



City of Arlington

Public Works

March 28, 2019 (signed letter uploaded as pdf file to Ecology web site as requested)

James Maroncelli
Washington Department of Ecology
PO Box 47696
Olympia, WA 98504-7696

RE: City of Arlington (City) Comments on Formal Draft—
NPDES General Permit for Water Treatment Plant (WTP) Backwash Discharge (Permit)

Dear Mr. Maroncelli:

The City of Arlington provides the following comments on the formal draft of the above permit released for review on February 20, 2019. The Permit is scheduled to be effective from September 1, 2019 through August 31, 2024.

1. Overall, Ecology's modifications to this permit relative to the prior cycle result in beneficial improvements for both utilities and the environment.
2. The City supports the concept of turbidity benchmarks of 25 and 250 NTUs established in S-2.1 and S-5.4. We understand the benchmarks serve as thresholds which, *when approached*, serve to trigger adaptive management by utility operators in order to reduce the quantity of solids in discharges of backwash waste.
3. Define and distinguish "Essential Maintenance" and "Non-essential Maintenance" within S-4.2.1 or in Appendix B. It is possible that intended improvements may have resulted in reduced clarity regarding these terms.
4. The treatment diagram first referenced in S-5.2.3 (and elsewhere in the draft Permit) does not appear to describe WTP backwash treatment processes at the City of Arlington or at other treatment plants where alternative treatment methods may exist, such as splitting of the backwash flows based on characteristics of water quality (i.e. turbidity, settleable solids, and/or residual chlorine). We also note that Ecology indicated in its Publication 18-10-014 (regarding this Permit) that its "understanding of the water treatment industry may have become outdated. More large systems operate now than in the past. More of those systems probably discharge their backwash wastewater to the ground than in the past. The volumes of those wastewater discharges to the ground are likely greater than Ecology had assumed in the past."

Accordingly, Ecology should not simply increase the number of its permittees, or begin to emphasize groundwater, but modify its management of WTP backwash discharges to recognize multiple treatment technologies and the effects of various discharge locations and methods.

5. Ecology's intent to use the secondary contaminant data in conjunction with discharges to ground as an evaluation method for risk of groundwater contamination is unclear. The paired samples alone (before and after treatment of backwash waste, and prior to discharge to ground) cannot adequately quantify risk of violation of groundwater standards. In addition, in the City of Arlington's situation, the evaluation of risk is further complicated by these factors:
 - a. backwash waste treatment includes diversion of turbid fractions to the WRF, but the permit specifies it does not apply to dischargers to POTWs—therefore, does the City get treatment (contaminant removal) credit even though sediment is avoided rather than minimized contaminant?
 - b. WTP backwash waste is blended with stormwater, reclaimed water, and natural groundwater as it enters the constructed treatment wetland, so its unique characteristics are modified and immediately lost before it enters groundwater.
 - c. Construction of the Ecology-funded wetland and blending with other waters for "polishing" water quality is already an Ecology-identified adaptive management measure (e.g., heat reduction in reclaimed water for the benefit of river water quality).
6. S-5.3.1, Laboratory Accreditation, requires use of an accredited environmental lab for all chlorine and secondary pollutant data. The City disputes the need for environmental lab accreditation for routine monitoring of total residual chlorine under this Permit. Most WTPs meet both public health and environmental regulations for chlorine residuals using their own equipment employing the same photometer method that a third-party lab would use. It is time to provide utilities the opportunity to meet alternative accrediting standards for such a common parameter used throughout the water industry.
7. The flexibility provided for the Planning Requirements in S-3 using the questionnaires in S-6.3.1 and S-6.3.6 is appreciated.

Please contact me at 360-403-3541 or mwolane@arlingtonwa.gov if you would like to further discuss any of these remarks in greater detail. Thank you for the opportunity to comment.

Sincerely,



Michael D. Wolanek
Water Resources Planner