COMMENTS ON THE 2021 DRAFT BOATYARD GENERAL PERMIT

FROM SEATTLE YACHTS dba NORTHWEST MARINE CENTER

To: Department of Ecology

Attn: Mr. James Hovis, Permit Writer for the 2021 Draft Boatyard General Permit

Seattle Yachts purchased the assets of Marine Servicenter in May of 2020 and started the new boatyard under the name Northwest Marine Center. Since May of 2020 we have worked diligently to comply and exceed all Department of Ecology standards. Our company is dedicated to providing quality service to our local boating community and pride ourselves in maintaining a clean yard. The majority of our employees are boaters themselves and understand the importance of protecting our waters for future generations to enjoy.

Northwest Marine Center also consulted with Northwest Marine Trade Association (NMTA) and our environmental consultant in reviewing of Ecology's proposed changes to the 2021 draft Boatyard General Permit (Permit). Our review comments on draft Permit and Fact Sheet are provided below. We have four main areas of concern:

- Erroneous basis for calculation of the new copper benchmark
- Addition of a sixth sampling event reducing the effectiveness of adaptive management
- Disproportionate impact compared to other comparable industries
- Disproportionate cost of compliance

S2.D, Table 2 Stormwater Benchmarks; Fact Sheet Page 24

Our primary concern is with the dramatic drop in the benchmark value for copper from a daily maximum of 147 µg/L (with 50 µg/L as a seasonal average benchmark) down to a daily maximum in marine water and western freshwater of only 15 µg/L. It is understood that when setting a Permit benchmark, Ecology must select the lower of the water quality-based benchmark value and the technology-based benchmark value. However, Ecology should have a valid scientific basis for its determination of the water-quality-based benchmark value before using it in place of the developed technology-based

benchmark value that has been in the current and prior boatyard permits. We have a specific concern that Ecology appears to have made invalid assumptions or used invalid data when calculating the water quality-based benchmark value, and therefore it does not have a valid scientific basis.

Overall Adequacy of the Permit Fact Sheet

According to the U.S. E.P.A., the public is entitled to "a clear and transparent record of the permit decision making process." In Washington, a Permit Fact Sheet must include, among other things, "[t]he legal and technical grounds for the draft permit determination." WAC 173-220-060(1). According to Washington's Pollution Control Hearings Board, which oversees Ecology's permit development, Fact Sheets are provided to enable the public to actively participate in permit development. The draft Fact Sheet lacks the details necessary to understand the methodology, assumptions, and the data that went into the copper water quality-based benchmark calculation.

However, despite this lack of detail, we have attempted to piece together the approach used by Ecology to calculate the new benchmark. Based on what we have found, we believe several of Ecology's assumptions when calculating the new water-quality-based benchmark value for copper should be more carefully evaluated, including the dilution factor of 5 and the ratio of dissolved copper to total copper (i.e., translator value), that were used as part of the benchmark development.

The 4.8 µg/L water quality criterion for copper in marine water per WAC 173-201A is only for dissolved copper. Rather than use copper translator values that are derived from dissolved to total copper ratio measurements in Washington State receiving water bodies (with that average ratio appearing to be high, at approximately 0.82 based on the EIM database), Ecology should perform additional testing and analysis to better determine the actual form of copper and bioavailability/toxicity in stormwater from boatyards. At a minimum, Ecology should allow the boatyards to conduct such a study, prior to

implementing a permit with drastic consequences that follows from assumptions that do not have a proper scientific basis or correspond to actual boatyard treated stormwater characteristics.

There would be adequate time during the upcoming Boatyard Permit cycle to investigate and more properly determine appropriate translator values and use a scientifically valid basis for developing a water quality-based copper benchmark for boatyards, and to determine if in fact that would be lower than the technology-based benchmark value. That is a standard practice in the NPDES permit program, where there are identified potential data gaps, to collect valid and applicable data over a 5-year permit cycle **before** establishing effluent limitations for the following permit.

Beyond potential errors in the dissolved copper translator value used, there are concerns with other elements of the copper benchmark calculation. In its method for determining the copper benchmark value, Ecology relies on and repeats the calculation method from a 2009 report titled Water Quality Risk Evaluation for Proposed Benchmarks/Action Levels in the Industrial Stormwater General Permit (Herrera, February 9, 2009). In this report it is noted that "The actual risk level that is deemed acceptable for exceeding water quality standards is a **policy issue** that must be resolved by Ecology with input from other stakeholders associated with the ISWGP. In connection with ongoing discussions between Ecology and the external stakeholder workgroup, proposed benchmarks and action levels are being considered based on a dilution factor of 5, and a 10 percent risk threshold for exceeding the applicable water quality standard for each metal." Given the significant logistical and financial impact to boatyards from this proposed copper benchmark change, it is incumbent on Ecology to avoid using arbitrary and/or excessively conservative criteria that have no clear basis in federal or state laws or regulations. To penalize boatyards with having to carry out onerous response actions based on a stormwater copper discharge concentration of 16 µg/L, which even by Ecology's conservative and likely inappropriate calculation has little more than 10 percent chance of temporarily exceeding the state water quality criterion, seems to be excessive.

Further Context on Concern over an Inappropriately Determined Water Quality-Based Benchmark

With the proposed dramatic lowering of the copper benchmark to 15 µg/L, we are concerned that Ecology appears to have entirely dropped the joint agreement between Northwest Marine Trade Association (NMTA) and Puget Soundkeeper Alliance (PSA) in 2007 and the associated research study that provided technical assessment of applicable stormwater treatment technologies. This study was presented in a technology assessment report titled "Boatyard Stormwater Treatment Study" produced by Taylor Associates, Inc. in 2008. That study demonstrated multimedia filtration as being effective for copper and zinc removal from stormwater. As stated by Ecology in the draft 2021 Permit Fact Sheet, "In 2010, Ecology deemed the level of performance from multimedia filtration as AKART," with AKART being an acronym for All Known, Available and Reasonable methods of prevention, control and Treatment. In August 2008, following the treatment study report, the NMTA and PSA sent a draft permit to Ecology that they said was mutually acceptable, and which Ecology agreed and subsequently incorporated/adopted into the Current Permit.

Finally, the apparently invalid scientific basis for determining the copper benchmark is of heightened concern considering the anti-backsliding provision of the NPDES permit development process, such that an erroneously low benchmark value for copper would never be allowed to increase back to a properly-derived value, even if there were determined to be flaws or shortcomings with how the erroneously low value was calculated.

S7. Inadequacy of Adaptive Management Provisions

With conducting a proposed 6 stormwater sampling events within an 8-month monitoring period there is likely to be inadequate time to complete a Level One response before the next monitoring event. Even with diligent implementation of pollutant source controls and diligent attention to operating, maintaining, and optimizing the installed stormwater treatment systems, we would expect to exceed the copper benchmark each monitoring period and trigger a Level 3 response within the first year of the

new permit. The adaptive management strategies that are in the permit would be of no use to delay or avoid a large cost for installing new infrastructure and advanced treatment.

S2.D Monitoring Frequency; Fact Sheet Pages 20, 23-24, 32

Ecology has presented no data or compelling rationale in its Fact Sheet for why a 6 th annual sampling event in March needed to be added to the permit. Page 20 of the draft Fact Sheet states,

Ecology has determined that the additional month of sampling in March is need to necessary to verify the effectiveness of best management practices during a month that typically sees high boatyard activity and rainfall.

However, it seems that could be more appropriately addressed by simply moving one of the other 5 monitoring months to March, without increasing the burden of permit compliance (which would be above and beyond that of other industries in the state under the ISGP, which only requires sampling 4 times per year). Page 32 of the draft Fact Sheet states,

…the new permit has replaced the "seasonal average" measurement and benchmark and replaced it with an additional sampling month of March.

However, that is not at all an equivalent replacement. An additional sampling event adds sampling labor, DMR reporting requirements, as well as the not insignificant external lab analysis costs associated with the proposed expanded 6 benchmark parameters.

Onerous Conditions that are Disproportionate to Boatyards Versus other Industries

Ecology appears to want to align the Boatyard general Permit with the conditions in the Industrial Stormwater General Permit (ISGP), but there is a clear reason why the Boatyard Permit is separate and distinct from the ISGP: the pollutant sources, applicable Best Management Practices (BMPs), and

stormwater treatment needs are significantly different for a boatyard facility compared to the typical ISGP facility.

In apparently wanting to align the Boatyard Permit with the ISGP, Ecology has incorporated changes to the Boatyard Permit that in fact make it disproportionately more onerous to boatyards as compared to an industrial facility under the ISGP. Examples of this disproportionate impact are listed in the following table:

Permit Condition	ISGP	Draft Boatyard Permit
S2.D Sampling frequency	4 times per year, flexible selection of sampling months in the 4 quarters (other than the first fall sample)	6 times per year, specific sampling months dictated
S7.A Benchmark exceedances that count toward Level 2 or Level 3 response actions	Reset to zero each calendar year	"…are counted during the effective term of the permit and do not reset annually."
S2.D Benchmark value for zinc	117 µg/L	90 µg/L
S2.D Benchmark value for pH	5-9	6-9
S2.D Sampling requirements for stormwater discharge to ground	None	6 samples per year, in selected months
S2.D Maximum concentration limits for infiltration to ground	None	Concentration limits for both copper and zinc
S2.D Pretreatment requirement for infiltration basin/trench	None	Absorptive media required
S2.D Ability to discontinue sampling for a parameter	"Consistent attainment" achieved after 8 consecutive samples meeting benchmark	No established path to discontinue sampling through "consistent attainment"

Given the above more restrictive elements of the draft permit compared to the ISGP, which all have potential cost impacts to boatyards, how can Ecology justify the statement from its Economic Impact

Analysis that “Ecology has determined there is no opportunity to significantly reduce the costs of this permit…”? Rather, it seems that was an erroneous statement, and that Ecology has many reasonable opportunities to reduce the costs of complying with this permit. That is especially so when also considering the potentially inappropriate data and assumptions that Ecology used when determining the water quality-based benchmark value for copper, as discussed earlier in this comment letter.

Specifically, as mentioned earlier, if the proposed 15 µg/L copper benchmark is allowed to become final, we would need to make significant modifications to our stormwater conveyance infrastructure in order to install an advanced stormwater treatment system. The cost for the infrastructure modifications and for the treatment itself does not appear to be adequately estimated in Ecology’s Small Business Economic Impact Analysis (February 2021, Publication 21-10-004), which cites a range of annualized cost for “Stormwater Treatment Technology” of $23,161 to $62,079 for a “Small Boatyard.” The Economic Impact Analysis report and the draft Permit Fact Sheet do not adequately spell out what infrastructure improvements and treatment technologies were used to develop that estimated range of cost.

Even with a possible under-estimation of cost, the conclusion of the analysis was that the annual cost per employee for a small business from this proposed draft permit would be $3,663 to $8,742, which would be an unacceptably large cost increase. Further, the report concludes “it is likely that the costs of compliance with the draft permit are disproportional.” Despite that conclusion, Ecology appears to have taken no reasonable effort to more closely examine its basis for deriving its proposed water quality-based copper benchmark or to collect a truly representative set of data for that derivation, or to consider other permit changes such as monitoring frequency, as discussed above.

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