DEQ rec'd 7/17/24 via email - Incomplete
DEQ rec'd 7/22/24 via email - missing & incomplete items

Oregon Department of Environmental Quality
RENEWAL APPLICATION
National Pollutant Discharge Elimination System Individual Permit
(NPDES-R)

State of Oregon Department of Environmental Quality

DEQ USE ONLY
Application #: 948075
Annual Fee Paid:
☐ IND ☐ DOM ☐ OSS ☐ UIC:
DOC Conf.:

A. REFERENCE INFORMATION

1. Legal Name: City Of Waldport Wastewater Treatment Plant
2. Common Name: Wastewater Treatment Plant

3. Permit #: 101149
DEQ File#: 107816
Permit Expiration Date: February 28, 2025

4. Facility Physical Address: 390 Lint Slough Road
City, State, Zip Code: Waldport, Oregon, 97394
County: Lincoln

5. Responsible Official: Dann Cutter Title: City Manager
Mailing Address, City, State, Zip Code: P O Box 1120, Waldport, Oregon, 97394
Email Address: dann.cutter@waldport.org Telephone #: 541-563-3561

6. Facility Contact: James Ledbetter Title: Wastewater Treatment Plant Operator
Mailing Address, City, State, Zip Code: P O Box 1120, Waldport, Oregon, 97394
Email Address: James.ledbetter@waldport.org Telephone #: 541-563-2325

7. Invoice to: Dann Cutter Title: City Manager
Mailing Address, City, State, Zip Code: P O Box 1120, Waldport, Oregon, 97394
Email Address: dann.cutter@waldport.org Telephone #: 541-563-3561

B. REQUIRED INFORMATION
(EPA Form 2A, 2B, 2C, 2E, or 2F must also be submitted with this application)

Attach additional information to describe the following:
1. The permitted facility, type of wastewater, and primary method of wastewater treatment and disposal.
2. Any alterations to treatment or disposal methods since the last application was submitted.
3. Any significant changes in quantity or quality of wastewater since the last application was submitted.
4. Any significant changes in the management of biosolids, recycled water, or industrial solids since the last application was submitted.
5. Any changes anticipated in the near future that would affect wastewater quantity or quality or management of biosolids, recycled water, or industrial solids.
6. Progress made to meet the requirements, limitations, and compliance schedules of your permit.

C. SIGNATURE OF LEGALLY AUTHORIZED REPRESENTATIVE

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. In addition, I agree to pay the annual compliance determination fee invoiced annually by DEQ and all other fees required by Oregon Administrative Rules, Chapter 340, Division 045.

Dann Cutter	City Manager
Name of Legally Authorized Representative (Type or Print)	**Title**
	7/16/2024
Signature of Legally Authorized Representative	**Date**

City of Waldport

P.O. Box 1120
Waldport, OR 97394
Phone: (541) 563-3561

NPDES-R section B

1. City Of Waldport Wastewater Treatment Plant
   390 Lint Slough Road

   Waldport, Oregon. 97394

   EPA permit type: Minor

Treatment of raw sewage, first passing through screens then by way of Sequential Batch Reactor (SBR). Sludge is sent to an onsite lagoon for further breakdown while the effluent is Disinfected by UV lights and released into lint slough.

2. No alterations to treatment or disposal methods since last application.
3. No significant changes in quantity or quality of wastewater since last application.
4. No change in the management of biosolids since last application.
5. There are no changes anticipated in the near future that would affect wastewater quantity, quality or management of biosolids, recycled water or industrial solids.
6. An upgrade to the current UV disinfection system will ensure that the effluent quality that has been maintained thus far, will continue to meet the quality standard

EPA Identification Number	NPDES Permit Number	Facility Name
OR0034053	101149	Waldport Wastewater

OMB No. 2040-0004
Expires 07/31/2026

Form 2A NPDES

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater
NEW AND EXISTING PUBLICLY OWNED TREATMENT WORKS

SECTION 1. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS (40 CFR 122.21(J)(1) AND (9))

Facility Information

1.1 Facility name
Waldport Wastewater Treatment Plant

Mailing address (street or P.O. box)
P. O. box 1120

City or town	State	ZIP code
Waldport	Oregon	97394

Contact name (first and last)	Title	Phone number	Email address
James Ledbetter	City Manager	5415632325	james.ledbetter@waldport.o

Location address (street, route number, or other specific identifier) ☐ Same as mailing address
390 Lint Slough Rd.

City or town	State	ZIP code
Waldport	Oregon	97394

1.2 Is this application for a facility that has yet to commence discharge?
☐ Yes ➔ See instructions on data submission requirements for new dischargers. ☑ No

Applicant Information

1.3 Is applicant different from entity listed under Item 1.1 above?
☑ Yes ☐ No ➔ SKIP to Item 1.4.

Applicant name
City Of Waldport

Applicant address (street or P.O. box)
P.O. Box 1120

City or town	State	ZIP code
Waldport	Oregon	97394

Contact name (first and last)	Title	Phone number	Email address
Dann Cutter	City Manager	5419633561	dann.cutter@waldport.org

1.4 Is the applicant the facility's owner, operator, or both? (Check only one response.)
☐ Owner ☐ Operator ☑ Both

1.5 To which entity should the NPDES permitting authority send correspondence? (Check only one response.)
☐ Facility ☐ Applicant ☑ Facility and applicant (they are one and the same)

Existing Environmental Permits

1.6 Indicate below any existing environmental permits. (Check all that apply and print or type the corresponding permit number for each.)

Existing Environmental Permits

☑ NPDES (discharges to surface water) 101149	☐ RCRA (hazardous waste)	☐ UIC (underground injection control)
☐ PSD (air emissions)	☐ Nonattainment program (CAA)	☐ NESHAPs (CAA)
☐ Ocean dumping (MPRSA)	☐ Dredge or fill (CWA Section 404)	☐ Other (specify)

Collection System and Population Served

1.7 Provide the collection system information requested below for the treatment works.

Municipality Served	Population Served	Collection System Type (indicate percentage)	Ownership Status
City Of Waldport	970	100 % separate sanitary sewer	☑ Own ☑ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
		____ % separate sanitary sewer	☐ Own ☐ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
		____ % separate sanitary sewer	☐ Own ☐ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
		____ % separate sanitary sewer	☐ Own ☐ Maintain
		____ % combined storm and sanitary sewer	☐ Own ☐ Maintain
		☐ Unknown	☐ Own ☐ Maintain
Total Population Served	970		

	Separate Sanitary Sewer System	Combined Storm and Sanitary Sewer
Total percentage of each type of sewer line (in miles)	100 %	%

Indian Country

1.8 Is the treatment works located in Indian Country?

☐ Yes ☑ No

1.9 Does the facility discharge to a receiving water that flows through Indian Country?

☐ Yes ☑ No

Design and Actual Flow Rates

1.10 Provide design *and* actual flow rates in the designated spaces.

Design Flow Rate
1.20 mgd

Annual Average Flow Rates (Actual)		
Two Years Ago	**Last Year**	**This Year**
.4620 mgd	.4395 mgd	.4003 mgd

Maximum Daily Flow Rates (Actual)		
Two Years Ago	**Last Year**	**This Year**
1.435 mgd	.8326 mgd	1.68 mgd

Discharge Points by Type

1.11 Provide the total number of effluent discharge points to waters of the United States by type.

Total Number of Effluent Discharge Points by Type				
Treated Effluent	**Untreated Effluent**	**Combined Sewer Overflows**	**Bypasses**	**Constructed Emergency Overflows**
1				

Outfalls and Other Discharge or Disposal Methods

Outfalls Other Than to Waters of the United States

1.12 Does the POTW discharge wastewater to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the United States?

☑ Yes ☐ No ➔ SKIP to Item 1.14.

1.13 Provide the location of each surface impoundment and associated discharge information in the table below.

Surface Impoundment Location and Discharge Data

Location	Average Daily Volume Discharged to Surface Impoundment	Continuous or Intermittent (check one)
44n. x124w within fenced property of wastewater treatment plant	5078 gpd	☐ Continuous ☑ Intermittent
	gpd	☐ Continuous ☐ Intermittent
	gpd	☐ Continuous ☐ Intermittent

1.14 Is wastewater applied to land?

☐ Yes ☑ No ➔ SKIP to Item 1.16.

1.15 Provide the land application site and discharge data requested below.

Land Application Site and Discharge Data

Location	Size	Average Daily Volume Applied	Continuous or Intermittent (check one)
	acres	gpd	☐ Continuous ☐ Intermittent
	acres	gpd	☐ Continuous ☐ Intermittent
	acres	gpd	☐ Continuous ☐ Intermittent

1.16 Is effluent transported to another facility for treatment prior to discharge?

☐ Yes ☑ No ➔ SKIP to Item 1.21.

1.17 Describe the means by which the effluent is transported (e.g., tank truck, pipe).

1.18 Is the effluent transported by a party other than the applicant?

☐ Yes ☐ No ➔ SKIP to Item 1.20.

1.19 Provide information on the transporter below.

Transporter Data

Entity name	Mailing address (street or P.O. box)	
City or town	State	ZIP code
Contact name (first and last)	Title	
Phone number	Email address	

Outfalls and Other Discharge or Disposal Methods Continued

1.20 In the table below, indicate the name, address, contact information, NPDES number, and average daily flow rate of the receiving facility.

Receiving Facility Data

Facility name	Mailing address (street or P.O. box)	
City or town	State	ZIP code
Contact name (first and last)	Title	
Phone number	Email address	
NPDES number of receiving facility (if any) ☐ None	Average daily flow rate mgd	

1.21 Is the wastewater disposed of in a manner other than those already mentioned in Items 1.14 through 1.21 that do not have outlets to waters of the United States (e.g., underground percolation, underground injection)?

☐ Yes ☑ No ➔ SKIP to Item 1.23.

1.22 Provide information in the table below on these other disposal methods.

Information on Other Disposal Methods

Disposal Method Description	Location of Disposal Site	Size of Disposal Site	Annual Average Daily Discharge Volume	Continuous or Intermittent (check one)
		acres	gpd	☐ Continuous ☐ Intermittent
		acres	gpd	☐ Continuous ☐ Intermittent
		acres	gpd	☐ Continuous ☐ Intermittent

Variance Requests

1.23 Do you intend to request or renew one or more of the variances authorized at 40 CFR 122.21(n)? (Check all that apply. Consult with your NPDES permitting authority to determine what information needs to be submitted and when.)

☐ Discharges into marine waters (CWA Section 301(h)) ☐ Water quality related effluent limitation (CWA Section 302(b)(2))

☑ Not applicable

Contractor Information

1.24 Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?

☐ Yes ☑ No ➔SKIP to Section 2.

1.25 Provide location and contact information for each contractor in addition to a description of the contractor's operational and maintenance responsibilities.

Contractor Information

	Contractor 1	Contractor 2	Contractor 3
Contractor name (company name)			
Mailing address (street or P.O. box)			
City, state, and ZIP code			
Contact name (first and last)			
Phone number			
Email address			
Operational and maintenance responsibilities of contractor			

SECTION 2. ADDITIONAL INFORMATION (40 CFR 122.21(J)(1) AND (2))

Design Flow

Outfalls to Waters of the United States

2.1 Does the treatment works have a design flow greater than or equal to 0.1 mgd?

☑ Yes ☐ No ➔ SKIP to Section 3.

Inflow and Infiltration

2.2 Provide the treatment works' current average daily volume of inflow and infiltration.

Average Daily Volume of Inflow and Infiltration
.1381 gpd

Indicate the steps the facility is taking to minimize inflow and infiltration.

repair or replace damaged manholes, smoke test to try and identify infiltration sources.

Topographic Map

2.3 Have you attached a topographic map to this application that contains all the required information? (See instructions for specific requirements.)

☑ Yes

Flow Diagram

2.4 Have you attached a process flow diagram or schematic to this application that contains all the required information? (See instructions for specific requirements.)

☑ Yes

Scheduled Improvements and Schedules of Implementation

2.5 Are improvements to the facility scheduled?

☑ Yes ☐ No ➔ SKIP to Section 3.

Briefly list and describe the scheduled improvements.

1. upgrade to uv disinfection system and new controll panel
2.
3.
4.

2.6 Provide scheduled or actual dates of completion for improvements.

Scheduled or Actual Dates of Completion for Improvements

Scheduled Improvement (from above)	Affected Outfalls (list outfall number)	Begin Construction (MM/DD/YYYY)	End Construction (MM/DD/YYYY)	Begin Discharge (MM/DD/YYYY)	Attainment of Operational Level (MM/DD/YYYY)
1.	1	08/01/2024	08/01/2025	08/1/2024	8/1/2024
2.					
3.					
4.					

2.7 Have appropriate permits/clearances concerning other federal/state requirements been obtained? Briefly explain your response.

☐ Yes ☑ No ☐ None required or applicable

Explanation:

will not be affecting treatment of wastewater during construction.

SECTION 3. INFORMATION ON EFFLUENT DISCHARGES (40 CFR 122.21(J)(3) TO (5))

Description of Outfalls

3.1 Provide the following information for each outfall. (Attach additional sheets if you have more than three outfalls.)

	Outfall Number 1	Outfall Number _____	Outfall Number _____
State	Oregon		
County	lincoln		
City or town	waldport		
Distance from shore	25 ft.	ft.	ft.
Depth below surface	6 ft.	ft.	ft.
Average daily flow rate	.4003 mgd	mgd	mgd
Latitude	44.43		
Longitude	124.05		

Seasonal or Periodic Discharge Data

3.2 Do any of the outfalls described under Item 3.1 have seasonal or periodic discharges?

☐ Yes ☑ No ➔ SKIP to Item 3.4.

3.3 If so, provide the following information for each applicable outfall.

	Outfall Number _____	Outfall Number _____	Outfall Number _____
Number of times per year discharge occurs			
Average duration of each discharge (specify units)			
Average flow of each discharge	mgd	mgd	mgd
Months in which discharge occurs			

Diffuser Type

3.4 Are any of the outfalls listed under Item 3.1 equipped with a diffuser?

☐ Yes ☑ No ➔ SKIP to Item 3.6.

3.5 Briefly describe the diffuser type at each applicable outfall.

	Outfall Number _____	Outfall Number _____	Outfall Number _____

Waters of the U.S.

3.6 Does the treatment works discharge or plan to discharge wastewater to waters of the United States from one or more discharge points?

☑ Yes ☐ No ➔ SKIP to Section 6.

Receiving Water Description

3.7 Provide the receiving water and related information (if known) for each outfall.

	Outfall Number 1	Outfall Number _____	Outfall Number _____
Receiving water name	Lint Slough		
Name of watershed, river, or stream system	Alsea River		
Natural Resources Conservation Service 14-digit watershed code	17100205000516		
Name of state management/river basin	Alsea		
U.S. Geological Survey 8-digit hydrologic cataloging unit code			
Critical low flow (acute)	cfs	cfs	cfs
Critical low flow (chronic)	cfs	cfs	cfs
Total hardness at critical low flow	mg/L of $CaCO_3$ ☐ ☐	mg/L of $CaCO_3$ ☐ ☐	mg/L of $CaCO_3$ ☐ ☐

Treatment Description

3.8 Provide the following information describing the treatment provided for discharges from each outfall.

	Outfall Number 1	Outfall Number _____	Outfall Number _____
Highest Level of Treatment (check all that apply per outfall)	☐ Primary ☐ Equivalent to secondary ☑ Secondary ☐ Advanced ☐ Other (specify) _____	☐ Primary ☐ Equivalent to secondary ☐ Secondary ☐ Advanced ☐ Other (specify) _____	☐ Primary ☐ Equivalent to secondary ☐ Secondary ☐ Advanced ☐ Other (specify) _____
Design Removal Rates by Outfall			
BOD_5 or $CBOD_5$	85 %	%	%
TSS	85 %	%	%
Phosphorus	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %
Nitrogen	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %
Other (specify) _____	☑ Not applicable %	☐ Not applicable %	☐ Not applicable %

Treatment Description Continued

3.9 Describe the type of disinfection used for the effluent from each outfall in the table below. If disinfection varies by season, describe in the table below.

	Outfall Number 1	Outfall Number _____	Outfall Number _____
Disinfection type	UV		
Seasons used	all		
Dechlorination used?	☑ Not applicable ☐ Yes ☐ No	☐ Not applicable ☐ Yes ☐ No	☐ Not applicable ☐ Yes ☐ No

Effluent Testing Data

3.10 Have you completed monitoring for all Table A parameters and attached the results to the application package?

☑ Yes

3.11 Have you conducted any WET tests during the 4.5 years prior to the date of the application on any of the facility's discharges or on any receiving water near the discharge points?

☐ Yes ☑ No ➔ SKIP to Item 3.13.

3.12 Indicate the number of acute and chronic WET tests conducted since the last permit reissuance of the facility's discharges by outfall number or of the receiving water near the discharge points.

	Outfall Number _____		Outfall Number _____		Outfall Number _____	
	Acute	Chronic	Acute	Chronic	Acute	Chronic
Number of tests of discharge water						
Number of tests of receiving water						

3.13 Does the treatment works have a design flow greater than or equal to 0.1 mgd?

☑ Yes ☐ No ➔ SKIP to Item 3.16.

3.14 Does the POTW use chlorine for disinfection, use chlorine elsewhere in the treatment process, or otherwise have reasonable potential to discharge chlorine in its effluent?

☐ Yes ➔ Complete Table B, including chlorine. ☑ No ➔ Complete Table B, omitting chlorine.

3.15 Have you completed monitoring for all applicable Table B pollutants and attached the results to this application package?

☑ Yes

3.16 Does one or more of the following conditions apply?

- The facility has a design flow greater than or equal to 1 mgd.
- The POTW has an approved pretreatment program or is required to develop such a program.
- The NPDES permitting authority has informed the POTW that it must sample for the parameters in Table C, must sample other additional parameters (Table D), or submit the results of WET tests for acute or chronic toxicity for each of its discharge outfalls (Table E).

☐ Yes ➔ Complete Tables C, D, and E as applicable. ☑ No ➔ SKIP to Section 4.

3.17 Have you completed monitoring for all Table C pollutants and attached the results to this application package?

☐ Yes

3.18 Have you completed monitoring for all Table D pollutants required by your NPDES permitting authority and attached the results to this application package?

☐ Yes ☐ No additional sampling required by NPDES permitting authority.

Effluent Testing Data Continued

3.19 Has the POTW conducted either (1) minimum of four quarterly WET tests for one year preceding this permit application or (2) at least four annual WET tests in the past 4.5 years?

☐ Yes ☐ No ➔ Complete tests and Table E and SKIP to Item 3.26.

3.20 Have you previously submitted the results of the above tests to your NPDES permitting authority?

☐ Yes ☐ No ➔ Provide results in Table E and SKIP to Item 3.26.

3.21 Indicate the dates the data were submitted to your NPDES permitting authority and provide a summary of the results.

Date(s) Submitted (MM/DD/YYYY)	Summary of Results

3.22 Regardless of how you provided your WET testing data to the NPDES permitting authority, did any of the tests result in toxicity?

☐ Yes ☐ No ➔ SKIP to Item 3.26.

3.23 Describe the cause(s) of the toxicity:

3.24 Has the treatment works conducted a toxicity reduction evaluation?

☐ Yes ☐ No ➔ SKIP to Item 3.26.

3.25 Provide details of any toxicity reduction evaluations conducted.

3.26 Have you completed Table E for all applicable outfalls and attached the results to the application package?

☐ Yes ☐ Not applicable because previously submitted information to the NPDES permitting authority.

SECTION 4. INDUSTRIAL DISCHARGES AND HAZARDOUS WASTES (40 CFR 122.21(J)(6) AND (7))

Industrial Discharges and Hazardous Wastes

4.1 Does the POTW receive discharges from SIUs or NSCIUs? (See instructions for definitions of SIUs and NSCIUs.)

☐ Yes ☑ No ➔ SKIP to Item 4.7.

4.2 Indicate the number of SIUs and NSCIUs that discharge to the POTW.

Number of SIUs	Number of NSCIUs

4.3 Does the POTW have an approved pretreatment program?

☐ Yes ☐ No

4.4 Have you submitted either of the following to the NPDES permitting authority that contains information substantially identical to that required in Table F: (1) a pretreatment program annual report submitted within one year of the application or (2) a pretreatment program?

☐ Yes ☐ No ➔ SKIP to Item 4.6.

4.5 Identify the title and date of the annual report or pretreatment program referenced in Item 4.4. SKIP to Item 4.7.

4.6 Have you completed and attached Table F to this application package?

☐ Yes

Industrial Discharges and Hazardous Wastes Continued

4.7 Does the POTW receive, or has it been notified that it will receive, by truck, rail, or dedicated pipe, any wastes that are regulated as RCRA hazardous wastes pursuant to 40 CFR 261?

☐ Yes ☑ No ➔ SKIP to Item 4.9.

4.8 If yes, provide the following information:

Hazardous Waste Number	Waste Transport Method (check all that apply)	Annual Amount of Waste Received	Units
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		
	☐ Truck ☐ Rail ☐ Dedicated pipe ☐ Other (specify) _____		

4.9 Does the POTW receive, or has it been notified that it will receive, wastewaters that originate from remedial activities, including those undertaken pursuant to CERCLA and Sections 3004(7) or 3008(h) of RCRA?

☐ Yes ☑ No ➔ SKIP to Section 5.

4.10 Does the POTW receive (or expect to receive) less than 15 kilograms per month of non-acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e)?

☐ Yes ➔ SKIP to Section 5. ☐ No

4.11 Have you reported the following information in an attachment to this application: identification and description of the site(s) or facility(ies) at which the wastewater originates; the identities of the wastewater's hazardous constituents; and the extent of treatment, if any, the wastewater receives or will receive before entering the POTW?

☐ Yes

SECTION 5. COMBINED SEWER OVERFLOWS (40 CFR 122.21(J)(8))

CSO Map and Diagram

5.1 Does the treatment works have a combined sewer system?

☐ Yes ☑ No ➔ SKIP to Section 6.

5.2 Have you attached a CSO system map to this application? (See instructions for map requirements.)

☐ Yes

5.3 Have you attached a CSO system diagram to this application? (See instructions for diagram requirements.)

☐ Yes

CSO Outfall Description

5.4 For each CSO outfall, provide the following information. (Attach additional sheets as necessary.)

	CSO Outfall Number ____	CSO Outfall Number _____	CSO Outfall Number _____
City or town			
State and ZIP code			
County			
Latitude			
Longitude			
Distance from shore	ft.	ft.	ft.
Depth below surface	ft.	ft.	ft.

CSO Monitoring

5.5 Did the POTW monitor any of the following items in the past year for its CSO outfalls?

	CSO Outfall Number ____	CSO Outfall Number _____	CSO Outfall Number _____
Rainfall	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO flow volume	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO pollutant concentrations	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Receiving water quality	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
CSO frequency	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Number of storm events	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

CSO Events in Past Year

5.6 Provide the following information for each of your CSO outfalls.

	CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
Number of CSO events in the past year	events	events	events
Average duration per event	hours ☐ Actual or ☐ Estimated	hours ☐ Actual or ☐ Estimated	hours ☐ Actual or ☐ Estimated
Average volume per event	million gallons ☐ Actual or ☐ Estimated	million gallons ☐ Actual or ☐ Estimated	million gallons ☐ Actual or ☐ Estimated
Minimum rainfall causing a CSO event in last year	inches of rainfall ☐ Actual or ☐ Estimated	inches of rainfall ☐ Actual or ☐ Estimated	inches of rainfall ☐ Actual or ☐ Estimated

CSO Receiving Waters

5.7 Provide the information in the table below for each of your CSO outfalls.

	CSO Outfall Number ____	CSO Outfall Number ____	CSO Outfall Number ____
Receiving water name			
Name of watershed/ stream system			
Natural Resources Conservation Service 14-digit watershed code (if known)	☐ Unknown	☐ Unknown	☐ Unknown
Name of state management/river basin			
U.S. Geological Survey 8-Digit Hydrologic Unit Code (if known)	☐ Unknown	☐ Unknown	☐ Unknown
Description of known water quality impacts on receiving stream by CSO (see instructions for examples)			

SECTION 6. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(A) AND (D))

Checklist and Certification Statement

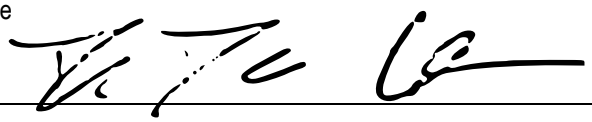
6.1 In Column 1 below, mark the sections of Form 2A that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to provide attachments.

Column 1	Column 2	
☑ Section 1: Basic Application Information for All Applicants	☐ w/ variance request(s)	☐ w/ additional attachments
☑ Section 2: Additional Information	☑ w/ topographic map ☐ w/ additional attachments	☑ w/ process flow diagram
☑ Section 3: Information on Effluent Discharges	☑ w/ Table A ☑ w/ Table B ☐ w/ Table C	☐ w/ Table D ☐ w/ Table E ☐ w/ additional attachments
☑ Section 4: Industrial Discharges and Hazardous Wastes	☐ w/ SIU and NSCIU attachments ☐ w/ additional attachments	☐ w/ Table F
☑ Section 5: Combined Sewer Overflows	☐ w/ CSO map ☐ w/ CSO system diagram	☐ w/ additional attachments
☑ Section 6: Checklist and Certification Statement	☑ w/ attachments	

6.2 Provide the following certification. (See instructions to determine the appropriate person to sign the application.)

Certification Statement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print or type first and last name)	Official title
Dann Cutter	City Manager
Signature 	Date signed 7/16/2024

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
OR0034053	101149	Waldport Wastewater	1

OMB No. 2040-0004
Expires 07/31/2026

TABLE A. EFFLUENT PARAMETERS FOR ALL POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Biochemical oxygen demand ☐ BOD_5 or ☑ $CBOD_5$ (report one)	9.4	mg/l	4.57	mg/l	52	5210 B-2016	☐ ML ☑ MDL
Fecal coliform	14.6	#/100ml	5.4	#/100ml	52	colelert 18	mpn ☐ ML ☑ MDL
Design flow rate	1.68	MGD	.2443	MGD	365		
pH (minimum)	6.5	su					
pH (maximum)	7.7	su					
Temperature (winter)	18.4	Celcius	14.25	Celcius	52		
Temperature (summer)	22.9	Celcius	19.4	Celcius	52		
Total suspended solids (TSS)	19.2	mg/l	7.13	mg/l	52		☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
OR0034053	101149	Waldport Wastewater Treatment Plant	1

OMB No. 2040-0004
Expires 07/31/2026

TABLE B. EFFLUENT PARAMETERS FOR ALL POTWS WITH A FLOW EQUAL TO OR GREATER THAN 0.1 MGD

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Ammonia (as N)	5.0	mg/l	1.35	mg/l	4	sm 4500-nh3 d	☐ ML ☐ MDL
Chlorine (total residual, TRC)[2]							☐ ML ☐ MDL
Dissolved oxygen	7.1	mg/l	5.9	mg/l	4	sm 4500-O C	☐ ML ☐ MDL
Nitrate/nitrite	5.9	mg/l	2.75	mg/l	4	EPA 365.3	☐ ML ☐ MDL
Kjeldahl nitrogen	5.3	mg/l	2.7	mg/l	4	sm 4500-norg c	☐ ML ☐ MDL
Oil and grease	6.3	mg/l	1.5	mg/l	4	EPA 1664A	☐ ML ☐ MDL
Phosphorus	5.2	mg/l	2.88	mg/l	4	EPA 365.3	☐ ML ☐ MDL
Total dissolved solids	230	mg/l	200	mg/l	4	SM 2540 C	☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

[2] Facilities that do not use chlorine for disinfection, do not use chlorine elsewhere in the treatment process, and have no reasonable potential to discharge chlorine in their effluent are not required to report data for chlorine.

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TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Metals, Cyanide, and Total Phenols							
Hardness (as $CaCO_3$)							☐ ML ☐ MDL
Antimony, total recoverable							☐ ML ☐ MDL
Arsenic, total recoverable							☐ ML ☐ MDL
Beryllium, total recoverable							☐ ML ☐ MDL
Cadmium, total recoverable							☐ ML ☐ MDL
Chromium, total recoverable							☐ ML ☐ MDL
Copper, total recoverable							☐ ML ☐ MDL
Lead, total recoverable							☐ ML ☐ MDL
Mercury, total recoverable							☐ ML ☐ MDL
Nickel, total recoverable							☐ ML ☐ MDL
Selenium, total recoverable							☐ ML ☐ MDL
Silver, total recoverable							☐ ML ☐ MDL
Thallium, total recoverable							☐ ML ☐ MDL
Zinc, total recoverable							☐ ML ☐ MDL
Cyanide							☐ ML ☐ MDL
Total phenolic compounds							☐ ML ☐ MDL
Volatile Organic Compounds							
Acrolein							☐ ML ☐ MDL
Acrylonitrile							☐ ML ☐ MDL
Benzene							☐ ML ☐ MDL
Bromoform							☐ ML ☐ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
OR0034053	101149	Waldport Wastewater	1

OMB No. 2040-0004
Expires 07/31/2026

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Carbon tetrachloride							☐ ML ☐ MDL
Chlorobenzene							☐ ML ☐ MDL
Chlorodibromomethane							☐ ML ☐ MDL
Chloroethane							☐ ML ☐ MDL
2-chloroethylvinyl ether							☐ ML ☐ MDL
Chloroform							☐ ML ☐ MDL
Dichlorobromomethane							☐ ML ☐ MDL
1,1-dichloroethane							☐ ML ☐ MDL
1,2-dichloroethane							☐ ML ☐ MDL
trans-1,2-dichloroethylene							☐ ML ☐ MDL
1,1-dichloroethylene							☐ ML ☐ MDL
1,2-dichloropropane							☐ ML ☐ MDL
1,3-dichloropropylene							☐ ML ☐ MDL
Ethylbenzene							☐ ML ☐ MDL
Methyl bromide							☐ ML ☐ MDL
Methyl chloride							☐ ML ☐ MDL
Methylene chloride							☐ ML ☐ MDL
1,1,2,2-tetrachloroethane							☐ ML ☐ MDL
Tetrachloroethylene							☐ ML ☐ MDL
Toluene							☐ ML ☐ MDL
1,1,1-trichloroethane							☐ ML ☐ MDL
1,1,2-trichloroethane							☐ ML ☐ MDL

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Trichloroethylene							☐ ML ☐ MDL
Vinyl chloride							☐ ML ☐ MDL
Acid-Extractable Compounds							
p-chloro-m-cresol							☐ ML ☐ MDL
2-chlorophenol							☐ ML ☐ MDL
2,4-dichlorophenol							☐ ML ☐ MDL
2,4-dimethylphenol							☐ ML ☐ MDL
4,6-dinitro-o-cresol							☐ ML ☐ MDL
2,4-dinitrophenol							☐ ML ☐ MDL
2-nitrophenol							☐ ML ☐ MDL
4-nitrophenol							☐ ML ☐ MDL
Pentachlorophenol							☐ ML ☐ MDL
Phenol							☐ ML ☐ MDL
2,4,6-trichlorophenol							☐ ML ☐ MDL
Base-Neutral Compounds							
Acenaphthene							☐ ML ☐ MDL
Acenaphthylene							☐ ML ☐ MDL
Anthracene							☐ ML ☐ MDL
Benzidine							☐ ML ☐ MDL
Benzo(a)anthracene							☐ ML ☐ MDL
Benzo(a)pyrene							☐ ML ☐ MDL
3,4-benzofluoranthene							☐ ML ☐ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
OR0034053	101149	Waldport Wastewater	1

OMB No. 2040-0004
Expires 07/31/2026

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
Benzo(ghi)perylene							☐ ML ☐ MDL
Benzo(k)fluoranthene							☐ ML ☐ MDL
Bis (2-chloroethoxy) methane							☐ ML ☐ MDL
Bis (2-chloroethyl) ether							☐ ML ☐ MDL
Bis (2-chloroisopropyl) ether							☐ ML ☐ MDL
Bis (2-ethylhexyl) phthalate							☐ ML ☐ MDL
4-bromophenyl phenyl ether							☐ ML ☐ MDL
Butyl benzyl phthalate							☐ ML ☐ MDL
2-chloronaphthalene							☐ ML ☐ MDL
4-chlorophenyl phenyl ether							☐ ML ☐ MDL
Chrysene							☐ ML ☐ MDL
di-n-butyl phthalate							☐ ML ☐ MDL
di-n-octyl phthalate							☐ ML ☐ MDL
Dibenzo(a,h)anthracene							☐ ML ☐ MDL
1,2-dichlorobenzene							☐ ML ☐ MDL
1,3-dichlorobenzene							☐ ML ☐ MDL
1,4-dichlorobenzene							☐ ML ☐ MDL
3,3-dichlorobenzidine							☐ ML ☐ MDL
Diethyl phthalate							☐ ML ☐ MDL
Dimethyl phthalate							☐ ML ☐ MDL
2,4-dinitrotoluene							☐ ML ☐ MDL
2,6-dinitrotoluene							☐ ML ☐ MDL

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
OR0034053	101149	Waldport Wastewater Treatment Plant	1

OMB No. 2040-0004
Expires 07/31/2026

TABLE C. EFFLUENT PARAMETERS FOR SELECTED POTWS

Pollutant	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
1,2-diphenylhydrazine							☐ ML ☐ MDL
Fluoranthene							☐ ML ☐ MDL
Fluorene							☐ ML ☐ MDL
Hexachlorobenzene							☐ ML ☐ MDL
Hexachlorobutadiene							☐ ML ☐ MDL
Hexachlorocyclo-pentadiene							☐ ML ☐ MDL
Hexachloroethane							☐ ML ☐ MDL
Indeno(1,2,3-cd)pyrene							☐ ML ☐ MDL
Isophorone							☐ ML ☐ MDL
Naphthalene							☐ ML ☐ MDL
Nitrobenzene							☐ ML ☐ MDL
N-nitrosodi-n-propylamine							☐ ML ☐ MDL
N-nitrosodimethylamine							☐ ML ☐ MDL
N-nitrosodiphenylamine							☐ ML ☐ MDL
Phenanthrene							☐ ML ☐ MDL
Pyrene							☐ ML ☐ MDL
1,2,4-trichlorobenzene							☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
OR0034053	101149	Waldport Wastewater	1

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TABLE D. ADDITIONAL POLLUTANTS AS REQUIRED BY NPDES PERMITTING AUTHORITY

Pollutant (list)	Maximum Daily Discharge		Average Daily Discharge			Analytical Method[1]	ML or MDL (include units)
	Value	Units	Value	Units	Number of Samples		
☐ No additional sampling is required by NPDES permitting authority.							
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
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							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL
							☐ ML ☐ MDL

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR Chapter I, Subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

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TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number _____	Test Number _____	Test Number _____
Test Information			
Test species			
Age at initiation of test			
Outfall number			
Date sample collected			
Date test started			
Duration			
Toxicity Test Methods			
Test method number			
Manual title			
Edition number and year of publication			
Page number(s)			
Sample Type			
Check one:	☐ Grab ☐ 24-hour composite	☐ Grab ☐ 24-hour composite	☐ Grab ☐ 24-hour composite
Sample Location			
Check one:	☐ Before disinfection ☐ After disinfection ☐ After dechlorination	☐ Before disinfection ☐ After disinfection ☐ After dechlorination	☐ Before disinfection ☐ After disinfection ☐ After dechlorination
Point in Treatment Process			
Describe the point in the treatment process at which the sample was collected for each test.			
Toxicity Type			
Indicate for each test whether the test was performed to assess acute or chronic toxicity, or both. (Check one response.)	☐ Acute ☐ Chronic ☐ Both	☐ Acute ☐ Chronic ☐ Both	☐ Acute ☐ Chronic ☐ Both

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number _____	Test Number _____	Test Number _____
Test Type			
Indicate the type of test performed. (Check one response.)	☐ Static ☐ Static-renewal ☐ Flow-through	☐ Static ☐ Static-renewal ☐ Flow-through	☐ Static ☐ Static-renewal ☐ Flow-through
Source of Dilution Water			
Indicate the source of dilution water. (Check one response.)	☐ Laboratory water ☐ Receiving water	☐ Laboratory water ☐ Receiving water	☐ Laboratory water ☐ Receiving water
If laboratory water, specify type.			
If receiving water, specify source.			
Type of Dilution Water			
Indicate the type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.	☐ Fresh water ☐ Salt water (specify)	☐ Fresh water ☐ Salt water (specify)	☐ Fresh water ☐ Salt water (specify)
Percentage Effluent Used			
Specify the percentage effluent used for all concentrations in the test series.			

Parameters Tested						
Check the parameters tested.	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen	☐ pH ☐ Salinity ☐ Temperature	☐ Ammonia ☐ Dissolved oxygen

Acute Test Results			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% confidence interval	%	%	%
Control percent survival	%	%	%

TABLE E. EFFLUENT MONITORING FOR WHOLE EFFLUENT TOXICITY

The table provides response space for one whole effluent toxicity sample. Copy the table to report additional test results.

	Test Number _____		Test Number _____		Test Number _____	
Acute Test Results Continued						
Other (describe)						
Chronic Test Results						
NOEC	%		%		%	
IC_{25}	%		%		%	
Control percent survival	%		%		%	
Other (describe)						
Quality Control/Quality Assurance						
Is reference toxicant data available?	☐ Yes	☐ No	☐ Yes	☐ No	☐ Yes	☐ No
Was reference toxicant test within acceptable bounds?	☐ Yes	☐ No	☐ Yes	☐ No	☐ Yes	☐ No
What date was reference toxicant test run (MM/DD/YYYY)?						
Other (describe)						

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TABLE F. INDUSTRIAL DISCHARGE INFORMATION

Response space is provided for three SIUs. Copy the table to report information for additional SIUs.

	SIU ____	SIU ____	SIU ____
Name of SIU			
Mailing address (street or P.O. box)			
City, state, and ZIP code			
Describe all industrial processes that affect or contribute to the discharge.			
List the principal products and raw materials that affect or contribute to the SIU's discharge.			
Indicate the average daily volume of wastewater discharged by the SIU.	gpd	gpd	gpd
How much of the average daily volume is attributable to process flow?	gpd	gpd	gpd
How much of the average daily volume is attributable to non-process flow?	gpd	gpd	gpd
Is the SIU subject to local limits?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
Is the SIU subject to categorical standards?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No

TABLE F. INDUSTRIAL DISCHARGE INFORMATION

Response space is provided for three SIUs. Copy the table to report information for additional SIUs.

	SIU ____	SIU ____	SIU ____
Under what categories and subcategories is the SIU subject?			
Has the POTW experienced problems (e.g., upsets, pass-through interferences) in the past 4.5 years that are attributable to the SIU?	☐ Yes ☐ No	☐ Yes ☐ No	☐ Yes ☐ No
If yes, describe.			

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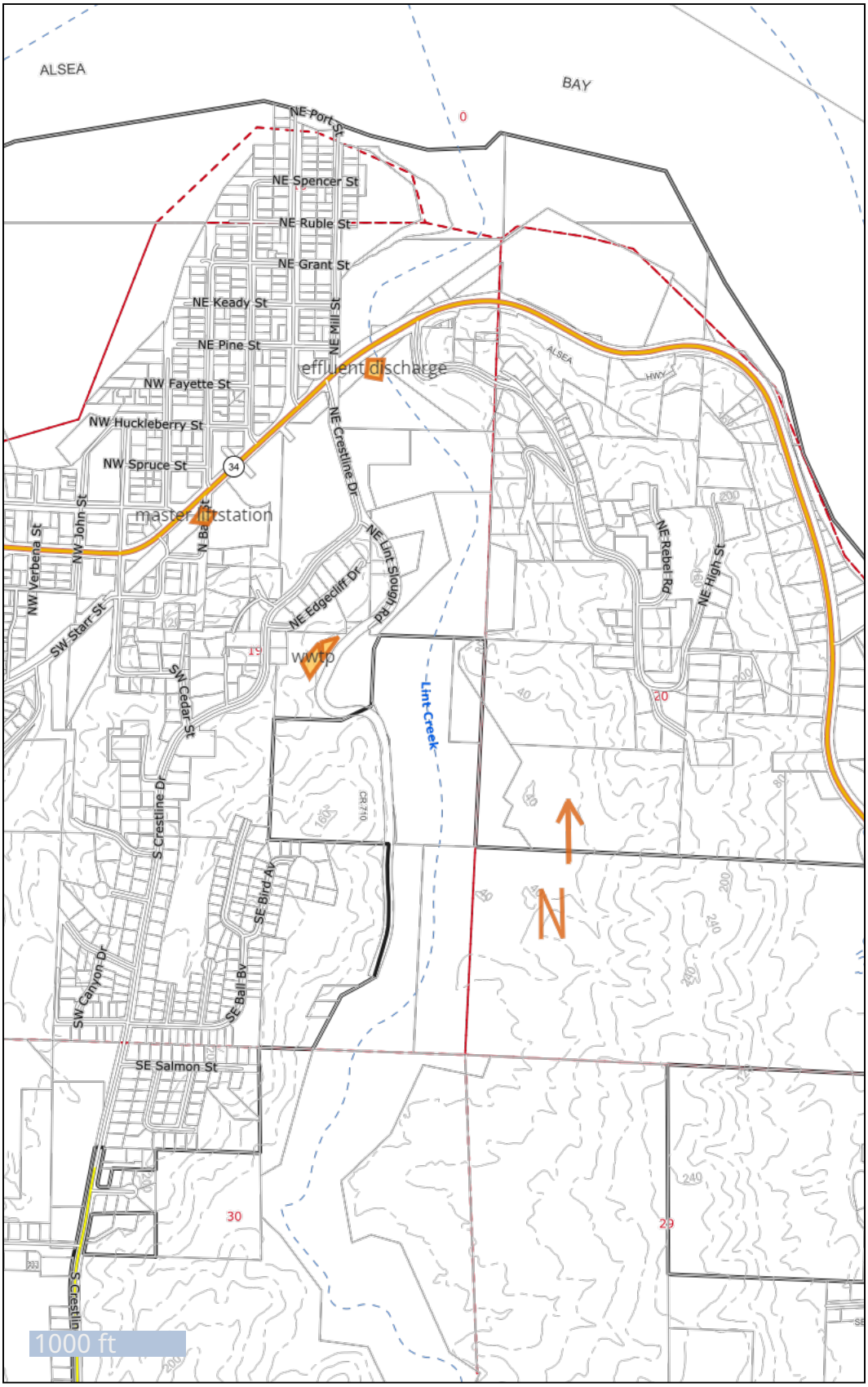
city of waldport wwtp



Legend

Cities

Sections

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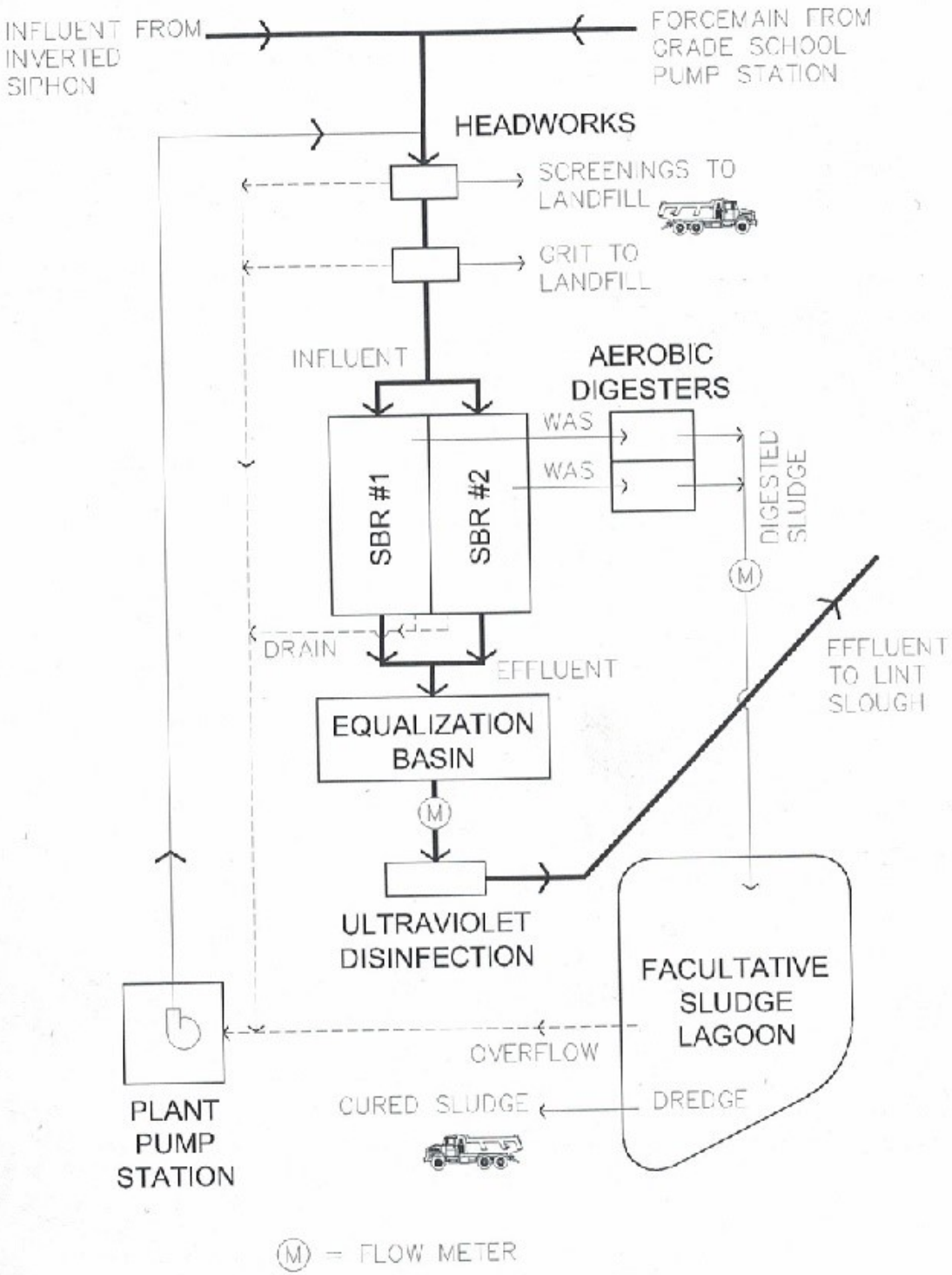
Lincoln County OREGON ESTABLISHED 1893


INFLUENT FROM INVERTED SIPHON
FORCEMAIN FROM CRADE SCHOOL PUMP STATION
HEADWORKS
SCREENINGS TO LANDFILL
GRIT TO LANDFILL
INFLUENT
AEROBIC DIGESTERS
WAS
WAS
SBR #1
SBR #2
DIGESTED SLUDGE
M
DRAIN
EFFLUENT
EFFLUENT TO LINT SLOUGH
EQUALIZATION BASIN
M
ULTRAVIOLET DISINFECTION
FACULTATIVE SLUDGE LAGOON
OVERFLOW
PLANT PUMP STATION
CURED SLUDGE
DREDGE
M = FLOW METER

Biosolid Management Plan

For

City of Waldport

EPA #: OR-003405-3
File Number: 107816
Permit Number: 101149

James Ledbetter, Lead Operator
City of Waldport
P.O. Box 1120
Waldport OR 97394
541-563-2325

Activated Sludge-Sequencing Batch Reactor (SBR)
Lincoln County
Treatment: II
Collections: II

INTRODUCTION

City of Waldport (population approximately 3294) owns and operates a municipal sewage collection and treatment system (built 1993) under National Discharge Elimination system (NPDES) permit number (101149). Wastewater processed by the sewage treatment works is principally of domestic origin from the City of Waldport. Septage is not accepted at this wastewater treatment facility. There are no industrial discharges to the City of Waldport Facility, which require regulation under a local pretreatment permit. Treated effluent from the treatment plant is discharged to Lint Slough, which is part of Alsea Bay. This biosolids management plan, as required by the NPDES permit, outlines the liquids and solids processes at the facility, how biosolids are managed to meet federal and state requirements, and how the biosolids land application program is operated. The City of Waldport biosolids management plan was originally approved by the Oregon Department of Environmental Quality (Department) on 5/29/2003 and is being updated at this time for permit renewal.

WASTEWATER TREATMENT FACILITY

The City of Waldport owns and operates an Activated Sludge-Sequencing Batch Reactor, wastewater treatment facility and sewage collection system. Flows received are primarily domestic and commercial sewage with no significant industrial wastes sources. Currently the plant serves the residents and businesses of the City of Waldport.

The City completed an upgrade of the wastewater facility in 1994. The upgrade was to construct two Sequencing Batch Reactor (SBR) secondary treatment units. The SBR treatment is five-stage reactor tank activated sludge process. The five stages are fill, react, settle, decant, and solids wasting.

The Design Average Dry Weather Flow (DADWF) of the facility is 0.36 Million Gallons per Day (MGD). The facility consists of headworks with 6-ft. sidehill screens and vortex grit removal. This process step removes 95% of particles 100 microns and larger. The influent composite sampler is located just after the grit removal system. The influent then passes into one of two secondary treatment basins. this step is known as the Fill phase. The influent is mixed with the mixed liquor, that was settled during the last â_‹phase, until the required depth is reached. Air is then added to the basin to encourage biological growth. While still under aeration, oxidation of organics occurs during the React phase. During the Settling phase, mixing and aeration are stopped to allow solids to settle. After settling, the Decant stage begins. Effluent is decanted from the reactor tank, sent through a channel of ultraviolet lights to be

disinfected, killing off the majority of remaining organisms, ultimately being discharged to Lint Slough. A portion of the waste activated sludge (WAS) is sent to the digester in the Solids Wasting stage. The remaining WAS is retained to begin the cycle anew.

Solids Treatment Processing:
Waste activated sludge (WAS) is wasted to one of two aerobic digesters that have a capacity of 48,000 gallons each and provide 23-day storage @ 10,000 GPD WAS (1-% solids). The facility has a sludge storage stabilization pond (3.2 million gallons), which could add another 18 days detention at ambient temperatures.

There are two (2) potential end routes for biosolid from this facility and they are: 1) direct irrigation/land application of digester biosolid and 2) direct irrigation of biosolid after 24-hour alkaline stabilization process.

Solids Storage Structure:
There is a 180,000 gallon sludge stabilization storage-pond at this facility.

Septage Receiving Facility:
No septage (0 gallons per year) is received at City of Waldport' facility.

Pretreatment Program:
Not applicable.

Solid Treatment Processes:

The EPAs 40 CFR parts 503 and the DEQs Oregon Administrative Rules (OAR) 340-50 allow permittees to use EPA approved alternatives to satisfy Class A and B biosolid pathogen or vector attraction reduction criteria. The permittee must notify the Department in writing and get approval prior to any process change that would utilize pathogen reduction or vector attraction reduction alternatives other than their primary reduction alternatives contained in this management plan. The permittee must also certify that the alternatives used are EPA approved and that sampling and monitoring conforms to the 40 CFR 503 and OAR 340-050 regulations.

Pathogen Reduction

To meet the 503 part regulatory requirements pathogen reduction must be met before vector attraction reduction or at the same time vector attraction reduction is achieved. This facility is capable of achieving Class B Biosolid criteria for beneficial land application.

Class B Biosolid

Class B biosolid can be met by using one of three alternatives, the two primary alternatives used by this facility are Alt. 1) Monitor sewage sludge for fecal coliform 503.32(b)(2), and Alt. 2) Use Process to Significantly Reduce Pathogen (PSRP) 503.32(b)(3). Alt. 1) Monitor sewage sludge for fecal coliform 503.32(b) (2) requires that seven samples of treated sewage sludge (biosolid) be collected and that the geometric mean fecal coliform density of these samples be less than 2 million MPN per dry gram biosolid (dry weight basis). Alt. 2) Use Process to Significantly Reduce Pathogen (PSRP) 503.32(b)(3) considers sludge treated in one of the PSRPs listed in appendix B of the Part 503 to meet Class B biosolid criteria for pathogen reduction.

For this facility the following PSRPs are primarily used:

--1 aerobic digestion, sludge is treated in the presence of air for a specified residence time at a specified temperature. Values of the mean cell residence time and temperature shall be between 40 days at 20 (68C) and 60 days at 15C (59F), and

--5 sufficient alkaline stabilization agent is added to the sewage sludge to raise the pH of the sewage sludge to 12 for 2 hours of contact (mixed).

Under 40 CFR Part 503 and Oregon Administrative Rules Chapter 340, Division 50, pathogen reduction and vector attraction reduction for biosolids must be met prior to land application. Vector attraction reduction requirements can also be met at the time of land application if biosolids are injected below the surface of the land or incorporated into the soil within 6 hours after application to the land. Biosolids are categorized as Class A or Class B depending on the method used to determine pathogen reduction. Biosolids may also be classified as exceptional quality (EQ) if the product meets: pollutant concentration limits in 40 CFR Part 503, one of the Class A pathogen reduction alternatives in 40 CFR Â§503.32(a), and one of the vector attraction reduction options in 40 CFR Â§503.33(b)(1) through (8). To meet regulatory requirements, pathogen reduction must be met before or at the same time that vector attraction reduction is achieved.

The City of Waldport will certify in writing that Class B pathogen requirements and vector attraction reduction requirements are met. The City of Waldport will also notify the Department in writing and obtain written approval prior to any process change that would use a pathogen reduction or vector attraction reduction method other than what is specified in this biosolids management plan.

Class B Pathogen Requirements

*Note: Must meet one of the following alternatives. Check applicable alternative.

Alternative 1: The geometric mean of the density of fecal coliform of seven representative samples shall be less than either 2 million Most Probable Number (MPN) or 2 million Colony Forming Units (CFU) per gram of total solids (dry weight basis).

Alternative 2: Biosolids shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in the table below.

Alternative 3: Biosolids shall be treated in a process that is equivalent to a PSRP, as determined by the permitting authority.

Processes to Significantly Reduce Pathogens (PSRP) Listed in Appendix B of 40 CFR Part 503

*Note: Check applicable PSRP

Aerobic Digestion

Sewage sludge is agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time (i.e., solids retention time) at a specific temperature. Values for the mean cell residence time and temperature shall be between 40 days at 20ºC (68ºF) and 60 days at 15ºC (59ºF).

Air Drying

Sewage sludge is dried on sand beds or on paved or unpaved basins. The sewage sludge dries for a minimum of 3 months. During 2 of the 3 months, the ambient average daily temperature is above 0ºC (23ºF).

Anaerobic Digestion

Sewage sludge is treated in the absence of air for a specific mean cell residence time (i.e., solids retention time) at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35ºC to 55ºC (131ºF) and 60 days at 20ÂºC (68ºF).

Composting

Using either the within-vessel, static aerated pile, or windrow composting methods, the temperature of the sewage sludge is raised to 40ºC (104ºF) or higher and remains at 40ºC

(104ºF) or higher for 5 days. For 4 hours during the 5-day period, the temperature in the compost pile exceeds 55ºC (131ºF).

Lime Stabilization

Sufficient lime is added to the sewage sludge to raise the pH of the sewage sludge to 12, for 2 hours of contact.

Vector Attraction Reduction

This facility primarily uses alkaline stabilization to meet vector attraction reduction. This facility may be able to utilize the following vector attraction reduction options:

To meet the biosolid vector attraction reduction requirements an aerobic digester must provide a 15 day detention time at 35ºC (95ºF) in a completely mixed high rate digester in order to achieve a volatile solids reduction of 38% or more. There are alternative volatile solid reduction methods that are deemed equivalent to the 38% volatile solid reduction criteria under the EPAs and the DEQs regulations.

Vector attraction reduction requirements of 40 CFR Part 503 are met through option # 1

Vector Attraction Reduction Options

*Note: Must meet one of the following options. Check applicable option(s).

40 CFR Part 503 Requirement

What is Required?

Most Appropriate For:
Option 1 503.33(b)(1)

At least 38% reduction in volatile solids during sewage sludge treatment

Sewage sludge processed by:
Anaerobic biological treatment
Aerobic biological treatment

Option 2 503.33(b)(2)

Less than 17% additional volatile solids loss during bench-scale anaerobic batch digestion of the sewage sludge for 40 additional days at 30ºC to 37ºC (86ºF to 99ºF).

Only for anaerobically digested sewage sludge that cannot meet the requirements of Option 1.

Option 3 503.33(b)(3)

Less than 15% additional volatile solids reduction during bench-scale aerobic batch digestion for 30 additional days at 20ºC (68ºF)

Only for aerobically digested liquid sewage sludge with 2% or less solids that cannot meet the requirements of Option 1“ e.g., sewage sludges treated in extended aeration plants.

Sludges with 2% or greater solids must be diluted

Option 4 503.33(b)(4)

SOUR at 20ºC (68ºF) is 1.5 mg oxygen/hr/g total sewage sludge solids
Liquid sewage sludges (2% or less solids) from aerobic processes run at temperatures between 10 to 30ºC (should not be used for composted sewage sludges).

Option 5 503.33(b)(5)

Aerobic treatment of the sewage sludge for at least 14 days at over 40ºC (104ºF) with an average temperature of over 45ºC (113ºF).

Composted sewage sludge (For sewage sludges from other aerobic processes, it will likely be easier to meet option 3 or 4).

Option 6 503.33(b)(6)

Addition of sufficient alkali to raise the pH to at
least 12 at 25ºC (77ºF) and maintain a pH 12 for 2 hours and a pH 11.5 for 22 more hours

Alkali-treated sewage sludge (alkaline materials include lime, fly ash, kiln dust, and wood ash)

Option 7 503.33(b)(7)

Percent solids 75% prior to mixing with other materials

Sewage sludges treated by an aerobic or anaerobic process (i.e., sewage sludges that do not contain unsterilized solids generated in primary wastewater treatment)

Option 8 503.33(b)(8)

Percent solids 90% prior to mixing with other materials

Sewage sludges that contain unsterilized solids generated in primary wastewater treatment (e.g., heat-dried sewage sludges)

Option 9 503.33(b)(9)

Sewage sludge is injected into soil so that no significant amount of sewage sludge is present on the land surface 1 hour after injection, except Class A sewage sludge which must be injected within 8 hours after the pathogen reduction process.

Sewage sludge applied to the land or placed on a surface disposal site. Domestic septage applied to agricultural land, a forest, or a reclamation site, or placed on a surface disposal site

Option 10 503.33(b)(10)

Sewage sludge is incorporated into the soil within 6 hours after application to land or placement on a surface disposal site, except Class A sewage sludge which must be applied to or placed on the land surface within 8 hours after the pathogen reduction process.

Sewage sludge applied to the land or placed on a surface disposal site. Domestic septage applied to agricultural land, forest, or a reclamation site, or placed on a surface disposal site.

III Biosolid Characteristics

City of Waldport treatment works utilizes an activated sludge process. The treatment facility wastes activated sludge form the secondary clarifier to the aerobic digesters. The sludge under goes 3 to 4 months of digestion at

ambient temperatures prior to removal, a volatile solids reduction calculation and alkaline stabilization are performed by the operators at this time.
Annually, City of Waldport had generated approximately 22 dry US tons of biosolids. For the year 1987 City of Waldport land applied 20 dry metric tons of Class B biosolid.

Monitoring

City of Waldport produces approximately 20 dry metric tons of biosolid each year. Under the 40 CFR Part 503, City of Waldport is required to sample biosolid once a year. Frequency of monitoring depends on the amount biosolid generated that is marketed to be sold or given away, land application and surface disposal. Frequency depends the amount on bulk biosolid applied to the land, or the amount of sewage sludge received by a person who prepares biosolid that is sold or given away in a bag or other container for application to the land (dry weight basis), or the amount of biosolid (excluding domestic septage) placed on a surface disposal site.

Sampling

1) Digester
Sample location: Sample port on discharge line of digester. Number and type of sample taken per day: Composite of discrete samples collected throughout the sampling period.

Sample storage and transport: Samples are stored at 4 degrees C in ice chest or refrigerator. Samples are transported in ice chest to maintain temperature during delivery to laboratory. Pathogen samples are delivered to lab within 1 hour of sample collection.

Sample analysis method: EPA 9045; EPA 160.3;EPA 160.4; SM 4500-NH3B; EPA 353.2; EPA 365.3; EPA 351.3; SW-846 7060; SW-846 6010; SW-846; SW-846 7481; SW-847 7471; SW-846 7740; SM 18, 9221E.1; SM 18:9260D.1; ASTM D 4994-89; EPA 600/1-87/014; EPA 8240; EPA 1613; EPA 8270; EPA 1613B; EPA 1668 (may include one or more of the referenced methods).

Samples collected and analyzed will be representative of the biosolids to be land applied. Quality control measures and procedures will be implemented for microbiological tests to verify precision and accuracy.

All monitoring and reporting will be conducted in accordance with the City of Waldport NPDES permit. The monitoring frequency is based on the amount of biosolids generated that is land applied, or marketed to be sold or given away. Based on 40 CFR Â§503.16, Table 1.

Transportation and Land Application:

Biosolids are off loaded into a Contract hauler owned (gal.)-tanker trucks near the treatment plant headworks. The biosolid loading area is impounded in case of accidental spillage of biosolids during the truck loading process. This area has a drain that ties back into the headworks of the plant. During the summer months City of Waldport personnel oversee all biosolids land application on DEQ authorized sites (38 acres total). The biosolid land application sites are capable of assimilating 4 times City of Waldport annual total nitrogen production. The perennial agronomic biosolid land application rate for pastures and grass is 100 lb. available N per acre/yr.

Land application in the state of Oregon, City of Waldport land applies on farmlands to beneficially reuse their biosolids.

Biosolids Site Management Information:

Site Name Site	Site Name	Site No.	Net Acres	Loading (lb./ac/yr.)	Usable Nitrogen per Site lb. N/ac
Field 1A	1	7.6	100 lb. N/ac	760	
Field 1B	2	29.7	100 lb. N/ac	2970	
Total	2	37.3		3730	

Long term biosolid application rates and site restrictions are contained in the biosolid site authorization letter. References to the OAR 34-50, The EPA 40 CFR Part 503, site setbacks, site agronomic loading rates, land application restrictions and site restrictions are also detailed out in the site authorization letter.

Staging

The unloading and placement of biosolids in one area at a land application site may occur on a limited time basis. If staging of biosolids occurs, the requirements outlined in the site authorization letters for each site will be followed.

Field Storage

Field storage is not authorized by the Department at this time.

Spill During Transportation of Biosolids

In event biosolids are spilled between the treatment facility and the land application site City of Waldport sewage treatment works shall contain the spill, lime, absorb (via sand) and remove spilled sludge solids spills with a front-end loader or shoves and dispose of the spillage at a DEQ authorized application or disposal site. All spills into waters of the state or spills on the ground surface that are like to enter waters of the state shall be reported to immediately to Oregon Emergency Response System (OERS) at 1-800-452-0311 and your regional biosolids coordinator at (541) 440-3338. All spills of 25 gallons or more on the ground surface shall be report to the regional biosolids coordinator at (541) 440-3338.

The City of Waldport is responsible for cleanup of any biosolids spills that occur while transporting to land application sites. If a spill occurs during the transport of biosolids between the wastewater treatment facility and the land application site, the City of Waldport will:

--Contain the spill.
--Post the area and set up temporary fencing if there is a potential for public exposure.
--Remove spilled biosolids with a front-end loader or shovel.
--Cover the area with dry lime if needed.
--Apply absorbent (e.g., sand) if needed.
--Transport spilled product to a Department authorized biosolids land application or disposal site.

Solids Treatment Process Failure or Modification

If a mechanical problem occurs with a aerobic digester and replacement parts are not in stock at the treatment facility, an emergency parts order will be placed. During this period, the digester in question would be isolated and WAS would be directed to digester #2, or bypass both digesters and direct flow to lagoon.

If maintenance is needed on a treatment process component that will affect compliance with pathogen reduction or vector attraction reduction requirements, the City of Waldport will notify the Department and get approval prior to the maintenance activity.

The City of Waldport, as the preparer and land applier of biosolids, is required to maintain records to demonstrate that federal and state biosolids requirements are met. Records will be kept on file by the City of Waldport, and will be available upon request by the Department. Monitoring and sampling records will be retained for a period no less than 5 years, unless otherwise required by the NPDES permit or a site authorization letter. The minimum required records include the following information:

--Pollutant concentrations of each parameter stated in the permit;
--Pathogen requirements as stated in the permit for Class B, Description of how one of the vector attraction reduction requirements in 40 CFR 503.33(b)(1) through (8) are met;
--Description of how the management practices in 40 CFR 503.14 and site restrictions in 40 CFR 503.32(b)(5) are

met for each biosolids land application site (note: this is for Class B bulk biosolids); and
--Certification that the information submitted is accurate to determine compliance with pathogen and vector attraction reduction requirements, and site restriction/management requirements.

Annual Reporting

A biosolids annual report is required to be submitted to the Department each year by February 19 or as required by the permit if bulk biosolids have been land applied, or biosolids derived products were sold or given away the previous year. The report will include information on biosolids handling activities and data (i.e., monitoring results, nutrient loading rates) from the previous calendar year. Some of the information required with the annual report includes:

--Daily site logs or records, including date, time, and quantity (gallon, pounds) of nitrogen/acre land applied.
--Map, including scale, showing the site and the land application location that coincides with the daily site application method (e.g., truck spreader bar, irrigation cannon).
--Signed copy of the certification statement (see next section on Certification Statement).

Certification Statement

The City of Waldport is capable of meeting Class B pathogen reduction and vector attraction reduction requirements. As required under 40 CFR 503.17, the City of Waldport must retain a certification statement indicating whether compliance with pathogen reduction, vector attraction reduction, and certain site restrictions have been met. The certification statement must be retained for a period of five years, and must be submitted with the annual report that is due February 19 or as required by the permit. The City of Waldport will retain the following certification statement and it will be signed by a principal executive officer or ranking elected official (note: for a municipality, State, Federal, or other public agency) or their duly authorized representative (e.g., individual or position having responsibility for the overall operation of the system, such as the position of plant manager, supervisor, superintendent or equivalent responsibility).

*Note: The following certification is for the most common situation when Class B bulk biosolids meet Table 3 metals values and VAR is achieved at the wastewater treatment works, and is prepared and land applied by the permittee. For other situations including Class A biosolids, domestic septage, or when Table 2 Cumulative Pollutant Loading Rates are met, a different certification statement must be signed and retained. These statements are posted on the Department web site at http://www.deq.state.or.us/wq/Biosolids/BioCerts.html.

I certify, under penalty of law, that the information that will be used to determine compliance with the Class B pathogen requirements in 40 CFR 503.32(b), the vector attraction reduction requirement in 40 CFR 503.33(b) option (1), and the site restrictions in 40 CFR 503.32(b)(5) for each site on which Class B sewage sludge was applied, was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification, including the possibility of fine and imprisonment.

Signature_____Date_____

City of Waldport is also required as the land applier to certify that the management practices in 40 CFR 503.14 are being met. This certification includes that biosolids are being land applied at approved agronomic loading rates as specified in department issued site authorization letters.

I certify, under penalty of law that the management practices in 40 CFR 503.14 have been met for each site on which bulk biosolids is applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met.

I am aware that there are significant penalties for false certification, including the possibility of fine and imprisonment.

Signature_____Date_____

BIOSOLIDS CHARACTERISTICS

Biosolid Analysis Year		2017					
Source	Waldport	**Lab analysis #**	1706266	**Date**	6/19/2017		
File No.	107816		Neilson Lab				
Phone No.	541-563-2325						
Contact	Jason McAdoo						
	Tyson Arrant						
Nutrient and metals analysis are a representative sampling taken for the year's biosolids are land applied.							
Nutrient and metal concentrations are determined from the current year's representative solids analysis.							
Site loading rates for nutrients and metal must be adjusted							
based on current analysis to meet authorized site loading rates.							
COLOR KEY							
		requires entered value					
		calculated value					
		replace 1 with coefficient from selection					
SOLIDS ANALYSIS							
Cake Biosolid	1	**0.85**	**Replace the 1 with the appropriate decimal**				
Liquid Biosolid	0.5	**0.5**	**Dewater (10-50%) and Liquid**				
% Total Solids	2.3						
% Volatile Solids	1						

PATHOGEN REDUCTION							
Class A Biosolid			**Put X next to Class A if true**				
Class B Biosolid		X	**Put X next to Class B if true**				
	b2alternative 1		**Cite 503.32 Alternative**				
Fecal Coliform	Yes	**<2,000,000 /dry gr. Total Solids**					
org.-100ml/1 dry gr.							
VECTOR ATTRACTION REDUCTION (DIGESTION METHOD)							
Volatile Solids Reduction Method			b1	**Cite 503.33 Option**			
	2017						
Source	Waldport						
File No.							
VOLATILE SOLIDS REDUCTION (DIGESTION METHOD)							
Volatile Solids Reduction Method				**Cite 503.33 option**			
Anaerobic D.	0.2	0.2	Replace the 1 with the appropriate decimal				
Aerobic D.	1	0.3	Replace the 1 with the appropriate decimal				
Drying Bed	1	0.15	Replace the 1 with the appropriate decimal				
Gal/yr.	1	*** Note If cake biosolids are generated then is total cubic yards instead of total gallons**					
		Note biosolid cake conversion is 0.65 ton/ yd^3					
		Pounds Equation			0	**Cubic yards hauled**	
Dry TS US ton/yr.	300000.00	**lb. TS/yr. = %TS x 8.34 x gal/yr.**			0	**Total US tons**	
lb. TS/yr.	57546				0		
Total US tons	**29**				**0**		
Conversion							
US-> Metric tons multiply by 1.11			**Total Metric**	25.90			

			tons				
Metric -> US tons multiply by 0.9							
NUTRIENT ANALYSIS							
	mg/kg	**mg/kg dry-wt.**					
			Organic N = Total N - (NO3+NH3)				
Total Organic	6.89	68900	**Organic N = (%TKN-%NH4)**				
TKN	6.9	69000	**Inorganic N = (%NH4 + %NO3)**				
NH3	0.01	100					
NO3	0.41	4100					
Phosphorus	1.9	19000					
Potassium	2.1	21000					
	mg/kg dry-wt.	**lb. / yr.**	**lb./ac-yr.**	**kg/ha**			
Phosphorus	19000	1093	49.69882	55.66268			
Potassium	21000	1208	54.93027	61.52191			
pH	6.8						
	2017						
Source	Waldport						
File No.							
NITROGEN	**mg/kg dry-wt.**	**lb. / yr.**	**lb./ac-yr.**	**kg/ha**			
Total Organic	68900	793	36	40			
TKN	69000	794	180	202			
NH3	100	1	0	0			
NO3	4100	47	11	12			
lb. mineralized organic N/dry ton			28				
lb. inorganic N/dry ton			0				
Total lb. available N/dry			27.937				

ton							
NUTRIENT LOADING							
Crop nitrogen loading rate N lb./acre			100	112	**kg/ha**		
Total acres land applied for year.			22				
Number dry tons land applied per acre			1	3	**metric ton/ha**		
lb. Available Nitrogen per dry ton			0.00				
Total lb. Org-N produced per year			793				
Total lb. NH4 produced per year			1				
Total lb. NO3 produced per year			47		#DIV/0!	**lb. N / yd^3**	
Total lb. Available N per year			841		841.32	**lb. N / gallon**	
Min. number of acres required per year (Nitrogen)			8				
	2017						
Source	Waldport						
File No.	107816						
BIOSOLID METALS ANALYSIS AND CALCULATIONS							
Sample calculation:							
[([(5.0 mg As/1000000 mg TS X 140000 lb. Total Solids) = 0.07 lb. As/yr.							
(((5.0 mg As/ 1000000 mg TS) x 140000 lb. TS) / 52 ac = 0.013 lb. As/ac-yr.							
(EPA cumulative loading 41 total lb. As/ac / 0.013 lb. As/ac/yr.) = 2719.3 yr. site life for As							
(0.013 lb. As/ac-yr.) x 1.12 conversion factor = 0.015 kg/ha-yr.							
(2.6 tons biosolid is equivalent to a loading rate of 100 lb. total available N/ac) .							
Metal Analysis	**mg/kg dry-wt.**						
Arsenic	6.6						
Cadmium	4.62						
Chromium	0						
Copper	337						
Lead	71.2						
Mercury	1.08						
Molybdenum	9						
Nickel	26.5						

Selenium	8.7						
Zinc	952						
	0						
Source	0						
File No.	0						
		Ceiling	**Ceiling**				
	Biosolid	**Limits**	**Limits**				
	concentration	**503.13**	**503.13**	**Yearly**	**Yearly**	**Yearly**	
		Table 1 Conc.	**Table 1 metal**	**lb. Metal per**	**Loading**	**Loading**	
Metals	**mg/kg**	**mg/kg**	**lb./ton biosolid**	**ton biosolids**	**lb./ac-yr.**	**kg/yr.**	
Arsenic	7	75	0.150	0.37980	0.01726	0.019	
Cadmium	5	85	0.170	0.26586	0.01208	0.014	
Chromium	0	1200	2.400	0.00000	0.00000	0.000	
Copper	337	4300	8.600	19.39300	0.88150	0.987	
Lead	71	840	1.680	4.09728	0.18624	0.209	
Mercury	1	57	0.114	0.06215	0.00282	0.003	
Molybdenum	9	75	0.150	0.51791	0.02354	0.026	
Nickel	27	420	0.840	1.52497	0.06932	0.078	
Selenium	9	100	0.200	0.50065	0.02276	0.025	
Zinc	952	7500	15.000	54.78379	2.49017	2.789	
There is no Ceiling limit for Chromium, table value is a past limit that is no longer valid, used here for loading calculations only.							
		Cumulative					
	Analysis	**Pollutant Limits**					
	Biosolid	**CFR 503.13**	**40 CFR 503.13**	**Yearly**	**Biosolid**	**Biosolid**	
	conc.	**Table 2**	**Table 2 metal**	**lb. Metal per**	**Loading**	**Loading**	
Metals	**mg/kg**	**mg/ha**	**lb./ac biosolid**	**ton biosolids**	**lb./ac-yr.**	**kg/ha-yr.**	
Arsenic	6.6	41	45.920	0.924	0.0420	0.047	
Cadmium	4.62	39	43.680	0.647	0.0294	0.033	
Chromium	0	1200	1344.000	0.000	0.0000	0.000	
Copper	337	1500	1680.000	47.180	2.1445	2.402	
Lead	71.2	300	336.000	9.968	0.4531	0.507	
Mercury	1.08	17	19.040	0.151	0.0069	0.008	

Molybdenum	9	75	84.000	1.260	0.0573	0.064	
Nickel	26.5	420	470.400	3.710	0.1686	0.189	
Selenium	8.7	100	112.000	1.218	0.0554	0.062	
Zinc	952	2800	3136.000	133.280	6.0582	6.785	
There are no limits for Chromium or Molybdenum under Table 2, Mo concentration comes from Table 1. Ceiling Limit.							
	2017						
Source	Waldport						
File No.	107816						
		Pollutant	**Table 3**				
	Biosolid	**Conc. Limits**					
	Analysis	**Table 3**	**lb. Metal per**	**Loading**	**Loading**	**Site Life**	
Metals	**mg/kg**	**mg/ha**	**/ac biosolid**	**lb./ac-yr.**	**kg/ha-yr.**	**in years**	
Arsenic	6.6	41	45.920	0.017	0.019	2120	
Cadmium	4.62	39	43.680	0.012	0.014	2881	
Chromium	0	1200	1344.000	0.000	0.000	#DIV/0!	
Copper	337	1500	1680.000	0.882	0.987	1519	
Lead	71.2	300	336.000	0.186	0.209	1438	
Mercury	1.08	17	19.040	0.003	0.003	5373	
Molybdenum	9	75	84.000	0.024	0.026	2845	
Nickel	26.5	420	470.400	0.069	0.078	5410	
Selenium	8.7	100	112.000	0.023	0.025	3923	
Zinc	952	2800	3136.000	2.490	2.789	1004	
There are no limits for Chromium or Molybdenum under Table 3, Mo concentration comes from Table 1. Ceiling Limit.							
40 CFR 503.13 Tables 1-4.							
T1, Ceiling loading, bulk biosolids sold or given away, bag or container, can not exceed pollutant concentration Table 1.							
T2, Cumulative Loading, has to meet Table 1 and 2 limits, no lawn/garden Class A no ability to tract.							
T3, Pollutant Concentration , bulk biosolid land applied on agriculture land, forest,							
	public contact site or reclamation site has to meet Tables 1 &3.						
T4, Annual Pollutant loading Rate, for land application of Class A biosolid							
	given away in bag or container, has to meet Table 1 & 4.						