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December 30, 2020

VIA EMAIL (PDF) TO CHEMACTIONPLANS@ECY.WA.GOV

State Department of Ecology
State Board of Health
State Department of Health

Re: Comments on Draft PFAS Chemical Action Plan

The City of Redmond has reviewed the background material soliciting comments regarding the draft Per- and Polyfluoroalkyl Substances (PFAS) Chemical Action Plan (CAP). The City of Redmond is offering the following comments as part of the public comment period:

- Page 9: The Executive Summary and the CAP in its entirety fail to acknowledge and address the presence of PFAS in reclaimed water. This is a significant oversight. Given that reclaimed water is wastewater effluent treated to a different standard and deployed in a variety of land-based applications with potential impacts to both ground and surface waters, its role in the PFAS CAP should be developed and addressed within the wastewater treatment section.
- Page 11, Section 1.1, references mitigation alternatives to include finding and financing an "alternative water source." Department of Ecology (DOE) should recognize this is not feasible or difficult in closed basins. In closed basins the issuance of new water rights is virtually impossible.
- Section 1.1 states "timely mitigation." The CAP should define timely as PFAS is consistent in the environment. Also, in Section 1.1, the CAP accurately identifies that without funding appropriated for mitigation to public water systems, their customers will ultimately absorb mitigation and remediation costs. Public water systems should not be placed in the position of bearing the remediation costs for PFAS contamination where they had no involvement in the release of PFAS into the environment.
- Section 1.1 recommends the use of Drinking Water State Revolving Funds for mitigation. Any mitigation programs should be grant oriented and not loans, since the public utility and ratepayers did not cause the contamination. Additionally, a recommendation under Section 1.1 references the impacts to public water systems who are required to issue a "Do Not Use" order as a result of PFAS contamination. The PFAS CAP should recognize that a "Do Not Use" order is subject to Department of Health (DOH) oversight, and the proposed CAP generally fails to recognize and align with proposed DOH rules.

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Coordination and alignment between DOH and DOE is essential to provide clarity and effective PFAS administrative rules.

- Page 13, Section 1.2, recommend Ecology create a PFAS database or data repository to allow water utilities easy access to new and historical PFAS monitoring data and reports."
- Page 13, Section 1.2, it is important to note an additional challenge to characterizing and remediating PFAS in a shallow aquifer would include temporary construction dewatering which can change characteristics and flow of groundwater.
- Page 13, Section 1.2, add a table to definitions to the CAP to include all relevant terms used throughout the document. Example: Contamination. When using the term contamination, does this refer to any level that exceeds an MCL?
- Page 13, under Recommendation in Section 1.2, the CAP recognizes the need for DOE and DOH to align efforts. Again, this is essential for effective regulatory oversight and clarity for affected water systems.
- Page 13, Section 1.2, recommend Ecology create a communication structure to facilitate timely and effective communication to all PFAS affected parties, water utilities, and the community.
- Page 13, Section 1.2, will mitigation and cleanup coordination be conducted through the Voluntary Cleanup Program?
- Page 13, Section 1.2, proposed an action for DOE to provide remediation funding to public water systems from the Safe Drinking Water Action Grant program to address PFAS contamination in drinking water. Redmond supports the use of grant funding as opposed to loans since a loan program will shift remedial costs to ratepayers of public drinking water systems.
- Page 13, Section 1.2, the proposal for DOE to prioritize mitigation and clean up based on the number of people impacted, the concentration of the PFAAs in the drinking water, and vulnerable populations is subjective. Objective criteria should be established while noting affected public water systems may have local standards for considering the need for PFAS mitigation.
- Page 13, Section 1.2, recommend that Ecology evaluate PFAS levels in reclaimed water and possible exposure pathways in its use to inform characterization of sites and potential sources.
- Page 15, Section 2.1, evaluate effects of artificial changes to groundwater flow that can occur from activities such as temporary construction dewatering, in characterizing and remediating a site.

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- Page 15, Section 2.1 recommendation includes DOE using the existing authority under MTCA to develop clean up levels based upon the State Board of Health's (SBOH) proposed drinking water standards and evolving rules. This recommendation further validates the importance of alignment and coordination between DOE, DOH, and SBOH. Additionally, DOE should establish regulations which prohibit any PFAS discharges in the environment where the known source exceeds the DOH's proposed State Action Level (SAL). DOE should go beyond "considering" development of clean up levels. Rather, it should require development of clean up levels.
- Page 16, Section 2.1 indicates DOE proposes to provide information to interested parties of cleanup efforts. This recommendation should be revised that information be automatically provided to local water systems impacted or potentially impacted by the contamination.
- Beginning on page 17, Section 2.3 proposes to prevent PFAS releases from firefighting foam use and manufacturing. The CAP should likewise consider prevention of releases associated with wastewater treatment plant sludge, effluent and reclaimed water. The corresponding list of potential sources identified in Section 2.3 should include sludge, effluent and reclaimed water.
- Page 17, Section 2.3, the CAP should also consider releases associated with reclaimed water, especially in those situations where the presence of PFAS in reclaimed water may exceed State Action Levels (SAL).
- Page 18, Section 2.3, DOE should consider adding an additional recommendation of establishing a registry of known sites where PFAS-containing AFFF was used for fire suppression and training to require fire department transparency and reporting.
- Page 18, Section 2.3, in addition to working proactively with industry, manufacturing, and businesses to eliminate PFAS releases to the environment, DOE should likewise evaluate potential risks from sludge, effluent, and reclaimed water and prohibit any releases that exceed the DOH's SAL or DOE limits.
- Page 19, Section 2.3, consideration should be given to require costs for disposal to be borne by the industries manufacturing or handling PFAS. Under "Cost", the agencies that have stockpiled should be responsible for paying for the disposal.
- Page 24, Section 4.1, evaluation of PFAS in wastewater treatment should include the evaluation of PFAS in reclaimed water and prohibition of any future release of reclaimed water to the environment that exceed the DOH's SAL.
- Page 24, Section 4.1, Evaluation of PFAS in wastewater treatment should include the evaluation of PFAS in reclaimed water. This should include consideration of regular monitoring of reclaimed water as treated wastewater effluent. At a minimum, if PFAS is

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found in reclaimed water at levels above SAL it should be prohibited from use within Critical Aquifer Recharge Areas (CARAs).

- Page 25, Section 4.2, the second phase of the program for groundwater and gaseous emissions should require groundwater modeling.
- Page 26, Section 4.3, the City supports all areas of Section 4.3, "Evaluate Washington biosolids management", in considering the PFAS CAP. The District supports the proposal, but recommends DOE require scientific modeling to assess potential PFAS transfer from biosolids to soil or groundwater and "realistic" exposure and model parameters to be used.
- Page 27, the Executive Summary of the proposed CAP recognizes the current initiative of the SBOH's PFAS rulemaking. This recognition emphasizes the importance of alignment between DOE and DOH.
- Page 30, Section 4.3, ensure scope of work for WWTP sampling includes all potential PFAS fate and transport scenarios including reclaimed water as it is wastewater effluent. If none of the three identified WWTPs provide reclaimed water to its customers consider including a WWTP that does to this funded sampling effort.
- Page 34, Appendix 1, as noted in this CAP PFAS is completely resistance to natural degradation. Evaluation and sampling of resources containing PFAS utilized in the natural environment (compost, biosolids, and reclaimed water) should be conducted and appropriate limits/use restrictions set to prevent this potential contamination source.
- Page 37, Appendix 4, evaluate manufacturing processes that release PFAS through stack emissions. Take the necessary steps to reduce aerial deposition of PFAS from manufacturing processes.
- Page 37, Appendix 5, evaluate PFAS in stormwater and catch basin sediments at facilities that manufacture, handle, store or use products or materials containing PFAS and require mitigation where appropriate.
- Page 40, Health Appendix 7, references several Washington drinking water sources that have been contaminated near sites of AFFF release. The list only references the City of Issaquah and fails to recognize the Lower Issaquah Valley Aquifer in general. PFAS contamination of the Lower Issaquah Valley Aquifer has also impacted Sammamish Plateau Water and Sewer District (District). Although the impacts to the District do not exceed the Environmental Protection Agency's (EPA) lifetime health advisory level, they do exceed DOH's proposed SAL. Additionally, the City recommends that identification of contaminated aquifers and affected public water systems be based upon both EPA's lifetime level and the proposed DOH SALs.

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- Page 47, Section 1.1, identifies the Issaquah PFAS Pilot Project which is being administered by Eastside Fire and Rescue and a significant level of State supported funding. In any case where State funding is being appropriated for investigation and mitigation, all data and reports should be transparently shared with interested or affected public water systems. Any impacted or interested public water system should not have to file a public records request to receive data and reports.
- Page 53, Section 2.1, the City supports the establishment of clean up levels for soil and groundwater using the SBOH's drinking water standards. However, the City asks DOE to go beyond "considering" clean up levels and that DOE establish clean up levels.
- Page 56, Section 2.3 recommends DOE will work to prevent PFAS releases from fighting foam use and manufacturing. To minimize the release of PFAS to the environment, DOE should expand its approach with industry, manufactures, and businesses to include any generator of PFAS products.
- Page 65, Section 4.1 proposes evaluation of PFAS and wastewater treatment plant (WWTP) influent and effluent. The proposed CAP should also include evaluation of reclaimed water and prohibit the release if it exceeds DOH's SAL.
- Page 164, Section 3.4.2, again there is no mention of reclaimed water as a type of wastewater effluent and potential impacts on both surface and groundwater quality.
- Page 183, Recommendation 4.1, both sampling and potential monitoring of reclaimed water as wastewater effluent should be considered in this section.
- Page 217, Section 4.6 Data Gaps, PFAS concentrations have been identified in reclaimed water, but reclaimed water usage has not been identified as a potential source of contamination in the PFAS CAP. With increased usage of reclaimed water around Washington State an evaluation of fate and transport of PFAS in reclaimed water should be identified, as well as monitoring and allowable PFAS limits for usage of reclaimed water. Evaluate WA reclaimed water management identifying current policies, data gaps, and recommendations.
- Page 254 Tables, 52 & 53, recommend including in the notes if PFOA wasn't tested, as PFOA is included on the State Action levels list.
- Page 322, Section 7.4 identifies known areas of PFAS contamination in drinking water aquifers but fails to specifically identify to the Lower Issaquah Valley Aquifer as a known area of contamination for which impacts both the City of Issaquah and Sammamish Plateau Water and Sewer District. Although the District's test results do not exceed EPA's lifetime health advisory limit, they do exceed DOH's proposed SAL.
- Page 332, Section 7.4.10, Table 69 fails to incorporate and recognize the interests of Sammamish Plateau Water and Sewer District. Upon learning of contamination affecting

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City of Issaquah's wells, District follow up to its own UCMR3 test revealed PFAS contamination in District wells located in the Lower Issaquah Valley Aquifer.

- Page 354, begins a list of references for Appendix 7 of the draft CAP. The Sammamish Plateau Water District is listed as a reference, but the District's interests generally not recognized throughout the report.
- Page 427, Appendix 9, federal designation of the family of PFAS chemicals as "hazardous substances" rather than the five that are identified in proposed State Action Levels requires expanded monitoring. How would the CAP adapt to this change?
- Page 42 and 443, in reference to Appendix 10, Economic Analysis, the District requests that the costs incurred by Sammamish Plateau Water and Sewer District for the testing, groundwater modeling, mitigation planning be identified. Testing and modeling costs are in excess of $510,000 and the District is funding an $800,000 project to design a PFAS treatment plant in response to the proposed DOH SAL. Ultimate construction of a PFAS removal treatment plant is estimated to be between $6,000,000 and $7,000,000 dollars. The District has also incurred additional costs to replace water supply from wells that were removed from production due to PFAS contaminant levels.
- General Comment: Will Ecology re-evaluate the estimated cost to implement recommendations when more information is known about the number of systems that are impacted? Is there a maximum estimated cost where modifications to recommendations would be necessary due to limited funding?

On behalf of the City of Redmond, thank you for consideration of these comments as part of the rulemaking process.

Sincerely,

DocuSigned by:
Dave Juarez
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Dave Juarez
Public Works Director

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