

Fact Sheet for State Waste Discharge Permit ST0007271

Waste Management of Washington, Inc.

Olympic View Sanitary Landfill

Public Notice Date: March 16, 2021

Purpose of this fact sheet

This fact sheet explains and documents the decisions the Department of Ecology (Ecology) made in drafting the proposed State Waste Discharge Permit for Waste Management of Washington, Inc. – Olympic View Sanitary Landfill, that will allow the discharge of wastewater to the City of Bremerton (West Plant) sanitary sewer system, and the City of Port Orchard – West Sound Utility District (aka South Kitsap Water Reclamation Facility) sanitary sewer system.

State law requires any commercial or industrial facility to obtain a permit before discharging waste or chemicals to municipal sanitary sewer collection and treatment systems.

Waste Management of Washington, Inc. reviewed the draft permit and fact sheet for factual accuracy. Ecology corrected any errors or omissions about the facility's location, history, product type, production rate, or discharges prior to publishing this draft fact sheet for public notice.

Summary

Waste Management of Washington, Inc. operates a closed landfill located in Kitsap County. The proposed State Waste Discharge Permit is intended to authorize the discharge of landfill leachate and condensate, transfer station leachate, related stormwater, and sample well purge water, to the City of Bremerton POTW and to the City of Port Orchard – West Sound Utility District (aka South Kitsap Water Reclamation Facility) sanitary sewer system. The monitoring requirements and effluent limits for discharges to Bremerton have been changed to match current Bremerton local limits and include limits for ammonia and conductivity; monitoring requirements and effluent limits for discharges to South Kitsap are identical to the existing permit. Two annual samples to determine nitrogen concentrations have been added.

Table of Contents

<i>I.</i>	<i>Introduction.....</i>	<i>4</i>
<i>II.</i>	<i>Background Information</i>	<i>5</i>
A.	Facility description	8
	Operations at the closed landfill	8
	Historical operations at landfill.....	8
	Leachate collection system	10
	Leachate treatment ponds	11
	Support facilities	11
B.	Discharge to the South Kitsap Water Reclamation Facility	12
C.	Discharge to the City of Bremerton Wastewater Treatment Plant.....	12
D.	Wastewater characterization	13
E.	Summary of compliance with previous permit issued	14
F.	State environmental policy act (SEPA) compliance	14
<i>III.</i>	<i>Proposed Permit Limits.....</i>	<i>14</i>
A.	Technology-based effluent limits	15
B.	Effluent limits based on local limits – City of Bremerton.....	15
C.	Effluent limits based on local limits – South Kitsap Water Reclamation Facility	16
D.	Comparison of effluent limits with the previous permit issued on February 12, 2016	17
<i>IV.</i>	<i>Monitoring Requirements</i>	<i>18</i>
A.	Lab accreditation	18
B.	Wastewater monitoring	19
<i>V.</i>	<i>Other Permit Conditions</i>	<i>19</i>
A.	Reporting and recordkeeping.....	19
B.	Operations and maintenance.....	19
C.	Prohibited discharges	19
D.	Dilution prohibited	19
E.	Non routine and unanticipated wastewater	19
F.	General conditions	20
<i>VI.</i>	<i>Public Notification of Noncompliance</i>	<i>20</i>

VII.	<i>Permit Issuance Procedures</i>	20
A.	Permit modifications	20
B.	Proposed permit issuance	20
VIII.	<i>References for Text and Appendices</i>	21
	<i>Appendix A - Public Involvement Information</i>	22
	<i>Appendix B - Your Right to Appeal</i>	23
	<i>Appendix C - Glossary</i>	24
	<i>Appendix D - Response to Comments</i>	33

List of Tables

Table 1: General Facility Information.....	5
Table 2: Design Criteria for South Kitsap Water Reclamation Facility.....	12
Table 3: Design Criteria for City of Bremerton West Plant	13
Table 4: Wastewater Characterization	13
Table 5: Limits Based on City of Bremerton Local Limits	16
Table 6: Limits Based on City of Port Orchard Local Limits	17
Table 7: Comparison effluent limits with the previous permit for discharges to Bremerton	18

List of Figures

Figure 1: Facility Location Map	7
Figure 2: Aerial View of Olympic View Sanitary Landfill Facility	7

I. Introduction

The legislature defined Ecology's authority and obligations for the wastewater discharge permit program in the Water Pollution Control law, chapter 90.48 RCW (Revised Code of Washington).

Ecology adopted rules describing how it exercises its authority:

- State waste discharge program (chapter 173-216 WAC)
- Submission of plans and reports for construction of wastewater facilities (chapter 173-240 WAC)

These rules require any industrial facility owner/operator to obtain a State Waste Discharge permit before discharging wastewater to state waters. This rule includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. They also help define the basis for limits on each discharge and for other performance requirements imposed by the permit.

Under the State Waste Discharge permit program and in response to a complete and accepted permit application, Ecology generally prepares a draft permit and accompanying fact sheet, and makes it available for public review before final issuance. If the volume of the discharge has not changed or if the characteristics of the discharge have not changed Ecology may choose not to issue a public notice.

II. Background Information

Table 1: General Facility Information

Facility Information	
Applicant	Waste Management of Washington, Inc. 2615 Davis Street San Leandro, CA 94577
Facility Name and Address	Olympic View Sanitary Landfill 10015 SW Barney White Road Bremerton, WA 98312-4935
Contact at Facility	Marc Davis, District Manager Brem-Air Disposal
Responsible Official	Patrick Madej, District Manager Waste Management of Washington, Inc. Environmental Legacy Management Group 2615 Davis Street San Leandro, CA 94577 510-376-7700
Industrial User Type	Significant Industrial User
Industry Type	Landfill, closed
Type of Treatment by Industry	Flow equalization, Aeration
SIC Codes	4953
NAIC Codes	56212
Permit Fee Category	Solid Waste Site, < 50 acres
Olympic View Sanitary Landfill Facility Location (NAD83/WGS84 reference datum) (coordinates refer to truck load out point SW of leachate pond)	Latitude: 47.4997 degrees North Longitude: 122.7905 degrees West
Treatment Plant Receiving Discharge	City of Bremerton Wastewater Treatment Plant (West Plant) NPDES Permit WA0029289

Facility Information	
City of Bremerton WWTP Discharge-Activated Sludge Plant (aka West Plant) (discharge to Sinclair Inlet) Discharge Location (NAD83/WGS84 reference datum)	Latitude: 47.5447 degrees North Longitude: 122.6699 degrees West
Treatment Plant Receiving Discharge	South Kitsap Water Reclamation Facility (aka City of Port Orchard/West Sound Utility District WWTP) NPDES Permit WA020346
South Kitsap Water Reclamation Facility (aka City of Port Orchard/West Sound Utility District WWTP) Discharge Location (NAD83/WGS84 reference datum)	Latitude: 47.5527 degrees North Longitude: 122.6111 degrees West
Permit Status	
Issuance Date of Previous Permit	February 12, 2016
Application for Permit Renewal Submittal Date	December 10, 2020
Date of Ecology Acceptance of Application	December 17, 2020



Figure 1: Facility Location Map



Figure 2: Aerial View of Olympic View Sanitary Landfill Facility

A. Facility description

Operations at the closed landfill

The Olympic View Sanitary Landfill is a closed Subtitle D sanitary landfill under post-closure operation and maintenance. The landfill was operated since 1963 under various private ownerships. The facility stopped receiving solid wastes in 2003 and was capped with an impervious cover and closed in 2004. The closed landfill is owned and operated by Olympic View Sanitary Landfill, Inc. (OVSL), a subsidiary of Waste Management of Washington, Inc. The landfill site is located ten miles southwest of Bremerton (between Gorst and Belfair) off State Route 3, just west of the Bremerton National Airport, and adjacent to Port of Bremerton's Olympic View Industrial Park.

Operations at the site currently consist of post-closure operation and maintenance, including the collection, pretreatment, and off-site disposal (at either of two municipal POTWs) of landfill leachate. Leachate, which forms when liquids pass-through or are generated in a landfill, are collected using a series of collection lines, a gravity transmission line, a pump station and force main, a pretreatment storage lagoon, an evaporator unit, and a truck load-out station. Leachate is also generated from solid waste at the solid waste transfer station located opposite the site, across SW Barney White Road.

Pretreatment of the collected leachate occurs within a lined lagoon with a capacity of approximately 3.12 million gallons. The pretreatment train primarily consists of aeration.

Pretreated wastewater from the lagoon is transferred into 6000-gallon hauling trucks for off-site discharge at either the South Kitsap Water Reclamation Facility (SKWRF) or the City of Bremerton POTW. During the last permit cycle, water was hauled exclusively to the SKWRF. These transfers typically occur during the summer and consist of batch deliveries to the POTW that can accrue from 50,000 to over 1,000,000 gallons over a delivery period of several weeks.

Historical operations at landfill

In the early 1960s solid waste disposal operations began at the facility, then known as the Old Barney White Landfill. The facility accepted US Navy, industrial, putrescible, and self-hauled municipal waste, and was operated as an open burning dump. When Brem Air Disposal, Inc. acquired the landfill in 1970, the name was changed to "Brem Air Northwest Disposal Facility." Brem Air Disposal discontinued burning of waste by 1972. By 1975, the company had developed the new landfill operations to comply with state regulations, the Minimal Functional Standards for Solid Waste Handling, and permit requirements imposed by Bremerton-Kitsap County Health District. At that time it began spreading, compacting, and applying cover to the solid waste. In 1975, Brem Air

Disposal, Inc. shareholders formed a new corporation, Kitsap County Sanitary Landfill, Inc. (KCSL). KCSL continued to operate the landfill, although its name was changed in 1995 to Olympic View Sanitary Landfill, Inc. (OVSL). OVSL was purchased by Envirofil, Inc., on November 5, 1993. In 1994, Envirofil merged with USA Waste Services. Subsequently, in 1997, USA Waste Services merged with Waste Management of Washington, Inc., which now owns OVSL. The facility stopped receiving solid wastes in 2003, and was capped and closed in 2004.

Olympic View Sanitary Landfill site occupies 65 acres of a 500-acre parcel. The municipal solid waste landfill consists of three sections: an old unlined portion (the Old Barney White Landfill), the Phase I expansion, and the Phase II expansion.

The Old Barney White Landfill was closed in 1985 under the standards of Chapter 173-301 WAC. This portion of the landfill is unlined and has no internal leachate collection system. The final cover, constructed in 1985, consisted of a one-foot layer of sand and gravel, a 1.5-foot layer of low permeability soil, 2.5 feet of sludge-amended soil, and six inches of topsoil. A perimeter leachate interceptor (toe seep collector) and a passive gas collection system were also installed in 1985. The total volume of waste disposed of in this 25-acre area is estimated to be approximately 2.2 million cubic yards [907,000 metric tons of municipal solid waste (MSW)].

The old landfill closure was improved in 1991 and 1992. The improved closure consists of the original layer of low permeability soil overlain by a 50-mil geo-membrane [textured very low density polyethylene (VLDPE)] layer, a geo-net composite drainage layer, 1.5 feet of cover soil, and six inches of top soil. An active gas extraction system was also added at that time.

Phase I constitutes 20 acres and had an original estimated capacity of one million cubic yards. Stage A abuts the old disposal area, is lined, and is equipped with a leachate collection system.

The Stage A liner, which was constructed in 1985, consists of two feet of compacted soil on the bottom and a 36-mil Hypalon liner on the side slopes. This liner does not satisfy the design requirements of Chapter 173-304 WAC (the minimal functional standards). A portion of Stage 1A was closed in 1992/1993 with the improvement of the old landfill closure.

The Stage B liner, constructed in 1988, consists of two feet of compacted soil with a permeability of 10^{-6} cm/sec overlain by a 60-mil high density polyethylene geo-membrane.

The 20-acre Phase II expansion area is located directly north of Phase I. Its originally proposed capacity was 1.2 million cubic yards. A vertical expansion was approved for the Phase I and Phase II areas in 1991, which increased the combined capacity of Phase I

and Phase II from 2.1 million cubic yards to 4.0 million cubic yards. Development of Phase II by stages began in the summer of 1996.

The following sequence has been utilized with respect to filling of each of the landfill cells:

- 1997 Phase II a1
- 1998 Phase II b1
- 1999 Phase II b2
- 2000 Phase II b3

Phase II b3 was the last of the active cells, prior to the cessation of receipt of solid wastes in 2003. Following closure of the landfill, a solid waste transfer station was constructed. Generation of leachate from the landfill continues after closure of the landfill, although at a reduced rate with respect to the time the landfill was in operation.

Leachate collection system

Leachate is formed when liquids pass through a landfill, removing contaminants and their degradation products from the solid waste. Decay and fermentation produce gases (for example, carbon dioxide and methane) and organic acids, resulting in the dissolution of chemical constituents such as iron and manganese from the waste. Landfills in western Washington may become partially or totally saturated by winter precipitation and, in unlined landfills, horizontal or upward flow of ground water. The rate or degree of saturation and the subsequent leachate production is based on site-specific conditions and landfill operations. The amount of leachate produced and the rate of production is a function of the bulk chemical composition, particle size and hydraulic conductivity of the refuse, and the capacity of the cover and liner material to restrict infiltration of incident precipitation.

The leachate management system at Olympic View Sanitary Landfill includes leachate collection lines, a gravity transmission line, a pump station and force main, pretreatment/storage lagoons, and a truck load-out station.

The leachate collection system includes the toe seep collection system around the base of the old landfill and the drainage layer/leachate collection lines installed above the liner in the Phase I and Phase II expansion areas. Pumps with a capacity of 35-65 gpm have been lowered to the bottom of the risers. The leachate is pumped to an HDPE force main.

A gravity transmission line conveys the leachate from the leachate collection system to the leachate treatment/storage lagoons. This line is located along the north shoulder of the north perimeter road. There is a series of five manholes along this transmission line.

A cutoff valve is provided at Manhole #1 to stop the flow from the Phase I expansion area.

Condensate is a wastewater which forms in the collection pipes of active gas extraction systems. Condensate from the active gas collection system at Olympic View Landfill is discharged into the leachate treatment/storage system at Olympic View.

Leachate treatment ponds

The leachate recovered is directed to the leachate treatment/collection lagoon, which is equipped with two aerators. The capacity of the pond is approximately 3.12 million gallons. The treatment/storage lagoon has a double composite liner system utilizing a 60-mil and 80-mil HDPE geo-membrane liner. Recent practice has been to operate the aerators continuously throughout the year. A leachate polishing pond, located nearby the leachate treatment pond, has been abandoned.

The leachate truck load-out station is located adjacent to the lagoon. Prior to 1997, treated leachate from the treatment and storage system was in-hauled and discharged at the Port Orchard/Kitsap County Sewer District No. 5 Wastewater Treatment Plant. In 1997, the landfill began hauling leachate to the City of Bremerton POTW.

A leachate irrigation system, permitted in the permit issued in 1988, has been abandoned. The system consisted of a pump station, force main, system controller, and the irrigation sites. The pipe to the irrigation system has been capped at the pump station. The pump flow line was converted to a recirculating line, and all leachate discharges into lagoon #1.

Under post-closure conditions, pretreated wastewater from the lagoon is transferred into 6000-gallon hauling trucks for off-site discharge at either the South Kitsap Water Reclamation Facility or the City of Bremerton's POTW. These transfers typically occur in the summer, and consist of batch deliveries to the POTW that can accrue to between 50,000 to over 1,400,000 gallons over a delivery period of several days.

Support facilities

Support facilities for the general operations of the landfill include:

- **Transfer station:** Waste water from the drainage system at the newly constructed transfer station is discharged to the leachate storage and pretreatment lagoon. The transfer station drainage system accepts contact waste water from the tipping floor and compactor. The contact wastewater is collected in a 1,150-gallon below-ground reinforced concrete vault located below the compactor. The vault includes a two-chambered oil-water separator. When the level of liquid in the vault reaches 675 gallons, a pump is automatically activated, and the liquid is pumped to an above-ground storage tank located near the special waste/recyclables loading area.

The pump is equipped with an alarm system that alerts the operator if the pump is not working. The above-ground storage tank is equipped with a mechanical level indicator. The above-ground tank is pumped on a periodic basis and transferred to the leachate storage and treatment system. The volume of this water is expected to be relatively insignificant, with an average rate of generation expected to be less than 100 gallons per day.

- **Landfill gas flare station:** The landfill gas flare station is located west of the southwest corner of the Old Barney White Landfill. The station consists of the landfill gas flare, ancillary equipment, and a contractor office trailer. Sanitary waste from the office trailer work area is stored in a portable toilet for pickup by vacuum truck and is disposed of off-site.

B. Discharge to the South Kitsap Water Reclamation Facility

The City of Port Orchard (PO) and West Sound Utility District (WSUD) jointly own the South Kitsap Water Reclamation Facility (SKWRF). The facility was formerly known as the City of Port Orchard/West Sound Utility District Joint Wastewater Treatment Plant. WSUD operates the facility. SKWRF provides wastewater treatment with two separate treatment trains using different treatment processes: (i) complete mix activated sludge process, and (ii) Membrane Bioreactor (MBR) process. In addition, a ballasted sand clarifier at the facility can provide advanced primary treatment to peak flows that exceed the facility's secondary treatment capacity.

Table 2: Design Criteria for South Kitsap Water Reclamation Facility

Design Criteria for South Kitsap Water Reclamation Facility	
Maximum Month Design Flow (MMDF)	4.2 MGD
BOD ₅ Loading for Maximum Month	6,340 lbs/day
TSS Loading for Maximum Month	6,910 lbs/day

C. Discharge to the City of Bremerton Wastewater Treatment Plant

The City of Bremerton has owned, operated, and maintained a secondary wastewater treatment plant (West Plant) in west Bremerton since June 1985. Approximately 60% of Bremerton's sewer system consists of a combined sewage system that conveys a mixture of sanitary sewage and stormwater to the West Plant for treatment. The City of Bremerton upgraded the West Plant in 2009 to increase the amount of combined sewage it can treat and, in turn, further reduce the potential for CSO discharges. The West Plant operates as a conventional activated sludge secondary treatment system. The liquid stream treatment components include three mechanical bar screens, two aerated grit chambers, two Parshall flumes for flow measurement, two primary

clarifiers, two aeration basins with fine bubble diffusers, two secondary clarifiers, two chlorine contact basins for disinfection with sodium hypochlorite solution, and a sodium bisulfite solution dechlorination system. The plant also has a roughing biofilter available. The solids stream treatment system includes two rotating drum thickeners (RDTs), two anaerobic digesters, and a centrifuge. The plant also has a gravity thickener that is currently not in use. Pumps transfer primary sludge from the primary clarifiers directly to the anaerobic digesters for stabilization. Waste activated sludge pumps direct secondary sludge to the RDTs for thickening. The thickened secondary sludge is then pumped to the anaerobic digesters. The centrifuge dewateres the digested sludge before it is shipped out as a Class B biosolids to city-owned forest lands for silviculture purposes. Water removed from solids by the RDT and the centrifuge, along with supernatant decanted from the digesters, return to the head of the plant for treatment.

Design Criteria – City of Bremerton West Plant: Ecology originally approved design criteria for the City of Bremerton West Plant in the plans and specifications dated April 1983, prepared by CH2M Hill. Subsequently, Ecology approved higher flow design criteria for this plant in the Westside Wastewater Treatment Plant Rating Study dated December 2009, prepared by Richwine Environmental. The table below includes design criteria from the referenced reports.

Table 3: Design Criteria for City of Bremerton West Plant

Design Criteria for City of Bremerton West Plant	
Maximum Month Design Flow (MMDF)	15.5 MGD
Maximum Month Design Flow (MMDF) (May through September)	11.0 MGD
BOD ₅ Loading for Maximum Month	18,100 lb/day
TSS Loading for Maximum Month	22,600 lb/day

D. Wastewater characterization

Olympic View Sanitary Landfill reported the concentration of pollutants in the permit application and in discharge monitoring reports. The tabulated data represents the quality of the effluent discharged from March 2016 through August 2020. The effluent is characterized as follows:

Table 4: Wastewater Characterization

Parameter	Units	# of Samples	Average Value	Maximum Value
Flow	GPD	74	91500	120000
Biochemical Oxygen Demand (BOD ₅)	mg/L	10	37	140

Parameter	Units	# of Samples	Average Value	Maximum Value
Total Suspended Solids (TSS)	mg/L	10	8.6	39
Copper, Total	mg/L	8	0.019	0.027
Nickel, Total	mg/L	8	0.076	0.087
Zinc, Total	mg/L	8	0.040	0.067

Parameter	Units	# of Samples	Minimum Value	Maximum Value
pH	Std. units	14	6.88	8

E. Summary of compliance with previous permit issued

The previous permit placed effluent limits on Flow, BOD, TSS, Copper, Nickel and Zinc.

Olympic View Sanitary Landfill has complied with the effluent limits and permit conditions throughout the duration of the permit issued on February 12, 2016. Ecology assessed compliance based on its review of the facility's information in the Ecology Permitting and Reporting Information System (PARIS), discharge monitoring reports (DMRs) and on inspections conducted by Ecology.

F. State environmental policy act (SEPA) compliance

State law exempts the issuance, reissuance or modification of any wastewater discharge permit from the SEPA process as long as the permit contains conditions that are no less stringent than federal and state rules and regulations (RCW 43.21C.0383). The exemption applies only to existing discharges, not to new discharges.

III. Proposed Permit Limits

State regulations require that Ecology base limits in a State Waste Discharge permit on the:

- Technology and treatment methods available to treat specific pollutants (technology-based). Technology-based limits are set by the EPA and published as a regulation (40 CFR 400 - 471), or Ecology develops limits on a case-by-case basis (40 CFR 125.3, and RCW 90.48). Dischargers must treat wastewater using all known, available, reasonable methods of prevention, control, and treatment (AKART).

- Effects of the pollutants on the publicly-owned treatment works (POTW). Wastewater must not interfere with the operation of the POTW. Ecology considers local limits in developing permit limits.
- Applicable requirements of other local, state and federal laws.

Ecology applies the most stringent of these limits to each parameter of concern and further describes the proposed limits below.

The limits in this permit reflect information received in the application and from supporting reports (engineering, hydrogeology, monitoring, etc.). Ecology evaluated the permit application and determined the limits needed to comply with the rules adopted by the state of Washington. Ecology does not develop effluent limits for all reported pollutants. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, and are not listed in regulation.

Ecology does not usually develop permit limits for pollutants not reported in the permit application but may be present in the discharge. The permit does not authorize the discharge of the non-reported pollutants. During the five-year permit term, the facility's effluent discharge conditions may change from those conditions reported in the permit application. The facility must notify Ecology if significant changes occur in any constituent. Until Ecology modifies the permit to reflect additional discharge of pollutants, a permitted facility could be violating its permit.

A. Technology-based effluent limits

Waste discharge permits issued by Ecology specify conditions requiring all available and reasonable methods of prevention, control, and treatment (AKART) of discharges to waters of the state (RCW 90.48).

As Waste Management of Washington only seeks authorization to discharge process wastewater (leachate) from municipal solid waste to the City of Bremerton and City of Port Orchard POTWs, the landfill categorical limitations (which are only applicable to direct discharge) are not applicable to this site. In addition, the categorical limitations for Centralized Waste Treaters (40 CFR Part 437) which became effective on January 22, 2001, contain a specific exemption for landfills and transfer stations engaged in municipal solid waste-only operations. The Department of Ecology considers aeration to be consistent with AKART requirements, with respect to removal of BOD.

B. Effluent limits based on local limits – City of Bremerton

In order to protect the City of Bremerton POTW from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, effluent limitations for certain

parameters are necessary. Therefore, monitoring limitations for those three metals are included in the proposed permit. The limitations in the permit applicable to discharges to the City of Bremerton POTW are based on the City of Bremerton Municipal Code for metals and pH.

Table 5: Limits Based on City of Bremerton Local Limits

City of Bremerton Local Discharge Limitations City of Bremerton Municipal Code Chapter 15.03.110 (current December 2020)	
Parameter	Local Limitation (daily maximum except as noted)
BOD5 (mg/L)	200
TSS (mg/L)	200
Ammonia (mg/L)	50
Conductivity (mS/cm)	6.0 (30-day average)
Copper, total (mg/L)	0.75
Nickel, total (mg/L)	0.60
Zinc, total (mg/L)	2.0
pH (standard pH units)	6.0 – 10.0

C. Effluent limits based on local limits – South Kitsap Water Reclamation Facility

In order to protect the South Kitsap Water Reclamation Facility from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, effluent limitations for certain parameters are necessary for discharges to the City of Port Orchard POTW. The limitations for BOD₅ and TSS are based on the City of Port Orchard Municipal Code as cited in the table below. The metals limits are retained from the existing permit.

Table 6: Limits Based on City of Port Orchard Local Limits

City of Port Orchard Local Discharge Limitations	
City of Port Orchard Municipal Code Chapter 13.04.130 (current December 2020)	
Parameter	Local Limitation (daily maximum)
BOD5 (mg/L)	300
TSS (mg/L)	350
pH (standard pH units)	5.5 – 9.0

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Waste water must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW. Aeration and settling, as conducted in the waste storage pond, together with the secondary treatment provided at the POTW are anticipated by the Department of Ecology to result in compliance with AKART requirements.

The South Kitsap Water Reclamation Facility has a relatively small design capacity (4.2 MGD, maximum month design flow). Based on this fact, and the fact that landfill leachate BOD₅ values may approach 300 mg/L, the Department of Ecology proposes a flow limitation for landfill leachate the South Kitsap Water Reclamation Facility of 125,000 gallons per day. This flow limitation is intended to minimize the potential of upsets or other system perturbations at the South Kitsap Water Reclamation Facility.

D. Comparison of effluent limits with the previous permit issued on February 12, 2016

The effluent limits for discharges to South Kitsap in the proposed permit are identical to the effluent limits in the existing permit. The effluent limits for discharges to Bremerton have been changed to match Bremerton's current local limits and now include ammonia and conductivity.

Table 7: Comparison effluent limits with the previous permit for discharges to Bremerton

City of Bremerton Discharge Limitations City of Bremerton Municipal Code Chapter 15.03.110 (current December 2020)			
Parameter	Proposed Permit Limits to Bremerton	Current Ecology State Waste Discharge Permit limits to Bremerton	Average OVSL discharge over last 5 years
BOD5 (mg/L)	200	300	37.0
TSS (mg/L)	200	350	8.6
Ammonia, (mg/L)	50	N/A	N/A
Conductivity (mS/cm)	6.0	N/A	N/A
Copper, total (mg/L)	0.75 mg/L	3.0	0.02
Nickel, total (mg/L)	0.60 mg/L	2.5	0.08
Zinc, total (mg/L)	2.0 mg/L	5.0	0.04
pH (standard pH units)	6.0 – 10.0	6.0 – 10.0	7.65 – 7.7

IV. Monitoring Requirements

Ecology requires monitoring, recording, and reporting (WAC 173-216-110) to verify that the treatment process functions correctly and that the discharge complies with the permit's effluent limits.

If a facility uses a contract laboratory to monitor wastewater, it must ensure that the laboratory uses the methods and meets or exceeds the method detection levels required by the permit. The permit describes when facilities may use alternative methods. It also describes what to do in certain situations when the laboratory encounters matrix effects. When a facility uses an alternative method as allowed by the permit, it must report the test method, detection level (DL), and quantitation level (QL) on the discharge monitoring report or in the required report.

A. Lab accreditation

Ecology requires that facilities must use a laboratory registered or accredited under the provisions of chapter 173-50 WAC, Accreditation of Environmental Laboratories, to prepare all monitoring data (with the exception of certain parameters).

B. Wastewater monitoring

Ecology details the proposed monitoring schedule under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

The proposed permit requires additional monitoring of total kjeldahl nitrogen and nitrate-nitrogen to further characterize the facility's wastewater. Ecology will evaluate the necessity of continuing this monitoring during the next permit renewal.

V. Other Permit Conditions

A. Reporting and recordkeeping

Ecology based Special Condition S3 on its authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges [WAC 173-216-110 and CFR 403.12 (e),(g), and (h)].

B. Operations and maintenance

Ecology requires dischargers to take all reasonable steps to properly operate and maintain their wastewater treatment system in accordance with state regulations (WAC 173-240-080 and WAC 173-216-110).

C. Prohibited discharges

Ecology prohibits certain pollutants from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (chapter 173-303 WAC).

D. Dilution prohibited

Ecology prohibits the facility from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limits.

E. Non routine and unanticipated wastewater

Occasionally, this facility may generate wastewater not characterized in the permit application because it is not a routine discharge and the facility did not anticipate it at

the time of application. These wastes typically consist of waters used to pressure-test storage tanks or fire water systems or of leaks from drinking water systems.

The permit authorizes the discharge of non-routine and unanticipated wastewater under certain conditions. The facility must characterize these waste waters for pollutants and examine the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and on any opportunities for reuse, Ecology may:

- Authorize the facility to discharge the water.
- Require the facility to treat the wastewater.
- Require the facility to reuse the wastewater.

F. General conditions

Ecology bases the standardized general conditions on state law and regulations. They are included in all state waste discharge permits issued by Ecology.

VI. Public Notification of Noncompliance

Ecology may annually publish a list of all industrial users in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters in a local newspaper. Accordingly, this permit Special Condition informs the Facility that noncompliance with this permit may result in publication of the noncompliance.

VII. Permit Issuance Procedures

A. Permit modifications

Ecology may modify this permit to impose or change the numerical limits, if necessary to comply with changes in the pretreatment requirements, conditions in local sewer ordinances, or based on new information from sources such as inspections and effluent monitoring. It may also modify this permit to comply with new or amended state or federal regulations.

B. Proposed permit issuance

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limits and conditions believed necessary to control toxics. Ecology proposes that the permit be issued for five years.

VIII. References for Text and Appendices

Washington State Department of Ecology.

[Laws, Rules & Rulemaking](https://ecology.wa.gov/About-us/How-we-operate/rulemaking) (https://ecology.wa.gov/About-us/How-we-operate/rulemaking)

[Permit and Wastewater Related Information](https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance) (https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance)

[Permit Writer's Manual](https://apps.ecology.wa.gov/publications/documents/92109.pdf), January 2015. Publication Number 92-109
(https://apps.ecology.wa.gov/publications/documents/92109.pdf)

Appendix A - Public Involvement Information

Ecology proposes to reissue a permit to Olympic View Sanitary Landfill. The permit includes wastewater discharge limits and other conditions. This fact sheet describes the facility and Ecology's reasons for requiring permit conditions.

Ecology placed a Public Notice of Draft on March 16, 2021 in the Kitsap Sun to inform the public and to invite comment on the proposed draft State Waste Discharge permit and fact sheet.

The notice:

- Tells where copies of the draft Permit and Fact Sheet are available for public evaluation (a local public library, the closest Regional or Field Office, posted on our website).
- Offers to provide the documents in an alternate format to accommodate special needs.
- Urges people to submit their comments, in writing, before the end of the Comment Period
- Tells how to request a public hearing of comments about the proposed state waste discharge permit.
- Explains the next step(s) in the permitting process.

Ecology has published a document entitled [Frequently Asked Questions about Effective Public Commenting](https://apps.ecology.wa.gov/publications/documents/0307023.pdf), available at <https://apps.ecology.wa.gov/publications/documents/0307023.pdf>.

You may obtain further information from Ecology by telephone, (425) 649-7201, or by writing to the address listed below.

Water Quality Permit Coordinator
Department of Ecology
Northwest Regional Office
PO Box 330316
Shoreline, WA 98133-9716

The primary author of this permit and fact sheet is Robert Nolan.

Appendix B - Your Right to Appeal

You have a right to appeal this permit to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of the final permit. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2) (see glossary).

To appeal you must do the following within 30 days of the date of receipt of this permit:

- File your appeal and a copy of this permit with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this permit on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.

You must also comply with other applicable requirements in chapter 43.21B RCW and chapter 371-08 WAC.

ADDRESS AND LOCATION INFORMATION

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW STE 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

Appendix C - Glossary

1-DMax or 1-day maximum temperature -- The highest water temperature reached on any given day. This measure can be obtained using calibrated maximum/minimum thermometers or continuous monitoring probes having sampling intervals of thirty minutes or less.

7-DADMax or 7-day average of the daily maximum temperatures - The arithmetic average of seven consecutive measures of daily maximum temperatures. The 7-DADMax for any individual day is calculated by averaging that day's daily maximum temperature with the daily maximum temperatures of the three days prior and the three days after that date.

Acute toxicity - The lethal effect of a compound on an organism that occurs in a short time period, usually 48 to 96 hours.

AKART - The acronym for "all known, available, and reasonable methods of prevention, control and treatment." AKART is a technology-based approach to limiting pollutants from wastewater discharges, which requires an engineering judgment and an economic judgment. AKART must be applied to all wastes and contaminants prior to entry into waters of the state in accordance with RCW 90.48.010 and 520, WAC 173-200-030(2)(c)(ii), and WAC 173-216-110(1)(a).

Alternate point of compliance - An alternative location in the groundwater from the point of compliance where compliance with the groundwater standards is measured. It may be established in the groundwater at locations some distance from the discharge source, up to, but not exceeding the property boundary and is determined on a site specific basis following an AKART analysis. An "early warning value" must be used when an alternate point is established. An alternate point of compliance must be determined and approved in accordance with WAC 173-200-060(2).

Ambient water quality - The existing environmental condition of the water in a receiving water body.

Ammonia - Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Annual average design flow (AADF) - Average of the daily flow volumes anticipated to occur over a calendar year.

Average monthly (intermittent) discharge limit - The average of the measured values obtained over a calendar months' time taking into account zero discharge days.

Average monthly discharge limit - The average of the measured values obtained over a calendar months' time.

Background water quality - The concentrations of chemical, physical, biological or radiological constituents or other characteristics in or of groundwater at a particular point in time upgradient of an activity that has not been affected by that activity, [WAC 173-200-020(3)]. Background water quality for any parameter is statistically defined as the 95% upper tolerance interval with a 95% confidence based on at least eight hydraulically upgradient water quality samples. The eight samples are collected over a period of at least one year, with no more than one sample collected during any month in a single calendar year.

Best management practices (BMPs) - Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the state. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅ - Determining the five-day Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in receiving waters after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD₅ is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass - The intentional diversion of waste streams from any portion of a treatment facility.

Categorical pretreatment standards - National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties, which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Chlorine - A chemical used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Chronic toxicity - The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

Clean water act (CWA) - The federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance inspection-without sampling - A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance inspection-with sampling - A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable

statutes and regulations. In addition it includes as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Ecology may conduct additional sampling.

Composite sample - A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Construction activity - Clearing, grading, excavation, and any other activity, which disturbs the surface of the land. Such activities may include road building; construction of residential houses, office buildings, or industrial buildings; and demolition activity.

Continuous monitoring - Uninterrupted, unless otherwise noted in the permit.

Critical condition - The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Date of receipt - This is defined in RCW 43.21B.001(2) as five business days after the date of mailing; or the date of actual receipt, when the actual receipt date can be proven by a preponderance of the evidence. The recipient's sworn affidavit or declaration indicating the date of receipt, which is unchallenged by the agency, constitutes sufficient evidence of actual receipt. The date of actual receipt, however, may not exceed forty-five days from the date of mailing.

Detection limit - The minimum concentration of a substance that can be measured and reported with 99 percent confidence that the pollutant concentration is above zero and is determined from analysis of a sample in a given matrix containing the pollutant.

Dilution factor (DF) - A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction, for example, a dilution factor of 10 means the effluent comprises 10% by volume and the receiving water 90%.

Distribution uniformity - The uniformity of infiltration (or application in the case of sprinkle or trickle irrigation) throughout the field expressed as a percent relating to the average depth infiltrated in the lowest one-quarter of the area to the average depth of water infiltrated.

Early warning value - The concentration of a pollutant set in accordance with WAC 173-200-070 that is a percentage of an enforcement limit. It may be established in the effluent, groundwater, surface water, the vadose zone or within the treatment process. This

value acts as a trigger to detect and respond to increasing contaminant concentrations prior to the degradation of a beneficial use.

Enforcement limit - The concentration assigned to a contaminant in the groundwater at the point of compliance for the purpose of regulation, [WAC 173-200-020(11)]. This limit assures that a groundwater criterion will not be exceeded and that background water quality will be protected.

Engineering report - A document that thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report must contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Fecal coliform bacteria - Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.

Grab sample - A single sample or measurement taken at a specific time or over as short a period of time as is feasible.

Groundwater - Water in a saturated zone or stratum beneath the surface of land or below a surface water body.

Industrial user - A discharger of wastewater to the sanitary sewer that is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial wastewater - Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business; from the development of any natural resource; or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated stormwater and, also, leachate from solid waste facilities.

Interference - A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and
- Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge

management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local limits - Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Major facility - A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum daily discharge limit - The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is the maximum discharge of a pollutant measured during a calendar day.

Maximum day design flow (MDDF) - The largest volume of flow anticipated to occur during a one-day period, expressed as a daily average.

Maximum month design flow (MMDF) - The largest volume of flow anticipated to occur during a continuous 30-day period, expressed as a daily average.

Maximum week design flow (MWDF) - The largest volume of flow anticipated to occur during a continuous 7-day period, expressed as a daily average.

Method detection level (MDL) - See Detection Limit.

Minor facility - A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Mixing zone - An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The permit specifies the area of the authorized mixing zone that Ecology defines following procedures outlined in state regulations (chapter 173-201A WAC).

National pollutant discharge elimination system (NPDES) - The NPDES (Section 402 of the Clean Water Act) is the federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the state of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both state and federal laws.

pH - The pH of a liquid measures its acidity or alkalinity. It is the negative logarithm of the hydrogen ion concentration. A pH of 7 is defined as neutral and large variations above or below this value are considered harmful to most aquatic life.

Pass-through - A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

Peak hour design flow (PHDF) - The largest volume of flow anticipated to occur during a one-hour period, expressed as a daily or hourly average.

Peak instantaneous design flow (PIDF) - The maximum anticipated instantaneous flow.

Point of compliance - The location in the groundwater where the enforcement limit must not be exceeded and a facility must comply with the Ground Water Quality Standards. Ecology determines this limit on a site-specific basis. Ecology locates the point of compliance in the groundwater as near and directly downgradient from the pollutant source as technically, hydrogeologically, and geographically feasible, unless it approves an alternative point of compliance.

Potential significant industrial user (PSIU) - A potential significant industrial user is defined as an Industrial User that does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

- a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
- b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes). Ecology may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation level (QL) - Also known as Minimum Level of Quantitation (ML) – The lowest level at which the entire analytical system must give a recognizable signal and acceptable calibration point for the analyte. It is equivalent to the concentration of the lowest calibration standard, assuming that the lab has used all method-specified sample weights, volumes, and cleanup procedures. The QL is calculated by multiplying the MDL by 3.18 and rounding the result to the number nearest to $(1, 2, \text{or } 5) \times 10^n$, where n is an integer. (64 FR 30417).

ALSO GIVEN AS:

The smallest detectable concentration of analyte greater than the Detection Limit (DL) where the accuracy (precision & bias) achieves the objectives of the intended purpose. (Report of the Federal Advisory Committee on Detection and Quantitation Approaches and Uses in Clean Water Act Programs Submitted to the US Environmental Protection Agency December 2007).

Reasonable potential - A reasonable potential to cause a water quality violation, or loss of sensitive and/or important habitat.

Responsible corporate officer - A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or

more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Sample Maximum - No sample may exceed this value.

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.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug discharge - Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate that may cause interference or pass through with the POTW or in any way violate the permit conditions or the POTW's regulations and local limits.

Soil scientist - An individual who is registered as a Certified or Registered Professional Soil Scientist or as a Certified Professional Soil Specialist by the American Registry of Certified Professionals in Agronomy, Crops, and Soils or by the National Society of Consulting Scientists or who has the credentials for membership. Minimum requirements for eligibility are: possession of a baccalaureate, masters, or doctorate degree from a U.S. or Canadian institution with a minimum of 30 semester hours or 45 quarter hours professional core courses in agronomy, crops or soils, and have 5,3,or 1 years, respectively, of professional experience working in the area of agronomy, crops, or soils.

Solid waste - All putrescible and non-putrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

Soluble BOD₅ - Determining the soluble fraction of Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of soluble organic material present in an effluent that is utilized by bacteria. Although the soluble BOD₅ test is not specifically described in Standard Methods, filtering the raw sample through at least a 1.2 um filter prior to running the standard BOD₅ test is sufficient to remove the particulate organic fraction.

State waters - Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater - That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based effluent limit - A permit limit based on the ability of a treatment method to reduce the pollutant.

Total coliform bacteria - A microbiological test, which detects and enumerates the total coliform group of bacteria in water samples.

Total dissolved solids - That portion of total solids in water or wastewater that passes through a specific filter.

Total maximum daily load (TMDL) - A determination of the amount of pollutant that a water body can receive and still meet water quality standards.

Total suspended solids (TSS) - Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Upset - An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Water quality-based effluent limit - A limit imposed on the concentration of an effluent parameter to prevent the concentration of that parameter from exceeding its water quality criterion after discharge into receiving waters.

Appendix D - Response to Comments

Ecology did not receive any comments during the public notice of draft period.