Future Permit Requirements for Vessels: EPA Technology Based Effluent Limits for Ballast Water Treatment

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- Until December 19, 2008 EPA will have a regulatory exemption for ballast water and other incidental discharges.
- Due to court order, this exemption will be vacated.
- As a result, many vessels must have a 402 Clean Water Act NPDES permit to discharge legally after that date.
- Due to congressional action, these permits will not apply to any recreational vessel (now regulated by different section of the Act).
- Due to congressional action, the permitting program will also not apply to non-recreational vessels less than 79 feet fishing vessels (regardless of size) except for Ballast Water discharges until at least July, 2010.
CWA PERMIT BASICS

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

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

- National Pollutant Discharge Elimination System (NPDES) Permits [CWA § 402]
  - Individual permits
  - General permits
  - Permit Term not to exceed 5 years
  - State authorization (46 States and authorized territories)
  - For EPA-issued permits, State 401 certification required
EPA Permit Development

- June 21, 2007 Fed Reg notice (72 FR 34241)
  - Explain implications and seek public input
    - Over 1,600 responses received

- June 17, 2008 Fed Reg notice (73 FR 34296)
  - Proposed for public comment two draft NPDES general permits for discharges incidental to normal operation of vessels
  - Due to recent legislation, EPA will finalize only one of these permits.

- On or around December 19, 2008, EPA will finalize the Vessel General Permit for vessels greater than 79 feet (excluding recreational vessels and fishing vessels).
Permit Requirements
(this iteration)

- Initial issuance of general permit will be national in scope
- No EPA fees
- Under CWA, NPDES permitting for vessels being used as a means of transportation covers inland waters and 3 nautical mile (nm) Territorial Sea.
Permit Requirements
(this iteration)

- EPA national general permit does not ensure national consistency.
- Under section 401 of the Clean Water Act, states may add requirements for their state waters provided they are based on:
  - State Law, or
  - State Water Quality Standards
- Some states have indicated they will be adding additional requirements.
Effluent Limits

- Technology-Based Effluent Limits applicable to all vessels
- Discharge Specific Effluent limits: 28 discharges identified, each with at least one BMP associated with the discharge
  - Ballast Water, Bilgewater, AFFF, Hull Leachate, Graywater, Underwater Husbandry...
Discharge Specific Limits: Ballast Water

- The permit:
  - Incorporates Coast Guard mandatory management and exchange requirements
  - Vessels engaged in Pacific Nearshore Voyages must conduct exchange greater than 50 nm from the coast – considering for Atlantic/Gulf of Mexico
  - Mandatory saltwater flushing for all vessels with residual ballast water and sediment (NOBOBs) coming from outside the USEEZ
Discharge Specific Limits: Ballast Water (cont.)

- The permit:
  - Must use shore based treatment if available and economically practicable and achievable
  - Must conduct exchange as early as practicable

- Exchange/flushing requirements have a safety exemption and do not mandate diversion.

- Reopener clause in the permit to allow for inclusion of a more stringent standard if appropriate before permit reissuance.
Experimental Ballast Water Treatment Systems

- Permittees may discharge residual biocides if:
  - Lower than acute water quality criteria
  - Lower than 100 ug/L of residual chlorine

- EPA specifically requested comment on appropriate limits, and whether to include other limits for biocides (i.e. Total Residual Oxidant).

- In final permit, EPA is considering inclusion of these limits.

- Permittees may apply for individual permits if they do not meet these terms.
Ballast Water Treatment Standards

- Why is EPA not requiring numeric living organism Ballast Water Treatment Standards for the 2008 permit?
- What is Best Available Technology (BAT) economically achievable?
- At this time, EPA found that treatment technologies are not currently available and economically achievable.
What does EPA need to show that technologies are available?

- Robust effectiveness data for at least one treatment system
- Data that at least one system can function reliably on-board ships.
- At least minimal installation capacity
- Robust economic/costing information for installation and maintenance of the systems.
Changes in future “availability”

- Much has changed in the last year – more will change over the next few years.
- If technologies become available very quickly, EPA may use reopener clause and require technology sooner than 5 years.
- EPA will continue evaluating what we consider available under a BAT standard over the life of the permit and beyond.
Future Permit Requirements and Effluent Limits

Once Technologies are available, EPA may require limits that reflect the more effective technologies.

EPA will set future limits based on availability and economic achievability. This means:

- Standards may vary dependent upon age or size of vessels.
Future Permit Requirements and Effluent Limits

- Once systems are considered available under BAT, EPA does not nor will not type approve nor mandate specific systems.
  - EPA will set effluent limits: it is upon the permittee (ship owner/operator) to ensure they select a system that works and functions effectively.
- IMO standard might be a good interim limit, but lower concentration limits as ultimate goal (i.e. Administration proposal – 2 orders of magnitude lower than IMO).
For More Information

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

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