



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Southwest Region Office
PO Box 47775, Olympia, WA 98504-7775 • 360-407-6300

April 15, 2024

The Honorable David Olson, Mayor
PO Box 68
Cathlamet, WA 98612

Re: WA0022667 – Town of Cathlamet Wastewater Treatment Facility, 2024 Inspection

Dear Mayor Olson:

On April 5, 2024, the Department of Ecology (Ecology) conducted an inspection of the Cathlamet Wastewater Treatment Facility. Enclosed you will find a copy of our inspection report for your records. We would like to express our thanks to Brandon McClain and Tim Pfeiffer for the courtesy extended during the inspection.

We appreciate the Town's effort and attention in caring for the WWTP.

If you have any other questions, or if we can be of service to you, please contact Eleanor Ott at eleanor.ott@ecy.wa.gov or (360) 280-5624.

Sincerely,

Eleanor Ott, P.E.
Small Communities Facility Engineer
Southwest Region Office
Water Quality Program

Enclosure: Inspection Report

ecc: David McNally, Public Works Supervisor
Permit File, Town of Cathlamet WWTP



Form Approved
OMB No. 2040-0057

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

Transaction Code		NPDES						yr/mo/day				Inspection Type		Inspector		Fac Type					
¹ [N]	² [5]	³ [W]	A	0	0	2	2	6	6	7	¹¹	¹² [2]	4	0	4	0	5	¹⁷	¹⁸ [C]	¹⁹ [S]	²⁰ [1]
Remarks																					
²¹ []		[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]	⁶⁶	
Inspection Work Days		Facility Self-Monitoring Evaluation Rating						BI		QA		-----Reserved-----									
⁶⁷ []	⁶⁹ [0][1]	⁷⁰ [5]							⁷¹ [N]	⁷² [N]	⁷³ []	⁷⁴						⁷⁵ []	[]	⁸⁰	

Section B: Facility Data




Name and Location of Facility Inspected <i>(For industrial users discharging to POTW, also include POTW name and NPDES permit number)</i> Cathlamet WWTP 171 E State Route 4 Cathlamet, WA 98612	Entry Time/Date 10:30 04/05/2024	Permit Effective Date 5/2/2022
	Exit Time/Date 11:55 04/05/2024	Permit Expiration Date 4/30/2027
	Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) David McNally Public Works Superintendent 360-751-0257	
Name, Address of Responsible Official/Title/Phone and Fax Number. David Olson, Mayor <div style="text-align: right;"> Contacted <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No </div>		Other Facility Data

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 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 type="checkbox"/> Pollution Prevention
<input checked="" type="checkbox"/> Facility Site Review	<input type="checkbox"/> Compliance Schedules	<input type="checkbox"/> Pretreatment	<input type="checkbox"/> Multimedia
<input checked="" type="checkbox"/> Effluent	<input checked="" type="checkbox"/> Laboratory	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Other:

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

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Population (millions)	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.1	9.3	9.5	9.7	9.9	10.1	10.3	10.5	10.7	10.9	11.1	11.3	11.5	11.7
GDP (trillion USD)	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
Life expectancy (years)	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94
Urban population (%)	55	57	59	61	63	65	67	69	71	73	75	77	79	81	83	85	87	89	91	93	95
Renewable energy (%)	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50
CO2 emissions (Gt)	15.0	15.5	16.0	16.5	17.0	17.5	18.0	18.5	19.0	19.5	20.0	20.5	21.0	21.5	22.0	22.5	23.0	23.5	24.0	24.5	25.0
Forest cover (%)	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11
Water stress (%)	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75
Healthcare expenditure (USD/billion)	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	260	270	280	290	300
Education expenditure (USD/billion)	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150
Research & Development (USD/billion)	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130
Unemployment (%)	5.5	5.8	6.1	6.4	6.7	7.0	7.3	7.6	7.9	8.2	8.5	8.8	9.1	9.4	9.7	10.0	10.3	10.6	10.9	11.2	11.5
Income inequality (Gini index)	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
Digital literacy (%)	60	65	70	75	80	85	90	95	100	100	100	100	100	100	100	100	100	100	100	100	100
Gender inequality index	0.75	0.76	0.77	0.78	0.79	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88	0.89	0.90	0.91	0.92	0.93	0.94	0.95
Human Development Index	0.70	0.72	0.74	0.76	0.78	0.80	0.82	0.84	0.86	0.88	0.90	0.92	0.94	0.96	0.98	1.00	1.02	1.04	1.06	1.08	1.10

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
Eleanor Ott 	Ecology/SWRO/360-280-5624	April 11, 2024
Erica Fot 	Ecology/ SWRO/ 360-701-5802	April 12, 2024
Signature of Management Q A Reviewer Steve Ogle 	Agency/Office/Phone and Fax Numbers Ecology/SWRO/564-999-3591	Date April 15, 2024

Section D Narrative:

Ecology inspector and permit manager, Eleanor Ott, in addition to Erica Fot and Alisha Mckittrick, arrived onsite at the Cathlamet WWTP around 10:30 am on Friday, April 5, 2024. Access was provided by Tim Pfeiffer, Group 4 Operator in Responsible Charge and Brandon McClain, a new Operator in Training (pending testing). David McNally, Public Works Superintendent, also stopped by the plant during the inspection.

The inspection started at the headworks. A duplex lift station in the downtown area lifts influent wastewater to the headworks where it then flows by gravity through the remaining unit processes. Influent flow enters the plant and receives preliminary treatment from a fine screen prior to grit removal. The back up bar screen does not meet biosolids regulations (WAC 173-308-205) which require a spacing smaller than 3/8-inch; however, operators have retrofitted the bar screen with chicken wire to reduce the aperture size. Operators had no recollection of the bypass channel being used in recent history. The town uses a composite sampler at the headworks for influent sampling. Samples are taken after the fine screen and grit removal, prior to flow measurement with a Parshall flume/ultrasonic flow meter. Sample tubing is replaced approximately every six months. Inert solids removed at the headworks are hauled offsite and disposed at a local landfill.

Wastewater then flows through a distribution box where it mixes with return activated sludge (RAS) before entering the oxidation ditch. RAS return rates are controlled by a VFD; however the rate of return was not reported. Two anoxic selectors are available upstream of the oxidation ditch; however, these selectors were empty and have never been used. Operators indicated they do not have trouble with filaments or settling in the secondary clarifiers and as a result are not inclined to bring the selectors online. Tim and Brandon reported that the mixed liquor suspended solids (MLSS) in the aeration basin is around 2,500 - 3,500 mg/L. The town has some control over air delivery to the oxidation ditch as the duplex blowers sending air to the oxidation ditch are controlled by a dissolved oxygen probe with a setpoint of 1.5 mg/L. Solids residence time in the oxidation ditch was reported to be roughly 25 - 28 days.

The Cathlamet WWTP has two secondary clarifiers. Typical operations only use one at a time; however, during periods of high rain fall, operators can use both in parallel. Flow from the oxidation ditch enters the secondary clarifier for solids removal ahead of UV disinfection. A sludge blanket of 18-24 inches is kept in the clarifiers. Visual observation showed some vegetation growth in the weirs which are cleaned thoroughly once per week. The clarifier's scum pit is manually cleaned when visual inspection indicates the need. The observed algal growth in the weirs during the inspection has not impacted the effluent quality.

The town uses UV disinfection prior to discharge into the Columbia River. Only one of the two UV banks get used at one time. Both banks can be used in parallel; however, the town transitioned to one bank after realizing both are not needed to meet fecal coliform effluent limits. Flows must exceed 0.370 MGD for both units to run in parallel. Each self-cleaning UV bank has 10 lamps which are changed after 10,000 – 12,000 hours. The town uses runtime as an indicator and changes lamps when they reach the end of their useful life. Old bulbs are maintained as spares which are used on an as needed basis. Ecology reviewed the operations room maintenance log during the inspection. Effluent is routed to a wetwell prior to discharge to the Columbia River. An automatic composite sampler pulls composite samples for permit compliance from this location. A hobo temperature tidbit is also contained in the wetwell and is used for compliance with the heat load from the EPA's Lower Snake and Columbia Temperature TMDL. Operators did not know the location of the effluent flow meter.

Solids wasted from the secondary clarifiers enter the aerobic digester. The town has two aerobic digesters and use one at a time. Typical operation includes filling one digester then switching to the other digester while the accumulated solids in the full tank get drawn down and dewatered via a bio bag. In general, solids are held in the digester for approximately one year before dewatering. The addition of polymer assists in the passive dewatering process. Dewatered biosolids are maintained on site, held in covered drying beds after removal from the bio bag. Class B biosolids are typically hauled off site for land application; however since Tribeca closed, the town is looking for another hauler.

The onsite generator gets exercised once per week. The last time a load was transferred is unknown.

Ecology reviewed documents in the lab confirming lab accreditation, records, access to O&M manuals and the presence of the permit. Tim indicated they are working with lab accreditation to get performance tests completed to maintain their accreditation. No SOPs for quality assurance and quality control were found in the laboratory.

The town has needs to continue work on reducing I/I in the collection system as flows significantly increase during the wet, winter months.

Findings from the Inspection:

- Calibrate flow meters according to manufacturer's directions. If no calibration frequency is specified, then calibrate once per year. Notify Ecology once this is complete.
- Transfer a load to the generator once per year (or according to the manufacturer's directions) to ensure the automatic transfer switch remains functional during a power outage.

- Develop standard operating practices (SOPs) for analytical tests in the laboratory as soon as possible.
- Identify the location of the effluent flow meter. Calibrate based on manufacturer's directions.