

Artificial Reefs and Habitats

Florida Keys National Marine Sanctuary Advisory Council

February 17, 2015



Laura S. Johnson
U.S. Environmental Protection Agency



Briefing Topics



EPA's Roles and Responsibilities:

- Defining Artificial Reefs
- Artificial Reef Permitting – EPA Roles and Responsibilities
- Vessels-to-Reefs
- Conclusion

Reefing vs. Dumping

“...placement of matter for a purpose other than the mere disposal thereof, provided that such placement is not contrary to the aims of the London Convention.”

Creation of artificial reefs can fall within this exclusion, and it is the responsibility of the Party to determine if such placement would be contrary to the aims of the London Convention.

The Marine Protection, Research, and Sanctuaries Act (MPRSA) definition of “dumping” when otherwise regulated by federal or state law (or occurring pursuant to authorized federal or state programs) excludes:

- the construction of fixed structures or artificial islands
- deposits of materials/matter for the purpose of developing or maintaining fisheries resources

London Convention/London Protocol definition of artificial reef

“An artificial reef is a submerged structure deliberately constructed or placed on the seabed to emulate some functions of a natural reef such as protecting, regenerating, concentrating, and/or enhancing populations of living marine resources.

Objectives of an artificial reef may also include the protection, restoration and regeneration of aquatic habitats, and the promotion of research, recreational opportunities, and educational use of the area.

The term does not include submerged structures deliberately placed to perform functions not related to those of a natural reef - such as breakwaters, mooring, cables, pipelines, marine research devices or platforms - even if they incidentally imitate some functions of a natural reef.”

Artificial Reefs

EPA's Statutory and Regulatory Authorities

Clean Water Act (CWA) Section 404 – Applies to placement of fill material or structures, such as those used to create artificial reefs, in navigable waters of the United States seaward to the three-mile limit.

Administering and enforcing Section 404 is shared by the U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA).

Artificial Reefs

Roles and Responsibilities

U.S. Army Corps of Engineers:

- Administers day-to-day program, including individual and general permit decisions;
- Conducts or verifies jurisdictional determinations;
- Develops policy and guidance; and
- Enforces Section 404 provisions.

Artificial Reefs

Roles and Responsibilities

U.S. Environmental Protection Agency:

- Develops and interprets policy, guidance and environmental criteria used in evaluating permit applications;
- Determines scope of geographic jurisdiction and applicability of exemptions;
- Approves and oversees State and Tribal assumption;
- Reviews and comments on individual permit applications;
- Has authority to prohibit, deny, or restrict the use of any defined area as a disposal site (Section 404(c));
- Can elevate specific cases (Section 404(q));
- Enforces Section 404 provisions.

Artificial Reefs

EPA's Role – CWA Section 404 Individual Permit Review

Reviews and comments on individual permit applications

- Corps issues public notice within 15 days of receiving completed permit application.
- Public notice describes proposed activity, location, and potential environmental impacts; invites comments during a period of typically 15 to 30 days.
- The public, as well as interested Federal, state, and local agencies, have an opportunity to comment on the proposed activity.

Has authority to prohibit, deny, or restrict the use of any defined area as a disposal site (Section 404(c))

Can elevate specific cases (Section 404(q))

Enforces Section 404 provisions

Artificial Reefs

Roles and Responsibilities

Clean Water Act Section 404 Enforcement

Types of Violations:

- Failure to comply with terms or conditions of Section 404 permit
- Discharging dredged or placement of fill material in waters of the U.S. without a permit

Case Selection for Enforcement Action(factors considered):

- amount of fill,
- size of water body (acres of wetlands filled and environmental significance),
- discharger's previous experience with Section 404 requirements,
- discharger's compliance history.

Artificial Reefs

Other Regulatory Regimes

Rivers and Harbors Act (RHA) Section 10 – The Corps is the permitting authority for construction of artificial reefs. RHA permit is necessary for construction of reefs on the Outer Continental Shelf beyond the seaward limits of the territorial sea. RHA provides for consideration of general environmental concerns.

Corps Regional or Programmatic General Permits – Permits are issued at the Division or District level in lieu of individual permits under CWA Section 404 and RHA Section 10. The Regional/General permits avoid duplication or overlap with existing State, local, or other Federal agency programs.

Toxic Substance Control Act – Regulates substances, such as polychlorinated biphenyls (PCBs), contained in material to be used for artificial reefs.

Artificial Reefs

EPA's Statutory and Regulatory Authorities

Liberty Ship Act – EPA must certify that a State's proposed use of a Department of Transportation (under the Maritime Administration) vessel as an artificial reef will be compatible with “applicable water quality standards and other appropriate environmental protection requirements.”

National Fishing Enhancement Act – Obligates the National Oceanic Atmospheric Administration (NOAA), in consultation with EPA (among other agencies), to issue an artificial reef plan to include siting and design criteria.

Preparing Vessels to be Reefed

Joint EPA/MARAD document entitled *National Guidance Best Management Practices for Preparing Vessels Intended to Create Artificial Reefs (BMP Guidance)*, May 2006.

- Addresses the vessel management option of reefing obsolete and decommissioned military and commercial vessels.
- Provides a consistent, national approach for vessel clean-up and preparation.
- Does not substitute for any statute or regulation.
- Satisfies mandate of Section 3516 of the National Defense Authorization Act for Fiscal Year 2004.



Utility of the *BMP Guidance*

- Anyone cleaning an obsolete or decommissioned military or commercial vessel for the purpose of creating an artificial reef.
- Permitting authorities could request verification of achieving the *BMP Guidance* clean-up goals when determining if vessels are sufficiently cleaned for placement as a reef.

NAVY -- required to prepare a vessel stricken from Naval Vessel Register for use as an artificial reef in accordance with the *BMP Guidance* (10 U.S.C. 7306b(c)).

EPA -- has relied on verification of achieving *BMP Guidance* clean-up goals (via documentation and/or inspection) as a condition of the Liberty Ship Act certificate for transfer of MARAD vessels to be reefed.

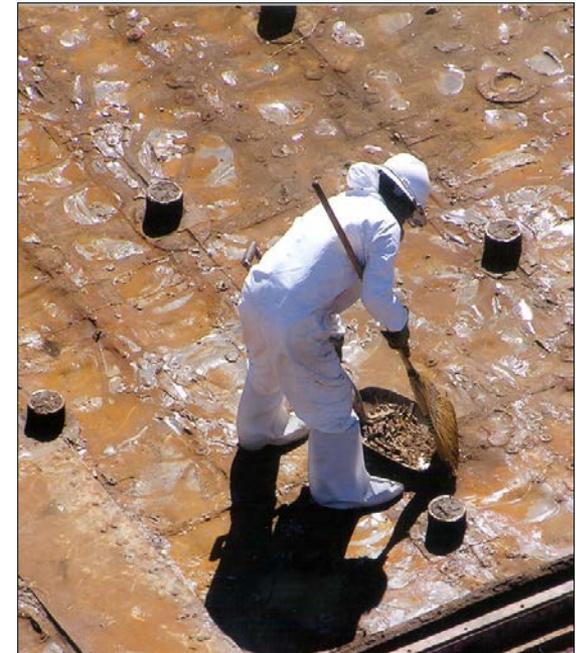
- MARAD vessels are not required to be cleaned/prepared in accordance with the *BMP Guidance*.

BMP Guidance

Materials Of Concern

The *BMP Guidance*:

- Identifies materials or categories of materials of concern that may be present aboard vessels and where these materials may be found.
- Describes the potential adverse impacts if such materials are released into the marine environment.
- Provides general clean-up performance goals and information on methods to address these goals prior to sinking.

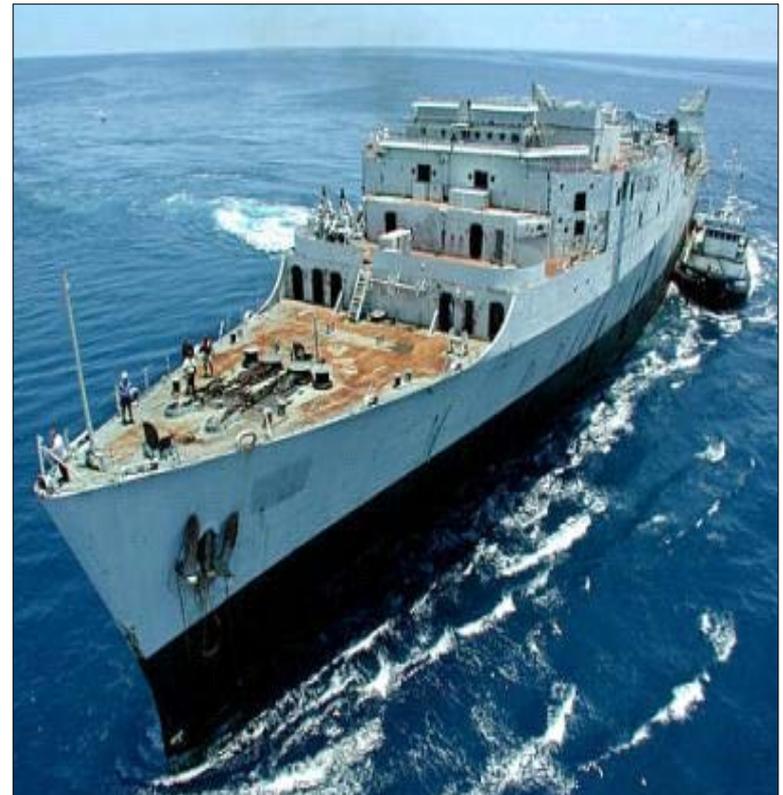


BMP Guidance

Materials Of Concern

The Materials of Concern include but are not limited to:

- Oil and fuel
- Asbestos
- Polychlorinated biphenyls (PCBs)
- Paint
- Solids/debris/floatables
- Other materials of environmental concern



Achieving and Verifying *BMP Guidance* Clean-up Goals

Key elements of the *BMP Guidance*

Documentation

- Documenting the clean-up procedures used and how the clean-up goals were achieved.
- Documenting the contaminants that will remain onboard the vessel.

Inspection

- Visual inspection to verify whether and how the vessel was prepared.

Documentation and inspection could help support permit applications and any State or local certifications.



Vessel Reefing vs. Vessel Disposal

- **Ocean Dumping** – Intent to dispose in ocean waters
 - Follow general permit under MPRSA.
- **Reefing** – Intent to change bottom elevation and create habitat
 - Follow CWA Section 404 (inland out to 3 miles from shore) and RHA Section 10 (inland out to the continental shelf).
- ***Either disposal or reefing, NOT both***
 - Section 3(f) of MPRSA provides that dumping does not include placement of material for developing fisheries resources when otherwise regulated by federal or state law or pursuant to federal/state programs.



Conclusion

Contact Information:

Laura S. Johnson

(202) 566-1273

Johnson.Laura-s@epa.gov