

Andy Peters

From: Andy Peters
Sent: Monday, January 31, 2022 4:15 PM
To: 'YELTON-BRAM Tiffany'; 'PINNEY Mike * DEQ'; 'Tim.RUBY@deq.oregon.gov'; 'Jeffrey.NAVARRO@deq.oregon.gov'
Cc: Dan Huff; Mac Corthell; J.W. Ring; 'Mark P. Strandberg'; David Hori; R Quigley; S Major; T Molatore
Subject: Compliance Point Clarification Technical Memorandum
Attachments: 20220127 Compliance Point.pdf

Dear Tiffany, Mike, Jeff, and Tim,

Thank you for meeting with the City of Molalla on January 21st to discuss permit assumptions with the City's Design Team. One topic we discussed was the Compliance Point where sampling should be performed, since this Point must be known before many important features of the plant can be properly designed. During this discussion DEQ asked for a memorandum explaining the Compliance Point being assumed, and the Engineering Team at Dyer has prepared the brief technical memorandum, attached, to provide that clarity. While neither the City nor DEQ can predict what the final NPDES permit will say (since there is a Public Process that will inform its composition) the City is requesting preliminary consensus on these assumptions from DEQ, since your agency is able to provide expert advice to help the City of Molalla navigate this phase of planning. The goal of asking this question in the first place, and the other issues discussed during the meeting, is so that the Plant that comes out of this Design Phase is the plant we all want and need.

The City sent the final responses from its Engineers' answers to the Value Engineering team this morning, and that Value Engineering document will now be finalized. This, coupled with DEQs advice on the Compliance Point, BOD/TSS and Mass Load Limit situation, and Storage Requirements during Shoulder Months, is what the City needs in order to move the design forward as speedily and wisely as possible. Therefore, if possible, the City requests DEQs return comments on these issues as soon as practical.

This email and memorandum is a public record, available on the City of Molalla website. Thank you in advance for all the assistance DEQ is providing with this important project!

Respectfully,

Andy Peters, Public Works Div Manager

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M E M O R A N D U M

DATE January 27, 2022

TO Andy Peters, City of Molalla

FROM Tyler J. Molatore, PE

PROJECT NAME Wastewater Treatment Plant Upgrades – Effluent Monitoring Requirements
City of Molalla

PROJECT NO. 198.28

This Memorandum summarizes the anticipated effluent compliance monitoring requirements when discharging to the Molalla River (Outfall 001) or land applying recycled water (Outfall 002) for the City of Molalla’s Wastewater Treatment Plant after the upgrades are completed.

Outfall 001 (Molalla River)

When discharging to the Molalla River the compliance monitoring location for *E. coli* bacteria will be immediately following the UV disinfection system. The compliance monitoring location for effluent BOD₅, TSS, pH, NH₃-N, and temperature will be at the Effluent Pump Station. Effluent flow will be measured using a flow meter that measures the flow conveyed to the Effluent Pump Station (and therefore the total flow discharged to the Molalla River).

Outfall 002 (Recycled Water)

When land applying recycled water the compliance monitoring location for pH, Total Coliform, and nutrients (TKN, NO₂+NO₃-N, NH₃-N, Total Phosphorus) will be immediately following the UV disinfection system, but prior to the effluent storage pond. Flow, or quantity of recycled water irrigated, will be measured using a flow meter that measures flow conveyed to the Effluent Pump Station (and therefore total quantity of recycled water irrigated).

Summary

Tables 1 and 2, below, summarize the effluent monitoring requirements for Outfall 001 and 002.

**TABLE 1
EFFLUENT MONITORING REQUIREMENTS (OUTFALL 001)**

Item or Parameter	Effluent Monitoring Location
Flow (MGD)	Total flow conveyed to the Effluent Pump Station
BOD ₅ and TSS (mg/L and lbs/day)	Effluent Pump Station
BOD ₅ and TSS Percent Removal (%)	Effluent Pump Station
NH ₃ -N (mg/L)	Effluent Pump Station
pH (S.U.)	Effluent Pump Station
Temperature (deg C)	Effluent Pump Station
<i>E. coli</i> (# org/100 mL)	Immediately following the UV disinfection system ¹

1. Immediately following the UV system but prior to the effluent storage ponds.

**TABLE 2
EFFLUENT MONITORING REQUIREMENTS (OUTFALL 002)**

Item or Parameter	Effluent Monitoring Location
Flow (MGD) or Quantity Irrigated (inches/acre)	Total flow conveyed to the Effluent Pump Station
Total Coliform (# org/100 mL)	Immediately following the UV disinfection system ¹
Nutrients (TKN, NO ₂ +NO ₃ -N, NH ₃ -N, Total Phosphorus)	Immediately following the UV disinfection system ¹
pH (S.U.)	Immediately following the UV disinfection system ¹

1. Immediately following the UV system but prior to the effluent storage ponds.

As shown in Tables 1 and 2, the compliance monitoring location for disinfection (*E. coli* when discharging to the Molalla River or Total Coliform when land applying recycled water) will be immediately following the UV disinfection system and thus will remain the same point year-round regardless of whether or not final effluent is land applied or discharged to the Molalla River. Also, all effluent monitoring will occur at the Wastewater Treatment Plant site, since there is no secondary treatment or disinfection processes that occur in the effluent force main to either outfall.

END OF MEMORANDUM