PO Box 47775 · Olympia, Washington 98504-7775 · (360) 407-6300
711 for Washington Relay Service · Persons with a speech disability can call 877-833-6341

September 14, 2020

The Honorable JW Foster, Mayor City of Yelm 106 2nd Street SE Yelm, WA 98597

Re: 2020 Inspection, Yelm Water Reclamation Facility, NPDES WA0040762

Dear Mayor Foster:

On June 24, 2020, the Department of Ecology (Ecology) conducted an inspection of the Yelm Water Reclamation Facility and Cochrane Memorial Park. We have enclosed a copy of our inspection report for your records, and would like to express our thanks to Bill VanBuskirk and Jeremy Campeau for the courtesy extended during the inspection.

The water reclamation facility seemed to be well operated and maintained at the time of our inspection. Cochrane Memorial Park also appeared to be well maintained, though public works staff outlined several planned improvement projects that should further enhance this amenity after completion. We appreciate the City's efforts and attention in caring for these facilities.

If you have any questions regarding this letter, or if I can be of any service to you, please contact me directly by email at steven.ogle@ecy.wa.gov or (360) 407-6319.

Sincerely,

Steve M. Ogle, P.E.

Small Communities Engineer Southwest Regional Office

Water Quality Program

Enclosure: Inspection Report

cc: Cody Colt, Yelm Public Works Director

Bill VanBuskirk, Operations Manager

Jeremy Campeau, Lead Operator

Permit File, Yelm Water Reclamation Facility



United States Environmental Protection Agency Washington D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e., PCS)								
Transaction Code N	PDES	yr/mo/dy	I	Inspection Type	Inspector	Facility Type		
1 <u>N</u> <u>5</u> <u> W A 0 0</u>	4 0 7 6 2	2 0 0 6 2 4		<u>C</u>	S	11		
Remarks								
21								
	y Self-Monitoring Ev			QA	Reser			
67 <u> 69 </u>								
Section B: Facility Data								
Name and Location of Facility Insp		users discharging to	POTW, also	Entry Time/Date	Permi	t Effective Date		
include POTW name and NPDES permit number)				8:00 AM				
City of Yelm Water Reclamation Facility				6/24/2020		st 1, 2011		
931 Northern Pacific Road NE				Exit Time/Date	Permi	t Expiration Date		
Yelm, WA 98597				4:00 PM				
				6/24/2020	,	1, 2016		
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number				Other Facility Data (e.g., SIC NAICS, and other				
Cody Colt, Public Works Director / 360-458-8412				description informa	ition)			
Patrick Hughes, Project Manager /								
Bill VanBuskirk, Operations Mana								
Jeremy Campeau, Lead Operator /								
Name, Address of Responsible Off								
The Honorable JW Foster Contacted								
Mayor, City of Yelm Yes No								
Section C: Areas Evaluated During Inspection (Check only those areas evaluated)								
Permit	Self-Monitori		Pretreatment	t [MS4			
□ Records/Reports	Compliance S	Schedules	Pollution Pre	evention				
Facility Site Review	Laboratory		Stormwater	Stormwater				
☐ Effluent/Receiving Waters	Operations &	Maintenance	Combined Sewer Overflow					
Flow Measurement	Sludge Handl	ing/Disposal	Sanitary Sev	Sanitary Sewer Overflow				
Section D: Summary of Findings/Comments								
(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)								

The Department of Ecology's (Ecology's) previous, documented inspection of Yelm's Water Reclamation Facility (WRF) was conducted on August 2, 2017. The 2017 inspection does not identify any specific compliance issues, but did make eight recommendations for various improvements. Ecology reviewed these recommendations with Yelm's Lead Operator, Jeremy Campeau, as part of this inspection and found that all recommendations have either been properly incorporated, or will be addressed as part of upcoming improvement projects at the facility. The primary reasons for this inspection were 1) to observe the operating condition of the treatment facilities and 2) to discuss the planned improvement projects at the WRF and Cochrane Memorial Park.

Ecology's inspector, Steve Ogle, arrived at Cochrane Memorial Park around 8:00 AM on June 24. The inspector met several Public Works staff (Bill VanBuskirk, Patrick Hughes, and Cody Colt) and consultants from Skillings, Inc. (Tom Skillings and Aaron Wu) upon arrival. Yelm's WRF was one of the first reclaimed water facilities in Washington state, and the City uses reclaimed water for irrigation and aquifer recharge, but also has surface water outfalls that discharge to the Centralia Power Canal or the Nisqually River when demand for reclaimed water irrigation is low. Yelm has retained Skillings to design improvements at the park, including an expansion of the rapid infiltration basins. After introductions, Tom and Bill led the group on a walk-through of the reclaimed water features and rapid infiltration basins. Skillings did the original design of these facilities and Tom was very familiar with both existing operations and the future improvements planned for the park. Tom and Bill pointed out some issues with the existing features and discussed ways that the expansion project would alleviate them. The park was observed to be well used by members of the community during the tour.

Ecology's inspector and Yelm's Public Works Staff then traveled to the WRF and toured the facilities from headworks to the sand filters and chlorination facilities. Plant grounds were orderly, neat, and well maintained at the time of this inspection. Yelm's collection system is a septic tank effluent pumping (STEP) system, which serves to minimize infiltration and inflow, but also sends less organics and solids to the WRF, making operation of the secondary treatment system challenging due to lower than normal nutrient levels for microbial growth. The WRF utilizes Sequenced Batch Reactors (SBRs) with three active basins for secondary treatment. Yelm has struggled in recent years to meet permit limits for total nitrogen, but Bill explained that recent changes in aeration and cycling times in the SBRs seemed to be improving total nitrogen performance (Ecology concurs). SB/R effluent is discharged to/equalization basins for short-term storage, prior to final sand filtration and chlorine disinfection. Yelm's Lead Operator, Jeremy Campeau, met with the inspector at the sand filters and discussed various aspects of the treatment system, including the planned upgrades to the WRF. Jeremy stated that the sand filters had been completely rebuilt, including sand washers and air lifts. Ecology's

inspector observed that all unit processes appeared to be well operated and maintained, and found Bill and Jeremy to be very knowledgeable about plant operations and regulatory requirements.						
After a break for lunch, Ecology's inspector returned to the WRF and met with Jeremy in the laboratory. The lab was neat and organized at the time of the inspection. The lab book was observed to be complete, up to date, and in accordance with Ecology requirements.						
Following the lab inspection, Ecology's inspector rejoined Public Works staff and met with consultants from Parametrix (Brian Bunker and Doug Berschauer), who have been retained to complete design of a new membrane bioreactor (MBR) system to replace the current SBR system. After some discussion of the new MBR system, the group toured the solids handling facilities and discussed several improvements that the City would like to pursue. Finally, the group inspected an existing but unused septage unloading station that the City would like to refurbish and bring online in conjunction with the MBR upgrade and solids handling improvement projects. After a discussion of various options for improving the septage station, the group adjourned. Following a brief inspection closeout discussion with Bill and Jeremy in the lab, Ecology's inspector departed the site around 4:00						
PM. Verify Latitude and Longitude Announced						
N/A		Unannounced				
Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date				
Steve Ogle, P.E.	Ecology/SWRO (360) 407-6319	09/14/20				
Signature of Management QA Reviewer	Agency/Office/Phone and Fax numbers	Date				

Ecology/SWRO (360) 407-6271

09/14/20

Andrew Kolosseus Wohn K
EPA FORM 3560-3 (Rev 1-06) Previous editions are obsolete