



# Oregon

Theodore R. Kulongoski., Governor

June 10, 2010

## Department of Human Services

Public Health Division

Drinking Water Program

800 NE Oregon Street #640

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Jonathan Smith, PE  
Cascade Water Works Inc  
3415 Commercial Street  
Suite 112  
Salem, OR 97302

**Re: Water Treatment Facilities (PR# 37-2010)  
Luckiamute Domestic Water Co-op, PWS 4100538  
Conditional Approval**

Dear Jonathan,

Thank you for your submittal to the Drinking Water Program (DWP) of plans for the new water treatment facilities for the Luckiamute Domestic Water Co-op, (Plan Review #37-2010). Our office has received plans for the two facilities (each including residual maintenance with sodium hypochlorite injection and corrosion control with caustic soda and possibly zinc orthophosphate), a corrosion control report, a land use compatibility statement as well as a plan review fee of \$300. A portion of that fee (\$150) was refunded. I apologize for the delay in the review of the plans.

The project is approved subject to the following conditions:

### **Conditions for Residual Maintenance**

- The sodium hypochlorite utilized must be NSF certified.
- Raw water sample taps must be provided at each well head. The 2009 water system survey showed that raw water sample taps were available. These must remain in place. A finished water sample tap is shown on the submitted plans.
- A DPD style test kit must be available. This kit is to be used at least weekly to verify that the Hach analyzer does not need calibration. The chlorine residual in the distribution system will need to be measured twice per week; the DPD style test kit should be used for that purpose as well.
- The water system's operation and maintenance manual must be updated to include the procedures and maintenance of the residual maintenance equipment.

The installation of chlorine for residual maintenance is required because Luckiamute Domestic Water Co-op receives some surface water from the City of Falls City and therefore must maintain a measurable residual throughout the distribution system. It is recommended that the water system try to keep the residual at approximately the same level as the incoming City of Falls City water.

At this time, 30 minutes of contact time is not required, however, the contact time calculations completed

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should be provided for our records.

At this time, Luckiamute Domestic Water Co-op is required to take an increased number of coliform samples each month. Once the chlorinators are fully operational and providing a detectable residual throughout the distribution system and final plan review approval has been given, then the required number of coliform samples can be reduced from 5 to 3.

**Conditions for Corrosion Control**

- As noted in the June 2009 Corrosion Control Plan, the caustic soda utilized must be NSF certified.
- If Luckiamute opts to add zinc orthophosphate, it must have its own feed pump and injection point.
- The water system's operation and maintenance manual must be updated to include the procedures and maintenance of the corrosion control equipment, including the periodic calibration of the Hach pH analyzer.

Once the installation of the corrosion control equipment is completed, two consecutive six-month rounds of lead and copper tap sampling must be completed. The number of customer sample sites required, based on population, is twenty, which is the number of sites required during the initial lead and copper monitoring effort in 1993. This sampling should not be completed until the water system has verified through additional sampling that the treatment is effective; please contact me when the system is ready to begin the first of the two six-month rounds.

Additionally, pH monitoring at the entry point will be required at least once every two weeks. Again, this monitoring begins once treatment has been shown to be effective. After discussion with the system, a minimum pH will be set and a data form for pH data will be provided by our office. This form will need to be turned in once per month.

Upon completion of the project, the engineer must verify in writing that all conditions listed above have been met and that construction was completed according to the submitted plans. If substantial changes are made, a set of as-built drawings must be submitted. If you have any questions or concerns, please feel free to contact me at any time at 971-673-0191 or via e-mail at [carrie.l.gentry@state.or.us](mailto:carrie.l.gentry@state.or.us).

Sincerely,

Carrie Gentry, PE  
Department of Human Services  
Drinking Water Program

cc: Luckiamute Domestic Water Co-op