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www.healthoregon.org/dws

June 17, 2024

Steve Stewart

City of Newport 169 SW Coast Hwy Newport Oregon 97365

via email

Re: City of Newport – WS ID# 00566

**Excess Recirculation Installation in Membrane Filter Racks** 

Conditional Approval – PR# 4-2024

Dear Mr. Stewart:

Thank you for submitting information via e-mail on June 7, 2024, addressing the conditions in the Conditional Approval Letter dated February 16, 2024. The project regarding the modification of 5 of the 6 existing Aria Filtra UNA-620A membrane racks (Racks 1-5) to operate with an excess recirculation (XR) system is granted final approval.

The XR system has a maximum design flow of 3 gpm per membrane module. Flow meters and flow control valves have been installed on the feed and filtrate side of the racks to ensure compliance with this requirement. The City of Newport's existing membrane O&M manual has been updated with XR system specifications from the membrane supplier. The SCADA system screens have been upgraded for ease of monitoring operations, and alarm setpoints have been programmed according to the manufacturer's recommendations.

Below is a summary of the monitoring requirements for the primary racks (Racks 1-5):

Minimum DIT ending pressure: 16.95 psi

PDR<sub>max</sub> during a DIT:  $0.24 \,^{\text{psi}}/_{\text{min}}$ 

Log removal credit (LRC): 4.0

Ambient Log Removal Value (LRV<sub>ambient</sub>): displayed & recordable

Rack 5 operates in a "swing" operating mode, allowing it to operate as a primary treatment rack, or as a backwash recovery rack. Rack 5, in backwash recovery mode, and Rack 6 will have the same monitoring requirements, but will have a PDR<sub>max</sub> of 0.08 psi/min during DIT.

Thank you for your cooperation during this process and if you have any questions on the information above, or would like this information in an alternative format, please contact me at (541) 393-4374 or via email.

Sincerely,

BCIL

Baxter Call, PE Regional Engineer OHA – Drinking Water Services

cc: Adam Odell, PE, Stantec Pete Farrelly, PE, OHA-DWS