 permit programs appear at 33 CFR 320.3(b), 320.4(h), and 325.2(b)(2).

- The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321, et seq., requires that federal agencies include in their decision-making processes appropriate and careful consideration of the environmental effects of, and alternatives to, their actions. NEPA section 102(2)(C) includes a requirement for preparation of an environmental impact statements (EIS) for “major federal actions significantly affecting the quality of the human environment.” For proposed federal actions where the environmental effects are unclear, the agency often prepares an environmental assessment, which is a brief and concise document containing sufficient evidence and analysis for the agency to determine whether to prepare an EIS or to issue a finding of no significant impact. 40 CFR 1501.4(b), 1508.9(a)(1), 1508.13. Council on Environmental Quality regulations implementing NEPA appear at 40 CFR Parts 1500 – 1518. Corps regulations implementing NEPA for its RHA section 10 and CWA section 404 permit programs appear at 33 CFR 320.3(d) and Part 325, Appendix B.
- Under Clean Air Act section 309, 42 U.S.C. § 7609, EPA reviews and comments on the environmental impacts of several types of actions of other federal agencies, including all actions subject to the requirement under the National Environmental Policy Act to prepare an Environmental Impact Statement. EPA comments in writing and make those comments available to the public. If EPA determines that the action is unsatisfactory from the standpoint of public health or welfare or environmental quality, EPA refers the matter to the Council on Environmental Quality.
- The Endangered Species Act (ESA), 16 U.S.C. §§ 1531, et seq., addresses the conservation of federally-listed threatened and endangered species and the ecosystems on which those species depend. ESA section 7 requires that federal agencies, in consultation with the National Marine Fisheries Service and/or the U.S. Fish and Wildlife Service<sup>7</sup>, ensure that any action authorized, funded, or carried out by the agency (including issuance of federal permits) is not likely to jeopardize the continued existence of listed species or result in the adverse modification of their designated critical habitat. Whenever such an agency action may affect a listed species or critical habitat, the interagency consultation requirement is triggered, and the ESA section 7 procedural requirements at 50 CFR Part 402 apply. In addition, ESA section 9 generally prohibits anyone from taking listed animal species without authorization. “Take” is defined in ESA section 3(19) to include harming and killing. Authorization to take is generally granted through the section 7 consultation process, in exchange for measures to minimize

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<sup>7</sup> The National Marine Fisheries Service is now referred to as NOAA Fisheries, and is generally responsible for marine species under the ESA. The U.S. Fish and Wildlife Service is generally responsible for terrestrial and freshwater species.

the take. Detailed information regarding ESA compliance can be found online at <http://www.nmfs.noaa.gov/pr/species/esa.htm> and <http://www.fws.gov/angered/wildlife.html>. EPA's CWA section 404(b)(1) guidelines also address ESA issues in the context of CWA section 404 permitting and appear at 40 CFR 230.30. Corps regulations implementing the ESA for its RHA section 10 and CWA section 404 permit programs appear at 33 CFR 320.3(i) and 325.2(b)(5).

- The Fish and Wildlife Coordination Act, 16 U.S.C. §§ 661, et seq., provides that whenever the waters or channel of a waterbody are proposed or authorized to be modified by a public or private agency under federal permit or license, the agency first shall consult with the USFWS and the head of the state agency responsible for wildlife resources. The purpose of this consultation is to promote conservation of wildlife resources by preventing loss of and damage to such resources and to provide for the development and improvement of wildlife resources in connection with the agency action. Although the recommendations of the Secretary of the Interior and state officials are not binding, the federal agency must give them full consideration. In addition, EPA's CWA section 404(b)(1) guidelines address wildlife issues in the context of section 404 permitting and appear at 40 CFR Part 230, Subpart D. Corps regulations implementing the Fish and Wildlife Coordination Act for its RHA section 10 and CWA section 404 permit programs appear at 33 CFR 320.3(e) and 320.4(c).
- Title III of the National Marine Sanctuaries Act (NMSA), 16 U.S.C. §§ 1431, et seq., authorizes the Secretary of Commerce to designate and manage national marine sanctuaries. Under NMSA section 304(d), federal agency actions (including private activities authorized by federal permits) that are likely to destroy, cause the loss of, or injure sanctuary resources are subject to consultation with the Secretary of Commerce. If the Secretary finds that a federal action is likely to have this effect, the Secretary must recommend feasible alternatives to protect resources, and if the agency does not follow those alternatives it must provide a written statement explaining why. The marine sanctuary program is administered by NOAA, which has promulgated implementing regulations at 15 CFR Part 922. Part 922 specifically identifies all designated marine sanctuaries and their boundaries, as well as applicable regulations and restrictions governing their use. EPA's CWA section 404(b)(1) guidelines also address marine sanctuaries in the context of section 404 permitting and appear at 40 CFR 230.40. Corps regulations implementing these NMSA provisions for its RHA section 10 and CWA section 404 permit programs appear at 33 CFR 320.3(c) and 320.4(i).
- The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), 16 U.S.C. §§ 1801, et seq., is the principal federal law addressing the conservation and management of fisheries resources. Among other things, Magnuson-Stevens Act section 305(b)(1) provides that fisheries management plans developed under the Magnuson-Stevens Act must identify essential fish habitat (EFH). Magnuson-Stevens Act section 3(10) defines EFH as "...those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." Under section 305(b)(2), federal agencies are directed to consult with the Secretary of Commerce with respect to any action to be authorized, funded, or undertaken that may adversely affect any identified EFH. If the Secretary determines the action would adversely affect such EFH, the

Secretary is to recommend measures that could be taken by the agency to conserve the EFH. The agency must respond to such recommendations in writing, including a description of measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on the EFH. Under Magnuson-Stevens Act section 305(b)(4), if the agency's response is inconsistent with the Secretary's recommendations, the agency must explain why. The locations of EFH identified under the Act can be found online at [http://www.nmfs.noaa.gov/habitat/habitatprotection/efh/fish\\_manage\\_c.htm](http://www.nmfs.noaa.gov/habitat/habitatprotection/efh/fish_manage_c.htm). NOAA regulations implementing the EFH provisions of the Act appear at 50 CFR Part 600, Subparts J and K.

- The Marine Mammal Protection Act of 1972 (MMPA), 16 U.S.C. §§ 1361,1362, 1371-1384 note, 1386-1389, 1401-1407, 1411-1417, 1421-1421h, is the principal federal legislation addressing marine mammal species protection and conservation. MMPA section 102 prohibits, with certain exceptions, the take of marine mammals in United States waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. Marine mammals subject to the MMPA are defined in MMPA section 3(6) to include both species that are morphologically adapted to the marine environment (e.g., sea otters, manatees, seals, walrus, dolphins, whales) or which primarily inhabit the marine environment (e.g., polar bears). MMPA section 3(13) provides that "take" means to harass, hunt, capture, or kill, or to attempt to do so. Depending on the species of marine mammal involved, MMPA section 3(12) divides MMPA implementation responsibility between the Department of the Interior (USFWS) and the Department of Commerce (NOAA). Under this division of responsibility NOAA manages the majority of marine mammals, including whales, dolphins, porpoises, seals, and sea lions, while the USFWS manages five species: polar bears, walrus, sea otters, manatees, and dugongs. Relevant implementing regulations appear at 50 C.F.R Part 216 (NOAA) and 50 CFR Part 18 (USFWS). Corps regulations implementing the MMPA for its RHA section 10 and CWA section 404 permit programs appear at 33 CFR 320.3(k).
- Section 401 of the Clean Water Act (33 U.S.C. 1341) requires that any applicant for a federal license or permit (e.g., an EPA-issued NPDES permits or a Corps-issued section 404 permit) to conduct an activity that may result in a discharge into waters of the United States shall provide the permitting agency a certification from the state in which the discharge originates certifying that the license or permit complies with CWA requirements, including applicable state water quality standards. No federal license or permit subject to CWA section 401 may be issued unless the state either grants or waives certification. As a result, CWA section 401 provides states with the ability to preclude the issuance of federal permits or licenses subject to section 401 by denying certification, as well as the ability to indirectly impose conditions upon such federal permits or licenses by placing limitations or conditions on its section 401 certification. EPA regulations implementing CWA section 401 appear at 40 CFR Part 121. Corps regulations implementing the CWA section 401 its RHA section 10 and CWA section 404 permit programs appear at 33 CFR 320.3(a), 320.4(d), and 325.2(b)(1).