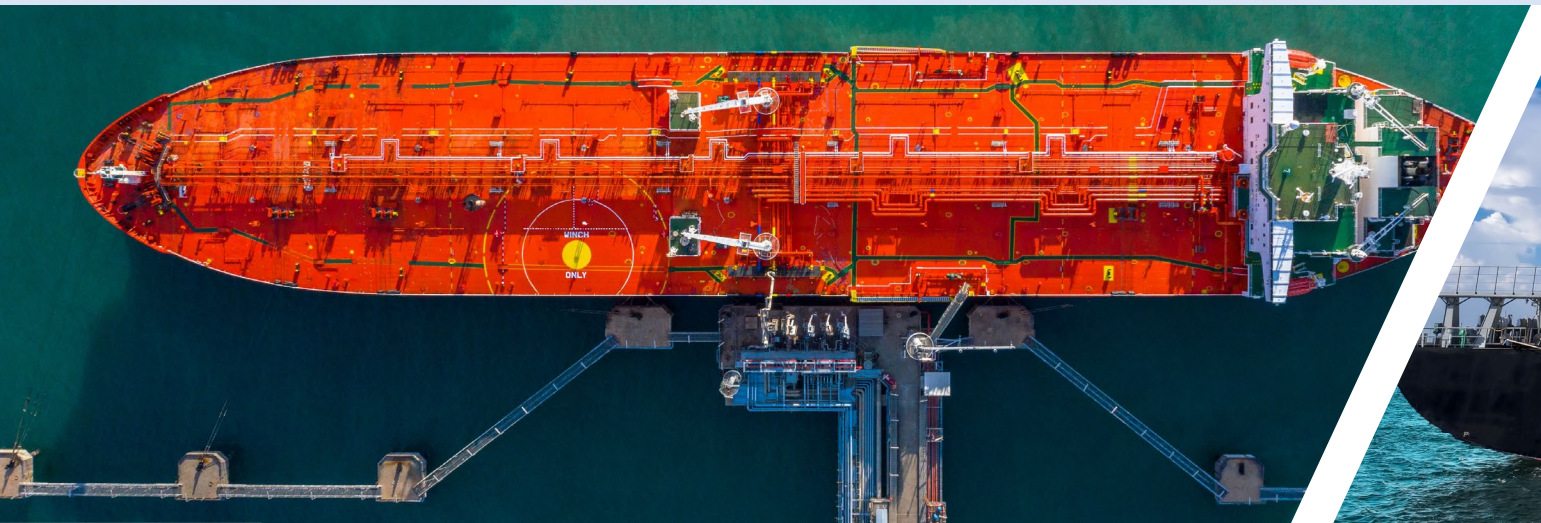
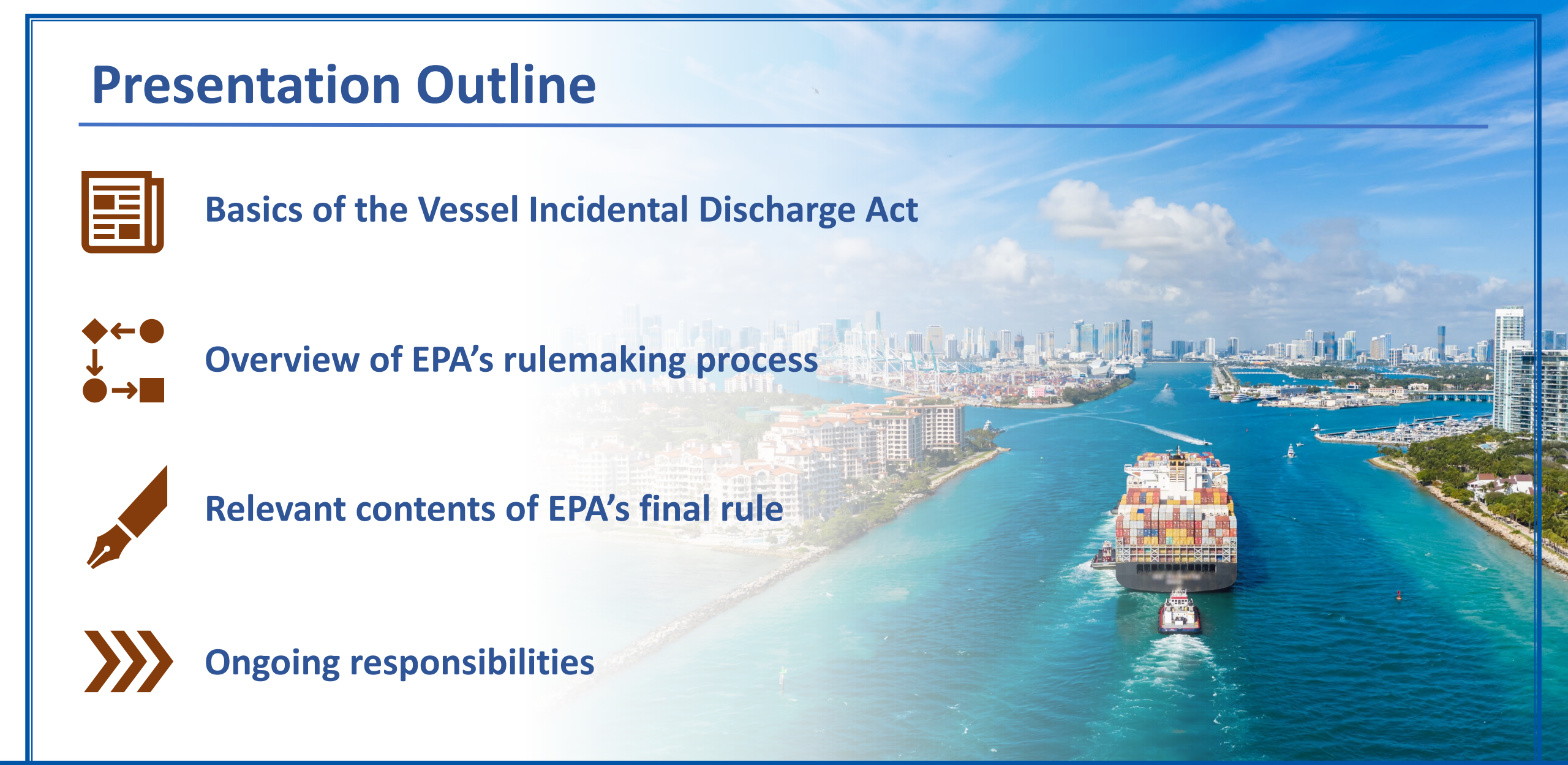
Vessel Incidental Discharge National Standards of Performance

2025 PBWBG Meeting – April 2025



Presentation Outline

- Basics of the Vessel Incidental Discharge Act
- Overview of EPA's rulemaking process
- Relevant contents of EPA's final rule
- Ongoing responsibilities



2018 Vessel Incidental Discharge Act (VIDA)

Purpose: (1) Harmonize the patchwork of U.S. Coast Guard (USCG), EPA, and state vessel incidental discharge permits/regulations, and **(2)** Prevent or reduce the discharge of pollutants (e.g., aquatic nuisance species; metals; pathogens) from large commercial vessels.

Applicability: Applies to discharges incidental to the normal operation of ~85,000 non-military, non-recreational (i.e., primarily commercial) vessels 79 feet in length and above, and ballast water only from smaller commercial vessels and fishing vessels of all sizes, into waters of the United States or the contiguous zone.

Effect: Preempts states from adopting or enforcing more stringent requirements except through one of several petition/application options identified in VIDA. Once final, the regulations will replace EPA's National Pollutant Discharge Elimination (NPDES) Vessel General Permit (VGP) and USCG regulations.

EPA

Directs EPA to promulgate **technology-based national standards of performance** that are at least as stringent as the VGP, with limited exceptions

USCG

Directs USCG to develop regulations necessary to **ensure, monitor, and enforce compliance** with EPA's standards and USCG requirements

EPA's VIDA Rulemaking

2020 Proposed Rule (NPRM)

- Three categories of "general standards" applicable to all discharges, and "specific standards" for 20 different equipment/systems
- Procedures for states to petition for more stringent standards, as provided for under VIDA

2023 Supplemental Notice (SNPRM)

Feedback received during comment period and post-proposal stakeholder engagement drove decision to issue a Supplemental Notice

1. **New Data:** EPA reviewed USCG ballast water management system type-approval data to evaluate the numeric ballast water discharge standard
2. **Additional Regulatory Options:** EPA presented additional options under consideration for the final rule for the following select discharges:
   - Ballast tanks
   - Graywater systems
   - Hulls and associated niche areas

2024 Final Rule

Published in the *Federal Register* on October 9, 2024 (89 FR 82074)

EPA's VIDA Rulemaking (continued)

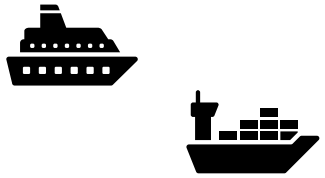
General Standards	Specific Standards		
• General operation & maintenance • Oil management • Biofouling management	• Ballast tanks • Bilges • Boilers • Cathodic protection • Chain lockers • Decks • Desalination & purification systems	• Elevator pits • Exhaust gas emission control systems • Fire protection equipment • Gas turbines • Graywater systems • Hulls & associated niche areas • Inert gas systems	• Motor gasoline & compensating systems • Non-oily machinery • Pools & spas • Refrigeration & air conditioning • Seawater piping • Sonar domes

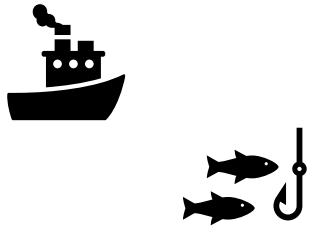
Procedures for State Petitions:

- **Review of standards:** Revise the national standards of performance based on new information.
- **Emergency order:** Temporarily require the use of an emergency best management practice (up to four years) in a specific location to address aquatic nuisance species or water quality concerns.
- **Enhanced Great Lakes System Requirements:** Establish additional requirements with respect to discharges in the Great Lakes.
- **No-Discharge Zone:** Completely prohibit one of more discharges in some or all state waters.

Interim Requirements

Until the USCG implementing regulations are final, effective, and enforceable, interim requirements apply.

Vessel Type	Applicable Requirements
 Non-fishing vessels ≥ 79 feet in length	• **2013 VGP** • **USCG ballast water regulations** • **Applicable state and local government requirements**

 Vessels < 79 feet in length and fishing vessels of any size	• **Ballast water requirements only**
	  • 2013 VGP
	  • USCG ballast water regulations
	• **Applicable state and local government requirements**

Ballast Water (BW): Numeric Discharge Standard

- Continues numeric limitations for biological parameters (organisms; Toxicogenic *Vibrio cholerae*; *Escherichia coli*; Intestinal enterococci), as well as four biocide parameters
  - The standard for both the organisms and biocide parameters represents instantaneous maximum values not to be exceeded.
  - The final rule reflects units of both MPN/mL and cfu/mL for *Escherichia coli* and intestinal enterococci
- Continues the requirement that, prior to the compliance date for the vessel to meet the discharge standard, BW exchange must be conducted for any vessel subject to the BW discharge standard.

BW: Exclusions and Exemptions

Exclusions from ballast tank standards (per CWA section 312(p)(2)(B)(ii)(I)-(V))	Exemptions from numeric discharge standard only
1) Vessels that continuously take on and discharge BW in a flow-through system, if the Administrator determines that the system cannot materially contribute to the spread or introduction of an aquatic nuisance species *(Note: EPA is unaware of any such vessel(s) currently in commercial operation)*	1) Vessels ≤ 3,000 GT (1,600 GRT if GT is not assigned) and that do not operate outside the EEZ
2) National Defense Reserve Fleet vessels scheduled for disposal if the vessel does not have an operable BWMS	2) Non-seagoing, unmanned, unpowered barges that are not part of a dedicated vessel combination
3) Vessels discharging BW consisting solely of water taken onboard that meets the Safe Drinking Water Act requirements	3) Vessels that uptake and discharge BW exclusively in the contiguous portions of a single Captain of the Port Zone, but that may operate in more than one Zone
4) Vessels carrying all permanent BW in sealed tanks that are not subject to discharge	4) Vessels that travel no more than 10 NM and do not pass through any locks
5) Vessels discharging BW into a reception facility	5) Vessels that operate exclusively in the Laurentian Great Lakes (“Lakers”)
	6) Vessels enrolled in the Shipboard Technology Evaluation Program (STEP)
	7) Vessels discharging BW in the same location as where that BW originated, provided there’s no mixing with unmanaged BW or sediment from other areas
	8) Discharges prior to the BW discharge standard compliance date

BW: Best Management Practices (BMPs)

1. Develop a ballast water management plan (BWMP)
   - Address both uptake and discharge of BW
   - Describe vessel-specific practices and systems that ensure compliance with requirements
   - Note: specific details related to implementation are under the USCG's purview
2. Minimize the use of gravity to drain ballast tanks in port
   - Discharge in port using pumps
3. When practicable, high sea suction sea chests must be used in port or where clearance is less than five meters to the lower edge of the sea chest
4. Avoid BW discharge or uptake in areas with coral reefs
5. Clean ballast tanks periodically and do not discharge sediment from ballast tank cleanings
6. Maintain sea chest screens

BW: Pacific Region

"**Pacific Region**": The entire EEZ adjacent to the states of Alaska, California, Hawaii, Oregon, and Washington

- **BW Exchange:** Unless exempted*, vessels operating in the Pacific Region** must conduct a complete BW exchange in waters more than 50 NM from shore (33 U.S.C. 1322(p)(10)(C)(ii))
  - * If the vessel uses a type-approved BWMS or for voyages between or to specific ports in WA, OR, CA, AK, and HI; the Ports of Los Angeles and Long Beach; and the El Segundo offshore marine oil terminal, if the BW originated from specified areas
  - ** Either between 2 ports/destinations within the Pacific Region; or a port/destination within the Pacific Region and a port/destination on the Pacific Coast of Canada or Mexico north of parallel 20 degrees north latitude, inclusive of the Gulf of California

- **Low-Salinity BW:** Unless excepted, a complete BW exchange must be conducted for any vessel that transports BW sourced from low-salinity waters (<18 ppt) and voyages to a Pacific Region port/destination with salinity <18ppt (33 U.S.C. 1322(p)(10)(C)(iii))
  - Exchange must occur 50+ NM from shore if BW was sourced from the Pacific Region, or 200+ NM from shore otherwise.
  - Not required for vessels operating a type-approved BWMS that achieves a specified, more stringent numeric discharge standard for biological parameters (*Note: There is not currently a USCG type-approved process for this standard for BWMSs)*

Biofouling Management

Each vessel is required to develop a biofouling management plan. Specific details of the plan fall under the USCG's purview.

Additional biofouling management requirements are present in the following sections:

- Cathodic protection
- Chain lockers
- Hulls and associated niche areas
- Seawater piping
- Sonar domes

Biofouling Management (continued)

Cathodic Protection:

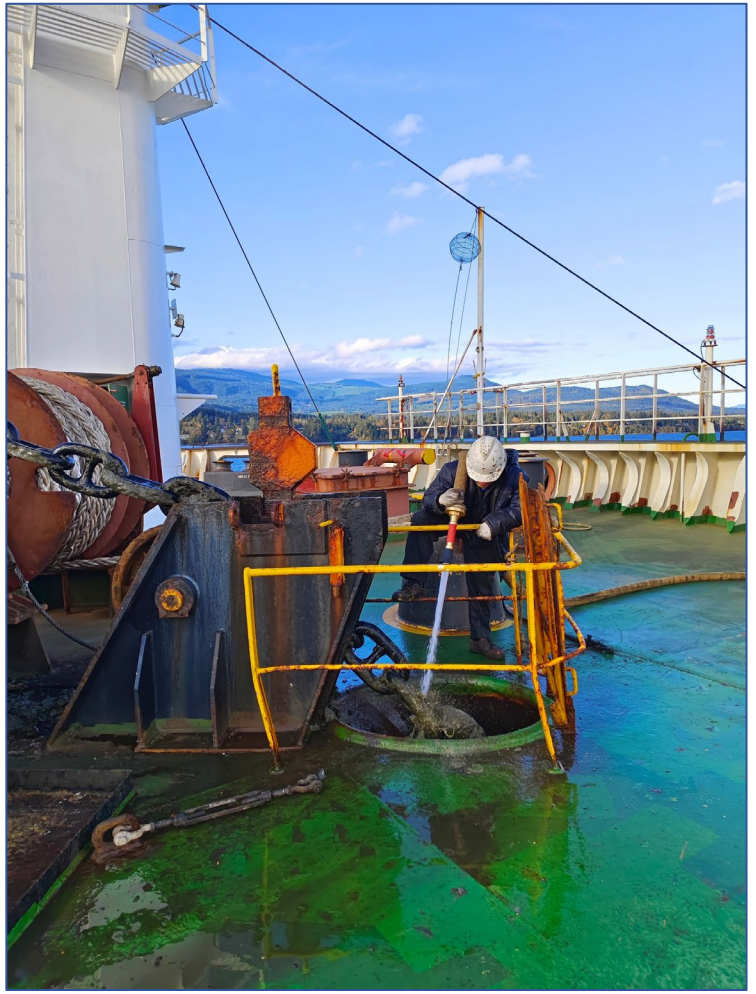
- Any spaces between flush-fit anodes and the backing must be filled

Chain Lockers:

- Rinse anchors and anchor chains of organisms and sediment when retrieved
  - ➢ For vessels that operate beyond the waters of the contiguous zone – rinse prior to entering the waters of the contiguous zone
- The discharge of biological organisms, sediment, precipitation, and seawater from any chain locker is prohibited in port

Sonar Domes:

- The discharge of bioaccumulative biocides from the exterior of the sonar dome is prohibited (when non-bioaccumulative alternatives are available)



Biofouling Management (continued)

Seawater Piping:

- Niche areas that are part of the seawater piping system are subject to "Hulls and Associated Niche Areas" requirements
- Inspect, maintain, and clean the system as necessary to minimize accumulation and discharge of biofouling organisms
- Any vessel with a seawater piping system that accumulates macrofouling must be fitted with a Marine Growth Prevention System (MGPS)
  - Must consider the level, frequency, and type of expected biofouling and the design, location, and area in which the system will be used
- Reactive measures to manage macrofouling must be used, but discharges from these measures are prohibited in port

Hulls and Associated Niche Areas (Anti-fouling Coatings):

- Must be specific to the operational profile of the vessel and equipment
- Apply, maintain, and reapply consistent with manufacturer specifications
- Includes specific restrictions and management practices related to coatings containing tributyltin (TBT), other organotin compounds, and cybutryne
- Alternatives to copper-based coatings (or coatings with lower biocidal release rates) must be considered for vessels either spending 30+ days/year in copper-impaired waters or using these waters as their home port

Biofouling Management (continued)

Hulls and Associated Niche Areas (Cleaning):

- Clean in in drydock when practicable
- Minimize damage to the coating, minimize release of biocides, and follow applicable requirements from manufacturer and FIFRA label
- Manage hulls and niche areas to minimize biofouling (e.g., through preventative cleaning of microfouling)
- Soaps, cleaners, and detergents used on vessel surfaces must be minimally toxic, phosphate-free, and biodegradable

In-water cleaning <u>without</u> capture:

- Discharge of macrofouling is prohibited
- For copper-based coatings, cleaning in a copper-impaired waterbody within 365 days of application is prohibited

In-water cleaning <u>with</u> capture is <u>not subject to the VIDA</u>

EPA's Ongoing Responsibilities

1 USCG Rulemaking Support

- Provide support to the USCG during the development of the proposed implementing regulations.

This includes both informal and formal (OMB/interagency) reviews of proposed standards to ensure that they align with the intent of EPA's standards.

2 State Petitions

- Develop process to implement the state petition program established under the VIDA, in line with EPA's regulations.

This includes:

- Identifying how EPA HQ, EPA Regions, and USCG will work together to respond to petitions.
- Hosting internal and external scoping meetings for feedback on petition procedures (planned for later in 2025).
- Developing procedures for state petitioners.

EPA's Ongoing Responsibilities

3 Intergovernmental Response Framework

- Coordinate with USCG and the ANS Task Force to develop a unified framework for ANS risks from vessel incidental discharges.

This includes:

- Providing procedures/tools to assess ecosystem vulnerability to ANS, identify and track ANS, and evaluate ANS risk from vessels; and
- Developing emergency BMPs for responding to ANS threats.

4 Great Lakes Research

- Continue collaboration with GLNPO, the University of Wisconsin-Superior, and MARAD on 7-year R&D plan (2020-2027) to test and pilot BWMSs for Lakers.

Primarily an oversight role while research/testing is being conducted.

More information on the R&D plan is available on the University of Wisconsin-Superior's website.

EPA's Ongoing Responsibilities

5 State-of-the-Science Research

- Continue to review new research and data on all 20 discharges.

This includes preparation for the VIDA-required 5-year reviews of all standards of performance.

EPA encourages you to share any new relevant information as it becomes available to facilitate these reviews.

6 Updates to Federally-Protected Waters

- Update the *Appendix A – List of Federally-Protected Waters* section of the final rule.

The list must be updated on a rolling basis to align with any new designations (e.g., Chumash National Marine Sanctuary).

QUESTIONS