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April 21, 2014

Ms. Amy Jankowiak
Washington Department of Ecology
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008

Re: Draft Petition to EPA to Designate Puget Sound a No Discharge Zone

Dear Ms. Jankowiak:

On behalf of the American Waterways Operators, the national trade association for the tugboat, towboat and barge industry, thank you for the opportunity to comment on the Washington State Department of Ecology's (Ecology) February 2014 draft petition to designate the waters of Puget Sound as a No Discharge Zone (NDZ) pursuant to Section 312(f)(3) of the federal Clean Water Act (CWA).

The U.S. tugboat, towboat and barge industry is a vital segment of America's transportation system. The industry safely and efficiently moves over 800 million tons of cargo each year, including more than 60 percent of U.S. export grain, energy sources, and other bulk commodities that are the building blocks of the U.S. economy. The fleet consists of more than 4,000 tugboats and towboats, and over 27,000 dry and liquid cargo barges. These vessels transit 25,000 miles of inland and intracoastal waterways, the Great Lakes, and the Atlantic, Pacific and Gulf coasts. 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.

Many AWO members operate towing vessels and barges in Puget Sound, moving freight and reducing congestion on Washington's highways and railroads while producing fewer pollutants than trucks and trains. In addition, harbor, ship assist and crew boats perform lightering, ship docking, tanker escort, bunkering, marine construction and other services in ports throughout Puget Sound, supporting the maritime industry that is critical to the region's economy.

Nationwide, AWO's 350 member companies are proud to be part of an industry that is the safest and most fuel-efficient, and has the smallest carbon footprint, of any surface transportation mode. We are deeply committed to building on the natural advantages of marine transportation and leading the development of higher standards of marine safety and environmental protection. In 1994, AWO became the first transportation trade association to adopt a code of safe practice and environmental stewardship for member companies. Today, compliance with the Responsible Carrier Program is a condition of AWO membership and members undergo independent third party audits every three years to demonstrate their continued compliance.

This history and these organizational characteristics inform our view of Ecology's draft petition. We seek to protect the marine environment in which our vessels operate, to provide a practicable regulatory framework that allows for the continued safe and efficient movement of essential maritime commerce, and to ensure that overbroad regulations do not result in the diversion of cargo to other ports outside of Puget Sound or to other transportation modes that pose increased risks to safety and the environment.

AWO and our members who operate in Puget Sound are deeply concerned with several aspects of the proposed NDZ. Most of these concerns were raised by AWO throughout the preliminary stakeholder outreach period that began in early 2013, at advisory committee meetings in June and July of 2013, and in our comments to Ecology of March 22, 2013, which are attached. According to Ecology's draft petition, the goal of the preliminary outreach period and advisory committee process was "to guide decision making for the NDZ." However, AWO does not believe that the significant concerns of the tugboat and barge industry were heard, understood or respected during this process. The resulting draft petition is overbroad, would impose unnecessary and severe hardships on towing vessel operators, and would negatively affect virtually all aspects of the Puget Sound maritime economy.

Ecology's proposed NDZ draft petition should be reconsidered because:

- There is an absence of scientific data to justify an NDZ on the entirety of Puget Sound;
- There is insufficient data to support the claim that federal performance standards for Type II Marine Sanitation Devices (MSDs[1]) are inadequate for all of Puget Sound;
- Areas cited by Ecology as having impaired water quality are near-shore and generally far from commercial vessel traffic routes;
- Towing vessel operators, along with many fishing, passenger and recreational vessel operators, would suffer severe economic hardship under the NDZ, as proposed;
- Pumpout infrastructure in Puget Sound, , as required under CWA 312(f)(3), cannot adequately accommodate the population of impacted commercial vessels; and
- It would negatively impact Washington's maritime economy by imposing significant additional regulatory compliance costs on vessel operators.

[1] We note that we generally use "MSDs" to refer to Type II MSDs, not to Type I MSDs, which are not employed by towing vessels, or Type III MSDs, which are holding tanks.

Ecology Has Not Demonstrated a Sufficient Justification for the Proposed NDZ

In its draft petition, Ecology proposes an NDZ that "includes all inland waters of Puget Sound and applies to all recreational and commercial vessels," but Ecology has not demonstrated several necessary elements to justify such a broad designation. First, Ecology has not demonstrated how their review of the most recent CWA 303(d) list of impaired waters and Washington Department of Health data on shellfish harvesting areas and beach closures has justified the proposed scope of the NDZ. Second, Ecology has not demonstrated that vessels, and more specifically, commercial vessels utilizing federally-approved MSDs, contribute in any way to water quality impairment in Puget Sound. Third, Ecology has not demonstrated that MSDs are inadequate protection for the marine environment of Puget Sound.

According to 40 CFR 140.4, any application made by a state to designate an NDZ under CWA section 312(f)(3) must include, firstly, "A certification that the waters included in the petition require greater environmental protection than the applicable federal standard." According to the draft petition, Ecology has relied on analysis of the CWA 303(d) list of impaired waters and Washington Department of Health data to justify its contention that over 2,000 square miles of water are inadequately protected by federal standards. However, there are vast stretches of Puget Sound that are neither listed under 303(d) nor mentioned by the WDOH data. Also, none of the areas depicted in Figure 4 of the draft petition, a map of waters impaired due to high bacteria concentrations in Puget Sound, are areas of even moderate commercial vessel traffic. The proposed NDZ would be, by far, the largest all-vessel NDZ in the United States, yet Ecology has only demonstrated water quality impairment in discrete areas within 0.5 miles from shore.

Ecology's draft petition states:

> Even though vessel sewage discharges may account for only a small portion of the total pollutant load entering Puget Sound, their impacts may be disproportionally large. Because vessels are mobile, their discharges may occur directly over sensitive environmental resources, causing localized water quality problems.

AWO undertook an arguably overly inclusive analysis of the contribution of treated sewage from 130 vessels using Type II MSDs to the total pollutant load entering Puget Sound, which is presented in the table below (there are approximately 170 working towing vessels homeported in Puget Sound). The analysis assumed a crew of five persons for each of the 130 vessels operating simultaneously, although in practice many tugs operate with less than five crewmembers and it is highly unlikely that over 75 percent of the tugboat fleet would be operating in the Sound on any given day.

	Population	Average per Capita Usage (gpd) [2]	Treated Effluent (gpd)	Percentage of Total Pollutant Load
Central Puget Sound Wastewater Treatment Facilties	3,780,000	100	378,000,000	99.994%
Commercial towing vessels using Type II MSDs	650	34	22,100	0.006%

This analysis suggests that even given an extraordinary amount of on-water activity of the affected vessel population, their total contributed pollutant load would be 0.006% of the total regional contribution. Ecology has not produced any evidence to suggest that this tiny percentage of treated effluent from vessels has had any impact on water quality whatsoever, let alone impacts which are "disproportionally large."

Ecology dismisses federally-approved MSD technology outright by citing one study to stand for the proposition that "many MSDs often perform far below the mandated treatment standards under normal use." The 2008 EPA study cited to support this conclusion examined cruise ships carrying approximately two thousand passengers each; the study's conclusions should not be applied to workboats operating with typical crews of between three and 12 persons. In fact, the EPA study focused almost entirely on the performance of Advanced Wastewater Treatment Systems (AWTS) aboard cruise ships. The draft petition ignores the thrust of the 162-page study and relies wholly on information from 5 pages that describe the performance of Type II MSDs in 2000 in Alaska.

In the study, EPA summarized the sampling showing that 43 percent of the samples for fecal coliform met the Type II MSD standard of 200 ppm, and 32 percent of the samples for total suspended solids met the Type II MSD standard of 150 mg/l. The report notes, "The Coast Guard inspected six of the cruise ships with poor effluent samples and found that five out of the six were either operating the MSDs improperly or failing to maintain them." Cruise ships have since adopted AWTS, so there is no information presented in the study that can credibly evaluate the performance of properly operated and maintained MSDs. AWO suggests that Ecology needs to examine current and more relevant information on properly operated and maintained Type II MSDs and their performance aboard towing vessels before dismissing their effectiveness.

The 2008 EPA study represents the entire basis for the draft petition's discussion about MSD performance. Ecology did not consult manufacturers of Type II MSDs or the United States Coast Guard, which approves them for use aboard vessels and regularly inspects these MSDs to verify

[2] Recommended Standards for Wastewater Facilities, Great Lakes - Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, 2004 Edition

that they are installed and performing as intended. Ecology conducted no tests of its own and cites no other studies or documentation to support its conclusion about MSD performance. Ecology is proposing to prohibit the use of onboard treatment technology in Puget Sound as the technology continues to improve. As recently as 2010, the International Maritime Organization (IMO) increased Type II MSD performance standards. Given that MSD technology is clearly improving, Ecology's petition, if granted, would act as a disincentive to technological development in this area.

The proposed NDZ does not address the water quality impairments in a practical way. Ecology cites nearshore concerns associated with bacteria affecting recreational usage and shellfish consumption. With draft restrictions of 14 to 16 feet, most towing vessels are physically unable to operate in a nearshore area, minimizing the likelihood that they are contributors to these localized water quality impairments. Generally speaking, NDZs are more appropriately oriented towards recreational vessels that gather in nearshore areas such as anchorages, embayments and marinas. As cited in Ecology's petition, the federal Clean Vessel Act of 1992 states that "sewage discharges by recreational vessels because of an inadequate number of pumpouts is a substantial contributor to localized degradation of water quality in the United States." Commercial vessels using Type II MSDs are not mentioned in the CVA as possible contributors. As such, AWO suggests that a series of discrete nearshore NDZs within the Sound targeted toward areas with demonstrated impairment would be a much more appropriate, more effective and less burdensome approach than Ecology's proposed Sound-wide NDZ.

Given the absence of data to support the conclusion that commercial vessels equipped with Type II MSDs are significant contributors to either the total pollutant load of Puget Sound or the areas of impairment on which Ecology has based its draft petition, and given Ecology's stated concern of protecting at-risk or impaired areas, it does not seem prudent or reasonable to move ahead with the petition as drafted.

As Proposed, the NDZ Would Impose an Unnecessary and Severe Hardship on Towing Vessel Operators

Washington has some of the most technologically- and environmentally- advanced towing vessel operators in the world. Towing vessels tend to be sophisticated and versatile machines designed for safety, efficiency and power. A typical ocean-going towing vessel costs $20 million to build and has an operational life expectancy of 30 years. Federally-approved Type II MSDs are by far the most common sewage treatment method in use among the Puget Sound towing vessel fleet, but under the proposed NDZ, use of this technology would be banned in Puget Sound. Most towing vessels utilize MSDs because MSDs are approved by the Coast Guard, effective at treating the volumes of sewage produced by typical towing vessel crews, and do not impact existing tank space which is otherwise vital for holding fuel and ballast water and maintaining the vessel's sea-keeping ability.

In order to comply with the proposed NDZ, a towing vessel would need to undergo a retrofitting procedure to install and plumb a sewage system and holding tank that is compliant with all relevant Coast Guard and IMO regulations. Retrofitting vessels for tankage can be time-

consuming and costly. Some vessels, due to age, configuration or tonnage restrictions, cannot feasibly be retrofitted at all. Space is often severely restricted aboard towing vessels since much of the available room is consumed by the massive propulsion units, fire-suppression and safety equipment, living space for crew, and tankage for fuel, potable water and ballast water.

Three separate towing vessel operators were consulted, along with representatives from company engineering departments, marine architects, steel vendors and class societies, to develop approximate typical cost estimates for installing a sewage holding tank aboard a towing vessel. While these estimates do not illustrate the exact costs for a retrofit, they do illustrate the costs associated with different aspects of vessel retrofits that would be required under the proposed NDZ. Each boat will be different: some vessels will cost more than the projection below, while others will cost less. Some companies may take advantage of the fact that "sister vessels" would not need redundant architecture and design work. However, the projected costs to the towing vessel industry as a whole run well into the ten-million-dollar range.

A vessel undergoing a typical sewage holding tank retrofit procedure, given the following assumptions:

- There is no currently unutilized tank available;
- Tank will be integrated into an existing tank;
- Modification will disturb hull coatings;
- Modification will require regulatory approval and incline testing;
- Modification will require naval architect stamped approval;
- 3000 gallon capacity (4-5 day reserve, pursuant to IMO International Convention for the Prevention of Pollution from Ships [MARPOL] rules);
- Stability Calculations will need to be performed; and
- Fuel, water, or lubricating oil capacity will be compromised.

would need to accommodate the following costs:

Action	**Cost**
Naval Architect for design work	$25,000
American Bureau of Shipping (ABS) Survey	$14,000
Steel: 1500 lbs. @ $25/lb.	$37,500
Coating system for new and disturbed internal steel	$20,000
Dry-dock fees to repair hull coatings disturbed by hot work on steel	$35,000
	Total Cost: $161,500

In the event that the vessel cannot integrate the new sewage holding tank into an existing tank, additional steps and costs would be required, adding approximately $40,000 to the above figure.

The cost estimate may seem high, but consider that modifications of tankage affect the void space on the vessel. Voids are key factors in buoyancy and stability. This is an area where

cutting corners could lead to tragedy. Also, because towing vessels frequently operate outside of the domestic boundary line, IMO MARPOL rules apply that mandate specific technical and size requirements for sewage holding tanks[3]:

Crew Size	Days	Required Capacity @ 75% (gallons)	Minimum Tank Size (gallons)
4	14	887	1109
7	14	1552	1940
7	21	2328	2911

Furthermore, tanks must be appropriately sized for a long-term voyage because towing vessels are often called on to perform multiple-day jobs that could keep them offshore for extended periods. For example, a towing vessel might be required to remain alongside a ship for several days or weeks without the ability to get to a pumpout station. If this voyage were to begin and end in Puget Sound, the vessel would need appropriate tank space to meet the NDZ requirements as proposed. These retrofits represent major alterations and modifications of the vessels and would require ABS inspection and recertification in order for the vessels to remain in compliance with applicable standards.

Ecology seeks to apply the NDZ immediately to all vessels in Puget Sound but provides for a temporary exception for:

> …small and mid-sized commercial vessels that operate almost exclusively within the NDZ that do not already have a Type III MSD…The exception would only apply until each boat's next dry dock maintenance event or for no more than 3 years from the effective date of the NDZ.

This exception is insufficient to accommodate the extensive retrofits that would be necessary for virtually the entire West Coast towing vessel fleet. Towing vessels are engaged in near-constant interstate commerce and operators frequently move equipment throughout the United States. Even vessels that do not operate almost exclusively within the NDZ would need to retrofit in order to operate in Puget Sound. Furthermore, most vessels undergo some type of drydocking event at intervals less than three years apart, so operators would not receive the benefit of a three-year phase-in period. For practical purposes, the phase-in period would be much shorter than three years and would compel operators to invest large amounts of capital in a short time in order to comply with the tankage requirements under the proposed NDZ.

Ecology has also failed to account for the substantial ongoing operational costs of the proposed NDZ. Retrofits would require shipyard and drydock time. A shipyard period deprives a working vessel of its revenue-earning potential. The retrofit could very well interfere with other integrated elements of the vessel, potentially adding to the time out of service. Over the life of the vessel, lost revenue days are forever lost—or, put another way, the revenue generation required to

[3] MARPOL Annex IV, Regulation 9

compensate for the costs of these modifications would easily exceed the actual costs of the modifications.

There are other very basic ongoing operational costs that would be required under the proposed NDZ. Vessel operators would need to purchase and consume excess fuel to transit to pumpout facilities. Once at the facility, they would need to pay for the pumpout service. Since there are no commercially available shoreside pumpout facilities for use by towing vessels in Puget Sound, towing vessel operators would need to use a pumpout truck. A typical pumpout for a towing vessel using a truck service costs $1,000 – a 2,000 gallon tank at $0.35 per gallon and three hours of truck service at $100/hour. This would likely need to occur two times per month, for an annual operating cost of $24,000 per vessel. This disruption in waste management practices would also incur costs associated with interrupting the schedule of the vessel, such as crew changes if the increased length of time of the voyage implicates Coast Guard work/rest rules.

Finally, AWO has undertaken a survey of its members about the feasibility of alternative no-discharge technology, including incinerator toilets. Although incinerator toilets do not produce an effluent, they do not represent a feasible alternative technology to Puget Sound towing vessel operators. Towing vessel operators that have installed incinerator toilets aboard barges and derricks have noted serious performance issues associated with their maintenance and operation, specifically with regards to foul odor. Also, based on industry research, there are no Coast Guard-approved incinerator toilets for use aboard commercial tugboats.

Shoreside Pumpout Facilities, Required Under CWA Section 312(f)(3), are Inadequate to Accommodate the Impacted Population of Commercial Vessels

Under CWA Section 312(f)(3), a state cannot prohibit sewage discharges unless and until EPA "determines that adequate facilities for the safe and sanitary removal and treatment of sewage from all vessels are reasonably available for such water to which such prohibition would apply." Of the seven elements state petitions to designate an NDZ under CWA Section 312(f)(3) must include, according to 40 CFR 140.4, five relate to the availability and adequacy of pumpout facilities. In its draft petition, Ecology only speaks to mobile pumpout facilities because, quite simply, there are no shoreside pumpout facilities for the impacted commercial vessel population of Puget Sound.

Most of the Sound's existing shoreside pumpout stations are designed to service recreational vessels, live-aboard vessels or houseboats, and most are located at marinas that cannot service towing vessels due to dock sizes and configurations, pumpout capacities and flow rates, and hours of operation. Other shoreside pumpout stations are reserved for the exclusive use of the Washington State Ferry system.

The mobile pumpout services cited in Table 8 of Ecology's draft petition cannot accommodate the physical and operational characteristics of towing vessels. The pumpout boats cited in the draft petition primarily serve the recreational vessel community and do not have the volumetric capacity and flow rates or the numeric or geographic reach necessary to serve towing vessels.

Land-based pumpout trucks, as mentioned above, are expensive to use with any regularity and are not permitted at many docks and terminals where towing vessels tie up. There is also a significant question whether existing pumpout truck services could support the needs of towing vessels operating in Puget Sound if the NDZ petition is granted as drafted.

Finally, Ecology has not specified whether or when the state would develop adequate shoreside pumpout capacity should the draft petition be granted. Because mobile pumpout sources are either prohibitively expensive or logistically inadequate, development shoreside pumpout infrastructure would be necessary under the CWA. It is not at all clear where the state would procure the funds to develop this infrastructure. AWO is concerned that these costs could be passed along to towing vessel operators and Ecology has not provided any assurances to the contrary.

As Proposed, the NDZ Would Do Damage to the Regional Maritime Industry and Economy

The proposed NDZ would adversely affect the $15.2 billion maritime industry of Puget Sound, and the economic benefits it brings to the region, by causing vessels to homeport elsewhere, forcing in-service vessels into retirement, reducing business for marine service providers, and contributing to an overall diminution in the viability of our regional maritime economy.

Vessels call Puget Sound home because of the broad range of marine services it provides, including freshwater maintenance facilities, shipyards, drydocks, and the area's ready supply of professional mariners. According to a November 2013 economic impact study commissioned by the Economic Development Workforce Development councils of Seattle and King County, Washington's maritime and supporting industries directly employed 57,700 workers across the state in 2012. The study found that the industry's largest cluster "is within the Central Puget Sound region. Approximately 41% of all direct Maritime employment is located in King County, with another 24% in Kitsap and 8% in Pierce" – meaning that almost three-quarters, or over 43,000, of the people directly employed by the state's maritime and supporting industries work in the Puget Sound region. Some vessel owners are already considering other homeports if the petition is granted as drafted. The potential loss of jobs that would result in the region's marine industry, both direct and indirect, would severely impact the local and regional economies.

AWO members represent just a portion of the impacted vessel population. During a stakeholder outreach meeting that Ecology held at the North Pacific Fishing Vessel Owners Association (NPFVOA), a much larger than expected number of impacted vessel operators, mostly representing the commercial fishing industry, attended and voiced serious concerns about the effects of the proposed NDZ. Because most resident commercial fishing vessels are individually owned and operated, it is difficult to accurately survey this community. However, the attendance at the NPFVOA meeting suggests that Ecology may have underestimated the impact on the full range of commercial vessels that transit Puget Sound.

It is clear that the proposed NDZ would cause serious harm to the Puget Sound maritime industry and, in so doing, result in job loss and damage to the economy of the Puget Sound region. AWO

believes that it would be a mistake to move ahead with the petition as drafted, particularly when serious questions about the proposal's environmental benefit are still unanswered.

A Potential Way Forward in Partnership

Ecology's current NDZ proposal is overbroad and too damaging to the Puget Sound maritime industry and the region's economy to approve without further scientific analysis and discussion. Ecology should take additional time to consider all of the factors mentioned in this letter and other comments from concerned stakeholders. The maritime sector is prepared to collaborate on meaningful measures to safeguard water quality, including AWO's recommendation of targeted NDZs for high-risk areas of water quality impairment.

AWO, along with a great many concerned stakeholders, would support a series of targeted NDZs for shellfish beds, areas of impaired water quality, and areas of high-bacteria concentrations. We believe that targeted NDZ initiatives would address all of Ecology's concerns and safeguard the interests of recreational users, the aquaculture industry, and commercial vessel operators. AWO believes that targeted NDZs would provide a better level of protection, would ease administration and compliance, and would provide a comparatively low-impact means of demonstrating the effectiveness of NDZ policy, generally. Alternatively, using the state-wide California NDZ as a model, the maritime industry is willing to cooperate on Sound-wide policy that allows only vessels without holding tanks to release treated effluent through a federally-approved MSD.

Fears that a series of targeted NDZs would create "dumping grounds" within Puget Sound are unfounded. As mentioned in the draft petition, deep-draft vessels have sufficient holding tank capacity and do not discharge in Puget Sound, while smaller vessels would either use onboard treatment in acceptable areas or use pumpout facilities. This configuration would essentially negate the possibility of a "dumping ground."

Concerns about the administration and enforceability of targeted NDZs are also misplaced. Most commercial vessels do not transit over shellfish beds or in areas of impaired water quality, but all vessels have extensive navigation information and technology that make it possible to avoid the areas that would be targeted on the basis of risk. It would also be feasible for Ecology to leverage publicly available maritime traffic Automatic Information System tools to verify that specific vessels are avoiding the NDZs. Many of these tools are available on mobile platforms as well. These tools would enable vessel operators to avoid targeted NDZs and allow for simple and efficient compliance with a more risk-based approach.

AWO recognizes the importance of a healthy Puget Sound. Many of our member companies and their employees live and work on the Sound and are well aware of our mutual obligation to ensure that the Sound's environmental, economic and recreational benefits can be sustained for future generations. AWO would actively support remedial or protective actions that are grounded in scientific evidence and could be empirically demonstrated to improve water quality in Puget Sound. However, it is difficult to discern where the Sound-wide NDZ that Ecology has proposed would meaningfully contribute to water quality improvement, and all too easy to identify where

it would negatively impact the region's maritime industry and economy. For these reasons, AWO asks Ecology to reconsider the draft petition and to work more closely with stakeholders to identify practical, evidence-based solutions to water quality problems in Puget Sound.

Thank you for the opportunity to comment. AWO would be pleased to answer any questions or provide further information as Ecology sees fit.

Sincerely,

Charles P. Costanzo

ATTACHED

MARCH 22, 2013 COMMENTS OF

THE AMERICAN WATERWAYS OPERATORS

REGARDING THE NO DISCHARGE ZONE

EVALUATION FOR PUGET SOUND

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March 22, 2012

Ms. Amy Jankowiak
Washington State Department of Ecology
3190 – 160th Ave. SE
Bellevue, WA 98008-5452

Re: No Discharge Zone
Evaluation for Puget Sound

Dear Ms. Jankowiak:

On behalf of the American Waterways Operators, the national trade association for the tugboat, towboat and barge industry, thank you for the opportunity to comment on the Washington State Department of Ecology's evaluation of whether to proceed with a complete sewage discharge prohibition for the waters of Puget Sound.

The U.S. tugboat, towboat and barge industry is a vital segment of America's transportation system. The industry safely and efficiently moves over 800 million tons of cargo each year, including more than 60 percent of U.S. export grain, energy sources such as coal and petroleum, and other bulk commodities that are the building blocks of the U.S. economy. The fleet consists of more than 4,000 tugboats and towboats, and over 27,000 dry and liquid cargo barges. These vessels transit 25,000 miles of inland and intracoastal waterways, the Great Lakes, and the Atlantic, Pacific and Gulf coasts. 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.

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Nationwide, AWO's 350 member companies are proud to be part of an industry that is the safest and most fuel-efficient, and has the smallest carbon footprint, of any surface transportation mode. We are deeply committed to building on the natural advantages of marine transportation and leading the development of higher standards of marine safety and environmental protection. In 1994, AWO became the first transportation trade association to adopt a code of safe practice

and environmental stewardship for member companies. Today, compliance with the Responsible Carrier Program is a condition of AWO membership, and members undergo independent third-party audits every three years to demonstrate their continued compliance.

This history and these organizational characteristics inform our view of Ecology's consideration of a "No Discharge Zone" (NDZ) designation for Puget Sound. We seek to protect the marine environment in which our vessels operate, to provide a practicable regulatory framework that allows for the continued safe and efficient movement of essential maritime commerce, and to ensure that infeasible regulations do not result in the diversion of cargo to other ports outside of Puget Sound or to other transportation modes that pose increased risks to safety and the environment.

The members of AWO who operate in Puget Sound have serious concerns about their ability to comply with an NDZ, were Ecology to decide to apply for such a designation. In order to fulfill NDZ requirements, vessels must be equipped with holding tanks for sewage effluent. Due to the physical characteristics and limitations of most of the towing vessels servicing Puget Sound, it is incredibly difficult, if not impossible, to retrofit or reconfigure them to accommodate onboard sewage holding tanks.

Almost all of the tugboats operating in Puget Sound are currently equipped with a Type II marine sanitation device (MSD), a flow-through sewage treatment device that is certified by the U.S. Coast Guard to meet performance standards established by the U.S. Environmental Protection Agency (EPA).[1] If Puget Sound were to become an NDZ, the operators of these tugboats would be forced to disable these Type II MSDs and install Type III MSDs, holding tanks where sewage is stored until it can be disposed of shoreside or at sea, beyond three miles from shore.

Such installations are made infeasible by the very limited size of these tugboats. Many towing vessels are less than 125 feet long, with virtually no space onboard that is not already dedicated to machinery, crew member accommodations and other spaces that are critical to the safe and effective operation of the vessel. In order to avoid compromising the productivity of the towing vessels in Puget Sound, holding tanks would need to be large enough to accommodate the sewage generated by vessel crew members without requiring frequent trips to a shoreside facility or voyages outside of the three-mile boundary for disposal. In most cases, there is simply no room to install an adequately sized sewage holding tank, and no way to reconfigure existing fuel or ballast tanks to hold sewage without negatively impacting the towing vessel's efficiency and stability.

Even if the tugboats operating in Puget Sound had the capacity to hold sewage, the unavailability of adequate facilities for the shoreside removal and treatment of sewage from commercial

[1] AWO notes that the EPA study cited by Ecology on the website it has established to disseminate information about the establishment of a Puget Sound NDZ (www.ecy.wa.gov/programs/wq/nonpoint/CleanBoating/nodischargezone.html) evaluated only the performance of Type I MSDs, flow-through sewage treatment devices that commonly employ maceration and disinfection and that, because they can only be installed on vessels less than or equal to 65 feet in length, are unsuitable for use on commercial vessels and are typically found on small recreational vessels. With the exception of those installed on cruise ships, which generate much greater volumes of sewage than towing vessels, the performance of Type II MSDs, which employ biological treatment and disinfection, has not been evaluated.

vessels would hinder their operations. Under the federal Clean Water Act's section 312(f)(3), a state cannot prohibit sewage discharges unless and until EPA "determines that adequate facilities for the safe and sanitary removal and treatment of sewage from all vessels are reasonably available for such water to which such prohibition would apply" (emphasis added). A purely numerical assessment is not a sufficient measure of the adequacy of pumpout facilities to support an NDZ designation.

Currently, there are no "pumpout" facilities in Puget Sound that can physically or operationally accommodate the needs of commercial vessels. All of the Sound's existing pumpout stations are designed to service recreational vessels or houseboats, and most are located at marinas that cannot service towing vessels due to their dock sizes and configurations, pumpout capacities and flow rates, and hours of operation. Existing pumpout boats also serve the recreational vessel community and do not have the volumetric capacity or the numeric or geographic reach necessary to assist Puget Sound's towing vessels. The latter is likewise true of land-based pumpout trucks, which are prohibitively expensive to use with any regularity and are not permitted at many docks and terminals where towing vessels tie up. There is also a significant question whether existing pumpout truck services could support the needs of towing vessels operating in Puget Sound, were it to become an NDZ.

Towing vessel operators would be uniquely impacted by Ecology's decision to move forward with an application to designate Puget Sound an NDZ. There are an abundance of pumpout facilities around the Sound that would be able to facilitate compliance for the operators of recreational vessels, many of which are already equipped with Type III MSDs. Many of the large ships and passenger vessels that call in the region's ports are also already equipped with Type III MSDs, or are large enough that holding tanks could be installed without undue complications, and routinely voyage outside of the three-mile boundary, where their effluent can be legally discharged. Contrarily, a significant number of towing vessels, most with only three to four crew members, never leave the waters of Puget Sound. The physical configuration and operational profile of these vessels would make compliance with an NDZ essentially impossible. The ultimate effect would cripple both the harbor services industry of Puget Sound and the shipping industries that rely on towing vessels as vital service providers. For this reason, we strongly urge Ecology not to pursue an NDZ designation for Puget Sound, and to instead consider cooperating with the maritime industry to develop and implement risk-based best practices for the management of sewage effluent that achieve environmental benefits while allowing for the continued safe and efficient movement of waterborne commodities and services.

Thank you for the opportunity to comment. We would be pleased to answer any questions or provide further information as Ecology sees fit.

Sincerely,

Charles P. Costanzo