



The American Waterways Operators

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Water Docket
U.S. Environmental Protection Agency
Mailcode: 2822T
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re.: Development of Clean Water Act
National Pollutant Discharge Elimination
System Permits for Discharges Incidental to the
Normal Operation of Vessels
(Docket ID No. OW-2007-0483)

Dear Sir or Madam:

The American Waterways Operators (AWO) is the national trade association for the inland and coastal tugboat, towboat, and barge industry. AWO's 400 member companies include the owners and operators of barges and towing vessels operating on the inland and intracoastal waterways; the Atlantic, Pacific, and Gulf coasts; the Great Lakes; and ports and harbors around the country. Our industry's 4,000 towing vessels and 27,000 barges safely and efficiently transport over 800 million tons of cargo each year, including more than 60 percent of U.S. export grain, vital energy sources such as coal and petroleum (including most of New England's home heating oil and gasoline), and other bulk commodities that are the building blocks of the U.S. economy. The tugboat, towboat, and barge industry provides the nation with a safe, secure, low-cost, environmentally-friendly means of transportation for America's domestic commerce.

On behalf of AWO's members, thank you for the opportunity to comment on the potential development of National Pollutant Discharge Elimination System (NPDES) permits for discharges incidental to the normal operation of vessels, pursuant to the U.S. district court decision in *Northwest Environmental Advocates v. EPA* (No. CV 03-05760 SI). AWO, as a member of the Shipping Industry Ballast Water Coalition, is a named intervener in this case on the side of the U.S. government and strongly supports the government's decision to appeal the district court decision to the Ninth Circuit Court of Appeals. We believe strongly that EPA's exemption of vessel discharges from regulation under the NPDES program (40 CFR 122.3(a)) was a legitimate exercise of agency authority under the Clean Water Act, one fully consistent with the intent of Congress and affirmed by more than 30 years of congressional action which left the exemption intact.

AWO is deeply troubled by the prospect of regulating vessel discharges under the NPDES program, for three primary reasons:

1. **First, the NPDES program was designed to regulate discharges from stationary sources, not highly mobile sources such as vessels in interstate commerce.** This regulatory program is an extremely poor fit for vessels that may transit through the waters of a dozen or more states in the course of a single voyage. The NPDES program employs technology-based effluent guidelines and water quality-based effluent limits that presume the ability to identify and quantify the specific pollutants that will be discharged and their collective impact on a particular receiving waterbody. The diversity of vessels and discharge streams that could be affected by the district court's *vacatur* of EPA's regulatory exemption makes the scientific application of this model to vessel discharges an impossibility. The NPDES model is the wrong approach to regulating discharges of ballast water and other releases from marine vessels, and we urge EPA to pursue all available legal and legislative avenues to secure relief from the district court decision.

2. **Second, the time frame provided by the court for the development of regulations is unworkable.** Establishing effective, scientifically grounded regulations to control the multiplicity of discharges from the wide range of affected vessel types by September 30, 2008, is simply not realistic. We understand that it typically takes at least five years to develop a new effluent guideline, not counting the additional time required for industry to come into compliance with the standard. Even if the task at hand were less monumental, we see no practical way to produce regulations and achieve industry compliance within 13 months. If the district court decision is not reversed at the appellate level or mooted by legislative action, we urge EPA to petition the court for a postponement of the *vacatur*. Given that vessel owners will be subject to citizen suits for discharges without a permit after the *vacatur* takes effect, it is imperative that sufficient time be allowed for the development of practical, effective regulations with which industry can feasibly comply.

3. **Third, vessel discharges are already regulated by numerous other statutory and regulatory programs, most of which were developed specifically with the nature of vessel operations and discharge streams in mind.** In addition to the Nonindigenous Aquatic Nuisance Species Prevention and Control Act (NANPCA) and the National Invasive Species Act (NISA) (16 U.S.C. § 4701 *et seq.*) and Coast Guard regulations pursuant thereto (33 C.F.R. § 151.2035), these include, but are not limited to:
 - Section 1321 of the Federal Water Pollution Prevention and Control Act, 33 U.S.C. § 1251 *et seq.*, which prohibits the discharge of oil or hazardous substances into the navigable waters of the United States in harmful quantities.
 - The Refuse Act, 33 U.S.C. § 407, which prohibits the discharge or depositing of any refuse matter or any material of any kind into the navigable waters in a manner that could impede navigation.
 - The Ocean Dumping Act, 33 U.S.C. § 1401 *et seq.*, which prohibits the dumping of any material from a vessel of the United States without a permit.
 - The Act to Prevent Pollution From Ships, 33 U.S.C. § 1901 *et seq.*, which implements the provisions of the International Convention for the Prevention of Pollution from Ships ("MARPOL") and generally prohibits the disposal of plastics and other garbage into the sea.

- The Oil Pollution Act, 33 U.S.C. § 2701 *et seq.*, which prohibits the discharge of oil into navigable waters, requires reporting of spills, and imposes significant restrictions on the types of barges that can carry petroleum.
- The Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. § 9601 *et seq.*, which makes owners or operators of vessels used to transport hazardous substances potentially liable for releases of those substances to the environment.
- U.S. Coast Guard regulations which mandate that all sewage generated aboard a vessel must be processed and treated in approved marine sanitation device sewage treatment systems aboard the vessel. *See* 33 C.F.R. § 159.7.

Taken together, we believe this assortment of statutes and regulations provides a much more effective framework than the NPDES program for the regulation of discharges from mobile sources such as vessels. If Congress or EPA is concerned that this framework does not adequately address certain types of vessel discharges that may be environmentally harmful, we believe the best course of action would be to: 1) conduct a study to identify specifically the discharges of concern, their environmental consequences, and means of controlling them most effectively; and 2) develop a statutory and/or regulatory approach specifically tailored to vessel operations (as was the case with NISA and new ballast water legislation currently under consideration by Congress). We believe that such an approach would be both more practical and more effective than attempting to shoehorn vessel discharges into an NPDES program that was clearly developed with land-based, stationary sources in mind.

With these overarching comments as a backdrop, we offer the following responses to the specific questions posed by EPA in the June 21 Notice of Intent and Request for Information.

- 1. What existing public or private data sources are available for use in identifying, categorizing, and describing the numbers and various types of commercial and recreational vessels currently operating in waters of the U.S. and that may have discharges incidental to their normal operation?***

The two most comprehensive sources of data on U.S.-flag vessels of which we are aware are the U.S. Army Corps of Engineers' *Waterborne Transportation Lines of the U.S.* and the U.S. Coast Guard's *Merchant Vessels of the U.S.* As discussed in the introduction to these comments, the tugboat, towboat, and barge industry consists of approximately 4,000 tugboats and towboats and over 27,000 barges of various types (tank, deck, and open or covered hopper). Doug Scheffler, AWO's Manager-Research and Data Analysis, is available to provide more detailed information on the composition of the barge and towing vessel fleet. Mr. Scheffler can be reached at (703) 841-9300, extension 264, or via email at dscheffler@vesselalliance.com.

2. *What is the best way to inform vessel owners of the need to obtain NPDES permit coverage and what existing public or private data sources are available that will assist in identifying vessel owners and operators?*

Given the extremely serious consequences of failure to comply with NPDES regulations (including the prospect of citizen suits), it is essential that EPA mount a comprehensive initiative to educate the potentially regulated community. Outreach to industry trade associations such as AWO and the many other commenters to this docket should be a central part of that communications plan, along with industry trade publications such as *Waterways Journal*, *Marine Log*, *Journal of Commerce*, *WorkBoat*, *Tradewinds*, and *Lloyd's List*. We also recommend that EPA partner with the U.S. Coast Guard and the U.S. Maritime Administration to leverage those agencies' considerable opportunities for communication with maritime industry stakeholders.

3. *What existing public or private data sources are available that identify the type of normal operations onboard commercial and recreational vessels that give rise to discharges and the characteristics of such discharges?*

In the absence of a single comprehensive source of information that provides the information that EPA is seeking, we believe the best sources of data are maritime industry trade associations, which can provide such information for the particular industry segments that they represent. As a preliminary step in this regard, AWO has identified a list of vessel discharges that occur in the course of barge and towing vessel operations. (See Attachment 1, "Discharge Streams Associated with the Tugboat, Towboat and Barge Industry.") We would be pleased to meet with EPA in whatever forum the agency deems most appropriate to continue this discussion and provide additional information to assist EPA in expanding its knowledge base.

4. *What existing information is available as to potential impacts of discharges incidental to the normal operation of vessels?*

When EPA promulgated the vessel discharge exclusion in 1973, the agency commented that "Most discharges from vessels to inland waters are now clearly excluded from the [NPDES] permit requirements. *This type of discharge generally causes little pollution* and exclusion of vessel wastes from the permit requirements will reduce administrative costs drastically." 38 Fed. Reg. 13,528 (May 22, 1973) (emphasis added). Studies by the Illinois State Water Survey (1993) and U.S. Maritime Administration (1994) support this conclusion. The Maritime Administration report, titled *Environmental Advantages of Barge Transportation*, concluded that the effect of waterway freight transport on water quality "is usually minimal." The report cited the Illinois State Water Survey, which found that "current levels of barge traffic on the Illinois River are not adversely affecting water quality in the navigation channel."

While AWO is aware of no comprehensive source of data on the environmental impacts of vessel discharges, we believe this very lack of data – along with the preliminary evidence of minimal impact noted above – argues for a careful, methodical approach to ensuring that any additional regulation of vessel discharges is based on sound scientific evidence of

environmental harm. We note that the district court in *Northwest Environmental Advocates* “place[d] no limitation on the manner in which EPA addresses the different vessel discharges” and stated that “EPA is free to fashion different regulatory requirements for the different types of discharges at issue.” 2006 WL 2669042, at *8 n.9. Importantly, the court also clarified that EPA may exempt “de minimis sources of pollution” from NPDES permitting, and that “EPA may consider whether any vessel discharges produce only de minimis pollution on remand from this Court.” 2006 WL 2669042, at *9. Attachment 1 provides information on the types of vessel discharges from barges and towing vessels and, where possible, their approximate frequency and volume. We would be pleased to assist in connecting EPA with vessel operators who can provide more specific information, including arranging for site visits and vessel tours, to facilitate the agency’s evaluation of the need for further regulation of various types of vessel discharges.

5. *What international, federal, and state limitations or controls already exist on discharges incidental to the normal operation of vessels?*

Please see the partial list provided on pages 2-3 above. Given the interstate (and in many cases, international) nature of vessel operations, a uniform federal framework for the regulation of vessel discharges is extremely important. It is extremely difficult for vessel owners to comply with a hodgepodge of differing federal and state requirements as vessels transit political jurisdictions. For this reason, we believe strongly that the state-administered NPDES program is not the right vehicle through which to regulate vessel discharges. However, **if** EPA is forced to regulate vessel discharges through the NPDES program, and **if** the agency concludes that there are discharges that do not warrant exclusion from the program on the grounds of their de minimis volumes or lack of demonstrated environmental harm, then we urge EPA develop general permits for various vessel categories and to work with the states to ensure that an EPA or state-issued permit is recognized and considered valid by all other relevant federal or state environmental agencies in the areas where the vessel may operate.

6. *What existing information is available on the types of pollution control equipment or best management practices currently used, and what, if any, are the practical limitations on their use?*

Please see the information provided in Attachment 1.

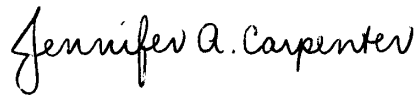
7. *What existing information is available as to commercial and recreational traffic patterns?*

The official source of data on commercial vessel traffic patterns is *Waterborne Transportation Lines of the U.S.* (WTLUS), published by the Waterborne Commerce Statistics Center of the U.S. Army Corps of Engineers. The WTLUS has data on the number of vessels entering, departing, and transiting at the waterway or port level, and identifies traffic by vessel type and draft.

As emphasized throughout these comments, AWO has grave concerns about the feasibility and effectiveness of attempting to regulate discharges incidental to normal vessel operations through the NPDES program. We strongly urge EPA to pursue all available options to develop a more suitable statutory/regulatory framework through which to consider the need for further regulation of vessel discharges.

Thank you for the opportunity to comment at this early stage of the regulatory process. AWO would be pleased to provide further information as EPA sees fit. Please feel free to contact me at (703) 841-9300, extension 260, or via email at jcarpenter@vesselalliance.com if AWO can be of further assistance.

Sincerely,

A handwritten signature in black ink that reads "Jennifer A. Carpenter". The signature is written in a cursive, flowing style.

Jennifer A. Carpenter

Attachment 1: Discharge Streams Associated with the Tugboat, Towboat and Barge Industry

Ballast Water

Towing Vessels – Towing vessels are ballasted for stability and trim. A large number of towing vessels are only ballasted with water from municipal or commercial sources, except in emergencies. Ballasting and deballasting is conducted during major shipyard maintenance periods and to replace spent fuel (in separate tanks) to retain vessel stability. Some ballast tanks are coated with protective lining to avoid rust and corrosion.

The quantity of ballast that is discharged is variable, based on vessel size and design. For coastal tugboats, ballast is discharged outside the demarcation line whenever possible or is retained onboard until it can be discharged to a shoreside facility. Coast Guard regulations require that all vessels equipped with ballast water tanks (including towing vessels and barges) maintain and comply with a vessel-specific ballast water management plan.

Tank Barges – Tank barges are purposely ballasted for a variety of reasons, including to maintain proper trim during loading and unloading operations, to improve tow configurations, and to permit passage underneath physical obstructions such as low bridges. Ballast is frequently taken on and discharged in the same location. In very rare cases, ballast is loaded for trim at sea. When this occurs, it is kept at a minimum. In order to ballast coastal tank barges, crew members have to transit from the tow to the barge and climb aboard the barge. Because of this safety risk, operators retain ballast onboard when feasible. When the safety of the vessel is threatened and ballast must be released while underway, operators release only the amount necessary for continued safe operations.

Rain Water Runoff

Towing Vessels – Rain water running off the deck of a towing vessel into surrounding water occurs regularly and in quantities that cannot be stated precisely. Rain water must be shed quickly to prevent accumulation. If retained, rain water would have adverse effects upon the stability of the vessel and the safety of personnel on slippery deck surfaces.

Tank Barges - Rain water running off the deck of tank barges into surrounding waters also occurs regularly and in quantities that cannot be reliably estimated. An increasing percentage of tank barges are fitted with perimeter spill rails, designed to prevent pollution during cargo transfer operations. Spill rails are fitted with scuppers to permit the runoff of rain water. During cargo transfer operations, these scuppers are plugged to prevent any cargo spilled from reaching the water. Before scupper plugs are removed (allowing the accumulated water to run through the scuppers and into the surrounding waters), the accumulated water is visually examined for signs of contamination with spilled oil or other substances, typically evidenced by sheen. If contamination is detected, the accumulated water is removed and transported to an approved treatment or disposal facility. Retaining rain water on the deck of the barge would pose a personnel safety hazard, risk the contamination of clean water within cargo areas, and reduce the amount of cargo that could be carried if rain water were required to be collected and stored for shoreside discharge.

- **Drip Pans** - Drip pans fitted on tank barges at cargo headers or manifolds contain minor amounts of cargo routinely spilled in the course of connecting and disconnecting cargo transfer hoses. Rain water can also accumulate in drip pans. The contents of drip pans are routinely monitored and accumulations of cargo and water are always removed and transported to an approved treatment or disposal facility.

Deck and Hopper Barges – Rain water that collects in open, but contained, areas is pumped periodically into the waterways. Spaces where the rain water might be contaminated are covered or contained to avoid the discharge of contaminated water. Preventative maintenance and shingling of barges is conducted regularly in order to minimize collection of water in barges. Retaining rain water on the deck of the barge would pose a personnel safety hazard, risk the contamination of clean water within cargo areas, and reduce the amount of cargo that could be carried if rain water were required to be collected and stored for shoreside discharge.

Seepage

Towing Vessels and Barges – Small quantities of water can accumulate due to minor hull leaks, or seepage. This small amount of water can be retained onboard for disposal at a facility. However, on rare occasions, vessels must discharge the water overboard in order to maintain the safety of the vessel. Personnel aboard the vessel are responsible for monitoring the presence and quantity of any seepage. If seepage water is contaminated, the water is discharged to a certified disposal facility.

River Water

Towing Vessels - Fire pumps on towing vessels are routinely tested with water that is taken from, and discharged back into, the surrounding waterway. Fire main systems, by design, take water from the surrounding sources. Each system has a relief valve that provides a continuous flow of water when the system is not in use. The water is then pumped back overboard.

Deck and Hopper Barges – River water occasionally collects in barge void spaces. Clean water is pumped into waterways. Preventative maintenance and shingling of barges is conducted regularly in order to minimize the collection of water.

Void Space Accumulation (Condensation)

Towing Vessels – Occasionally, water accumulates in towing vessel void spaces from condensation or damage. This can occur in the course of normal operations. Incidents that require the discharge of such water are very infrequent.

Tank Barges - Due to the nature of tank barge operations, water can accumulate in void spaces, typically as a result of condensation or damage which permits ingress of ambient water. Accumulated water must be discharged for safe operations, typically into the surrounding waterway using portable pumps.

Deck and Hopper Barges – Condensation occasionally collects in void spaces. Clean water is pumped overboard to maintain safe operation. Preventative maintenance and shingling of barges is conducted regularly in order to minimize the collection of water.

Refrigeration Condensation (A/C Systems)

Towing Vessels - All towing vessels are equipped with continuously running refrigeration units and air conditioners which drain condensation directly overboard. This discharge is very small, but continuous.

Wash Water

Towing Vessels - The normal operation of a towing vessel includes periodic topside washing with potable water, or clean ambient water, and detergent. Wash water runs off the vessel directly into the surrounding waters. If the decks are contaminated, contaminated surfaces are cleaned in advance of any wash down to prevent the discharge of any foreign substance. The frequency of vessel washing varies greatly by vessel size and service and the quantity of wash water discharged cannot be accurately determined. The detergents and cleaners used are biodegradable and phosphate free.

Greywater

Towing Vessels - Towing vessels vary in size and crew complement. Accordingly, the amount of grey water released depends on the potable water capacity of the vessel and crew habits. Grey water such as laundry, shower and kitchen water is released directly overboard from towing vessels on a daily basis. The detergents and cleaners used are biodegradable and phosphate free.

Bilge Water

Towing Vessels - Towing vessels are fitted with a segregated bilge system that keeps oily bilge liquids in the vessel's machinery space bilges separate from any water which may accumulate in the bilge areas surrounding propeller shafts. Oily bilge liquids are always removed and transported to an approved treatment or disposal facility. Propeller shafts on inland towing vessels are fitted at the point of penetration of the vessel's hull with a gland or seal to prevent the ingress of surrounding water around the rotating shaft.

Mechanical shaft seals are the most effective at preventing the ingress of water. However, mechanical shaft seals deteriorate more rapidly when used in waters (like the Mississippi River) with a high concentration of particulate matter, such as silt. Accordingly, towing vessels which operate primarily in the Mississippi River system are fitted with packing glands or pucker seals, which are less effective at preventing the ingress of water. Water accumulating in shaft alleys is pumped into the surrounding waters through the vessel hull.

Shaft Alley Discharge

Towing Vessels - Water is brought into the shaft alley to lubricate bearings. Properly operating propulsion shaft seals will introduce some water into the vessel bilge. The shaft seal area is segregated from any adjacent vessel bilges to prevent any possible contamination of this routine

source of water with machinery space oil. An automatic pump returns the water to its source. This uptake and discharge occurs daily on towing vessels.

In addition, stuffing boxes contain shaft packing materials that are water lubricated. A small but steady amount of water is required for both lubrication and cooling. This is necessary for the safe operation of the vessel. This water is discharged intermittently as it accumulates.

Raw Water Cooling Systems

Towing Vessels – Towing vessels constantly move water through pipes in the engines as a cooling mechanism. This water is collected, moved through a hose in the engine, and discharged continuously as the engine is running.

Rudder Lubrication

Towing Vessels - All towing vessels use the most environmentally friendly lubricant on rudder systems.

Aqueous Film-Forming Foam

Towing Vessels - Some towing vessels are equipped with fire fighting foam systems to protect crewmembers, vessels, and the public, particularly when moving barges with liquid cargo in tow. During training, testing, and maintenance operations, a mixture of seawater and firefighting foam is discharged either directly overboard from hoses, or onto decks and then subsequently washed overboard.

Wet Exhaust (From Outboard Engines)

Small Boats - Some towing vessels are equipped with small boats with outboard engines that produce a wet exhaust.