

November 18, 2025

Washington State Department of Ecology  
Tricia Miller, Permit Coordinator  
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Northwest Region Office  
PO Box 330316,  
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RE: Public Comments on National Pollutant Discharge Elimination System (NPDES) and  
State Waste Discharge Permit No. WA0031836  
Fire Training Academy  
North Bend, Washington

Ms. Miller:

I'm a resident of North Bend, and I live approximately 1.2 miles north of the Washington State Fire Training Academy (FTA). On November 7, 2025, the Washington State Department of Ecology (Ecology) made the Draft National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge Permit No. WA0031836 available for public comments during the 30-day period starting November 7, 2025. My comments on the draft NPDES Permit No. WA0031836 are provided below:

- **Background** – In the mid-1980s, Washington State built the FTA on property owned by the Department of Corrections, now the Washington State Patrol, located north of I-90 near Exit 38. From the mid-1980s to approximately 2009, the FTA trained firefighters how to extinguish gasoline or diesel-fueled fires using aqueous fire-fighting foam (AFFF) that contained per- and polyfluoroalkyl substances (PFAS), particularly perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). In 1997, as part of an expansion of the FTA to include a dedicated aircraft rescue firefighting facility (ARFF), the Port of Seattle's consultant, Herrera Environmental Consults, Inc. (Herrera), stated that the AFFF expected to be used at the FTA's ARFF was Aer-O-Lite 3%, manufactured by National Foam, and Herrera calculated the expected AFFF concentration in stormwater to be 154 milligrams per liter (mg/L) (Herrera. 1997. Regional Aircraft Rescue and Fire Fighting Training Facility – Water Quality Assessment, Prepared for the Port of Seattle, April 21. Page 17).

At the FTA facility, stormwater from areas where firefighting training is conducted is collected into drainage ditches and routed to an oil-water separator and then to three lined Stormwater Ponds (Pond #1, Pond #2, and Pond #3) and a Stormwater Detention Pond consisting of a series of lined and unlined stormwater collection cells: Cell# 1, and #2 are lined; Cells #3, #4 and #5 are unlined. Water accumulating in Cell #1 and Cell #2 either evaporates or flows to Cells #3, #4, and #5 where the water either infiltrates to groundwater or discharges to the unnamed creek and, ultimately, the South Fork of the Snoqualmie River. Until recently, the FTA obtained its potable water from a 738 foot deep well located south of Cells #3, #4, and #5. Laboratory analysis of water samples collected from Stormwater Pond #1, #2, and #3 in 2017 detected PFOS at concentrations of 623 nanograms per liter (ng/L), 504 ng/L, and 588 ng/L, respectively. Between 2017 and 2022, laboratory analysis of samples of drinking water at the FTA from the potable well detected PFOS at concentrations ranging from 18 ng/L to 31 ng/L and PFOA at concentrations ranging from 9.5 ng/L to 10 ng/L. In 2024, laboratory analysis of a sample of water collected from a spring that discharges water to the South Fork of the Snoqualmie River

and, historically, has provided make-up water to Pond #2 and emergency drinking water to the FTA detected PFOS at a concentration of 304 ng/L. In 2024, the FTA solicited a bid from an outside vendor for a treatment system that could reduce the concentrations of PFAS in water discharging from Monitoring Point 1 to below 4 ng/L. The FTA provided the vendor with the 2017 laboratory data for it to use as representative concentrations in the design of the treatment system. A copy of the vendor's proposal is attached.

- **Comment No. 1 - Special Conditions Section S1 – Discharge Limits** – In 2020, Ecology amended NPDES Permit No. WA0031836 Section S1 as follows, "This permit does not authorize the discharge or use of firefighting surfactants containing fluorinated foams." The text of Section S1 remains the same in the current draft NPDES permit. The purpose of this condition is to prevent the discharge to surface water or to groundwater of the fluorinated compounds (PFAS) found in firefighting surfactant foams (i.e., AFFF). Prior to 2009, the FTA used AFFF that contained fluorinated foams (PFAS). The laboratory analysis of surface water samples from Stormwater Ponds #1, #2, and #3 indicate that legacy contamination associated with the FTA's historical use of firefighting surfactants containing fluorinated foams was still contaminating surface water in 2017. On the basis of the historical use of firefighting surfactants containing fluorinated foams at the FTA, the laboratory analytical results from 2017 that confirm the presence of legacy PFAS contamination long after the FTA stopped using fluorinated foam, and the FTA's use of the 2017 analytical data as representative of current conditions in 2024, it is reasonable to conclude that the 2017 data are still representative of the surface water conditions in the FTA's discharge under NPDES Permit No. WA0031836. The ongoing discharge of PFAS from the FTA violates the permits prohibition on discharge of firefighting surfactants containing fluorinated foams established in Special Conditions Section S1 and the FTA appears to have known about this violation, but done nothing to address it, since 2020. Ecology should revise Special Conditions Section S1 to establish numeric discharge limits for PFAS that are protective of surface water and groundwater, and require active treatment and monthly testing to verify the effectiveness of the treatment.
- **Comment 2 – Discharge Limits for PFOA and PFOS** – Federal regulations (40 CFR 122.44) require Ecology to place limits in NPDES permits on toxic chemicals in an effluent whenever there is a reasonable potential for those chemicals to exceed the surface water quality criteria. The detected concentrations of PFOS in surface water samples collected from the Stormwater Ponds and from the unnamed spring exceed EPA's chronic freshwater based criteria for surface water of 250 ng/L and the PFOS and PFOA concentrations detected in potable water samples from the drinking water well exceed EPA's MCLs for PFOS and PFOA of 4 ng/L. The PFAS contamination in stormwater and groundwater appears to be the result of the FTA's historical use of PFAS containing AFFF. Since surface water samples collected at the FTA have exceeded surface water quality criteria for PFOS since 2017 even though the FTA reportedly stopped using PFAS containing AFFF in 2009 and the FTA has taken no action to clean up the legacy PFAS contamination at their facility, there is clearly a potential for PFOS to exceed the surface water quality criteria in the future. On the basis of the location of the FTA's potable well relative to the location of the three unlined Stormwater Detention Pond cells (#3, #4, and #5), infiltration of PFOS and PFOA contaminated stormwater to groundwater is the likely source of the PFOS and PFOA contamination in the FTA's drinking water. Since laboratory analytical results of water samples already demonstrate that stormwater containing toxic PFAS chemicals is discharging to surface water and to groundwater, Ecology should immediately follow the federal regulations (40 CFR 122.44) and establish discharge limits protective of the pathway with the most restrictive cleanup level: protection of groundwater.

Ecology used the protection of groundwater due to infiltration of stormwater as a rationale to set the benzene discharge limit at 1.0 ug/L. Based on the rationale used to develop a discharge limit for benzene, the PFOS and PFOA discharge limits should be set at 4 ng/L for protection of groundwater due to infiltration of stormwater.

- **Comment 3 – Section S10.B – PFAS Source Identification** – Ecology's requirement for the FTA to conduct a source identification if PFAS compounds are detected in the PFAS characterization monitoring under S2 disregards the substantial information already available about the historical use of PFAS containing AFFF at the FTA. The legacy use of PFAS containing AFFF at the FTA is the likely source of PFAS in stormwater, groundwater, and drinking water at the FTA. Instead of preparing a redundant source identification report, Ecology should require the FTA to design, install, and operate a treatment system to reduce the concentrations of PFAS in water discharging from the FTA to below discharge limits that are protective of drinking water.
- **Comment 4** – The FTA conducts important work in training fire fighters, but it should not be exempt from its responsibility to comply with environmental regulations, and Ecology should enforce those regulations without fear or favor, even if the permit holder is another state agency. However, the FTA has been aware of PFAS contamination at its facility since 2017, and Ecology has been aware of the PFAS contamination at the FTA facility since 2019, not 2023 as stated in the NPDES fact-sheet. That awareness has not resulted in any effort by either the FTA or Ecology to address the source of the contamination or to prevent ongoing discharges to surface water and groundwater. The decision by Ecology to not include discharge limits for PFAS in this draft NPDES permit, to not acknowledge that the likely source of PFAS in water discharging from the facility is legacy PFAS contamination, and to not require the FTA to take active measures to reduce the concentrations of PFAS in water discharging from the facility is irresponsible considering the existing body of evidence of ongoing release of PFAS to surface water.

William Carroll  
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