



King County

Department of Natural Resources and Parks

Wastewater Treatment Division

King Street Center, KSC-NR-0501

201 South Jackson Street

Seattle, WA 98104-3855

October 12, 2017

Jocelyn Jones
Department of Ecology
Water Quality Program
300 Desmond Drive SE
Lacey, WA 98503

Dear Ms. Jones:

Thank you for the opportunity to comment on the draft Reclaimed Water Rule (Washington Administrative Code (WAC) 173-219), draft Purple Book and associated rule documents. Reclaimed water is a valuable water resource that helps us build resiliency to cope with drought and changing hydrology due to climate change. We believe reclaimed water is a key component of King County's integrated water planning and can help our region and others address instream flow in water-short basins, recycle valuable nutrients, reduce discharge to Puget Sound and help conserve regional municipal water supplies for drinking and other potable uses. We are excited about the possibility of Washington State creating a regulatory system that encourages and incentivizes reclaimed water use as a key part of a solution to address complex water resource challenges. Overall this draft rule is much closer to achieving these goals. To ensure the rule can be successfully implemented there are a number of issues that still need to be resolved.

King County appreciates the extensive effort by the Department of Ecology (Ecology) and Department of Health (Health) in working with utilities and stakeholders in developing a workable reclaimed water rule. We thank you for your willingness to listen to comments of the Reclaimed Water Rule Advisory Committee (RAC) and to make changes based on RAC feedback. Overall, we are pleased to see that reclaimed water is treated much more like a water resource than a waste product in the draft rule. We want to highlight three of the elements of the rule that deserve recognition:

- **Reclaimed water reporting for irrigation uses:** we appreciate that reclaimed water regulation is focused on water quality compliance at the end of the pipe rather than the existing practice of submitting yearly agronomic calculations for each irrigation site. This will reduce burden on reclaimed water utilities and customers while keeping public health protections in place.
- **Coordination with drinking water utilities:** the rule directs early and consistent engagement between drinking water systems and wastewater systems throughout the planning, design and implementation of reclaimed water projects. Existing water planning processes already require consideration of reclaimed water. We agree with the State's approach that no new plans or processes are needed to implement reclaimed water projects.
- **Creates a pathway for advanced reuse options:** We think creating an approval pathway for future advanced reuse projects, such as potable reuse, is forward-thinking for communities that might need to pursue such a project in the future.

Despite the improvements, the draft rule does not address several barriers to reclaimed water use. Attached are detailed comments on the draft rule and associated documents with a summary of our major issues below.

- **The proposed rule disinfection requirements are unclear and could increase the costs to produce reclaimed water with no reported benefit.** The language in the draft rule regarding disinfection standards for Class A water is unclear and conflicting. The draft rule states that the disinfection treatment step must meet a 4-log virus removal/inactivation. However, the required dose and contact time listed in the disinfection section likely would not result in a 4-log virus removal/inactivation for systems with chloramination for disinfection, a common disinfection method for Class A reclaimed water. Furthermore, the form of chlorine (total or free chlorine) concentration is not specified in the rule, which can have major impacts to systems if free chlorine is implemented under permit requirements. The section also lists several field verification tests and studies that don't align with the kind of disinfection system that it is supposedly verifying. As a result, it is impossible to determine what the requirements are and if we would need to update our treatment facilities to comply. Ecology's technical guidance manuals, the draft Reclaimed Water Facilities Manual (the Purple Book) and the Sewage Design Criteria Manual (the Orange Book) list different chlorine concentration disinfection requirements than those in the draft rule. It is important that Ecology adopt disinfection requirements that are appropriate for the beneficial use, while keeping in mind impacts to reclaimed water systems that must comply with the rule. King County recommends preserving the existing disinfection standard of 1.0 mg/L total chlorine after a t10 contact time of at least 30 minutes. In the twenty years since this standard has been in effect, there has been no public health issues with the use of reclaimed water. We ask that you demonstrate a compelling benefit of requiring a different standard that could cause facilities to invest in unnecessary treatment process changes. We have made some language recommendations to the rule that we think are clear, technically sound and protect public health.
- **By not addressing water rights impairment issues, the state is not increasing availability of reclaimed water to much of Washington State.** Reclaimed water can stretch water supplies and help communities deal with challenging discharge limits. The draft rule does not articulate a pathway for resolving complex watershed needs of water quality improvement actions and stream flow protection. While it is not feasible to resolve these issues as part of this rule-making process, we request that Ecology not lose sight of reclaimed water in the broader policy discussions on balancing out-of-stream uses and instream flow protection. We are seeking a path forward for considering tradeoffs between water quality improvement and stream flow protections. These tensions will only grow as water supplies become more stressed and impaired in the future.
- **Cross-connection control responsibilities are unclear.** We appreciate that cross-connection requirements have been organized into one section of the rule. It will be valuable for utilities, reclaimed water users and potable water suppliers to be able to quickly find applicable requirements. King County currently follows best practices for coordinating with potable water systems to protect drinking water and for protecting the quality of our reclaimed water from lower quality waters. However, language in the draft rule is unclear on the division of responsibilities between the various utilities. Furthermore, it also applies requirements directly from drinking water protection to non-potable reclaimed water quality protection which is not aligned with the level of risk associated with using non-potable water. We are not clear what compliance with the requirements in this section would mean for our existing reclaimed water program. We are submitting several comments and suggestions on creating a workable program for addressing cross-connection that are better aligned with legal responsibilities of potable and reclaimed water systems and public health protection.

- **Unclear standards for groundwater recharge projects.** We appreciate the flexibility in establishing the point of compliance for groundwater recharge projects to best suit project-specific conditions. However, we don't believe Ecology has clarified the process for determining what water quality parameters would apply for groundwater recharge projects. We believe there is a disconnect between RCW 90.46.005, which indicates state drinking water standards meet the anti-degradation standard and the language and guidance in the draft rule and guidance document which indicate groundwater standards must be met to comply with the anti-degradation standards for reclaimed water groundwater recharge. The draft rule and guidance document needs additional work to clarify the standards and assessment criteria for groundwater recharge projects.

King County is committed to working with Ecology to develop a successful reclaimed water rule. Accordingly, we are offering comments and suggested revisions to rule text that create a workable rule for utilities and users while maintaining public health protections. Additionally, we welcome working with Ecology and Health to revise the accompanying reclaimed water technical manuals (the Orange and Purple Books) to incorporate our experience and expertise as well as new research and advances from other states. It is critical that Ecology complete the technical manual updates and maintain strong staff expertise in the future that can serve as a resource for utilities, the public, and regional permitting staff on reclaimed water.

Thank you for considering our comments. With some careful revision of the rule and continued commitment to working with stakeholders, we are certain a workable reclaimed rule can be adopted that will facilitate expanded use of reclaimed water for the long term benefit to the State. For technical questions regarding the rule comments, please contact Jacque Klug at 206-477-4474 or jacque.klug@kingcounty.gov.

Sincerely,



Mark Isaacson
Division Director

cc: Heather Bartlett, Water Quality Program Manager, Washington State Department of Ecology

