

Uniform National Discharge Standards



UNDS tidings

Uniform National Discharge Standards: Phase II Update and the Batch Rulemaking Process

Phase II Recap

The Navy and EPA are continuing the development of Phase II of the UNDS rulemaking. While Phase I identified the 25 Armed Forces vessel discharges that require control, the purpose of Phase II is to establish performance standards for these discharges. This second phase involves the evaluation of potential marine pollution control devices (MPCDs) as a basis for establishing the standards. The standards will be promulgated through rulemaking procedures.

The Batch Rulemaking Process

The development and application of a technical process for establishing performance standards for 25 discharges encompassing approximately 7,000 Armed Forces vessels is a complex process. The Navy and EPA originally envisioned promulgating performance standards simultaneously for all 25 discharges identified as requiring control from Phase I; however, it was determined that a more expeditious process was available to put in place environmentally protective standards for Armed Forces vessels. Therefore, Navy and EPA have agreed to promulgate Phase II standards in batches. The batch rulemaking approach allows Navy and EPA to conduct technical analyses and draft performance standards in smaller groups rather than focusing on

all 25 discharges at one time. The technical analyses will focus on one batch at a time, and it is expected that the 25 discharges will result in 4 to 5 batches.

Benefits of the Batch Rulemaking Process

There are several advantages associated with conducting a batch rulemaking. By expediting the progression of the rulemaking by batches, the Navy and EPA will be able to solicit State, Tribal, and public interest early and accelerate the development of performance standards, thus more quickly realizing the goals of UNDS.

The Batch One Discharges

The Navy and EPA have agreed that the first batch, Batch One, will consist of seven discharges. The seven discharges are:

- Chain locker effluent,
- Elevator pit effluent,
- Hull coating leachate,
- Photographic laboratory drains,
- Surface vessel bilgewater/oil-water separator discharge,
- Underwater ship husbandry, and
- Weather deck runoff.

Four of the Batch One discharges—hull coating leachate, surface vessel bilgewater/oil-water separator discharge, underwater ship husbandry, and weather deck runoff—require complex technical analyses to support standard development. These detailed analyses are discussed more in the next section. The remaining three Batch One discharges—chain locker effluent, elevator pit effluent, and photographic laboratory drains—do not require

CONTENTS

Uniform National Discharge Standards	
Phase II Update and the Batch Rulemaking Process.....	1
Overview of the Elements of Phase II	2
Upcoming Activities.....	3
UNDS Fast Fact.....	3
Frequently Asked Questions	4

Phase II continued...

complex analyses. These three discharges are not typically discharged within 12 nm, where UNDS is applicable, and the UNDS Program anticipates establishing zero discharge performance standards for these discharges. The Navy and EPA anticipate completing the necessary technical analyses for the Batch One discharges by late summer 2003.

Overview of the Elements of Phase II

Phase II Technical Approach

The Navy and EPA, as well as the U.S. Coast Guard (USCG), are fully engaged in conducting the technical analyses necessary for establishing the Batch One discharge performance standards. There are many components to the technical approach for each discharge:

- **Characterization Analysis:** Phase I results and Phase II sampling, literature searches, and input from ship systems experts are used to describe the physical, chemical, and biological properties of each discharge. This information is documented in a Characterization Analysis Report (ChAR).
- **MPCD Identification and Screening:** Potential MPCDs are identified and grouped by common operation (i.e., MPCD option group). MPCDs are screened to determine if they are sufficiently proven for the discharge in the marine environment. Those that are not sufficiently proven are not considered for further analysis to support standard development.
- **Vessel Grouping:** Vessels are grouped based on operational, engineering, and discharge characteristics to reduce the number of analyses in subsequent steps.
- **Feasibility Analysis:** Each MPCD option group that passes the screen is analyzed to determine the practicability, operational impacts, and the costs of installing and using the MPCD on Armed Forces vessels. A Feasibility Impact Analysis Report (FIAR) documents the analysis results.

- **Environmental Effects Analysis:** An environmental effects analysis (EEA) is conducted to assess the environmental impacts, in close proximity to the vessel, of both the controlled and uncontrolled discharge. The analysis involves comparing discharge parameters to water quality criteria or other regulatory limits, annual mass loadings, acute toxicity, and potential to release bioaccumulators, human pathogens, or nonindigenous species. The results of the analysis are documented in an Environmental Effects Analysis Report (EEAR).

After all of the analyses are performed, the Phase II analytical results for each discharge are synthesized in a discharge assessment report (DAR). The DAR also includes an evaluation of relevant U.S. laws and international standards. The Navy and EPA use the DAR to develop MPCD performance standards.

The analyses above consider discharge-specific effects. After drafting performance standards, cumulative impact analyses will be conducted to determine the effectiveness of the performance standards and to evaluate the combined impact of each batch of discharges. The Navy and EPA plan to develop and execute an analysis that will consider the cumulative impacts of multiple discharges from multiple vessels. This analysis will be performed for one or more harbors. The cumulative impact analysis (CIA) is currently under development.

Proposed Rule

Once technical analyses are complete, the Navy and EPA will begin preparation of the proposed rule. The preamble will describe the Navy and EPA's rationale for developing MPCD performance standards and will address statutory and Executive Order requirements. The proposed rule will be published in the Federal Register and open for public comment.

Upcoming Activities

The Navy, EPA, and USCG have established a process to meet with interested States, Territories, Native American Tribes, and Federal agencies to provide a forum to discuss the current technical approaches being used in the UNDS development process. During these meetings, the Navy, EPA, and USCG inquire about stakeholder interests and concerns and use this input to refine the technical approaches. These consultation meetings began in Phase I and are continuing in Phase II. The Navy, EPA, and USCG anticipate offering briefings to States, Territories, and Tribes on the current status of Phase II and the Batch One discharges in the summer of 2003. These briefings will be conducted prior to publication of the proposed Phase II rule. In addition, the Navy and EPA will participate in environmental conferences to increase the outreach opportunities to discuss the UNDS process.

Would you like to be added to the UNDS tidings mailing list?

Contact:

Booz Allen Hamilton Inc.

1725 Jefferson Davis Highway, Suite 1100

Arlington, VA 22202

Or email: UNDS@bah.com



UNDS Fast Fact

Batch One Discharge Descriptions

As discussed above, the Navy and EPA identified seven discharges for Batch One. The following provides descriptions of each of the Batch One discharges:

- **Chain Locker Effluent:** The accumulated precipitation and seawater that is emptied from the compartment used to store the vessel's anchor chain.
- **Elevator Pit Effluent:** The liquid that accumulates in, and is discharged from, the sumps of elevator wells on vessels.
- **Hull Coating Leachate:** The constituents that leach, dissolve, ablate, or erode from the paint on the hull into surrounding seawater.
- **Photographic Laboratory Drains:** The laboratory wastewater resulting from the processing of photographic film.
- **Surface Vessel Bilgewater/Oil-Water Separator Discharge:** The wastewater from a variety of sources that accumulates in the lowest part of the vessel (the bilge), and the effluent produced when the wastewater is processed by an oil-water separator.
- **Underwater Ship Husbandry:** The materials discharged during the inspection, maintenance, cleaning, and repair of hulls performed while the vessel is waterborne.
- **Weather Deck Runoff:** The precipitation, washdowns, and seawater falling on the weather deck of a vessel and discharged overboard through deck openings.

Frequently Asked Questions

The UNDS rulemaking is a dynamic process that has generated a great deal of interest and questions. Here are the answers to recent questions:

Q. Where is UNDS applicable?

A. UNDS requirements apply to the U.S. territorial sea and the contiguous zone, which refers to all inland navigable waters and the ocean waters out to 12 nautical miles.

Q. What is the basis for developing performance standards?

A. The UNDS statute requires the Navy and EPA to consider seven factors in the development of performance standards. These seven factors are the same as those required for Phase I analyses and include:

- The nature of the discharge;
- The environmental effects of the discharge;

- The practicability of using the MPCD;
- The effect that installation or use of the MPCD would have on the operation or operational capability of the vessel;
- Applicable U.S. law;
- Applicable international standards; and
- The economic costs of the installation and use of the MPCD.

The Navy and EPA consider each of these factors in the Phase II analyses. Nature of discharge is captured in the ChAR; practicability, operational impact, and cost are captured in the FIAR; environmental effects are captured in the EEAR and CIA; and relevant U.S. law and international standards are captured in the DAR. The DAR also summarizes the individual technical reports to support Navy and EPA decision making for performance standard development.

To learn more about UNDS, or to download current and past issues of **UNDS**tidings, check out the UNDS homepage: <http://unds.bah.com>

UNDS

1725 Jefferson Davis Highway, Suite 1100
Arlington, VA 22202