## PUBLIC HEALTH Environmental Public Health, Drinking Water Program

John A. Kitzhaber, MD, Governor

April 10, 2014

Jim Hart City of Oakland 637 NE Locust Oakland, OR 97462

RE: UV Light Disinfection (PR#2014-38) City of Oakland (PWS# 4100581)

Conditional Approval

Dear Mr. Hart:

Thank you for your submittal of plan review information for the new UV light disinfection device for the City of Oakland to the Oregon Health Authority's Drinking Water Services (DWS). On February 7, 2014, our office received a copy of the UV Disinfection Report by MAP Engineering, Inc. A plan review fee of \$150 was also received on February 25, 2014.

The project includes a new UV light device for disinfection treatment for the City of Oakland that was constructed in 2013.

Please address and confirm in writing to DWS the following system conditions per Oregon Administrative Rule (OAR) 333-061-0050:

- 1. Per OAR 333-061-0050(5)(k)(A), the UV unit must achieve the dosage of  $8.5 \text{ mJ/cm}^2$ .
- 2. Per OAR 333-061-0050(5)(k)(B), the ultraviolet lamps must be insulated from direct contact with the influent water and will be removable from the lamp housing.
- 3. Per OAR 333-061-0050(5)(k)(C), the unit must have an upstream valve or device that prevents the flow from exceeding 80 gpm, an ultraviolet light sensor that monitors the light intensity through the water during operation, and a visual and audible alarm.



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- 4. Per OAR 333-061-0050(5)(k)(D), there must be a way to visually verify operation of all lamps.
- 5. Per OAR 333-061-0050(5)(k)(H), the treatment unit must have a shut-off valve on the outlet side. There shall be no by-pass piping around the treatment unit. The current plans show an emergency by-pass and no valve is shown on the downstream side of the UV unit. The by-pass needs to be removed and shut-off valve installed on the outlet side of the unit.

When submitting the additional information, please reference Plan Review #2014-38. This information can be e-mailed to me at <a href="mailed-to:rebecca.a.templin@state.or.us">rebecca.a.templin@state.or.us</a> or mailed to:

Attn: Rebecca Templin
OHA-Oregon Drinking Water Services
444 A Street
Springfield, Oregon 97477

Until the project has been granted Final Approval, the new UV light disinfection device is not approved for use.

If you have any questions or concerns, or would like this in an alternate format, please contact me at (541) 726-2587 x29 or by email. Your cooperation is greatly appreciated.

Sincerely,

Rebecca Templin, P.E.

Regional Engineer

Drinking Water Services

cc: Plan Review, OHA/DWS Portland Mike Parker, MAP Engineering, Inc.