**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.

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**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:

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| --- | --- | --- |
| **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.

**Brent Moore**   |  National Service Director

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