

19 February 2016

COPY

Jon Woodward
London Water Co-Op
72727 Shoestring Road
Cottage Grove, Oregon 97424

RE: UV Disinfection (PR #2016-17)
London Water Co-Op (PWS OR4100239)
Conditional Approval

Dear Mr. Woodward:

Thank you for submitting plans for *plan review* on UV treatment at London Water Co-Op located near Cottage Grove in Lane County, Oregon. Oregon Health Authority Drinking Water Services (DWS) received a cover letter proposing a Viqua Pro-50 UV reactor and fee of \$248. It is DWS's understanding that UV is intended to provide *Giardia* inactivation as the plant's current contact time for chlorine is 46 minutes, making it difficult to achieve CT with colder water. The proposed reactor is credited with 3.5-log *Giardia* and *Cryptosporidium* inactivation when operated per manufacturer's specifications and at a flow up to 70 gallons per minute (gpm). At this time, DWS grants the project *conditional approval*.

The project will be granted final approval subject to London Water (or its designated representative) providing written verification that the project was completed per plans and meets OAR 333-061-0050 Construction Standards such as those described below.

1. The UV reactor location is sheltered from the weather and accessible for routine maintenance.
2. There is a spool in the by-pass piping around the reactor.
3. There is an upstream automatic device that prevents flow from exceeding 80 gpm through the UV reactor (between 70 and 80 gpm, treatment credit is 3.0-log which is more than sufficient to meet required CT).
4. There are shut-off valves upstream and downstream of the reactor.

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Thanks again for the plan submission. If you have any questions, you are welcome to contact me at (541) 726-2587 extension 57 or via email at james.r.macpherson@state.or.us.

Sincerely,



James "Jay" MacPherson, Ph.D., P.E.
Region 2 Plan Review Coordinator
OHA Drinking Water Services

cc: Plan Review, DWS Portland

Vicki Whisler, 72654 London Road, Cottage Grove 97424