

Effluent Limits to Mitigate the Spread of Invasive Species in the New EPA Vessel General Permit

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Clean Water Act Authority

- Until February 6, 2008, there will be a regulatory exemption from NPDES permitting of ballast water and other incidental discharges from vessels.
- 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, NPDES permitting will not apply to any recreational vessel (will be regulated by different section of the Act).
- Due to Congressional action, NPDES permitting also will not apply to non-recreational vessels less than 79 feet or to fishing vessels (regardless of size) except for Ballast Water discharges until at least July, 2010.

VESSEL GENERAL PERMIT (VGP) ISSUANCE

- June 17, 2008 - Federal Register notice (73 FR 34296)
 - Proposed for public comment two draft NPDES general permits for discharges incidental to normal operation of vessels: the Vessel General Permit and the Recreational Vessel General Permit.
- December 18, 2008 – final VGP issued (Federal Register notice on December 29, 2008 (73 FR 79473))
 - Final VGP covers:
 - All discharges incidental to normal operation of non-recreational vessels 79 feet or longer, except commercial fishing vessels.
 - For ballast water discharges, permit covers all non-recreational vessels (including commercial fishing vessels and vessels less than 79 feet).
 - The Recreational Vessel General Permit was not finalized due to the July 2008 Congressional action.



Permit Overview

- Initial Issuance of Vessel General Permit (VGP) is national* in scope
 - There are additional state specific requirements issued via the 401 certification process
- No EPA fees for the VGP
- Jurisdiction of the permit covers inland waters and 3 nautical mile (nm) Territorial Sea
 - *Alaska and Hawaii not included in the permit at this time, but will be added as soon as possible

Effluent Limits

- Technology-Based Effluent Limits applicable to all vessels
- Discharge Specific Effluent limits: 26 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
 - Mandatory saltwater flushing for all vessels with residual ballast water and sediment (NOBOBs) coming from outside the USEEZ

Discharge Specific Limits: Ballast Water (cont.)



- 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.

Additional Ballast Water State 401

Certification Requirements



- Ballast Water treatment standards with compliance schedules are incorporated by 8 states (California, Illinois, Indiana, Ohio, Michigan, Minnesota, New York, Pennsylvania).
 - There are four different treatment standards incorporated: IMO equivalent (Ill, Ind, Minn), S. 1578 equivalent (New York), California and Pennsylvania (zero discharge above 50 microns), and “Michigan Approach” (must use select treatment approaches (e.g., hypochlorite)).
- Some states require exchange without deviation allowances (e.g. New York).
- Some states are requiring Atlantic Nearshore Exchange and Flushing (e.g., Massachusetts and New York).
- Connecticut requires use of a treatment system if installed for any reason (e.g., STEP, to meet IMO conditions, or to meet 401 certification conditions for any other state).

Pacific State 401 Certifications

- Additional Conditions given by California, Hawaii.
 - See VGP Part 6
- 401 Certification Waived by Alaska, Oregon, and Washington.

Experimental Ballast Water Treatment Systems

- Permittees may discharge residual biocides if:
 - Lower than CWA § 304 acute water quality criteria
 - Lower than 100 ug/L of residual chlorine*
 - *Some states included lower residual chlorine limits (e.g., California at 8 ug/L)
- If water quality criteria are not available, permittees may conduct Whole Effluent Toxicity (WET) Testing and may discharge under VGP provided they have minimum toxicity.
- Permittees may apply for individual permits if they do not meet these terms

Ballast Water Treatment Standards

- Why did EPA not requiring numeric living organism Ballast Water Treatment Standards for the 2008 permit?
- At this time, EPA found that treatment technologies are not currently available and economically achievable as of December 18, 2008 under the Best Available Technology (BAT) standard.
 - CWA § 301 sets 1989 deadline for BAT – thus cannot put compliance schedules for technology based limits into NPDES permits
- However, this does not mean that EPA believes strict numeric limits are inappropriate, but rather, that technologies are not ‘available’ today under this BAT standard.
 - April 2008 DHS/EPA legislative proposal: IMO standard as first step, 100 times more stringent than IMO standard as second step

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 establish treatment-based discharge standard sooner than 5 years
- EPA will continue evaluating what we consider available under a BAT standard over the life of the permit and beyond.

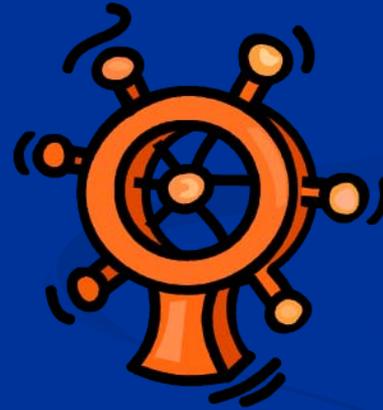
Future Permit Requirements and Technology-based Effluent Limits

- Once systems are considered available under BAT, EPA will not type approve nor mandate specific systems.
 - EPA will set effluent limits based on what available technology can achieve: it is upon the permittee (ship owner/operator) to ensure they select a system that works and functions effectively.
- IMO standard as a potential future interim limit
 - Active development of systems in international community to meet IMO standard

Other Invasive Species Targeted Limits

- EPA added other narrative limits that strive to minimize the spread of invasive species. For example:
 - Chain Locker Effluent
 - Seawater Piping Biofouling Prevention
 - Underwater Hull Husbandry
- EPA also did not prohibit the discharge of certain substances (e.g., copper anti-fouling paint) due to their potential role in mitigating the spread of invasive species.

Questions?



For More Information

- Visit www.epa.gov/npdes/vessels

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