Biofouling Management Approach in EPA’s Vessel General Permits

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PRESENTATION OVERVIEW

- Clean Water Act
- 2013 Final VGP and Key Hull Fouling Requirements
- 2014 Final sVGP and Key Hull Fouling Requirements
- State 401 Certifications
- Future Drivers
- Additional Resources
CLEAN WATER ACT (CWA) PERMIT BASICS

For more info visit http://cfpub.epa.gov/npdes/

- “Discharge of a pollutant” generally prohibited without a permit [CWA section 301(a)]

- National Pollutant Discharge Elimination System (NPDES) Permits [CWA section 402]
  - Individual permits
  - General permits
  - Permit term not to exceed 5 years
  - For EPA-issued permits, State 401 certification and CZMA concurrences required

- In 2006 U.S District Court issued an order revoking regulation (40 CFR 122.3(a)) which meant that incidental discharges from vessels were required to have NPDES permits, consistent with the Clean Water Act.
2013 FINAL VGP - OVERVIEW

Available at - [www.epa.gov/npdes/vessels](http://www.epa.gov/npdes/vessels)

- First VGP was issued in 2008 and expired in December 2013
- Second VGP was issued in 2013 and is effective from December 19, 2013 to December 18, 2018
- Jurisdiction of the permit
  - Inland waters, territorial sea up to 3 nautical miles (nm)
- Authorizes discharges incidental to the normal operation of non-recreational and non-military vessels 79 feet or longer, operating in a capacity as a means of transportation
  - 27 discharge categories, and additional vessel class-specific conditions for 8 classes of vessels
- Certain vessel discharges not eligible for coverage (e.g., sewage)
- Vessel Operators must submit a 2013 VGP Notice of Intent for coverage
- Annual Reports submitted by February 28 for previous operating year
BIOFOULING - VGP REQUIREMENTS

- Hull Fouling regulated under 3 discharge types in the VGP
  - Anti-foulant Hull Coatings (2.2.4)
  - Cathodic Protection (2.2.7)
  - Underwater Ship Husbandry - Primary Section (2.2.23)
BIOFOULING - VGP REQUIREMENTS

- Vessel operators must minimize hull fouling when not engaged in short distance voyages (from Underwater Ship Husbandry requirements):
  - Management measures to minimize the transport of attached living organisms include:
    - Selecting an appropriate anti-foulant management system and maintaining that system,
    - Conducting an in-water inspection,
    - Cleaning and maintenance of hulls, and
    - Thorough hull and other niche area cleaning when a vessel is in drydock.
  - Specified management measures consistent with IMO guidelines
  - *When feasible*, flush-fit sacrificial anodes to the hull or vessel fill the space between the anode and hull backing (from Cathodic Protection requirements)
2014 - SMALL VESSEL GENERAL PERMIT (SVGP)

Available at -
http://water.epa.gov/polwaste/npdes/vessels/Small-Vessel-General-Permit.cfm

- Effective December 19, 2014 to December 18, 2019
- Authorizes discharges incidental to the normal operation of non-military, non-recreational vessels less than 79 feet, operating in a capacity as a means of transportation
- Section 2.6 includes best management practices for “Vessel Hull Maintenance”
  - e.g., inspect the vessel hull at least once per quarter for any attached living organisms and clean, if necessary
  - prior to transporting the vessel from one waterbody to another overland, inspect the visible areas of the vessel for any attached or visible stowaway living organisms
  - minimize the impact of anti-foulant system to the aquatic environment
STATE WATER QUALITY CERTIFICATIONS

- Under Section 401 of the Clean Water Act, States have to certify that federally issued permits are protective of water quality in order for the permit to be issued in a state’s waters.

- Some States have additional requirements applicable to underwater ship husbandry and hull fouling within their State waters (e.g., additional limitations on underwater ship husbandry).

- States include California and Maine.

- See Part 6 of the VGP and Part 7 of the sVGP for State conditions.
BIOFOULING - FUTURE DRIVERS

• Identify practices that result in:
  • Reducing fouling while not resulting in secondary toxic impacts
  • Cost effective measures for evaluating the status or degree of fouling on vessels
  • Cost-effective measures for underwater ship husbandry (e.g., that remove growth and contain solid residuals before discharge)

• Other engaged stakeholders -
  • Shipowners have direct financial (and environmental stewardship) interest in reducing fouling
  • Other agencies actively engaged in finding solutions and international regulatory interests
ADDITIONAL RESOURCES

• General VGP questions
  • VGP@epa.gov
  • www.epa.gov/npdes/vessels

• Underwater Ship Husbandry Discharges - Technical Paper
  • http://www.epa.gov/npdes/pubs/vgp_hull_husbandry.pdf

• Webinars
  • EPA has held 4 webinars on the 2013 VGP
  • The archived presentations are available at http://water.epa.gov/polwaste/npdes/vessels/VGP-Additional-Resources.cfm

• Frequently Asked Questions (FAQs)
  • Revised FAQs for the 2013 VGP available at http://water.epa.gov/polwaste/npdes/vessels/Vessels-FAQs.cfm