



PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY

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VIA Email [cynthia.huwe@ecy.wa.gov] with Delivery and Read Receipt Options

February 15, 2019

Ms. Cindy Huwe, Permit Coordinator
Washington Department of Ecology – CRO
1250 West Alder Street
Union Gap, WA 98903-0009

Re: Factual Review of Draft Fact Sheet and Permit for Permit No. ST0005562 for the Community of Dryden

Dear Ms. Huwe:

We have completed a preliminary review of the subject documents, and offer the following comments for your consideration:

Draft Fact Sheet

1. Cover Sheet, Summary, first paragraph states Chelan PUD operates three other treatment plants. It operates two other treatment plants, Peshastin and Lake Wenatchee.
2. Page 2, Summary, second paragraph and Page 26 Section III. F. Engineering/Facility Plan Documents paragraph 2, both need an additional sentence to read as follows: *Chelan PUD has determined constructing a pipeline from Dryden POTW to Peshastin POTW and pumping wastewater to Peshastin is not currently an option.*
3. Page 2, Summary, third paragraph, last sentence reads, "The Wenatchee River TMDL requires a 65% reduction in total phosphorus loading, in the river's reach near Dryden by 2019." Page 27G. includes similar language referring to, "... meeting Wenatchee River TMDL requirement of 65% total phosphorus reduction by 2019. We understand the TMDL documents establish load and wasteload reductions needed to achieve water quality requirements, and discharge permits set enforceable effluent limitations and compliance schedules. Recognizing that improvements required to the Dryden system will extend beyond 2019, we are concerned that references to required reductions by 2019 could create confusion and misinterpretation. To remedy this, we request deleting "by 2019" from these sentences.

Page 26, III.F. Engineering /Facility Plan Documents needs the same change as above, with removal of “by 2019”.

4. Page 2, Summary, fourth paragraph, requires an engineering report or facility plan and specifications for selected improvements and requires construction within a two year period from the effective date of the permit. A two year compliance period would not be enough due to those factors set out in District comments below, under Draft Permit S1.A.2 Final Limitations Discharge to Drainfields.
5. Page 6, Background Information, last row of table identifies the last inspection date occurred October 21, 2016. We believe Ecology (James LaSpina) inspected the facility during December 2018.
6. Page 8, collection system status, second paragraph identifies a 1998 operations & maintenance manual. We believe our most current manual is dated 1981.
7. Page 14, Section A. Design criteria identifies the DOH Design standards for Large On-Site Systems is currently being updated. Please verify. We understand this document underwent a major overhaul several years ago.
8. Page 15, second to last paragraph identifies that Chapter 246-272B WAC applies to onsite systems between 3,500 and 14,500 gpd. The current regulation applies to systems between 3,500 and 100,000 gpd.
9. Page 27, Section III.G Compliance schedule for phosphorus reduction, same comments as above under Page 2 Summary, fourth paragraph.

Draft Permit

Page 6. S1.A. Effluent Limits, 1. Interim Limitations Discharge to Drainfields

The draft permit includes an interim phosphorus limit calculated from the 95th percentile of historic septic tank effluent data. Operation of the existing Dryden system can neither be adjusted nor controlled to enhance phosphorus removal. The Dryden system would statistically be out of compliance with its interim limit 5% of the time. Please consider increasing the interim limit to avoid unnecessarily placing the District at a compliance risk during the interim period.

Page 7. S1.A.2. Final Limitations Discharge to Drainfields

1. The final effluent limit for phosphorus is expressed as a daily maximum. Although appropriate for flow, BOD₅ and TSS, we don't believe a daily maximum is necessary for effluent phosphorus. Higher daily discharges will not adversely impact the drainfield. Similarly, the impact of effluent phosphorus, if any that enters the Wenatchee River would only affect the long-term growing season of periphyton on the river bottom. The impact of elevated single day discharges would be immeasurable due to attenuation and removal in the soil profile. For these reasons, we request the time period for compliance with the phosphorus final effluent limit be changed to monthly average.

2. The draft permit includes both concentration (mg/L) and load (lbs/day) limits for effluent phosphorus. We request that the permit be structured with effluent limits based only on the mass loading of phosphorus in lbs/day and removal of the concentration based limits. Conformance with the TMDL can be accomplished by using mass loading limits. Inclusion of concentration limits over specifies what is necessary to conform to the TMDL and may eliminate viable options for phosphorus management based solely upon inclusion of a concentration limit, when the mass loading is in compliance with the TMDL.
3. The phosphorus final effluent limit was determined, in part, by the Wenatchee River TMDL requirement to achieve a 65% reduction in total phosphorus loading, in the river's reach near Dryden. Table 12 of the TMDL calls for a variety of nonpoint source percentage reductions by river reach. The Dryden POTW appears to be located in both the Dryden Flats and Pine Flats reaches with load reductions of 65% and 44%, respectively. Ecology's QUAL2K water quality model for the Wenatchee River TMDL gives the location for Dryden POTW Drainfield at 62 km. Ecology's TMDL Table 12 gives reach locations in River Miles. Please provide an explanation for the location of the Dryden POTW Drainfield that reconciles Ecology's water quality model location in kilometers and TMDL reach locations in river miles.

Page 28. S.10 Compliance schedule for TMDL phosphorus reduction

1. We are unable to complete the planning, design, permitting, obtain necessary approvals, apply for and acquire funding, construction, and startup to meet the final effluent limits within two years of the effective date of this permit. Consider, as an example only, the alternative identified on page 27 of the Fact Sheet. Constructing a new drainfield outside the hyporheic zone of the Wenatchee River would include the following steps:
 - a. Conduct an analysis to identify potential properties and approach property owner(s). Execute purchase and sale agreement contingent on an approved engineering report.
 - b. Solicit proposals, select a qualified firm and negotiate a service agreement to prepare large on-site sewage system (LOSS) documentation for submittal to the Washington Department of Health (DOH). LOSS documentation includes, but is not necessarily limited to a project application, pre-design report, soil characterization, hydrogeological report, engineering report and plans & specifications. This documentation requires multiple submittals and reviews by DOH. Under the LOSS program, DOH accepts the engineering report, plans and specifications as a single submittal.
 - c. Apply for and acquire funding. Sometimes applying over multiple funding cycles is necessary to receive an acceptable funding package. For example, approximately 2-1/2 years passed from the time we submitted our initial funding application for our Peshastin wastewater facility and we executed a funding agreement with Ecology.
 - d. Advertise for bids, award contract, construct, decommission existing facility and closeout. We anticipate minimum 1-year, or more depending on project timing, winter weather and project complexity.
2. We request Ecology consider a compliance schedule such as the following:

- a. Engineering Report or Facility Plan – eighteen months after effective date if submitted separately from plans and specifications.
- b. Plans and Specifications – nine months after Engineering Report or Facility Plan approval, or thirty months after effective date, whichever is greater
- c. Application for Ecology funding – First application cycle following approval of plans and specifications.
- d. Letter of Construction/Mitigation Completion – 18 months following execution of funding agreement(s).

Thank you for the opportunity to review these draft documents. Please call me at (509) 661-4131 if you have any questions or need additional information.

Sincerely,



Ron Slabaugh, P.E.

Water & Wastewater Manager