



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000

711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

November 10, 2014

Mr. Bart Stepp, P.E.
Public Works Director
City of Woodland
300 East Scott Avenue
Woodland, WA 98674

Re: City of Woodland Wastewater Treatment Plant Inspection, October 29, 2014

Dear Mr. Stepp:

I visited the City's treatment works on October 29th for an unannounced inspection. Thank you for joining me.

We are very concerned with treatment plant operations as they were revealed to us on this inspection. Several areas in particular require the cities immediate attention. Those are:

- Laboratory equipment & procedures;
- Recordkeeping and accuracy of required submittals;
- Site safety, alarm, and response protocols;
- Maintenance Management programs and procedures.

The attached inspection form provides further details on these observed deficiencies.

We request your written response to our inspection findings by November 30, 2015. We strongly suggest that the city engage outside expertise to assist it in addressing operations management at the plant.

If we can assist in this matter or if you have questions regarding this review, please contact me at (360) 407-6277.

Sincerely,

David J. Knight, PE
Environmental Engineer, Municipal Unit
Southwest Regional Office
Water Quality Program

DK:

Enclosure: EPA inspection form

cc: Robert Choate, City of Woodland,
File: Clark County, Woodland STP, NPDES Permit Correspondence





Water Compliance Inspection Report

Form Approved.
OMB No. 2040-0057
Approval expires 10-31-95

Section A: National Data System Coding (i.e., PCS)

Transaction Code	NPDES	yr/mo/dy	Inspection Type	Inspector	Facility Type
1 N 2 5 3 W A 0 0 2 0 4 0 1 11	12 1 4 1 0 2 9 17	18 C	19 S	20 1	
Remarks					
21 A N N U A L I N S P E C T I O N 66					
Inspection Work Days	Facility Self-Monitoring Evaluation Rating	BI	QA	Reserved	
67 10 1 69	70 5	71 N	72 N	73	74 75 76 77 78 79 80

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) City of Woodland 100 Treatment Plant Road Woodland, WA 98674	Entry Time/Date 1000 10/29/14	Permit Effective Date 04/01/2012
	Exit Time/Date 1200 10/29/14	Permit Expiration Date 03/31/2017
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number Robert Choate, Group III Operator (Mark Morgan and Derek Amburgey were on vacation at time) 360-225-7007	Other Facility Data	
Name, Address of Responsible Official/Title/Phone and Fax Number Mr. Bart Stepp, P.E. 360 Public Works Director (225) 7999 Fax 360-225-7336	Contacted <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

<input checked="" type="checkbox"/> Permit	<input checked="" type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Operations & Maintenance	<input checked="" type="checkbox"/> CSO/SSO (Sewer Overflow)
<input checked="" type="checkbox"/> Records/Reports	<input checked="" type="checkbox"/> Self-Monitoring Program	<input checked="" type="checkbox"/> Sludge Handling/Disposal	<input checked="" type="checkbox"/> Pollution Prevention
<input checked="" type="checkbox"/> Facility Site Review	<input type="checkbox"/> Compliance Schedules	<input checked="" type="checkbox"/> Pretreatment	<input type="checkbox"/> Multimedia
<input checked="" type="checkbox"/> Effluent/Receiving Waters	<input checked="" type="checkbox"/> Laboratory	<input type="checkbox"/> Stormwater	<input type="checkbox"/> Other:

Section D: Summary of Findings/Comments (Attach additional sheets of narrative and checklists as necessary)

Laboratory Equipment & Procedures: An autoclave (or alternatively a hot air sterilizing oven) is necessary for sterilizing sample bottles, dilution water, certain culture media, tools (e.g. forceps) and glassware used in analyzing effluent fecal coliform levels. Absent a sterilization procedure meeting the requirements of Standard Methods, the City's analysis, in turn, does not meet 40 CFR 136 requirements and thus fecal coliform sampling results have been improperly reported on discharge monitoring reports as valid effluent data. The City has an autoclave, but the device had been broken for some unknown amount of time. There was no tag on it specifying when it will be repaired, or indication repairs were planned. On the other hand, the fecal coliform sample incubator did not need to be on 24/7 as was the current practice (especially since the accreditation for the test which uses it had been withdrawn). The influent sampler tube had significant growth inside, and was dirty enough to quite possibly impact influent BOD test results. The pH meter calibration steps were not recorded, and it was not possible to confirm when the probe was last changed (probes only have a useful life of up to 18 months). There were no instruction on using the different laboratory data forms or bench sheets (currently in an appendix to the O&M manual). The "lab manual" was merely a compilation of equipment user manuals, and thus did not include detailed procedures for performing the various tests either for process control or compliance (BOD, TSS, MLSS, etc.) There was no calibration procedure or daily calibration log sheet for the pH meter. Various procedures were taped to walls and windows, which appeared appropriate to consolidate into a lab manual. Sample containers for daily process control samples were on the floor and not being cleaned between uses and thus were providing a source of contamination in the lab. I observed what appeared to be dog hair in several lab areas. Sample handling did not appear to be consistently properly accomplished, the laboratory was inappropriately using "whiteout" to cross out incorrect data on the tabulation of data.

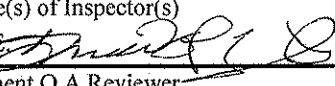

Recordkeeping and accuracy of required submittals: State criminal investigators had appropriated the facility's log book as evidence over a month prior. The facility had not replaced their log book, and thus in this interim period had not been making any annotations normally required to be kept such as equipment repairs, process changes, samples sent offsite for analysis, maintenance completed, or handling of alarm conditions. I informed the backup operator of the requirement for the facility to have a log book and requested he attend to that as soon as possible. I also found that given the fecal coliform sterilization equipment had been inoperative for an indeterminate amount of time and still had not been repaired, and the existence of dirty bottles which had not been cleaned properly, there was substantial cause to question the accuracy of data provided by the City's monitoring results and believe it necessary for the City to review and update their data quality assurance systems.

Site Safety, alarm, and response protocols: One of the SBR blowers was, according to the operator onsite, having the oil changed (oil was draining but there was no maintenance staff onsite). I observed no lockout device on the power, no visible placards or warning

signs, and no warning or alarm on the telemetry that the blower was offline. When the operator opened up the power panel, one breaker had been pulled, but it was unclear if that related to the blower, and the operator did not know what the breaker was pulled for. The facility needs to confirm all alarms are working as intended, and that when a condition occurs which could affect effluent quality (such as a bulb burnout), it triggers an alarm. The UV system presently only causes an alarm when "UV intensity" is down to 70%. It is not possible to confirm that the effluent is properly disinfected at this intensity level, as bulbs nearer the meter could mask the effects of bulbs burned out on the other side of the UV chamber. Any bulb burnout should cause an alarm. The intensity meter was designed to capture the gradual decrease in intensity that occurs as bulbs age, triggering a complete bulb replacement at that level. The operator related they were not getting an alarm and responding for each bulb burnout. He relayed that the week prior he had changed two burned out bulbs (of 8) at the same time even though intensity was not below 70% and there was no alarm. City should update the alarm section of their O&M Manual to ensure that all key equipment shutoffs and pump station power failures or high water alarms create alarm conditions, and address how these alarms and the response taken is to be documented in the log book.

Maintenance Management programs and procedures: The approved O&M Manual was observed to contain an appendix containing some spreadsheets showing maintenance intervals for major pieces of equipment and allowing for recording of when such maintenance was conducted. No records were found to show that these forms were used, that maintenance intervals were tracked, or that maintenance was being either forecast or recorded when complete. For the blower being serviced it was unclear who was doing this work, how it was determined to be necessary, or how it was being recorded as completed. The operator on site indicated it was a maintenance staff person doing this work.

POTW Operations: There was no tracking of performance data such as settleability or effluent quality over time versus other key metrics such as sludge age, the food to micro-organism ratio, effective time under aeration, or power use per loading or unit volume treated. SBR#3 was not in service, and it appeared it had never been used. To fulfill its role as a backup device, it should be regularly exercised to ensure that it could be used in times when one of the other two SBRs was inoperable for whatever reason. There was a process control worksheet, however it did not appear to have been fully completed, and I was unable to locate any instructions on its use.

Name(s) and Signature(s) of Inspector(s) David J. Knight, P.E. 	Agency/Office/Home and Fax Numbers Ecology/SWRO (360) 407-6277	Date 11/5/14
Signature of Management O&A Reviewer Greg Zentner, P.E. 	Agency/Office/Phone and Fax numbers Ecology/SWRO (360) 407-6272	Date 11/6/2014