

Wastewater Permitting for the Shipbuilding Industry

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Key Topics

- NPDES Permitting Overview
- Permit Application Process
- NPDES Permit Compliance

NPDES Permitting Overview



National Pollutant Discharge Elimination System (NPDES) Permit Program

- Established by Section 402 of the Clean Water Act (CWA)
- Permit system for point-source dischargers
- Most States, such as Louisiana and Texas, have been delegated as a permitting authority by the EPA; however, USEPA retains oversight of delegated NPDES programs
- NPDES permits allow for discharges of pollutants (all wastewaters) under applicable CWA sections such as:
 - Section 301 – Effluent Limitations
 - Section 302 – Water Quality-Related Effluent Limitations

National Pollutant Discharge Elimination System (NPDES) Permit Program

➤ Applicability

- A permit is required for discharge of **pollutants** from any **point source** into **waters of the United States**
- **Shipyards and Barge Cleaning facilities are included** – storm water, ballast waters, etc.

➤ Obtaining an NPDES Permit

- An application must be submitted to the delegated permitting authority
- New dischargers/sources must submit 180 days prior to discharge; can not discharge until permit is effective
- Existing dischargers must re-apply for renewal at least 180 days prior to permit expiration
- NPDES permit authorization is effective for five years

Permit Application Process



Importance of the Permit Application

- The permit application is an extension of the permit – “permit as a shield” concept

- The permit is effective for 5 years – Changes during permit period probably require a permit modification

- Opportunity to renegotiate permit limits and requirements
 - Reduction of monitoring frequency
 - Addition of “orphan” discharges (sources not previously included) or new outfalls

Preparing A Complete Application

- Conduct thorough evaluation of site to identify all current and future discharge sources and discharge points
- Collect analytical data for appropriate parameters/pollutants
 - Use Approved Test Methods
 - Use a Qualified Lab
- Update water balance flow diagram
- Update site figures & maps
- Prepare a detailed narrative describing wastewater generation, treatment, and discharge processes to supplement application forms
- Complete Application Forms
- Open communication with permitting agency

Common Wastewaters Generated at Shipyards

- Ballast Waters
 - Hydrostatic Test Waters
 - Sanitary Wastewaters
 - Equipment Washwater
 - Compressor Condensate
 - Deck Wash Water
 - Industrial Storm Water
-**Don't forget**
- Wastewater from disinfecting potable water systems – USCG requirement
 - Dry Dock Water
 - Other Misc. Washwaters

Permitting Challenges with Recent Bollinger LPDES Permit Renewal Applications

- The shipbuilding industry is very unique in terms of water permitting
- Collecting wastewater samples – intermittent discharges
- How to permit newly identified “orphan” wastewater streams
 - Potable Water Tank Disinfection Water
 - Internal Tank Washwater/ Misc. washwaters
- Salt water interference with Chemical Oxygen Demand (COD) results for incoming ballast waters
- Addressing incidental discharges from customer vessels and implications of EPA vessel general permit (VGP)

Resolving the Challenges

- The shipbuilding industry is very unique in terms of water permitting – **Maintained open communication between facility personnel and permit writer to enhance mutual understanding**
- Collecting wastewater samples – **Began application process at least 12 months prior to expiration**
- How to permit newly identified wastewater streams – **Requested BMPs in lieu of effluent limitations and monitoring**
- Salt water interference with Chemical Oxygen Demand (COD) results – **Requested Total Organic Carbon (TOC) limits in lieu of COD limits**
- Addressing incidental discharges from customer vessels – **Incorporated detailed discussion in permit application narrative and communicate with permit writer since VGP issuance**

Results of Negotiations – Draft Permit

- ✓ LDEQ incorporated BMPs in the draft LPDES permit in lieu of permit limits for the discharge of potable water tank disinfection water and internal tank washwater
- ✓ LDEQ granted the request to sample and monitor TOC instead of COD for ballast water discharges from facilities located in estuarine areas
- ✓ LDEQ incorporated language in Part II recognizing incidental discharges from customer vessels are authorized under EPA VGP
- ✓ Incoming ballast water outfalls were removed from LPDES permits since incoming ballast water is also regulated under EPA VGP

NPDES Permit Compliance



NPDES Permit Compliance: Knowing Your Permit

There are four (4) components to all NPDES Permits:

- Cover Page
- Part I – Effluent Limitations and Monitoring Requirements
- Part II – Other/Specific Requirements
- Part III – Standard Conditions –Applies to all NPDES permits
 - Outlines the legal, administrative, and procedural requirements of the permit

NPDES Permit Compliance:

Knowing Your Permit - Part I – Effluent Limitations and Monitoring Requirements

- Contains outfall designations and numeric limitations and monitoring frequencies for wastewater discharges
- In LPDES shipyard permits, it is not uncommon to see an outfall designated by wastewater type instead of an actual location to accommodate mobile discharge sources
- Common outfalls in LPDES shipyard permits include:
 - Ballast Waters
 - Hydrostatic Test Water
 - Equipment Washwater
 - Sanitary Wastewater
 - Compressor Condensate
 - Industrial Storm Water

Knowing Your Permit - Part II – Other Requirements

- Contains additional permit conditions specific to the permitted facility
 - BMPs
 - Additional monitoring activities
 - Pollution prevention plan requirements, etc.

- Many types of wastewaters from shipyards in LPDES permits are authorized by using BMPs instead of numeric limits
 - Sampling is logistically infeasible
 - Low contamination potential wastewaters
 - For example - Deck Washwater, Misc. Rinse Waters

- BMPs can also be imposed for wastewaters that have numeric limitations
 - Storm Water – Storm Water Pollution Prevention Plan (SWP3)
 - Equipment Washing

Complying With Your Permit

- Employee Training
 - General awareness training for all employees
 - Advanced training for personnel directly involved with environmental tasks
 - Wastewater operator training
 - Wastewater sampling
- Conduct internal compliance audits
- Maintain well organized records and documentation

Questions?

