

One person provided testimony at the public hearing and three people provided written testimony. The comments and testimony with Ecology's response follows:

Public Testimony by Ricardo R. Saavedra

My name is Rick Saavedra. I'm the Superintendent for the City of Longview Water Treatment Facility. Our comments today, city-wise, is we don't have any general problems with the permit at all. We're quite happy with the way things function. We just want that on public record. We do have a comment though on the de-chlorination side. One aspect that we think should be looked at and probably next cycle, if not sooner, is chemicals that are being added for that. There's a few choices out on the market, but at this point in time aren't regulated in any form. So certainly something that should have some look at. At times, these processes aren't monitored very well on the other end. You know, it's easy to get sample with zero chlorine, but what actually are you putting in that can be, in some instances, a great as a concern as the chlorine is presently being monitored. So that's something that we'd like the state to take a look at. And you know hopefully not just say look at it, but have some choices and have some background information so that cities can be able, be more prepared to react to something like that.

Ecology Response:

Ecology concurs that using appropriate chemicals and correctly applying them to achieve dechlorination or any other chemical treatment (e.g. pH adjustment), is an issue of concern. The permit will not include a list of acceptable procedures but the following language has been added to direct permittees to manage any chemical treatment appropriately.

Any addition of chemicals to treat the wastewater (discharge) must comply with manufacturers recommendations and administered only at a rate appropriate for treatment. The addition of excessive quantities of treatment chemicals to the wastewater is prohibited. The use of treatment chemicals that will result in a water quality violation in the receiving water is prohibited.

Comment from Jess Greenough III, Water Treatment Manager, City of Pasco

After reviewing the proposed changes to the Water Treatment Plant General Permit (WTP-GP) the City of Pasco found an issue of concern. The city feels that the lab accreditation requirement for (total) residual chlorine (Section - E. Laboratory Accreditation) presents an undue burden and provides no measurable benefit relative to quality assurance or quality control. The current DPD colorimetric method is reliable, accurate and cost effective. Furthermore, the City feels that this additional regulatory requirement will simply increase the cost of doing business and provide no bonafide/tangible benefit to anyone. In fact the current residual chlorine test method that the Water Treatment Plant performs now is accepted by the Department of Health. This testing method is acceptable for the human health and safety, therefore, it should be acceptable for WTP-GP requirements. See attached letter for additional information on the City of Pasco's testing history for (total) residual chlorine.

Ecology Response:

There are two issues in this comment. One is the lab accreditation requirement and the other is the use of the colorimetric test method.

Lab Accreditation Requirement: Certification of laboratories is authorized under RCW 43.21A.230 and WAC 173-226-090 requires accreditation for monitoring data.

- (4) Except as provided in subsection (5) of this section, all monitoring data required as a condition of a general permit, or required as part of an application for coverage under a general permit shall be prepared by a laboratory registered or accredited under the provisions of chapter 173-50 WAC within one year of first being covered under a general permit or by July 1, 1995, whichever is later.
- (5) The following parameters need not be accredited or registered:
 - (a) Flow;
 - (b) Temperature;
 - (c) Settleable solids;
 - (d) Conductivity, except that conductivity shall be accredited if the laboratory must otherwise be registered or accredited;
 - (e) pH, except that pH shall be accredited if the laboratory must otherwise be registered or accredited;
 - (f) Turbidity, except that turbidity shall be accredited if the laboratory must otherwise be registered or accredited; and
 - (g) Parameters which are used solely for internal process control.

There is no other option at this time but to require lab accreditation. However, should this rule come up for revision, we are hopeful that Pasco will again make their position known to Ecology.

Use of Colorimeter Test Method: Ecology concurs that the colorimeter test method can be an acceptable and authorized test method, although lab accreditation for conducting the test is required. The permit authorizes the following under Special Condition S4. Monitoring Requirements: Low range (0.01 mg/L) digital colorimetric meter or equivalent method. Equivalent in this case means that the test method will be sufficiently precise and accurate to detect total residual chlorine levels as low as the permit limit of .07 mg/L.

Comment from Samuel A. L. Perry, Department of Health, Office of Drinking Water

General Permit

Page 12: There are a couple types of Hach® Pocket Colorimeters™, so it would be more appropriate to list the requirement more generically as digital colorimetric meter. In addition, the required accuracy of the instrumentation should be noted, especially since the discharge standard is proposed for downward revision. The smallest increment on low range digital colorimetric meter is 0.01 mg/L as Cl₂ should be considered as an accuracy requirement to discourage the use of handheld colorwheels for low range measurements.

Page 12: Most bench top water treatment plant turbidimeters are accurate to nearest 0.01 NTU. Requiring reporting and measurement accuracy to the nearest 0.1 NTU is well within the capability of water treatment plant operators.

Page 13: The comments on page 12 apply to page 13 as well.

Page 13: Currently, there only a few water treatment plant laboratories in Washington State that are accredited for the analysis of chlorine residual. To require small water treatment plant laboratories to go through the lab accreditation process to use a pocket digital colorimeter is an onerous requirement with little apparent environmental health benefit. At water treatment plants, regulatory analysis must be conducted by a certified operator. It is recommended that this requirement be used as the means of sampling quality assurance rather than lab accreditation, especially if the only thing that the lab will be accredited for is the use of a digital colorimeter.

Page 14: Please provide the names and phone numbers of individuals to contact at each regional and field office. Going through the main switchboard can be a cumbersome, bureaucratic process.

Fact Sheet

Page 34: It appears that a simple mistake was made in listing the ground water criterion for arsenic as 0.05 ug/L. It should be listed as 0.05 mg/L or 50 ug/L.

Page 35: The section on arsenic removal contains a number of inaccuracies and should probably be rewritten in its entirety.

Page 36: Please be more clear that water treatment plants that use oxidation and filtration to remove iron, manganese, and arsenic and discharge to land are exempt from the permitting process. The focus of this document is appropriately on discharge to surface waters. Clearly stating that groundwater treatment plants that land apply the wastewater discharge via an infiltration pond, drainfield, or similar disposal method, are exempt from the NPDES permitting process would avoid potential misinterpretation and misuse of this permitting process.

Page 36: The comments above do not apply to groundwater treatment system that use ion exchange, reverse osmosis, or treat for nitrate. I agree that these situations should be evaluated on a case-by-case basis. However, some additional guidance on the subject would be helpful so that the regulated and regulatory communities can reach a common understanding more easily.

Ecology Response:

Ecology concurs that the meter requirement for chlorine should be expressed in a more generic fashion with emphasis on low level capability. The language has been changed to :

Low range (0.01 mg/L) digital colorimetric meter or equivalent method

The permit specifies an accuracy of 1 NTU because that is sufficient for the purpose of the required monitoring. It is good that the operators can do much better than that but it is not necessary to require greater NTU accuracy in the permit just because it is achievable. No change will be made.

As noted above in the response to the City of Pasco's comment, the lab accreditation requirement is based on rule and the permit can not conflict with the rule. No change can be made unless there is a rule revision.

Ecology's experience with listing names and phone numbers of specific contact people suggests that listing a more generic number that will remain constant is a better approach. This is a five year permit and in that time it can be expected that staff will change. Ecology reception staff are skilled in forwarding calls to the appropriate person and the more generic numbers will remain.

The fact sheet has been corrected to list the correct arsenic groundwater standard of .05 mg/L.

The arsenic removal language in the fact has been changed based on additional information provided by Samuel Perry.

The following language was added to the beginning of APPENDIX E - WTP Discharge to Land/POTW to clarify that this permit does not apply to land application of filter backwash.

The WTP general permit under development could include WTPs that discharge to land if that discharge had reasonable potential to pollute ground water. However typical

discharges of filtration backwash to land will not have reasonable potential to pollute ground water (discussed below) and land application of filtration backwash is not included in the water treatment plant general permit.

Comment from Arnold Peterschmidt

It is my opinion that there are some very small public water systems treating ground water for removal of iron and manganese that meet the conditions of section S1 as Group 1 Facilities under section S4 of the draft Water Treatment Plant Industry National Pollutant Discharge Elimination System Waste Discharge General Permit that should be exempt from the permit. Imposing the permit requirements for treatment and monitoring waste effluent will not provide the environmental benefits intended by the permit while increasing the costs of water supply to the community and adding to Ecology's work load.

I am currently working with a community water system that is a good example. The system employs a manganese green sand pressure filter system for removal of excess iron and manganese from the water produced by the two source wells. The treatment system has the capacity to produce up to approximately 100,000 gallons per day, double the permit threshold. The average daily water consumption is approximately 30,000 gallons per day for 115 residential water service connections. Backwash water is discharged to the drainage ditch along the County road in front of the water system facilities. Average discharge volume is approximately 2000 gallons per day which contains approximately 0.5 lb iron and 0.1 lb manganese and free chlorine at concentrations near 0.2 mg/l. The discharge site is approximately 3000 feet from the eastern shoreline of Admiralty Inlet. The condition of the ditch indicates that storm water runoff is seldom enough to flow from the backwash discharge site to the outfall at the shoreline. As roadside drainage ditches are included in the definition of "waters of the State" regardless of the nature of the receiving waters or the lack of hydraulic connection between a particular ditch and the potential receiving waters, the filter backwash must meet the effluent limitations set in the permit and discharged effluent must be monitored and reported at least monthly.

The requirements of the current draft permit seem unnecessary for water treatment systems such as that described above. The precipitated iron and manganese released with the backwash are not toxic and the quantities are small. As the hydraulic link between the discharge point and the surface water is long and weak and is not expected to occur at all except during significant storm water runoff events, the free chlorine residual will dissipate long before reaching the receiving water. The receiving body of water is very large with swift currents and the shoreline is normally turbid due to constant wave action. It is hard to imagine that this filter backwash could ever have any environmental impact on receiving water such as Admiralty Inlet.

It is the costs associated with monitoring that are my greatest concern. I estimate that it will require at least a half day per month labor by the contract water system operator to collect effluent samples, send them to an accredited lab and maintain the necessary records. With laboratory fees, the annual cost is expected to be around \$3000 for the system described above. There is substantial economy of scale in water systems. Small public water systems can not deliver water as economically as larger municipal water systems. Three thousand dollars per year, year after year is a significant expense for a very small system. It is an additional cost that will have an impact on water rates and funds available for maintenance, operations and replacement of water system facilities. I see no discernable benefit to the environment, the community served by the water treatment plant or the public at large from this permit process and the associated costs.

My suggestions are:

Increase the maximum water treatment plant capacity under part S1, A, 3 to 250,000 gallons per day for systems discharging filter backwash consistent with that described above.

Allow water treatment plants that discharge to a location with limited hydraulic continuity to a surface water body to install biofiltration swales and ponds such as those used in storm water treatment in lieu of continuous monitoring and reporting.

Ecology Response:

There are two issues here. One is the facility size threshold that is applied by this permit and the other concerns infiltration versus discharge to surface water. A discharge of wastewater (filter backwash) to surface water requires a permit. The size threshold was set to make this permit available to as many facilities as possible that have a surface water discharge and can reasonably be expected to meet the testing and reporting requirements of the permit. The current threshold is still applicable and no change will be made.

A discharge to a roadside ditch is typically considered a discharge to surface water, particularly when there is a connection between the ditch and a more traditional surface water body. There is a suggestion in the comment that this facility might be able to totally infiltrate the backwash and not discharge to the ditch. If that can be accomplished than no permit would be necessary.