



DEPARTMENT OF PUBLIC WORKS

1600 – 13th Avenue South
Kelso, WA 98626
TEL (360) 577-3030
FAX (360) 636-0845
Washington Relay Service 711 or (888) 833-8633

www.co.cowlitz.wa.us/publicworks/

Board of County Commissioners
Arne Mortensen District 1
Dennis P. Weber District 2
Richard R. Dahl District 3

January 30, 2023

Jessica Christensen, Permit Administrator
WASHINGTON STATE DEPT. OF ECOLOGY
Southwest Regional Office - WQ
P.O. Box 47775
Olympia, WA 98504-7775

RECEIVED

FEB 02 2023
WA State Department
of Ecology (SWRO)

**SUBJECT: Renewal of State Discharge Permit No. ST 6248
 Cowlitz County Headquarters Landfill**

Please accept this application for the renewal of our State Waste Discharge Permit Number ST 6248 at the Cowlitz County Headquarters Landfill.

Should you have any immediate questions or concerns, please call Michele Horn at 360-577-3030 ext. 6540 or via email at hornm@cowlitzwa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike Moss", is written over a horizontal line.

MIKE MOSS
Director

MM:ec



Application for a State Waste Discharge Permit to Discharge Industrial Wastewater to a Publicly-Owned Treatment Works (POTW)

This application is for a state waste discharge permit for a discharge of industrial wastewater to a publicly-owned treatment works (POTW) as required by Chapter 90.48 RCW and Chapter 173-216 WAC. It is designed to provide Ecology with information on pollutants in the waste stream, materials that may enter the waste stream, and the flow characteristics of the discharge.

Ecology may request additional information to clarify the conditions of this discharge. The applicant should reference information previously submitted to Ecology that applies to this application in the appropriate section.

SECTION A. GENERAL INFORMATION

1. Applicant Name: Cowlitz County Department of Public Works

2. Facility Name: Cowlitz County Headquarters Landfill
(if different from Applicant)

3. Applicant Mail Address: 1600 13th Avenue South
Street

Kelso, WA 98632
City/State Zip

4. Facility Location Address: 3434 South Silverlake Road
(if different from 3 above) Street

Castle Rock, WA 98611
City/State Zip

5. UBI No. 0830037
88
Sometimes called a registration, tax, "C," or resale number, the Unified Business Identifier (UBI) number is a nine-digit number used to identify persons engaging in business activities. The number is assigned when a person completes a Master Business Application to register with or obtain a license from state agencies. The Departments of Revenue, Licensing, Employment Security, Labor and Industries, and the Corporations Division of the Secretary of State are among the state agencies participating in the UBI program.

6. Latitude/longitude of the facility as decimal degrees (NAD83/WGS84):
46.25142 / 122.7790

RECEIVED

FEB 02 2023

WA State Department
of Ecology (DPE/C)

FOR OFFICE USE ONLY		Check One:	New/Renewal <input type="checkbox"/>	Modification <input type="checkbox"/>
Date Application Received _____	Date Fee Paid _____	Application/ Permit No. _____	Date Application Accepted _____	

7. Person to contact who is familiar with the information contained in this application:

Dan Bales
Name

Operations Manager
Title

360 577 3030 x6543
Telephone number

360 636 0845
Fax number

8. Check One:

Permit Renewal (including renewal of temporary permits)

Does this application request a greater amount of wastewater discharge, a greater amount of pollutant discharge, or a discharge of different pollutants than specified in the last permit application for this facility? YES NO

For permit renewals, the current permit is an attachment, by reference, to this application.

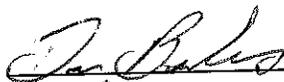
Permit Modification

Existing Unpermitted Discharge

Proposed Discharge

Anticipated date of discharge: _____

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 a fine and/or imprisonment for knowing violations.


Signature*

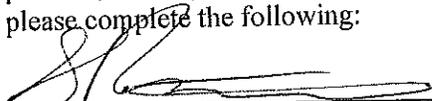
1-23-23
Date

Operations Manager
Title

Dan Bales
Printed Name

*Applications must be signed as follows: corporations, by a principal executive officer of at least the level of vice-president; partnership, by a general partner; sole proprietorship, by the proprietor. If these titles do not apply to your organization, the person who makes budget decisions for this facility must sign the application.

The application signatory may delegate signature authority for submittals required by the permit, such as monthly reports, to a suitable employee. You can delegate this authority to a qualified individual or to a position, which you expect to fill with a qualified individual. If you wish to delegate signature authority, please complete the following:


Signature of delegated employee

1/23/23
Date

Finance Manager
Title or function at the facility

Shawn Roewe
Printed name

SECTION B. PRODUCT INFORMATION

- Briefly describe all manufacturing processes and products, and/or commercial activities, at this facility. Provide the applicable Standard Industrial Category (SIC) and the North American Industry Classification System (NAICS) Code(s) for each activity (see *North American Industrial Classification System*, 2007 ed.). You can find the 1997 NAICS codes and the corresponding 1987 Standard Industry Category (SIC) codes at (<http://www.census.gov/epcd/naics/frames3.htm>).

Description: Municipal Solid Waste Landfill (MSW) operating under WAC 173-350 and WAC 173-351. Cowlitz County Headquarters Landfill (CCHL) has 22 planned cells that will be developed incrementally over the 60+ years expected life of the facility. The expected lifetime is based on a fill rate of 400,000 yd³/yr through 2017 and a rate of 750,000 yd³/yr thereafter with a maximum rate of 1,000,000 yd³/yd. The planned total site capacity is 54.8 million cubic yards (mcy) of in place waste.

As in-place waste actively decays, it generates carbon dioxide, methane and water or "leachate" effluent. Leachate from the landfill is collected in two leachate ponds for storage. Each of these ponds has a capacity of 2.5 million gallons. From the storage ponds, the pump station pumps leachate through an 80,000 foot, 8-inch diameter forcemain to the Three River Regional Waste Authority (POTW) wastewater collection system.

- List raw materials and products used at his facility:

Type	RAW MATERIALS	Quantity
<i>Grapes (Example)</i>		<i>1,000 tons per year</i>
Municipal Solid Waste		750,000 - 1,000,000 yd ³ /yr
Type	PRODUCTS	Quantity
<i>Grape Juice(Example)</i>		<i>300,000 gallons per year</i>
Landfill Gas		297,764,083 SCFM in 2021
Leachate		97,420,850 Gallons in 2021

SECTION C. PLANT OPERATIONAL CHARACTERISTICS

1. For each process listed in B.1. that generates wastewater, list the process, assign the waste stream a name and an ID # and describe whether it is a batch or continuous flow.

Process	Waste Stream Name	Waste Stream ID#	Batch (B) or Continuous (C) Process
MSW Landfill	Lined landfill Site	#1	C

2. On a separate sheet, produce a schematic drawing showing production processes, water flow through the facility, wastewater treatment devices and waste streams as named above. The drawing should indicate the source of intake water and show the operations contributing wastewater to the effluent. The treatment units should be labeled. Construct a water balance by showing average flows between intakes, operations, treatment units, and points of discharge to the POTW. *(See the example on page 16 of this application form.)*

3. What is the maximum daily wastewater discharge flow? 648,000 gallons/day

What is the maximum average monthly wastewater discharge flow (daily flows averaged over a month)? 266,906 gallons/day

4. Describe any planned wastewater treatment improvements or changes in wastewater disposal methods, and the schedule for these improvements. *(Use additional sheets, if necessary and label as attachment C4.)*

Please see Attachment C4

5. If production processes are subject to seasonal variations, provide the following information. The combined value for each month should equal the estimated total monthly flow. Please indicate the proper flow unit by checking one of the following boxes:

gallons per day gallons per month million gallons per month

Waste Stream ID#	MONTHS											
	J	F	M	A	M	J	J	A	S	O	N	D
#1	413995	362394	246018	142901	148543	154564	92191	102347	151483	253688	620671	523385
Estimated Total Monthly Flow (GPD)	413995	362394	246018	142901	148543	154564	92191	102347	151483	253688	620671	523385

6. How many hours a day does this facility typically operate? 10
 How many days a week does this facility typically operate? 5
 How many weeks per year does this facility typically operate? 52

7. List all incidental materials, such as oil, paint, grease, solvents, and cleaners, that are used or stored on site (*list only those with quantities greater than 10 gallons for liquids and 50 pounds for solids*). For solvents and solvent-based cleaners, include a copy of the material safety data sheet and estimate the quantity used. (*Use additional sheets, if necessary, and label as attachment C.7.*)

Materials/Quantity Stored: 1,500-gallon used oil, 370-gallon hydraulic oil, 250-gallon motor oil, 250-gallon transmission fluid, 500-gallon unleaded gasoline tank and 500 gallon diesel tank.

8. Some types of facilities are required to have spill or waste control plans. Does Yes No

this facility have:

- a. A spill prevention, control, and countermeasure plan (40 CFR 112)?
- b. An Oil Spill Contingency Plan (chapter 173-182 WAC)?
- c. An emergency response plan (per WAC 173-303-350)?
- d. A runoff, spillage, or leak control plan (per WAC 173-216-110(f))?
- e. Any spill or pollution prevention plan required by local, state or federal authorities? If yes specify: Storm Water Pollution Prevention Plan (SWPPP)
- f. A solid waste control plan?
- g. A Slug Discharge Control Plan (40 CFR 403.8(f)(2)(v))?

SECTION D. WATER CONSUMPTION AND WATER LOSS

1. Potable water source(s):

Public System (Specify) Group B

Private Well

Surface Water

a. Water Right Permit Number: 32026U

b. Legal Description of Water Source

 $\frac{1}{4}$ S, $\frac{1}{4}$ E, 22, Section, 09N TWN, 01W R

2. Potable water use

a. Indicate total water use _____

Gallons per day (average) _____

Gallons per day (maximum) _____

b. Is water metered?

YES NO

SECTION E. WASTEWATER INFORMATION

1. How are the water intake and effluent flows measured?

Intake: No measurable intake.

Effluent SCADA dedicated flow meter @ HOLF pump house

2. Describe the collection method for the samples analyzed below. (*i.e.*, grab, 24-hour composite). Applicants must collect grab samples (not composites) for analysis of pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform (including *E. coli*), and Enterococci (previously known as fecal streptococcus at § 122.26 (d)(2)(iii)(A)(3)), or volatile organics.

Grab samples for pH, cyanide, phenols, oil and grease and annual VOC's. 24 hour composite samples collected via an automated sampler for all other parameters tested. Samples collected from pump house pump station.

3. Has the effluent been analyzed for any other parameters than those identified in question E.4.? YES NO
If yes, attach results and label as attachment E.4. This data must clearly show the date, method and location of sampling. (*Note: Ecology may require additional testing.*)

4. Provide measurements or range of measurements for treated wastewater prior to discharge to the POTW for the parameters with an "X" in the left column. If you obtain the application from the internet, contact Ecology's regional office to see if testing for a subset of these parameters is permissible. All analyses (except pH) must be conducted by a laboratory registered or accredited by Ecology (WAC 173-216-125). If this is an application for permit renewal, provide data for the last year for those parameters that are routinely measured. For parameters measured only for this application, place the values under "Maximum." Report the values with units as specified in the parameter name or in the detection level.

The Permittee must use the specified analytical methods, detection limits (DLs) and quantitation levels (QLs) in the following table unless Ecology approves an alternate method or the method used produces measurable results in the sample and EPA has listed it as an EPA approved method in 40 CFR Part 136. If the Permittee uses an alternative method as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19 th , 20 th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
X	BOD (5 day)	200	1180	589	11	SM 5210 B	/2 mg/l
	COD					SM 5220 D	/10 mg/l
X	Total suspended solids	0	200	36.18	11	SM 2540 D	/5 mg/l
	Fixed Dissolved Solids					SM 2540 E	
	Total dissolved solids					SM 2540 C	
	Conductivity (micromhos/cm)					SM 2510 B	
X	Ammonia-N as N	62	202	118	11	SM 4500-NH ₃ C	/0.3 mg/L
X	pH	6.4	9.0	7.63	52	SM 4500-H	0.1 standard units
	Fecal coliform (organisms/100 mL)					SM 9221 E or 9222 D	
	Total coliform (organisms/100 mL)					SM 9221 B or 9222 B	
	Dissolved oxygen					SM 4500-O C/G	
	Nitrate + nitrite-N as N					SM 4500-NO ₃ E	100 µg/L
	Total kjeldahl N as N					SM 4500-N _{org} C/E/FG	300 µg/l
	Ortho-phosphate-P as P					SM 4500-P E/F	10 µg/l
	Total-phosphorous-P as P					SM 4500-P E/P/F	10 µg/l
	Total Oil & grease					EPA 1664A	1.4/5 mg/l
	NWTPH - Dx					Ecology NWTPH Dx	250/250 µg/l
	NWTPH - Gx					Ecology NWTPH Gx	250/250 µg/l
	Calcium					EPA 200.7	10 µg/l
	Chloride					SM 4500-Cl C	0.15 µg/l
	Fluoride					SM 4500-F E	.025/0.1 mg/l
	Magnesium					EPA 200.7	10/50 µg/l
	Potassium					EPA 200.7	700/ µg/l
	Sodium					EPA 200.7	29/ µg/l
	Sulfate					SM 4500-SO ₄ C/D	/200 µg/l
	Arsenic(total)					EPA 200.8	0.1/0.5 µg/l

X	Parameter	Measurement Values			Number of Analyses	Analytical Method Std. Methods 19 th , 20 th edition or EPA	Detection Limit/Quantitation Level
		Minimum	Maximum	Average			
	Barium (total)					EPA 200.8	0.5/2 µg/l
	Cadmium (total)					EPA 200.8	.05/1.25 µg/l
	Chromium (total)					EPA 200.8	0.2/1 µg/l
	Copper (total)					EPA 200.8	0.4/2 µg/l
	Lead (total)					EPA 200.8	0.1/1.5 µg/l
	Mercury (total) pg/L					EPA 1631E	0.2/0.5 pg/l
	Molybdenum(total)					EPA 200.8	0.1/0.5 µg/l
	Nickel(total)					EPA 200.8	0.1/0.5 µg/l
	Selenium (total)					EPA 200.8	1/1 µg/l
	Silver (total)					EPA 200.8	.04/1.2 µg/l
	Zinc (total)					EPA 200.8	0.5/2.5 µg/l

6. Does this facility use any of the following chemicals as raw materials or produce them as part of the manufacturing process, or are they present in the wastewater? YES NO

(The number in the column next to the chemical name is the Chemical Abstract Service (CAS) reference number to aid in identifying the compound.)

If yes, specify how the chemical is used and the quantity used or produced:

METALS, CYANIDE & TOTAL PHENOLS

Antimony, Total	7440-36-0	Nickel, Total	7440-02-0
Arsenic, Total	7440-38-2	Selenium, Total	7782-49-2
Beryllium, Total	7440-41-7	Silver, Total	7440-22-4
Cadmium, Total	7440-43-9	Thallium, Total	7440-28-0
Chromium (hex) dissolved	18540-29-9	Zinc, Total	7440-66-6
Chromium, Total	7440-47-3		
Copper, Total	7440-50-8	Cyanide, Total	57-12-5
Lead, Total	7439-92-1	Cyanide, Weak Acid Dissociable	
Mercury, Total	7439-97-6	Phenols, Total	

PESTICIDES

Aldrin	309-00-2	Endrin	72-20-8
alpha-BHC	319-84-6	Endrin Aldehyde	7421-93-4
beta-BHC	319-85-7	Heptachlor	76-44-8
gamma-BHC	58-89-9	Heptachlor Epoxide	1024-57-3
delta-BHC	319-86-8	PCB-1242	53469-21-9
Chlordane	57-74-9	PCB-1254	11097-69-1
4,4'-DDT	50-29-3	PCB-1221	11104-28-2
4,4'-DDE	72-55-9	PCB-1232	11141-16-5
4,4' DDD	72-54-8	PCB-1248	12672-29-6
Dieldrin	60-57-1	PCB-1260	11096-82-5
alpha-Endosulfan	959-98-8	PCB-1016	12674-11-2
beta-Endosulfan	33213-65-9	Toxaphene	8001-35-2
Endosulfan Sulfate	1031-07-8		

VOLATILE COMPOUNDS

Acrolein	107-02-8		
Acrylonitrile	107-13-1	1,1-Dichloroethylene	75-35-4
Benzene	71-43-2	1,2-Dichloropropane	78-87-5
Bromoform	75-25-2	1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene)	542-75-6
Carbon tetrachloride	56-23-5	Ethylbenzene	100-41-4
Chlorobenzene	108-90-7	Methyl bromide (Bromomethane)	74-83-9
Chloroethane	75-00-3	Methyl chloride (Chloromethane)	74-87-3
2-Chloroethylvinyl Ether	110-75-8	Methylene chloride	75-09-2
Chloroform	67-66-3	1,1,2,2-Tetrachloroethane	79-34-5
Dibromochloromethane	124-48-1	Tetrachloroethylene	127-18-4
1,2-Dichlorobenzene	95-50-1	Toluene (108-88-3)	
1,3-Dichlorobenzene	(541-73-1)	1,2-Trans-Dichloroethylene (Ethylene dichloride)	156-60-5
1,4-Dichlorobenzene	106-46-7	1,1,1-Trichloroethane	71-55-6
Dichlorobromomethane	75-27-4	1,1,2-Trichloroethane	79-00-5
1,1-Dichloroethane	75-34-3	Trichloroethylene	79-01-6
1,2-Dichloroethane	107-06-2	Vinyl chloride	75-01-4

ACID COMPOUNDS			
2-Chlorophenol	95-57-8	4-nitrophenol	100-02-7
2,4-Dichlorophenol	120-83-2	Parachlorometa cresol (4-chloro-3-methylphenol)	59-50-7
2,4-Dimethylphenol	105-67-9	Pentachlorophenol	87-86-5
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	534-52-1	Phenol	108-95-2
2,4 dinitrophenol	51-28-5	2,4,6-Trichlorophenol	88-06-2
2-Nitrophenol	88-75-5		

BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)			
Acenaphthene	83-32-9	3,3-Dichlorobenzidine	91-94-1
Acenaphthylene	208-96-8	Diethyl phthalate	84-66-2
Anthracene	120-12-7	Dimethyl phthalate	131-11-3
Benzidine	92-87-5	Di-n-butyl phthalate)	84-74-2
Benzyl butyl phthalate	85-68-7	2,4-dinitrotoluene	121-14-2
Benzo(a)anthracene	56-55-3	2,6-dinitrotoluene	606-20-2
Benzo(b)fluoranthene (3,4-benzofluoranthene)	205-99-2	Di-n-octyl phthalate	117-84-0
Benzo(j)fluoranthene	205-82-3	1,2-Diphenylhydrazine (as <i>Azobenzene</i>)	122-66-7
Benzo(k)fluoranthene (11,12-benzofluoranthene)	207-08-9	Fluoranthene	206-44-0
Benzo(r,s,t)pentaphene	189-55-9	Fluorene	86-73-7
Benzo(a)pyrene	50-32-8	Hexachlorobenzene	118-74-1
Benzo(ghi)Perylene	191-24-2	Hexachlorobutadiene	87-68-3
Bis(2-chloroethoxy)methane	111-91-1	Hexachlorocyclopentadiene	77-47-4
Bis(2-chloroethyl)ether	111-44-4	Hexachloroethane	67-72-1
Bis(2-chloroisopropyl)ether	39638-32-9	Indeno(1,2,3-cd)Pyrene	193-39-5
Bis(2-ethylhexyl)phthalate	117-81-7	Isophorone	78-59-1
4-Bromophenyl phenyl ether	101-55-3	3-Methyl cholanthrene	56-49-5
2-Chloronaphthalene	91-58-7	Naphthalene	91-20-3
4-Chlorophenyl phenyl ether	7005-72-3	Nitrobenzene	98-95-3
Chrysene	218-01-9	N-Nitrosodimethylamine	62-75-9
Dibenzo (a,j)acridine	224-42-0	N-Nitrosodi-n-propylamine	621-64-7
Dibenzo (a,h)acridine	226-36-8	N-Nitrosodiphenylamine	86-30-6
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	53-70-3	Perylene	198-55-0
Dibenzo(a,e)pyrene	192-65-4	Phenanthrene	85-01-8
Dibenzo(a,h)pyrene	189-64-0	Pyrene	129-00-0
		1,2,4-Trichlorobenzene	120-82-1

7. Are any other pesticides, herbicides or fungicides used at this facility? YES NO

If yes, specify the material and quantity used:

8. Are there other pollutants that you know of or believe to be present? YES NO

If yes, specify the pollutants and their concentration if known
(attach laboratory analyses if available as Attachment E8):

9. Is the wastewater being discharged, or proposed for discharge, to the POTW designated as a dangerous waste according to the procedures in Chapter 173-303 WAC?

YES NO DON'T KNOW

10. If the answer to question 9 above is yes, how did the waste designate as a dangerous waste (check appropriate box)?

For Listed and TCLP Characteristic Wastes only, also provide the Dangerous Waste Number(s).

Listed Waste Dangerous Waste Number(s) _____

Characteristic Wastes Dangerous Waste Number(s) _____

Ignitable

Reactive

Corrosive

TCLP

State Only Dangerous Wastes Dangerous Waste Number(s) _____

Toxicity

Persistent

For questions about waste designation under the *Dangerous Waste Regulations*, Chapter 173-303 WAC, contact Ecology's Hazardous Waste and Toxics Program at:

Northwest Regional Office - Bellevue	(425) 649-7000
Southwest Regional Office - Lacey	(360) 407-6300
Central Regional Office - Yakima	(509) 575-2490
Eastern Regional Office - Spokane	(509) 329-3400

SECTION F. SEWER INFORMATION

1. Is an inspection and sampling manhole or similar structure available on-site? YES NO
*If yes, attach a map or hand drawing of the facility that shows the location of these structures
(Label as attachment F1 or this may be combined with map in H8, if H8 is applicable to your
facility.)*

SECTION G. OTHER PERMITS

1. List all environmental control permits or approvals needed for this facility; for example, air emission permits.

Solid Waste Handling Operating Permit - Local Environmental Health Unit

Air Discharge Permit - Southwest Clean Air Agency

Air Operating Permit - Southwest Clean Air Agency

SECTION H. STORMWATER

1. Do you have coverage under the Washington State Industrial Stormwater NPDES General Permit? YES NO

If yes, please list the permit number here. WAR 001254 & WAR000916

If no, have you applied for a Washington State Stormwater Industrial Stormwater General Permit? YES NO

If you answered no to both questions above, complete the following questions 2 through 5.

2. Does your facility discharge stormwater: *(Check all that apply)*

To storm sewer system *(provide name of storm sewer system operator: _____)*

Directly to any surface waters of Washington State *(e.g., river, lake, creek, estuary, ocean).*

Specify waterbody name(s) _____

Indirectly to surface waters of Washington State *(i.e., flows over adjacent properties first).*

To a Sanitary Sewer

Directly to ground waters of Washington State via:

Dry well

Drainfield

Other

3. Areas with industrial activities at facility: *(check all that apply)*

Manufacturing Building

Material Handling

Material Storage

Hazardous Waste Treatment, Storage, or Disposal *(Refers to RCRA, Subtitle C Facilities Only)*

Waste Treatment, Storage, or Disposal

Application or Disposal of Wastewaters

Storage and Maintenance of Material Handling Equipment

Vehicle Maintenance

Areas Where Significant Materials Remain

Access Roads and Rail Lines for Shipping and Receiving

Other (please specify): _____

4. Material handling/management practices

a. Types of materials handled and/or stored outdoors: *(check all that apply)*

- | | |
|--|---|
| <input type="checkbox"/> Solvents | <input type="checkbox"/> Hazardous Wastes |
| <input type="checkbox"/> Scrap Metal | <input type="checkbox"/> Acids or Alkalies |
| <input type="checkbox"/> Petroleum or Petrochemical Products | <input type="checkbox"/> Paints/Coatings |
| <input type="checkbox"/> Plating Products | <input type="checkbox"/> Woodtreating Products |
| <input type="checkbox"/> Pesticides | <input type="checkbox"/> Other <i>(please list)</i> : _____ |

b. Identify existing management practices employed to reduce pollutants in industrial stormwater discharges: *(check all that apply)*

- | | |
|--|---|
| <input type="checkbox"/> Oil/Water Separator | <input type="checkbox"/> Detention Facilities |
| <input type="checkbox"/> Containment | <input type="checkbox"/> Infiltration Basins |
| <input type="checkbox"/> Spill Prevention | <input type="checkbox"/> Operational BMPs |
| <input type="checkbox"/> Surface Leachate Collection | <input type="checkbox"/> Vegetation Management |
| <input type="checkbox"/> Overhead Coverage | <input type="checkbox"/> Other <i>(please list)</i> : _____ |

5. Attach a facility site map showing stormwater drainage/collection areas, disposal areas and discharge points. This may be a hand-drawn map if no other site map is available *(See example on page 16 of this application)*. Label this as attachment H.5.

SECTION I. OTHER INFORMATION

1. Describe liquid wastes or sludges being generated by your facility that are not disposed of in the waste stream(s) and how they are being disposed of. For each type of waste, provide type of waste and the name, address, and phone number of the hauler.

NA

2. Describe storage areas for raw materials, products, and wastes.

NA

3. Have you designated the wastes described above according to the applicable YES NO procedures of Dangerous Waste Regulations, Chapter 173-303 WAC?

SECTION J. CERTIFICATIONS

1. Approval by Publicly-Owned Treatment Works [required by WAC 173-216-070(4)(b)]

I approve of the discharge as described in this application. The applicant is:

(Please check the appropriate box below.)

- A Significant Industrial User (see Definitions at the end of this Section)
- A Categorical Industrial User
- Neither of the above

Name and location of sewer system to which this project will be tributary:

Treatment Works Owner: THREE RIVERS REGIONAL WASTEWATER AUTHORITY
Street: 467 FIBRE WAY
City/State: LONSVIEW WA Zip: 98632
Duane Leaf 1/30/23 GENERAL MANAGER
Signature of Treatment Works Authority Date Title
DUANE LEAF
Printed Name

2. Application review by Intermediate Sewer Owner at point of discharge (if applicable)

I hereby acknowledge that I have reviewed the application for discharge to this sewer system.

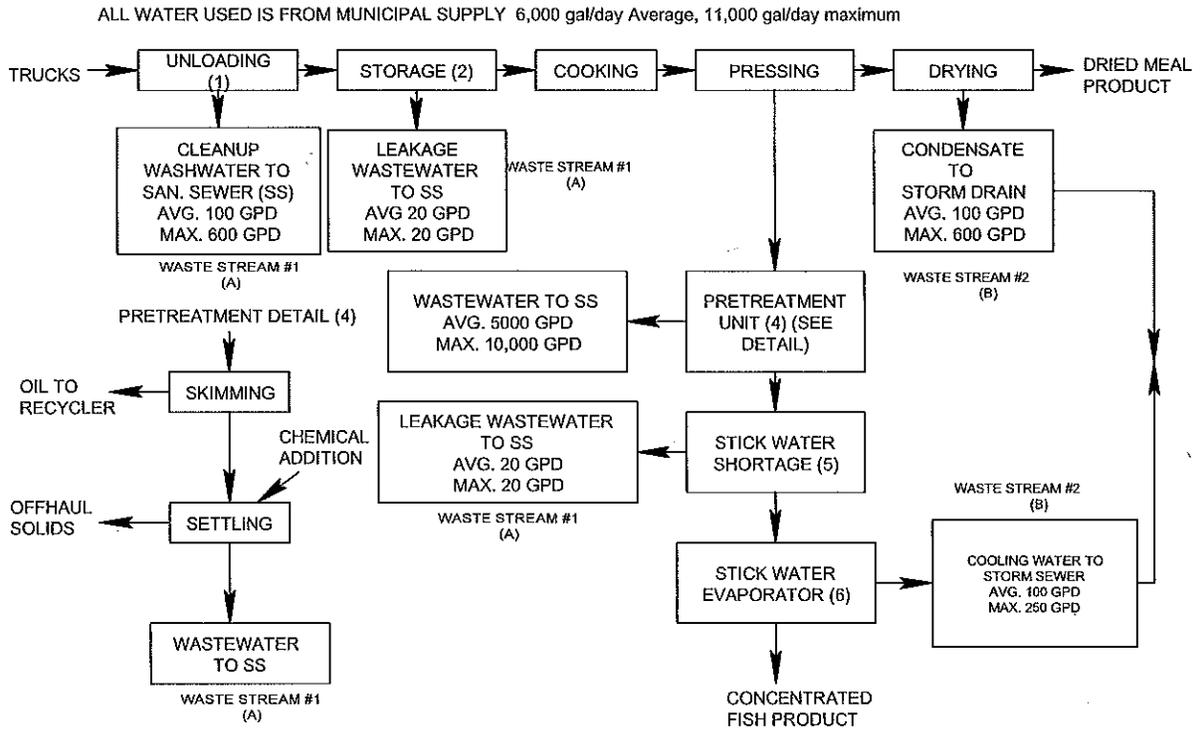
Name and location of sewer system to which this project will be tributary:

Sewer System Owner: NOT APPLICABLE
Street: _____
City/State: _____ Zip: _____

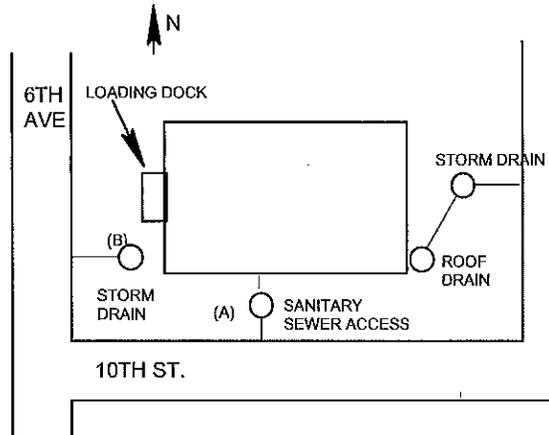
Signature of Sewer System Authority Date Title

Printed Name

Example 1 for application section C.2. (SCHEMATIC DIAGRAM)



Example 2 for application section F1 or H8 (FACILITY SITE MAP)



DEFINITIONS

Significant Industrial User (SIU)--

- 1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and
- 2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

Control Authority - means the Washington State Department of Ecology in the case of non-delegated POTWs or means the POTW in the case of delegated POTWs.

Categoric Industrial User (CIU): An industrial user subject to national categorical pretreatment standards promulgated by EPA (40 CFR 403.6 and 40 CFR parts 405-471).

Summary of Attachments That May be Required for This Application:

(Please check those attachments that are included)

- | | | | |
|-------------------------------------|--------------------------|------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | C.2. | Production schematic flow diagram and water balance |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | C.4. | Wastewater treatment improvements |
| <input type="checkbox"/> | <input type="checkbox"/> | C.7. | Additional incidental materials |
| <input type="checkbox"/> | <input type="checkbox"/> | E.8. | Additional results of effluent testing |
| <input type="checkbox"/> | <input type="checkbox"/> | F.1. | Facility site map |
| <input type="checkbox"/> | <input type="checkbox"/> | H.5. | Stormwater drainage map |

If you need this document in a format for the visually impaired, call the Water Quality Program at 360-407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

C4

Summary of work

A hydraulic and hydrologic analysis has been performed, to study the relationship between precipitation and generation of leachate for various conditions of exposed landfill area. A model has been developed by which leachate flows can be predicted for a given precipitation event.

The influent to the leachate lagoons has been sampled and chemically analyzed for a period of 4 months so far, with a total of 1 year planned. This analysis has informed the establishment of a set of design conditions for the parameters regulated by the permit. These design conditions will form the basis of design for improvements to the leachate treatment system.

Proposed Improvements

The proposed improvements to the leachate system should alleviate the permit exceedances for BOD. Three main classes of improvements are proposed:

1. Increase hydraulic residence time. Adequate hydraulic residence time will allow the "bugs" in the leachate more time to grow and to degrade BOD. This increased residence time will be achieved by increasing the active depth of the pond.
2. Increase aeration. A robust aeration system will greatly improve BOD removal by supplying sufficient oxygen to the bacteria and other "bugs" present in the leachate. A manufacturer/vendor of aeration systems will be engaged to design an engineered system. This system will most likely include a set of electrically powered mechanical blowers, which will feed air to a set of membrane aerators which will be installed in a grid pattern near the bottom of the leachate lagoon. Air will be injected from the blowers through the aerators, increasing dissolved oxygen in the water column and improving bacterial growth and degradation of BOD. Because aeration efficiency is dependent on the depth of the water column, this improvement also depends on an increased active depth of the pond. Occasionally (likely less than once a year), solids will need to be removed from the lagoon.
3. Improve lagoon performance features. Features are being considered to reduce short-circuiting of leachate (passage of leachate directly from the influent to the effluent sump resulting in low treatment efficiency), and to improve outlet conditions so that liquid is decanted from a quiescent area of the lagoon rather than a sump.