

October 18, 2012

Carl Anderson  
15321 NE Valley Road  
Newberg, OR 97132

**Re: Plan Review - Tilikum Retreat Center, Water System Improvements  
(PR #184-2011; PWS #91967)  
Final Approval**

On September 6, 2012, Evan Hofeld and I visited your facility, and met with you and Brad Crement, PE (engineer-of-record, HBH Consulting Engineers) the ripening process of the new Slow Sand Filters (SSF). During the visit, we observed the new SSF water treatment plant and found that it appeared to be constructed in accordance with the plans and specifications submitted with the referenced plan review.

On October 17, 2012, the Drinking Water Services (DWS) received a copy of the "Tracer Study Report" prepared by HBH Consulting Engineers (study performed on October 12, 2012). The results of the study were as follows:

*Flow = 5.26 gpm*

*Minimum contact chamber volume = 2700 gal*

*Contact Time Achieved = 210 minutes*

*Baffling Factor = 0.41*

*Minimum chlorine residual (per HBH Consulting Engineers) = 0.8 mg/l*

For purposes of future Monthly Operating Reports (MOR's) submitted to DWS, you should enter 210 minutes in the "Contact Time" column for your daily CT calculations.

This completes the plan review process, and the project is granted *final approval*. Typically, at this point, your old water treatment plant would be decommissioned, and the new SSF treatment plant placed in service on a permanent basis. Since the old plant is non-compliant with current surface water treatment requirements, DWS encourages you begin supplying your water demands with the new treatment plant as soon as possible (as determined by you and your engineer). Due to the delay experienced with the ripening of the new SSF, you may retain your old treatment plant (valved off so it is "off-line") until the performance of the SSF is demonstrated through a higher turbidity season, but no longer

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than 9 months from the date of this letter. Please notify me as soon as the SSF is actively supplying treated water to your facility, and the old plant is off-line.

Thank you for your cooperation during the plan review process.

Sincerely,

A handwritten signature in cursive script, appearing to read "Fred Kalish", followed by a horizontal line.

Fred Kalish, PE  
Regional Engineer  
Drinking Water Services

Cc: Gary Van Der Veen, Yamhill County  
Brad Crement, PE, HBH Consulting Engineers