



Issuance Date: __?__

Effective Date: __?__

Expiration Date: __?__

**National Pollutant Discharge Elimination System
Waste Discharge Permit WA0031682**

**State of Washington
DEPARTMENT OF ECOLOGY**

Northwest Region Office
PO Box 330316
Shoreline WA 98133-9716

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and

The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1342 et seq

**City of Seattle, Seattle Public Utilities
700 5th Ave, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018**

is authorized to discharge in accordance with the Special and General Conditions that follow.

Rachel McCrea
Water Quality Section Manager
Northwest Region Office
Washington State Department of Ecology

SUMMARY OF PERMIT SUBMITTALS..... 4

SPECIAL CONDITIONS..... 5

S1. Authorized combined sewer overflow (CSO) discharge locations..... 5

S2. Nine minimum controls 9

S3. Monitoring requirements 12

 S3.A. Combined sewer overflow (CSO) monitoring schedule 12

 S3.B. Sampling and analytical procedures..... 12

 S3.C. Flow measurement, and continuous monitoring devices 13

 S3.D. Laboratory accreditation 13

S4. Reporting and recording requirements..... 13

 S4.A. Monthly CSO discharge monitoring reports..... 14

 S4.B. Combined sewer overflow annual report 14

 S4.C. Other permit submittals and schedules 15

 S4.D. Records retention 15

 S4.E. Recording of results..... 15

 S4.F. Additional monitoring by the Permittee 16

 S4.G. Reporting permit violations 16

 S4.H. Other reporting 19

 S4.I. Maintaining a copy of this permit 19

S5. Operation and maintenance..... 19

 S5.A. Operation and maintenance program 19

 S5.B. Short-term reduction..... 19

 S5.C. Electrical power failure 20

 S5.D. Prevent connection of inflow..... 20

 S5.E. Operations and maintenance (O&M) manual 20

S6. Requirements for controlled combined sewer overflows..... 21

 S6.A. CSOs identified as controlled 21

 S6.B. Performance standards for controlled CSO outfalls..... 21

 S6.C. CSO post construction monitoring..... 21

 S6.D. Corrective actions for previously controlled CSO outfalls 22

S7. Requirements for uncontrolled combined sewer overflows..... 24

 S7.A. Combined sewer overflow reduction plan amendment..... 24

 S7.B. Engineering reports and plans and specifications for CSO reduction projects .. 24

S8. Outfall rehabilitation 25

S9. Application for permit renewal or modification for facility changes 25

REFERENCES 26

GENERAL CONDITIONS..... 28

G1. Signatory requirements..... 28

G2. Right of inspection and entry 29

G3. Permit actions 29

G4.	Reporting planned changes.....	31
G5.	Plan review required	31
G6.	Compliance with other laws and statutes.....	31
G7.	Transfer of this permit.....	31
G8.	Reduced production for compliance	32
G9.	Removed substances	32
G10.	Duty to provide information.....	32
G11.	Other requirements of 40 CFR	32
G12.	Additional monitoring	32
G13.	Payment of fees.....	33
G14.	Penalties for violating permit conditions.....	33
G15.	Upset	33
G16.	Property rights	33
G17.	Duty to comply	34
G18.	Toxic pollutants.....	34
G19.	Penalties for tampering.....	34
G20.	Compliance schedules.....	34
G21.	Service agreement review	34

**APPENDIX A – List of Pollutants, Analytical Methods, Detection Levels and
Quantitation Levels 35**

Table 1 - Summary of permit submittals.....	4
Table 2 - Combined sewer overflow (CSO) discharge locations	5
Table 3 - Combined sewer overflow (CSO) monitoring schedule.....	12

SUMMARY OF PERMIT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Table 1 - Summary of permit submittals

Permit section	Submittal	Frequency	First submittal date
S4.A	Monthly Discharge Monitoring Report (DMR)	Monthly	TBD
S4.B	CSO Annual Report	Annually	March 31, 2026
S4.G	Reporting permit violations	As necessary	
S5.F	Operations and maintenance manual update	As necessary	
S6.C	Post Construction Monitoring Plan	1/permit cycle	December 31, 2027
S6.D	CSO Outfall Corrective Actions Report	As necessary	lank
S7.A	Updated Long Term Control Plan	1/permit cycle	December 31, 2026
S7.B	CSO Engineering Reports	As necessary	lank
S8	Confirmation of outfall inspection and rehabilitation	1/permit cycle	December 31, 2026
S8	Outfall Inspection and Rehabilitation Plan	1/permit cycle	December 31, 2028
S8	Application for permit renewal	1/permit cycle	TBD
G1	Notice of change in authorization	As necessary	
G4	Reporting planned changes	As necessary	
G5	Engineering report for construction or modification activities	As necessary	
G7	Notice of permit transfer	As necessary	
G10	Duty to provide information	As necessary	
G20	Compliance schedules	As necessary	
G21	Contract submittal	As necessary	

SPECIAL CONDITIONS

S1. Authorized combined sewer overflow (CSO) discharge locations

Beginning on the effective date of this permit, the Permittee may discharge combined domestic wastewater and stormwater from the following list of combined sewer overflow (CSOs) outfalls. The outfalls represent occasional point sources of pollutants as a result of overloading of the combined sewer system during precipitation events. The permit prohibits discharges not caused by precipitation.

As allowed by chapter [173-201A-400 WAC](#), this permit authorizes a mixing zone for each CSO outfall identified below with a control status of “Controlled”. The state’s water quality standards exempt this mixing zone from numeric size restrictions for regulated mixing zones as well as limitations related to overlapping mixing zones. In accordance with chapters [173-201A-400\(4\)](#) this permit does not authorize a mixing zone for a CSO outfall when doing so causes adverse impacts that threaten characteristic uses of the receiving water, result in an exceedance of the Sediment Management Standards, cause a loss of sensitive or important habitat, or adversely affects public health.

Table 2 - Combined sewer overflow (CSO) discharge locations

Outfall No.	Address	Receiving water body	Latitude	Longitude	Control Status
12	NE 60th ST & NE WINDERMERE RD	Lake Washington	47.67108	-122.25295	Controlled
13	WINDERMERE PARK; NE AMBLESIDE RD & NE PENRITH RD	Lake Washington	47.66382	-122.26522	Uncontrolled
14	4218 55TH AVE NE	Lake Washington	47.65925	-122.26799	Controlled
15	NE LAURELCREST LN & 51ST AVE NE	Lake Washington	47.65523	-122.27129	Uncontrolled
16	3005 WEBSTER POINT RD NE	Lake Washington	47.64845	-122.27815	Controlled
18	3901 NE SURBER DR	Union Bay	47.65672	-122.28764	Controlled
19	4501 27TH AVE NE	Union Bay	47.66103	-122.29782	Controlled
20	E SHELBY ST & EAST PARK DR E	Union Bay	47.64696	-122.30074	Controlled
22	2539 39TH AVE E	Union Bay	47.64246	-122.28285	Controlled
24	E LEE ST & 42ND AVE E	Lake Washington	47.63093	-122.27623	Controlled
25	E LEE ST & 42ND AVE E	Lake Washington	47.63087	-122.27533	Controlled

Outfall No.	Address	Receiving water body	Latitude	Longitude	Control Status
27	1502 LAKE WASHINGTON BLVD	Lake Washington	47.61492	-122.27996	Controlled
28	1500 LAKE WASHINGTON BLVD	Lake Washington	47.61385	-122.28017	Uncontrolled
29	LAKE WASHINGTON BLVD & FULLERTON AVE	Lake Washington	47.60683	-122.28210	Controlled
30	LAKE WASHINGTON BLVD & E JEFFERSON ST	Lake Washington	47.60577	-122.28262	Uncontrolled
31	299 LAKESIDE AVE S	Lake Washington	47.60013	-122.28498	Uncontrolled
32	LAKESIDE AVE S & S DEARBORN ST	Lake Washington	47.59572	-122.28621	Uncontrolled
34	LAKESIDE AVE S & S CHARLES ST	Lake Washington	47.59451	-122.28666	Controlled
35	LAKESIDE AVE S & S MASSACHUSETTS ST	Lake Washington	47.58756	-122.28456	Controlled
36	2310 LAKE WASHINGTON BLVD S	Lake Washington	47.58261	-122.28612	Controlled
38	STANLEY SAYRES PARK; 3808 LAKE WASHINGTON BLVD S	Lake Washington	47.57139	-122.27555	Uncontrolled
40	LAKE WASHINGTON BLVD S & 49TH AVE S	Lake Washington	47.56840	-122.27192	Uncontrolled
41	LAKE WASHINGTON BLVD S & 50TH AVE S	Lake Washington	47.56824	-122.26983	Uncontrolled
42	4608 LAKE WASHINGTON BLVD S	Lake Washington	47.56234	-122.26664	Uncontrolled
43	LAKE WASHINGTON BLVD S & S ALASKA ST	Lake Washington	47.56062	-122.26389	Uncontrolled
44	SEWARD PARK; LAKE WASHINGTON BLVD S & S JUNEAU ST	Lake Washington	47.54735	-122.25531	Controlled
45	MARTHA WASHINGTON PARK; 5711 S HOLLY ST	Lake Washington	47.54150	-122.25961	Controlled
46	PRITCHARD ISLAND BEACH PARK; 8314 ISLAND DR S	Lake Washington	47.52946	-122.26177	Controlled
47	BEER SHEVA PARK; SEWARD PARK AVE S & S HENDERSON ST	Lake Washington	47.52329	-122.26287	Uncontrolled
48	9722 RAINIER AVE S	Lake Washington	47.51601	-122.25318	Controlled
49	9861 RAINIER AVE S	Lake Washington	47.51341	-122.25029	Uncontrolled
57	6701 SEAVIEW AVE NW	Puget Sound - Central	47.67843	-122.40693	Controlled
59	5637 SEAVIEW AVE NW	Salmon Bay	47.67029	-122.40590	Uncontrolled

Outfall No.	Address	Receiving water body	Latitude	Longitude	Control Status
60	W CRAMER ST & 39TH AVE W	Salmon Bay	47.66782	-122.40740	Uncontrolled
61	2599 PERKINS LN W	Elliott Bay	47.64315	-122.41871	Controlled
62	2599 PERKINS LN W	Elliott Bay	47.64200	-122.41774	Controlled
64	1499 32ND AVE W	Elliott Bay	47.63158	-122.39925	Controlled
68	PIER 91 AT 1523 W GARFIELD ST	Elliott Bay	47.63307	-122.37919	Uncontrolled
69	ALASKAN WAY & VINE ST	Elliott Bay	47.61321	-122.35232	Uncontrolled
71	ALASKAN WAY & MADISON ST	Elliott Bay	47.60370	-122.33858	Uncontrolled
78	SEACREST PARK; HARBOR AVE SW & FAIRMOUNT AVE SW	Elliott Bay	47.58752	-122.37723	Controlled
80	DON ARMENI PARK; 112 HARBOR AVE SW	Elliott Bay	47.59327	-122.38206	Controlled
83	ALKI BEACH PARK AT 1501 ALKI AVE SW	Puget Sound - Central	47.59125	-122.39415	Controlled
85	3219 POINT PL SW	Puget Sound - Central	47.57676	-122.42008	Controlled
88	5079 BEACH DR SW	Puget Sound - Central	47.55567	-122.40025	Controlled
90	LOWMAN BEACH PARK; 7015 BEACH DR SW	Puget Sound - Central	47.53994	-122.39988	Controlled
91	LINCOLN PARK; 8635 FAUNTLEROY WAY SW	Puget Sound - Central	47.52569	-122.39549	Controlled
94	FAUNTLEROY FERRY TERMINAL; 4829 SW BARTON ST	Puget Sound - Central	47.52372	-122.39673	Controlled
95	9279 FAUNTLEROY WAY SW	Puget Sound - Central	47.52050	-122.39578	Uncontrolled
99	TERMINAL 5 AT 3450 W MARGINAL WAY SW	West Waterway - Duwamish River	47.57367	-122.36120	Controlled
107	3411 E MARGINAL WAY S	East Waterway - Duwamish River	47.57367	-122.34269	Uncontrolled
111	3 S OREGON ST	Duwamish River	47.56314	-122.34531	Uncontrolled
120	2770 WESTLAKE AVE N	Lake Union	47.64541	-122.34706	Controlled
121	2046 WESTLAKE AVE N	Lake Union	47.63811	-122.34026	Controlled
124	LAKE UNION PARK AT 800 WESTLAKE AVE N	Lake Union	47.62663	-122.33868	Controlled

Outfall No.	Address	Receiving water body	Latitude	Longitude	Control Status
127	1099 FAIRVIEW AVE N	Lake Union	47.62965	-122.33123	Controlled
129	TERRY PETTUS PARK; FAIRVIEW AVE E & E NEWTON ST	Lake Union	47.63681	-122.32950	Controlled
130	LYNN ST PARK; FAIRVIEW AVE E & E LYNN ST	Lake Union	47.63959	-122.33037	Controlled
131	2373 FAIRVIEW AVE E	Lake Union	47.64209	-122.33001	Controlled
132	ROANOKE ST PARK; FAIRVIEW AVE E & E ROANOKE ST	Lake Union	47.64331	-122.32883	Controlled
134	FAIRVIEW AVE E & E ALLISON ST	Lake Union	47.64924	-122.32501	Controlled
135	3315 EASTLAKE AVE E	Lake Union	47.65208	-122.32092	Uncontrolled
136	3100 PORTAGE BAY PL E	Lake Union	47.64885	-122.31769	Controlled
138	1209 E SHELBY ST	Portage Bay	47.64693	-122.31604	Controlled
139	MONTLAKE PLAYFIELD AT 1618 E CALHOUN ST	Portage Bay	47.64268	-122.31077	Uncontrolled
140	W MONTLAKE PARK; WEST PARK DR E & E SHELBY ST	Portage Bay	47.64693	-122.30952	Uncontrolled
141	BRYANT SITE PARK AT 1215 NE BOAT ST	Portage Bay	47.65086	-122.31563	Controlled
144	3790 LATONA AVE NE	Lake Union	47.65313	-122.32556	Controlled
145	SUNNYSIDE AVE N BOAT RAMP; 2301 N NORTHLAKE WAY	Lake Union	47.65009	-122.33048	Controlled
146	1430 N NORTHLAKE WAY	Lake Union	47.64722	-122.33962	Controlled
147	N NORTHLAKE WAY & STONE WAY N	Lake Union	47.64801	-122.34285	Uncontrolled
148	4125 9TH AVE NW	Lake Washington - Ship Canal	47.65653	-122.36679	Controlled
151	5301 24TH AVE NW	Salmon Bay Waterway	47.66680	-122.38821	Uncontrolled
152	5301 28TH AVE NW	Salmon Bay Waterway	47.66728	-122.39284	Uncontrolled
161	MAGNUSON PARK AT 6451 65TH AVE NE	Lake Washington	47.67713	-122.24909	Controlled
165	LAKE WASHINGTON BLVD S & S ALASKA ST	Lake Washington	47.56061	-122.26401	Uncontrolled
168	2311 SW MYRTLE ST	Longfellow Creek	47.53920	-122.36241	Uncontrolled

Outfall No.	Address	Receiving water body	Latitude	Longitude	Control Status
169	LONGFELLOW CREEK; 2450 SW THISTLE ST	Longfellow Creek	47.52916	-122.36380	Uncontrolled
170	2311 SW MYRTLE ST	Longfellow Creek	47.53919	-122.36242	Controlled
171	CHINOOK BEACH PARK AT 9510 RAINIER AVE S	Lake Washington	47.52062	-122.25972	Uncontrolled
174	FREMONT CANAL PARK AT 151 NW CANAL ST	Lake Washington - Ship Canal	47.65276	-122.35980	Uncontrolled
175	FAIRVIEW AVE E & E GARFIELD ST	Lake Union	47.63389	-122.32722	Controlled

S2. Nine minimum controls

In accordance with chapter 173-245 WAC and US EPA CSO control policy (59 FR 18688), the Permittee must implement and document the following nine minimum controls (NMC) for CSOs. The Permittee must document compliance with the NMC in the annual CSO report as required in Special Condition S4.B.

The Permittee must comply with the following technology-based requirements; the Permittee must:

1. Implement proper operation and maintenance programs for the sewer system and all CSO outfalls to reduce the magnitude, frequency, and duration of CSOs. The Permittee must implement the Operation and Maintenance Plan for the Combined Sewer System (CSS) that will include the elements listed below. The Permittee also must update the plan to incorporate any changes to the system and must operate and maintain the system according to the plan. The Permittee must keep records to document the implementation of the plan.

a. *Inspection and Maintenance of CSS.*

The Permittee must inspect and maintain all CSO structures, regulators, pump stations, and tide gates to ensure that they are in good working condition and adjusted to minimize CSOs and prevent tidal inflow. The Permittee must inspect each CSO regulator structure at an appropriate frequency to ensure no dry weather overflows are occurring. The inspection must include, but is not limited to, determining the extent of debris and grit buildup, and removing any debris or transfer of debris to the County system that may constrict flow, cause blockage, or result in a dry weather overflow. The Permittee must keep records of the inspections. For CSO regulator structures that are inaccessible, the Permittee may perform a visual check of the overflow pipe to determine whether or not the CSO is occurring during dry weather flow conditions.

- b. *Provision for Trained Staff.*

The Permittee must ensure the availability of trained staff to carry out the operation, maintenance, repair, and testing functions required to ensure compliance with the terms and conditions of this permit.
 - c. *Allocation of Funds for O&M.*

The Permittee must allocate adequate funds specifically for operation and maintenance activities.
2. Implement procedures that will maximize use of the collection system for wastewater storage that can be accommodated by the storage capacity of the collection system to reduce the magnitude, frequency, and duration of CSOs.
 3. Review and modify, as appropriate, existing pretreatment program to minimize CSO impacts from the discharges from non-domestic users. Compliance with this control includes, but is not limited to, enforcing the Permittee's FOG ordinances, and assisting King County in administering their Industrial Pretreatment Program within the Permittee's service area.
 4. Operate the conveyance system to King County's interceptors and POTW/CSO treatment plants at the maximum transferable flow during wet weather flow conditions/events and deliver all flows to the treatment plants within the constraints of the capacity of the treatment plants. The Permittee must keep records to document these actions.
 5. Not discharge overflows from CSO outfalls except as a result of precipitation events. This permit prohibits dry weather overflows from CSO outfalls. The Permittee must report each dry weather overflow to Ecology immediately per Special Condition S4.G. When it detects a dry weather overflow, the Permittee must begin corrective action immediately and inspect the dry weather overflow each subsequent day until it has eliminated the overflow. The Permittee must maintain records of the cause, corrective measures taken, estimate of the overflow volume and the dates of beginning and cessation of the dry weather overflow.
 6. Implement measures to control solid and floatable materials in CSOs.
 7. Implement a pollution prevention program focused on reducing the impact of CSOs on receiving waters. As an element of the pollution prevention program, the Permittee must implement best management practices (BMPs) to control the sources of pollutants in stormwater runoff that enters the Permittee's combined sewer system. Ecology's [Stormwater Management Manual for Western Washington](#) contains applicable BMPs the Permittee may implement. The Permittee may also use BMPs contained in other Ecology-approved equivalent stormwater manuals. The Permittee must begin implementing revisions to the

pollution prevention program by June 30, 2026, and submit a schedule for full implementation in the CSO annual report due March 31, 2027.

The pollution prevention program must (1) include all areas served by the Permittee's CSS, (2) involve coordination with other jurisdictions as applicable, (3) include source tracing investigations to find and remove sources of pollutants to combined sewer infrastructure and receiving waters, and (4) include regular cleaning and maintenance of CSO infrastructure and infrastructure owned and/or operated by other jurisdictions that may connect to CSO infrastructure. The Permittee must use information obtained from the pollution prevention program in CSO basins to inform source control needs and actions. This program must consider BMPs to control pollutants such as, but not limited to, copper, zinc, PCBs, and 6PPD/6PPD-q. The program must identify criteria the Permittee will use to assess the effectiveness of BMP and identify the frequency for evaluations and analytical methods used for any monitoring. Any monitoring to assess the effectiveness of BMPs for reducing PCBs must use EPA method 1668c. Each annual report must document the results of evaluations completed during the reporting year.

8. Implement and maintain a public notification process to inform the citizens of when and where CSOs occur. The process must include (a) mechanism to alert people of the occurrence of CSOs and (b) a system to determine the nature and duration of conditions that are potentially harmful for users of receiving waters due to CSOs.
9. Monitor CSO outfalls to characterize CSO impacts and the efficacy of CSO controls. This must include collection of data the Permittee will use to document the existing baseline conditions, evaluate the efficacy of the technology-based controls, and determine the baseline conditions upon which it will base the long-term control plan. This data must include:
 - a. Characteristics of the combined sewer system, including the population served by the combined portion of the system and locations of all CSO outfalls in the CSS.
 - b. Total number of CSO events, and the frequency and duration of CSOs for a representative number of events.
 - c. Locations and designated uses of receiving water bodies.
 - d. Water quality data for receiving water bodies.
 - e. Water quality impacts directly related to CSO (e.g., beach closing, floatables, wash-up episodes, fish kills).

S3. Monitoring requirements

S3.A. Combined sewer overflow (CSO) monitoring schedule

The Permittee must monitor all discharges from CSO outfalls listed in Special Condition S1 using the following monitoring schedule. Permittees must use automatic flow monitoring equipment to collect the information required below. The Permittee must calibrate flow monitoring equipment according to requirements in Condition S3.C.

In addition to the event-based monitoring identified in Table 3, the Permittee must conduct ambient water quality and sediment quality monitoring according to the approved post-construction monitoring plan (see Special Condition S6.C).

A CSO discharge is defined as any untreated CSO which will exit or has exited the CSO outfall.

Table 3 - Combined sewer overflow (CSO) monitoring schedule

Parameter	Units	Minimum sampling frequency	Sample type
Volume discharged	Gallons	Per Event ^c	Measurement/Calculation ^{a,b}
Discharge duration	Hours	Per Event ^c	Measurement
Storm duration	Hours	Per Event ^d	Measurement
Precipitation	Inches	Per Event ^c	Measurement/Calculation ^b

Footnotes:

^a Flow measurement must be continuous, except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. During periods of interrupted service, a calculation may be used to estimate the discharge volume. An explanation must be provided in the monthly DMR for all disruptions in flow measurement.

^b “Measurement/Calculation” means the total volume of the discharge or amount of precipitation event as estimated by direct measurement or indirectly by calculation (i.e. flow weirs, pressure transducers, tipping bucket). Precipitation must be measured by the nearest possible precipitation-measuring device and actively monitored during the period of interest.

^c “Per Event” means a unique flow event as defined in the Permit Writer’s Manual, (Ecology, 2018), Chapter 5, Section 3.4.4. Ecology defines the minimum inter-event period (MIET) as 24 hours. A CSO event is considered to have ended only after at least 24 hours has elapsed since the last measured occurrence of an overflow.

^d Storm duration is the amount of total time when precipitation occurred that contributed to a discharge event. It is determined on a case-by-case basis.

S3.B. Sampling and analytical procedures

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 (or as applicable in 40 CFR subchapter N [Parts 400–471] or 40 CFR subchapter O [Parts 501-503]) unless otherwise specified in this permit. Ecology may specify alternative methods for parameters without limits and for those parameters without an EPA approved test method in 40 CFR Part 136.

S3.C. Flow measurement, and continuous monitoring devices

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard, the manufacturer's recommendation, and approved O&M manual procedures for the device and the waste stream.
3. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
4. Establish a calibration frequency for each device or instrument in the O&M manual that conforms to the frequency recommended by the manufacturer.
5. Calibrate flow-monitoring devices at a minimum frequency of at least one calibration per year.
6. Maintain calibration records for at least three years.

S3.D. Laboratory accreditation

The Permittee must ensure that all monitoring data required by Ecology for permit specified parameters is prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 Washington Administrative Code (WAC), Accreditation of Environmental Laboratories. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. The Permittee must obtain accreditation for conductivity and pH if it must receive accreditation or registration for other parameters.

S4. Reporting and recording requirements

The Permittee must monitor and report in accordance with the following conditions. Falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

S4.A. Monthly CSO discharge monitoring reports

The first monitoring period begins on the effective date of the permit (unless otherwise specified). The Permittee must:

1. Summarize, report, and submit monitoring data obtained during each monitoring period on the electronic Discharge Monitoring Report (DMR) form provided by Ecology within the [Water Quality Permitting Portal](#)¹. Include data for each of the parameters tabulated in Special Conditions S3 and as required by the form. Report a value for each day sampling occurred (unless specifically exempted in the permit) and for the summary values (when applicable) included on the electronic form.
2. Submit DMRs by the 28th day of the following month.
3. Enter the “No Discharge” reporting code for an entire DMR, for a specific monitoring point, or a specific parameter as appropriate, if the Permittee did not have a CSO discharge during a given monitoring period.

S4.B. Combined sewer overflow annual report

The Permittee must submit a CSO annual report to Ecology for review and approval by March 31st of each year. The CSO annual report must cover the previous calendar year. The report must comply with the requirements of WAC 173-245-090(1) and must include documentation of compliance with the nine minimum controls for CSOs described in Special Condition S2. The Permittee must submit the reports electronically using the *Water Quality Permitting Portal – Permit Submittals* application. Each submittal must include all appropriate written report(s) in PDF format. The CSO annual report must include the following information:

1. A summary of the number and volume of untreated discharge events per outfall for that year.
2. A summary of the 20-year moving average number of untreated discharge events per outfall, calculated once annually.
3. An explanation of the previous year’s CSO reduction accomplishments.
4. A list of CSO reduction projects planned for the next year.
5. Documentation of compliance with the Nine Minimum Controls described in Special Condition S2.
6. A detailed description of the pollution prevention program required by NMC-7 in Special Condition S2.7. The report must describe the appropriate BMPs along with the legal authority and administrative procedures the Permittee will use to ensure effective implementation of the program. If the legal authority and/or

¹ <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance>

- administrative procedures are not in place, the Annual CSO Report must include a detailed description of the steps needed to establish such a program and the timeline for developing the program.
7. The results of any post-construction monitoring completed during the reporting period.
 8. A detailed discussion of any corrective action projects implemented according to the adaptive management requirements in Special Condition S6.D.

S4.C. Other permit submittals and schedules

The Permittee must use the Water Quality Permitting Portal – Permit Submittals application (unless otherwise specified in the permit) to submit all permit-required reports by the date specified in the permit.

When another permit condition requires submittal of a paper (hard copy) report, the Permittee must ensure that it is postmarked or received by Ecology no later than the dates specified by this permit. Send these paper reports to Ecology at:

Water Quality Permit Coordinator
Department of Ecology
Northwest Region Office
P.O. Box 330316
Shoreline, WA 98133-9716

S4.D. Records retention

The Permittee must retain records of all monitoring information for a minimum of three years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. The Permittee must extend this period of retention during any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

S4.E. Recording of results

For each measurement or sample taken, the Permittee must record the following information:

1. The date, exact place, method, and time of sampling or measurement.
2. The individual who performed the sampling or measurement.
3. The date and time the analysis was performed.
4. The individual who performed the analysis.
5. The analytical technique or method used.
6. The results of all analyses.

S4.F. Additional monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Special Condition S3 of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's DMR unless otherwise specified by Special Condition S3.

S4.G. Reporting permit violations

The Permittee must take the following actions when it violates or is unable to comply with any permit condition:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.

The permittee must make reasonable attempts to collect a sample of any unusual discharge or discharge condition including prohibited bypasses, upsets, and maintenance-related conditions affecting effluent quality. The sample must be representative of the volume and nature of the uncharacteristic discharge. The additional monitoring results must be reported with written follow-up reports described below.

2. Immediate reporting

The Permittee must immediately report (see definition of "immediate reporting" in Appendix C of the Fact Sheet) to Ecology and the local health jurisdiction at the numbers listed below, all:

- Collection system overflows that discharge to surface water, stormwater conveyance systems, or into areas open to public access. This reporting requirement does not apply to permitted CSO discharges.
- Any other failures of the sewage system (pipe breaks, etc.) that may impact surface water or public health.

Northwest Region 206-594-0000

Office

Public Health of WaterRecreationProgramSewageRelease@kingcounty.gov

Seattle – King (business hours)

County 206-263-7885 (after business hours)

Additionally, for any sanitary sewer overflow (SSO) that discharges to a municipal separate storm sewer system (MS4), the Permittee must notify the appropriate MS4 owner or operator. The Permittee must report Dry Weather Overflows and backups into buildings within 24 hours, as required below.

Whenever any of the events listed in permit section S4.G.2 affects marine waters, the Permittee must also immediately report to the Department of Health, Shellfish Program at the number listed below:

Department of Health, Shellfish Program 360-789-8962

3. Five-day follow up report

The Permittee must also submit a written report within five days of the time that the Permittee becomes aware of any reportable event under S4.G.2. (See definition of “Days (compliance period interval)” in Appendix C of the Fact Sheet.)

Submit the written report electronically using the Water Quality Permitting Portal – Permit Submittals application under the “As Needed, 5-day Written Follow-up” submittal schedule. Include the ERTS number in the name of the file uploaded for this submittal. If the letter covers multiple ERTS reports, include the incident date in the file name (example file names: “ERTS XXXXXX follow-up” or “follow-up-MMDDYYYY incidents”)

The report must contain:

- a. A description of the noncompliance and its cause.
- b. The period of noncompliance, including exact dates and times.
- c. The estimated time the Permittee expects the noncompliance to continue if not yet corrected.
- d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- e. Estimate the quantity (in gallons) of the untreated overflow.

4. Waiver of written reports

Ecology may waive the report required in S4.G.3 on a case-by-case basis if the Permittee has submitted a timely oral report. If a waiver is requested, the Permittee must obtain documentation of this waiver in writing or email from Ecology.

5. Reporting – Dry weather overflows

Dry weather overflows (i.e. overflows from permitted CSO outfalls during periods of non-precipitation) are prohibited. The Permittee must report all dry weather overflows from CSO outfalls to Ecology at the ERTS phone number listed above as soon as the Permittee becomes aware of the dry weather overflow, but no later than 24 hours after becoming aware of the overflow.

Submit a detailed, written report to Ecology within five (5) business days as required under subpart 4 above, unless requested earlier by Ecology.

Corrective actions must commence immediately and continue until the dry weather overflow has been eliminated.

6. Reporting – Sewer backups into buildings

The Permittee must report sewer backups into buildings (basements, low lying first floors, garages, and toilets regardless of floor) to Ecology at the ERTS phone number listed above or via the online ERTS reporting form within 24 hours of becoming aware of the backup.

7. Quarterly violation summary reports

The Permittee must submit a spreadsheet once per quarter that provides a summary of information for each of the following violations that occurred during the quarter:

- Sanitary sewer overflows reported under Special Condition S4.G.2.
- Dry weather overflows reported under Special Condition S4.G.5.
- Backups into buildings reported under Special Condition S4.G.6.

The report must summarize and, as necessary, update the information required for the “5-day written follow-up” required by Special Condition S4.G.3 and include each ERTS tracking number, when applicable. Submit the spreadsheet electronically using the Water Quality Permitting Portal – Permit Submittals application under the “As Needed, Quarterly Violation Report” submittal schedule. The spreadsheet file name must identify the quarter and year for the report (example: “Quarterly violation 2023Q1”). The Permittee must submit the report no later than the 15th day of the month following each reporting period. Quarterly reporting periods are January through March, April through June, July through September, and October through December.

8. All other permit violation reporting

The Permittee must report all other permit violations when they submit monitoring reports under Special Condition S4.A. (Reporting). The reports must contain the information listed in S4.G.3. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or from the resulting liability for failure to comply.

S4.H. Other reporting

1. Spills of oil or hazardous materials

In addition to the requirements in S4.G, the Permittee must report a spill of oil or hazardous materials in accordance with the requirements of Revised Code of Washington (RCW) 90.56.280 and WAC 173-303-145. Visit the website [How to Report a Spill²](#) for further instructions.

2. Failure to submit relevant or correct facts

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to Ecology, it must submit such facts or information promptly.

S4.I. Maintaining a copy of this permit

The Permittee must keep a copy of this permit at their office and make it available upon request to Ecology inspectors.

S5. Operation and maintenance

The Permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes keeping a daily operation logbook (paper or electronic), adequate laboratory controls, and appropriate quality assurance procedures. This provision of the permit requires the Permittee to operate backup or auxiliary facilities or similar systems only when the operation is necessary to achieve compliance with the conditions of this permit.

S5.A. Operation and maintenance program

The Permittee must:

1. Institute an adequate operation and maintenance program for the entire sewage system.
2. Keep maintenance records on all major electrical and mechanical components of the combined sewage system including pumping stations. Such records must clearly specify the frequency and type of maintenance recommended by the manufacturer and must show the frequency and type of maintenance performed.
3. Make maintenance records available for inspection at all times.

S5.B. Short-term reduction

The Permittee must schedule any facility maintenance, which might require interruption of wastewater treatment and degrade effluent quality, during non-critical water quality periods and carry this maintenance out according to the approved O&M manual or as otherwise approved by Ecology.

² <https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue/Report-a-spill>

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limits on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee must:

1. Give written notification to Ecology, if possible, thirty (30) days prior to such activities.
2. Detail the reasons for, length of time of, and the potential effects of the reduced level of treatment.

This notification does not relieve the Permittee of its obligations under this permit.

S5.C. Electrical power failure

The Permittee must ensure that adequate safeguards prevent the discharge of untreated wastes or wastes not treated in accordance with the requirements of this permit during electrical power failure at sewage lift stations. Adequate safeguards include, but are not limited to, alternate power sources, standby generator(s), or retention of inadequately treated wastes.

S5.D. Prevent connection of inflow

The Permittee must strictly enforce its sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

S5.E. Operations and maintenance (O&M) manual

1. The Permittee must:
 - a. Review the O&M Manual at least annually.
 - b. Submit to Ecology for review substantial changes or updates to the O&M Manual.
 - c. Keep the approved O&M Manual at the permitted facility.
 - d. Follow the instructions and procedures of this manual.
2. In addition to the requirements of WAC 173-240-080(1) through (5), the O&M Manual must be consistent with the guidance in the *Criteria for Sewage Works Design (Orange Book)* (Ecology, 2023). The O&M Manual must include:
 - a. Emergency procedures for cleanup in the event of wastewater system upset or failure.
 - b. A review of system components which if failed could pollute surface water or could impact human health. Provide a procedure for a routine schedule of checking the function of these components.
 - c. Wastewater system maintenance procedures that contribute to the generation of process wastewater.

- d. Reporting protocols for submitting reports to Ecology to comply with the reporting requirements in the discharge permit.
- e. Any directions to maintenance staff when cleaning or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine).
- f. Minimum staffing adequate to operate and maintain the system and carry out compliance monitoring required by the permit.

S6. Requirements for controlled combined sewer overflows

S6.A. CSOs identified as controlled

Based on monitoring data, the CSO outfalls listed in S1 as “Controlled” meet the requirement of “greatest reasonable reduction” as defined in chapter WAC 173-245-020(22). Frequency of overflow events at these CSO outfalls, as a result of precipitation events, must continue to meet the performance standard.

S6.B. Performance standards for controlled CSO outfalls

The Permittee must maintain the performance standard of not more than one discharge due to precipitation per year, on average, for each CSO outfall identified as controlled. Ecology evaluates compliance with the performance standard annually based on a 20-year average of discharge events using data derived from calibrated flow modeling and from at-site monitoring. The Permittee must calculate and report in the CSO Annual Report required in Section S4.B the moving 20-year averages of the number of overflow events for each outfall. For outfalls controlled less than 20 years, use monitored data from the years following completion of the control project and modeled data for years prior to the control project. The Permittee must also calculate and report the 5-year moving average using only the most recent monitored data.

S6.C. CSO post construction monitoring

The Permittee must implement a post construction compliance monitoring program to verify the effectiveness of CSO controls and to demonstrate compliance with water quality standards and continue to meet conditions to qualify for a mixing zone.

The Permittee must submit an updated Post- Construction Monitoring Plan by December 31, 2027 which must:

- Account for any changes to Critical Milestones since 2015
- Incorporate new Washington Water Quality Standards (e.g. bacteria indicators for recreational use)
- Provide ongoing periodic visual water quality observations

- Establish a process for selecting new surrogate outfalls if sampling at the identified outfall is not possible or is deemed to no longer be representative.

The Permittee must implement the requirements in the conditionally approved Post-Construction Monitoring Plan, dated May 29, 2015, as modified by all approved updates and amendments.

As part of each annual report required by Special Condition S4.B, the Permittee must submit a data report containing the results of the monitoring and analysis completed during the reporting year. The data report must conform to the approved CSO Post-Construction Monitoring Plan.

Nothing in this condition is intended to revise or replace Post Construction Monitoring Program requirements listed in the City of Seattle's 2025 modified federal CSO Consent Decree, Civil Action No. 2:13-cv-678.

S6.D. Corrective actions for previously controlled CSO outfalls

If the annual average number of events calculated based on a 20-year period according to S6.B above exceeds one per year for two or more consecutive annual reporting periods, the Permittee must take corrective actions to restore compliance with the performance standard. This permit requires a tiered response to corrective actions based on the magnitude of exceedance and the length of time the outfall remains out of compliance. In evaluating corrective action options, the Permittee may consider near-term performance, calculated based on the most recent five years of discharge data, along with the long-term, 20-year performance period.

Tier I Actions:

The Permittee must initiate Tier I corrective actions for any previously controlled outfall that fails to comply with the performance standard for two consecutive years and whose calculated discharge frequency is between 1.0 and 2.0 discharges per year. Tier I actions must, at a minimum, include the following:

- Review monitoring practices to verify accuracy of the data used to calculate the average number of discharges. Implement changes to the monitoring as necessary to improve the accuracy.
- Review maintenance practices for the collection system in the vicinity of the outfall to verify proper operation of the system. Implement system cleaning, repairs, or adjustments as necessary to restore to proper operation.

The Permittee must submit a Tier I Corrective Action report to Ecology to document the actions it takes in response to non-compliance with the performance standard. The Permittee must submit the report within 60 days of completing the analysis and implementing necessary corrections.

Tier II Actions:

The Permittee must initiate Tier II corrective actions under the following situations:

- Any outfall requiring Tier I action that fails to comply with the performance standard for a third consecutive year, or
- Any previously controlled outfall that fails to comply with the performance standard for two consecutive years and whose calculated discharge frequency exceeds 2.0 discharges per year.

Tier II actions must, at a minimum, include the following:

- Review operating strategies for the collection system and identify opportunities to optimize operations.

Within 60 days of completing the optimization assessment, the Permittee must submit a Tier II Corrective Action Report to Ecology that identifies the specific optimization strategies it will implement along with an implementation schedule. If the Permittee is unable to identify system optimization strategies, or if implementation will take more than one year, the Permittee must begin Tier III actions described below.

Tier III Actions:

The Permittee must initiate Tier III corrective actions under the following conditions:

- When the Permittee is unable to identify a Tier II Corrective Action or unable to implement a Tier II Corrective Action within one year, or
- Any previously controlled outfall that remains out of compliance for two years after implementing Tier II corrective actions.

Ecology recognizes that Tier III Corrective Actions generally require design and construction of new or modified control strategies. Within 90 days of submitting the annual report that identifies an outfall as qualifying for Tier III Corrective Actions, the Permittee must submit a report to Ecology identifying the operational or structural changes it will evaluate along with a preliminary schedule for the planning, design, and construction of necessary changes. Any previously controlled outfall that triggers Tier III Corrective Actions will be reclassified with a status of "Uncontrolled". Ecology will use the Tier III Corrective Action Report as the basis for developing a compliance schedule for restoring the outfall to compliance with the CSO performance standard. Ecology will place this compliance schedule in an administrative order or as a condition of a future permit.

S7. Requirements for uncontrolled combined sewer overflows

S7.A. Combined sewer overflow reduction plan amendment

The Permittee must submit an amendment of its CSO reduction plan to Ecology for review and approval by December 31, 2026. The amendment must comply with the requirements of WAC 173-245-090(2) and contain the following:

1. Information describing which of the permitted CSO outfalls can be categorized as meeting the performance standard for controlled CSOs, defined as no more than an average of one untreated discharge per outfall per year.
2. For each CSO outfall that does not meet the performance standard for controlled CSOs defined above:
 - a. Identify CSO control alternatives to achieve an average of no more than one untreated CSO event per year per outfall.
 - b. For outfalls that do not meet the performance standard for controlled CSOs, the Permittee must include a list of all project tasks and milestones the Permittee will accomplish in the next five-year permit term.
 - c. The CSO Control Plan Amendment may not propose changes to the project list or implementation schedule in the approved Long Term Control Plan unless modified according to allowances in the City of Seattle's 2025 modified federal CSO Consent Decree, Civil Action No. 2:13-cv-678.

S7.B. Engineering reports and plans and specifications for CSO reduction projects

The Permittee must submit to Ecology an engineering report for each specific CSO reduction construction project. Engineering documents associated with each CSO reduction project must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by Ecology prior to construction. The report must

1. Specify any contracts, ordinances, methods of financing, or any other arrangements necessary to achieve this objective.
2. Describe how each project will achieve the performance standard of "greatest reasonable control" and explicitly state the expected frequency of overflow event(s) per year per associated outfall after the CSO reduction construction project has been completed.
3. Identify the potential hydraulic impact(s) of the project on downstream conveyance and treatment facilities.

For each specific CSO reduction construction project, the Permittee must prepare and submit approvable plans and specifications consistent with chapter 173-240-070 WAC to Ecology for review and approval. Ecology must approve plans and specifications prior to construction.

Nothing in this condition is intended to revise or replace engineering document requirements listed in the City of Seattle's 2025 modified federal CSO Consent Decree, Civil Action No. 2:13-cv-678.

S8. Outfall rehabilitation

The Permittee must submit, by December 31, 2026, a notice of completion for repair/rehabilitation of at least two CSO outfalls as well as line cleaning and confirmation of effectiveness for at least eight CSO outfalls.

By December 31, 2028, the Permittee must submit to Ecology for review and approval an outfall rehabilitation plan that describes outfalls to be inspected, repaired, or replaced during the next permit cycle.

S9. Application for permit renewal or modification for facility changes

The Permittee must submit an application for renewal of this permit by **TBC**.

REFERENCES

- Doneker, R. L., & Jirka, G. H. (2007). *CORMIX User Manual: A Hydrodynamic Mixing Zone Model and Decision Support System for Pollutant Discharges into Surface Waters, EPA-823-K-07-001*. Retrieved from <http://www.mixzon.com/downloads/>
- Ecology. (2004). *Information Manual for Treatment Plant Operators, Publication 04-10-020*. Retrieved from <https://apps.ecology.wa.gov/publications/SummaryPages/0410020.html>
- Ecology. (2016). *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies*. Retrieved from <https://apps.ecology.wa.gov/publications/summarypages/0403030.html>
- Ecology. (2016). *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria (Publication 95-80)*. Retrieved from <https://apps.ecology.wa.gov/publications/SummaryPages/9580.html>
- Ecology. (2018). *Water Quality Program Permit Writer's Manual, Publication 92-109*. Retrieved from <https://apps.ecology.wa.gov/publications/summarypages/92109.html>
- Ecology. (2021). *Sediment Cleanup User's Manual SCUM*. Retrieved from <https://apps.ecology.wa.gov/publications/SummaryPages/1209057.html>
- Ecology. (2022). *Standard Operating Procedure EAP080, Version 2.2: Continuous Temperature Monitoring of Freshwater Rivers and Streams, Publication 22-03-216*. Retrieved from <https://apps.ecology.wa.gov/publications/SummaryPages/2203216.html>
- Ecology. (2023). *Criteria for Sewage Works Design, Publication 98-37 (Orange Book)*. Retrieved from <https://apps.ecology.wa.gov/publications/SummaryPages/9837.html>
- Ecology and Department of Health. (2019). *Reclaimed Water Facilities Manual: The Purple Book*. Retrieved from <https://apps.ecology.wa.gov/publications/SummaryPages/1510024.html>
- Frick, W. E., Roberts, P. J., Davis, L. R., Keyes, D. J., & Baumgartner, G. K. (2003). *Dilution Models for Effluent Discharges, 4th Edition (Visual Plumes)*. Athens, GA: Ecosystems Research Division, USEPA. Retrieved from <https://www.epa.gov/sites/production/files/documents/VP-Manual.pdf>
- Kilpatrick, F. A., & Cobb, E. D. (1985). *Measurement of Discharge Using Tracers, Chapter A16, Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics*. Reston VA: USGS. Retrieved from https://pubs.usgs.gov/twri/twri3-a16/pdf/TWRI_3-A16.pdf
- USEPA. (1985). *Infiltration/Inflow: I/I Analysis and Project Certification*. Retrieved from <https://apps.ecology.wa.gov/publications/SummaryPages/9703.html>

- USEPA. (1996). *Method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels*. Retrieved from https://www.epa.gov/sites/default/files/2015-10/documents/method_1669_1996.pdf
- Wilson, J. F., Cobb, E. D., & Kilpatrick, F. A. (1986). *Fluorometric Procedures for Dye Tracing, Chapter A12. Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics*. Reston, VA: USGS. Retrieved from https://pubs.usgs.gov/twri/twri3-a12/pdf/TWRI_3-A12.pdf

GENERAL CONDITIONS

G1. Signatory requirements

1. All applications submitted to Ecology must be signed and certified.
 - a. In the case of corporations, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - 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, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - b. In the case of a partnership, by a general partner.
 - c. In the case of sole proprietorship, by the proprietor.
 - d. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity shall be submitted by the public entity.

2. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to Ecology.
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to authorization. If an authorization under paragraph G1.2, above, is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G1.2, above, must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section must make the following certification:

“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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

G2. Right of inspection and entry

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

1. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
2. To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
3. To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
4. To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. Permit actions

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon Ecology’s initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 40 CFR 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

1. The following are causes for terminating this permit during its term, or for denying a permit renewal application:

- a. Violation of any permit term or condition.
 - b. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
 - c. A material change in quantity or type of waste disposal.
 - d. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination.
 - e. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit.
 - f. Nonpayment of fees assessed pursuant to RCW 90.48.465.
 - g. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
2. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
- a. A material change in the condition of the waters of the state.
 - b. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
 - c. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
 - d. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
 - e. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
 - f. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
 - g. Incorporation of an approved local pretreatment program into a municipality's permit.
3. The following are causes for modification or alternatively revocation and reissuance:
- a. When cause exists for termination for reasons listed in 1.a through 1.g of this section, and Ecology determines that modification or revocation and reissuance is appropriate.

- b. When Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G7) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

G4. Reporting planned changes

The Permittee must, as soon as possible, but no later than one hundred eighty (180) days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in:

1. The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).
2. A significant change in the nature or an increase in quantity of pollutants discharged.
3. A significant change in the Permittee's sludge use or disposal practices.

Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G5. Plan review required

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

G6. Compliance with other laws and statutes

Nothing in this permit excuses the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. Transfer of this permit

In the event of any change in control or ownership of facilities from which the authorized discharge emanates, the Permittee must notify the succeeding owner or controller of the existence of this permit by letter, a copy of which must be forwarded to Ecology.

1. Transfers by Modification

Except as provided in paragraph (2) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or

revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

2. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

- a. The Permittee notifies Ecology at least thirty (30) days in advance of the proposed transfer date.
- b. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
- c. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G8. Reduced production for compliance

The Permittee, in order to maintain compliance with its permit, must control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G9. Removed substances

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G10. Duty to provide information

The Permittee must submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology upon request, copies of records required to be kept by this permit.

G11. Other requirements of 40 CFR

All other requirements of 40 CFR 122.41 and 40 CFR 122.42 are incorporated in this permit by reference.

G12. Additional monitoring

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G13. Payment of fees

The Permittee must submit payment of fees associated with this permit as assessed by Ecology.

G14. Penalties for violating permit conditions

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit may incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

G15. Upset

Definition – “Upset” means 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, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limits if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

1. An upset occurred and that the Permittee can identify the cause(s) of the upset.
2. The permitted facility was being properly operated at the time of the upset.
3. The Permittee submitted notice of the upset as required in Special Condition S3.F.
4. The Permittee complied with any remedial measures required under S3.F of this permit.

In any enforcement action the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G16. Property rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

G17. Duty to comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G18. Toxic pollutants

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G19. Penalties for tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two (2) years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this condition, punishment shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

G20. Compliance schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than fourteen (14) days following each schedule date.

G21. Service agreement review

The Permittee must submit to Ecology any proposed service agreements and proposed revisions or updates to existing agreements for the operation of any wastewater treatment facility covered by this permit. The review is to ensure consistency with chapters 90.46 and 90.48 RCW as required by RCW 70.150.040(9). In the event that Ecology does not comment within a thirty-day (30) period, the Permittee may assume consistency and proceed with the service agreement or the revised/updated service agreement.

APPENDIX A – List of Pollutants, Analytical Methods, Detection Levels and Quantitation Levels

The Permittee must use the specified analytical methods, detection levels (DLs) ¹ and quantitation levels (QLs) ² in the following table for permit and application required monitoring unless:

Another permit condition specifies other methods, detection levels, or quantitation levels.

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, not specified in the permit, and as allowed above, it must report the test method, DL, and QL on the discharge monitoring report or in the required report.

If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix-specific detection level (MDL) and a quantitation level (QL) to Ecology with appropriate laboratory documentation when the detection levels are too high to provide results near or below criteria (or applicable permit limits).

The lists below include conventional pollutants (as defined in CWA section 502(6) and 40 CFR Part 122), toxic or priority pollutants as defined in CWA section 307(a)(1) and listed in 40 CFR Part 122 Appendix D, 40 CFR Part 401.15 and 40 CFR Part 423 Appendix A), and nonconventionals. 40 CFR Part 122 Appendix D (Table V) also identifies toxic pollutants and hazardous substances which are required to be reported by dischargers if expected to be present. This permit appendix A list does not include those parameters.

The list also includes:

- Dioxin and furan congeners identified using EPA Method 1613.
- Per- and polyfluoroalkyl substances (PFAS) identified using EPA Method 1633.

Appendix A Table 1 – Conventional pollutants

Pollutant	CAS number (if available)	Recommended analytical protocol	Detection level (DL) ¹ µg/L unless specified	Quantitation level (QL) ² µg/L unless specified
Biochemical Oxygen Demand		SM5210-B		2 mg/L
Biochemical Oxygen Demand, Soluble		SM5210-B ³		2 mg/L
Fecal Coliform		SM 9221E, 9221F SM 9222D	N/A	Specified in method sample aliquot dependent
Oil and Grease (HEM) (Hexane Extractable Material)		1664 A or B	1,400	5,000
pH		SM4500-H+ B	N/A	N/A
Total Suspended Solids		SM2540-D		5 mg/L

Appendix A Table 2 - Nonconventional pollutants

Pollutant	CAS number (if available)	Recommended analytical protocol	Detection level (DL) 1 µg/L unless specified	Quantitation level (QL) 2 µg/L unless specified
Alkalinity, Total		SM2320-B		5 mg/L as CaCO ₃
Aluminum, Total	7429-90-5	200.8	2.0	10
Ammonia, Total (as N)		SM4500-NH3-B and C/D/E/G/H		20
Barium Total	7440-39-3	200.8	0.5	2.0
BTEX (benzene +toluene + ethylbenzene + m,o,p xylenes)		EPA SW 846 8021/8260	1	2
Boron, Total	7440-42-8	200.8	2.0	10.0
Chemical Oxygen Demand		SM5220-D		10 mg/L

Chloride		SM4500-Cl B/C/D/E and SM4110 B		Sample and limit dependent
Chlorine, Total Residual		SM4500 Cl G	10	50
Cobalt, Total	7440-48-4	200.8	0.05	0.25
Color		SM2120 B/C/E		10 color units
Dissolved oxygen		SM4500-OC/OG		0.2 mg/L
E.coli		SM 9221B, 9221F, 9223B	N/A	Specified in method; sample aliquot dependent
Enterococci		EPA 1600 SM 9230B, 9230C, 9230D,	N/A	Specified in method; sample aliquot dependent
Flow		Calibrated device		
Fluoride	16984-48-8	SM4500-F E	25	100
Hardness, Total		SM2340B		200 as CaCO ₃
Iron, Total	7439-89-6	200.7	12.5	50
Magnesium, Total	7439-95-4	200.7	10	50
Manganese, Total	7439-96-5	200.8	0.1	0.5
Molybdenum, Total	7439-98-7	200.8	0.1	0.5
Nitrate + Nitrite Nitrogen (as N)		SM4500-NO ₃ - E/F/H		100
Nitrogen, Total Kjeldahl (as N)		SM4500-N _{org} B/C and SM4500NH ₃ -B/C/D/EF/G/H		300
NWTPH Dx ⁴		Ecology NWTPH Dx	250	250
NWTPH Gx ⁵		Ecology NWTPH Gx	250	250
Phosphorus, Total (as P)		SM 4500 PB followed by SM4500-PE/PF	3	10

Salinity		SM2520-B		3 practical salinity units or scale (PSU or PSS)
Settleable Solids		SM2540 -F		Sample and limit dependent
Soluble Reactive Phosphorus (as P)		SM4500-P E/F/G	3	10
Sulfate (as mg/L SO ₄)		SM4110-B		0.2 mg/L
Sulfide (as mg/L S)		SM4500-S2F/D/G		0.2 mg/L
Sulfite (as mg/L SO ₃)		SM4500-SO3B		2 mg/L
Temperature		Analog recorder or micro-recording devices (thermistors)		0.2°C
Tin, Total	7440-31-5	200.8	0.3	1.5
Titanium, Total	7440-32-6	200.8	0.5	2.5
Total Coliform		SM 9221B SM 9222B	N/A	Specified in method; sample aliquot dependent
Total Organic Carbon		SM5310-B/C/D		1 mg/L
Total Dissolved solids		SM2540 C		20 mg/L

Appendix A Table 3 - Priority pollutants: Metals, chromium (hex), cyanide & total phenols

Priority pollutants	PP #	CAS number (if available)	Recommended analytical protocol	Detection level (DL) 1 µg/L unless specified	Quantitation level (QL) 2 µg/L unless specified
Antimony, Total	114	7440-36-0	200.8	0.3	1.0
Arsenic, Total	115	7440-38-2	200.8	0.1	0.5
Beryllium, Total	117	7440-41-7	200.8	0.1	0.5
Cadmium, Total	118	7440-43-9	200.8	0.05	0.25
Chromium (hex) dissolved	119	18540-29-9	SM3500-Cr C	0.3	1.2

Chromium, Total	119	7440-47-3	200.8	0.2	1.0
Copper, Total	120	7440-50-8	200.8	0.4	2.0
Lead, Total	122	7439-92-1	200.8	0.1	0.5
Mercury, Total	123	7439-97-6	1631E	0.0002	0.0005
Nickel, Total	124	7440-02-0	200.8	0.1	0.5
Selenium, Total	125	7782-49-2	200.8	1.0	1.0
Silver, Total	126	7440-22-4	200.8	0.04	0.2
Thallium, Total	127	7440-28-0	200.8	0.09	0.36
Zinc, Total	128	7440-66-6	200.8	0.5	2.5
Cyanide, Total	121	57-12-5	335.4	5	10
Cyanide, Weak Acid Dissociable	121		SM4500-CN I	5	10
Cyanide, Free Amenable to Chlorination (Available Cyanide)	121		SM4500-CN G	5	10
Phenols, Total	65		EPA 420.1		50

Appendix A Table 4 - Priority pollutants: Acid compounds

Priority pollutants	PP #	CAS number (if available)	Recommended analytical protocol	Detection level (DL) 1 µg/L unless specified	Quantitation level (QL) 2 µg/L unless specified
2-Chlorophenol	24	95-57-8	625.1	3.3	9.9
2,4-Dichlorophenol	31	120-83-2	625.1	2.7	8.1
2,4-Dimethylphenol	34	105-67-9	625.1	2.7	8.1
4,6-dinitro-o-cresol (2-methyl-4,6,-dinitrophenol)	60	534-52-1	625.1/1625B	24	72
2,4 dinitrophenol	59	51-28-5	625.1	42	126
2-Nitrophenol	57	88-75-5	625.1	3.6	10.8
4-Nitrophenol	58	100-02-7	625.1	2.4	7.2

Parachlorometa cresol (4-chloro-3-methylphenol)	22	59-50-7	625.1	3.0	9.0
Pentachlorophenol	64	87-86-5	625.1	3.6	10.8
Phenol	65	108-95-2	625.1	1.5	4.5
2,4,6-Trichlorophenol	21	88-06-2	625.1	2.7	8.1

Appendix A Table 5 - Priority pollutants: Volatile compounds

Priority pollutants	PP #	CAS number (if available)	Recommended analytical protocol	Detection level (DL) 1 µg/L unless specified	Quantitation level (QL) 2 µg/L unless specified
Acrolein	2	107-02-8	624.1	5	10
Acrylonitrile	3	107-13-1	624.1	1.0	2.0
Benzene	4	71-43-2	624.1	4.4	13.2
Bromoform	47	75-25-2	624.1	4.7	14.1
Carbon tetrachloride	6	56-23-5	624.1/601 or SM6230B	2.8	8.4
Chlorobenzene	7	108-90-7	624.1	6.0	18.0
Chloroethane	16	75-00-3	624/601	1.0	2.0
2-Chloroethylvinyl Ether	19	110-75-8	624.1	1.0	2.0
Chloroform	23	67-66-3	624.1 or SM6210B	1.6	4.8
Dibromochloromethane (chlordibromomethane)	51	124-48-1	624.1	3.1	9.3
1,2-Dichlorobenzene	25	95-50-1	624.1	1.9	7.6
1,3-Dichlorobenzene	26	541-73-1	624.1	1.9	7.6
1,4-Dichlorobenzene	27	106-46-7	624.1	4.4	17.6
Dichlorobromomethane	48	75-27-4	624.1	2.2	6.6
1,1-Dichloroethane	13	75-34-3	624.1	4.7	14.1
1,2-Dichloroethane	10	107-06-2	624.1	2.8	8.4
1,1-Dichloroethylene	29	75-35-4	624.1	2.8	8.4

1,2-Dichloropropane	32	78-87-5	624.1	6.0	18.0
1,3-dichloropropene (mixed isomers) (1,2-dichloropropylene)6	33	542-75-6	624.1	5.0	15.0
Ethylbenzene	38	100-41-4	624.1	7.2	21.6
Methyl bromide (Bromomethane)	46	74-83-9	624/601	5.0	10.0
Methyl chloride (Chloromethane)	45	74-87-3	624.1	1.0	2.0
Methylene chloride	44	75-09-2	624.1	2.8	8.4
1,1,2,2-Tetrachloroethane	15	79-34-5	624.1	6.9	20.7
Tetrachloroethylene	85	127-18-4	624.1	4.1	12.3
Toluene	86	108-88-3	624.1	6.0	18.0
1,2-Trans-Dichloroethylene (Ethylene dichloride)	30	156-60-5	624.1	1.6	4.8
1,1,1-Trichloroethane	11	71-55-6	624.1	3.8	11.4
1,1,2-Trichloroethane	14	79-00-5	624.1	5.0	15.0
Trichloroethylene	87	79-01-6	624.1	1.9	5.7
Vinyl chloride	88	75-01-4	624/SM6200B	1.0	2.0

Appendix A Table 6 - Priority pollutants: Base/neutral compounds

Priority pollutants	PP #	CAS number (if available)	Recommended analytical Protocol	Detection level (DL) 1 µg/L unless specified	Quantitation level (QL) 2 µg/L unless specified
Acenaphthene	1	83-32-9	625.1	1.9	5.7
Acenaphthylene	77	208-96-8	625.1	3.5	10.5
Anthracene	78	120-12-7	625.1	1.9	5.7
Benzidine	5	92-87-5	625.1	44	132
Benzyl butyl phthalate	67	85-68-7	625.1	2.5	7.5
Benzo(a)anthracene	72	56-55-3	625.1	7.8	23.4

Benzo(b)fluoranthene (3,4-benzofluoranthene) ⁷	74	205-99-2	610/625.1	4.8	14.4
Benzo(k)fluoranthene (11,12-benzofluoranthene) ⁷	75	207-08-9	610/625.1	2.5	7.5
Benzo(a)pyrene	73	50-32-8	610/625.1	2.5	7.5
Benzo(ghi)Perylene	79	191-24-2	610/625.1	4.1	12.3
Bis(2-chloroethoxy)methane	43	111-91-1	625.1	5.3	15.9
Bis(2-chloroethyl)ether	18	111-44-4	611/625.1	5.7	17.1
Bis(2-chloro-1-methylethyl)Ether (Bis(2-chloroisopropyl)ether) ⁸	42	108-60-1	625.1	5.7	17.1
Bis(2-ethylhexyl)phthalate	66	117-81-7	625.1	2.5	7.5
4-Bromophenyl phenyl ether	41	101-55-3	625.1	1.9	5.7
2-Chloronaphthalene	20	91-58-7	625.1	1.9	5.7
4-Chlorophenyl phenyl ether	40	7005-72-3	625.1	4.2	12.6
Chrysene	76	218-01-9	610/625.1	2.5	7.5
Dibenzo(a-h)anthracene (1,2,5,6-dibenzanthracene)	82	53-70-3	625.1	2.5	7.5
3,3-Dichlorobenzidine	28	91-94-1	605/625.1	16.5	49.5
Diethyl phthalate	70	84-66-2	625.1	1.9	5.7
Dimethyl phthalate	71	131-11-3	625.1	1.6	4.8
Di-n-butyl phthalate	68	84-74-2	625.1	2.5	7.5
2,4-dinitrotoluene	35	121-14-2	609/625.1	5.7	17.1
2,6-dinitrotoluene	36	606-20-2	609/625.1	1.9	5.7
Di-n-octyl phthalate	69	117-84-0	625.1	2.5	7.5
1,2-Diphenylhydrazine (as Azobenzene)	37	122-66-7	1625B/625.1	5.0	20
Fluoranthene	39	206-44-0	625.1	2.2	6.6
Fluorene	80	86-73-7	625.1	1.9	5.7

Hexachlorobenzene	9	118-74-1	612/625.1	1.9	5.7
Hexachlorobutadiene	52	87-68-3	625.1	0.9	2.7
Hexachlorocyclopentadiene	53	77-47-4	1625B/625.1	2.0	4.0
Hexachloroethane	12	67-72-1	625.1	1.6	4.8
Indeno(1,2,3-cd)Pyrene	83	193-39-5	610/625.1	3.7	11.1
Isophorone	54	78-59-1	625.1	2.2	6.6
Naphthalene	55	91-20-3	625.1	1.6	4.8
Nitrobenzene	56	98-95-3	625.1	1.9	5.7
N-Nitrosodimethylamine	61	62-75-9	607/625.1	2.0	4.0
N-Nitrosodi-n-propylamine	63	621-64-7	607/625.1	0.5	1.0
N-Nitrosodiphenylamine	62	86-30-6	625.1	1.0	2.0
Phenanthrene	81	85-01-8	625.1	5.4	16.2
Pyrene	84	129-00-0	625.1	1.9	5.7
1,2,4-Trichlorobenzene	8	120-82-1	625.1	1.9	5.7

Appendix A Table 7 - Base/neutral compounds – Ecology PBTs

Pollutant	CAS number (if available)	Recommended analytical protocol	Detection level (DL) 1 µg/L unless specified	Quantitation level (QL) 2 µg/L unless specified
Benzo(j)fluoranthene ⁷	205-82-3	625	0.5	1.0
Benzo(r,s,t)pentaphene	189-55-9	625	1.3	5.0
Dibenzo (a,h)acridine	226-36-8	610M/625M	2.5	10.0
Dibenzo (a,j)acridine	224-42-0	610M/625M	2.5	10.0
Dibenzo(a,e)pyrene	192-65-4	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene	189-64-0	625M	2.5	10.0
3-Methyl cholanthrene	56-49-5	625	2.0	8.0
Perylene	198-55-0	625	1.9	7.6

Appendix A Table 8 - Dioxin

Priority pollutant	PP #	CAS number (if available)	Recommended analytical protocol	Detection level (DL) 1 µg/L unless specified	Quantitation level (QL) 2 µg/L unless specified
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (2,3,7,8 TCDD)	129	1746-01-6	1613B	1.3 pg/L	5 pg/L

Appendix A Table 9 - Pesticides and PCBs

Priority pollutants	PP #	CAS number (if available)	Recommended analytical protocol	Detection level (DL) 1 µg/L unless specified	Quantitation level (QL) 2 µg/L unless specified
Aldrin	89	309-00-2	608.3	4.0 ng/L	12 ng/L
alpha-BHC	102	319-84-6	608.3	3.0 ng/L	9.0 ng/L
beta-BHC	103	319-85-7	608.3	6.0 ng/L	18 ng/L
gamma-BHC (Lindane)	104	58-89-9	608.3	4.0 ng/L	12 ng/L
delta-BHC	105	319-86-8	608.3	9.0 ng/L	27 ng/L
Chlordane ⁹	91	57-74-9	608.3	14 ng/L	42 ng/L
4,4'-DDT	92	50-29-3	608.3	12 ng/L	36 ng/L
4,4'-DDE	93	72-55-9	608.3	4.0 ng/L	12 ng/L
4,4' DDD	94	72-54-8	608.3	11ng/L	33 ng/L
Dieldrin	90	60-57-1	608.3	2.0 ng/L	6.0 ng/L
alpha-Endosulfan	95	959-98-8	608.3	14 ng/L	42 ng/L
beta-Endosulfan	96	33213-65-9	608.3	4.0 ng/L	12 ng/L
Endosulfan Sulfate	97	1031-07-8	608.3	66 ng/L	198 ng/L
Endrin	98	72-20-8	608.3	6.0 ng/L	18 ng/L
Endrin Aldehyde	99	7421-93-4	608.3	23 ng/L	70 ng/L
Heptachlor	100	76-44-8	608.3	3.0 ng/L	9.0 ng/L
Heptachlor Epoxide	101	1024-57-3	608.3	83 ng/L	249 ng/L

PCB-1242 ¹⁰	106	53469-21-9	608.3	0.065	0.195
PCB-1254	107	11097-69-1	608.3	0.065	0.195
PCB-1221	108	11104-28-2	608.3	0.065	0.195
PCB-1232	109	11141-16-5	608.3	0.065	0.195
PCB-1248	110	12672-29-6	608.3	0.065	0.195
PCB-1260	111	11096-82-5	608.3	0.065	0.195
PCB-1016 ¹⁰	112	12674-11-2	608.3	0.065	0.195
Toxaphene	113	8001-35-2	608.3	240 ng/L	720 ng/L

Appendix A Table 10 - Nonconventionals – dioxin & furan congeners

Pollutant	CAS number (if available)	Recommended analytical protocol	Detection level (DL) 1 µg/L unless specified	Quantitation level (QL) 2 µg/L unless specified
2,3,7,8- Tetrachlorodibenzo-p-dioxin (TCDD) (this is a priority pollutant also listed in Table 8)	1746-01-6	EPA 1613	1.3 pg/L	5 pg/L
Total TCDD	41903-57-5			
2,3,7,8- Tetrachlorodibenzofuran (TCDF)	51207-31-9		1.3 pg/L	5 pg/L
Total-TCDF	55722-27-5			
1,2,3,7,8- Pentachlorodibenzo-p-dioxin (PeCDD)	40321-76-4			
Total-PeCDD	36088-22-9			
1,2,3,7,8- Pentachlorodibenzofuran (PeCDF)	57117-41-6			
2,3,4,7,8-PeCDF	57117-31-4			
Total-PeCDF	30402-15-4			
1,2,3,4,7,8- Hexachlorodibenzo-p-dioxin (HxCDD)	39227-28-6			
1,2,3,6,7,8-HxCDD	57653-85-7			
1,2,3,7,8,9-HxCDD	19408-74-3			

Total-HxCDD	34465-46-8			
1,2,3,4,7,8- Hexachlorodibenzofuran (HxCDF)	70648-26-9			
1,2,3,6,7,8-HxCDF	57117-44-9			
1,2,3,7,8,9-HxCDF	72918-21-9			
2,3,4,6,7,8-HxCDF	60851-34-5			
Total-HxCDF	55684-94-1			
1,2,3,4,6,7,8- Heptachlorodibenzo-p-dioxin (HpCDD)	35822-46-9			
Total-HpCDD	37871-00-4			
1,2,3,4,6,7,8- Heptachlorodibenzofuran (HpCDF)	67562-39-4			
1,2,3,4,7,8,9-HpCDF	55673-89-7			
Total-HpCDF	38998-75-3			
Octachlorodibenzo-p-dioxin (OCDD)	3268-87-9			
Octachlorodibenzofuran (OCDF)	39001-02-0			

Appendix A Table 11 - Per- and polyfluoroalkyl substances (PFAS) ¹¹

Pollutant	CAS number (if available)	Recommended analytical protocol	Detection level (DL) 1 µg/L unless specified	Quantitation level (QL) 2 µg/L unless specified
Perfluorobutanoic acid (PFBA)	375-22-4	1633	0.330 ng/L	6.4 ng/L
Perfluoropentanoic acid (PFPeA)	2706-90-3	1633	0.196 ng/L	3.2 ng/L
Perfluorohexanoic acid (PFHxA)	307-24-4	1633	0.318 ng/L	1.6 ng/L
Perfluoroheptanoic acid (PFHpA)	375-85-9	1633	0.221 ng/L	1.6 ng/L
Perfluorooctanoic acid (PFOA)	335-67-1	1633	0.302 ng/L	1.6 ng/L
Perfluorononanoic acid (PFNA)	375-95-1	1633	0.221 ng/L	1.6 ng/L
Perfluorodecanoic acid (PFDA)	335-76-2	1633	0.333 ng/L	1.6 ng/L
Perfluoroundecanoic acid (PFUnA)	2058-94-8	1633	0.264 ng/L	1.6 ng/L

Perfluorododecanoic acid (PFDoA)	307-55-1	1633	0.379 ng/L	1.6 ng/L
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	1633	0.238 ng/L	1.6 ng/L
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1633	0.264 ng/L	1.6 ng/L
Perfluorobutanesulfonic acid (PFBS)	375-73-5	1633	0.245 ng/L	1.6 ng/L
Perfluoropentanesulfonic acid (PFPeS)	2706-91-4	1633	0.204 ng/L	1.6 ng/L
Perfluorohexanesulfonic acid (PFHxS)	355-46-4	1633	0.217 ng/L	1.6 ng/L
Perfluoroheptanesulfonic acid (PFHpS)	375-92-8	1633	0.137 ng/L	1.6 ng/L
Perfluorooctanesulfonic acid (PFOS)	1763-23-1	1633	0.327 ng/L	1.6 ng/L
Perfluorononanesulfonic acid (PFNS)	68259-12-1	1633	0.303 ng/L	1.6 ng/L
Perfluorodecanesulfonic acid (PFDS)	335-77-3	1633	0.334 ng/L	1.6 ng/L
Perfluorododecanesulfonic acid (PFDoS)	79780-39-5	1633	0.179 ng/L	1.6 ng/L
1H,1H,2H,2H-Perfluorohexanesulfonic acid (4:2FTS)	757124-72-4	1633	2.281 ng/L	6.4 ng/L
1H,1H,2H,2H-Perfluorooctanesulfonic acid (6:2FTS)	27619-97-2	1633	3.973 ng/L	6.4 ng/L
1H,1H,2H,2H-Perfluorodecanesulfonic acid (8:2FTS)	39108-34-4	1633	1.566 ng/L	6.4 ng/L
Perfluorooctanesulfonamide (PFOSA)	754-91-6	1633	0.227 ng/L	1.6 ng/L
N-methyl perfluorooctanesulfonamine (NMeFOSA)	31506-32-8	1633	0.196 ng/L	1.6 ng/L
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	4151-50-2	1633	0.585 ng/L	1.6 ng/L
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2355-31-9	1633	0.586 ng/L	1.6 ng/L
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2991-50-6	1633	0.324 ng/L	1.6 ng/L
N-methyl perfluorooctanesulfonamidoethanol (NMeFOSE)	24448-09-7	1633	1.191 ng/L	16 ng/L

N-ethyl perfluorooctanesulfonamidoethanol (NEtFOSE)	1691-99-2	1633	1.022 ng/L	16 ng/L
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252-13-6	1633	0.406 ng/L	6.4 ng/L
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	919005-14-4	1633	0.779 ng/L	6.4 ng/L
Perfluoro(2-ethoxyethane) sulfonic acid (PFEEESA)	113507-82-7	1633	0.137 ng/L	3.2 ng/L
Perfluoro-3-methoxypropanoic acid (PFMPA)	377-73-1	1633	0.177 ng/L	3.2 ng/L
Perfluoro-4-methoxybutanoic acid (PFMBA)	863090-89-5	1633	0.117 ng/L	3.2 ng/L
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	151772-58-6	1633	1.384 ng/L	3.2 ng/L
9-Chlorohexadecafluoro-3-oxaundecane-1-sulfonic acid (9CL-PF3ONS)	756426-58-1	1633	0.871 ng/L	6.4 ng/L
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11CL-PF3OUNDS)	763051-92-9	1633	0.819 ng/L	6.4 ng/L
3-Perfluoropropyl propanoic acid (3:3FTCA)	356-02-5	1633	0.721 ng/L	8.0 ng/L
2H,2H,3H,3H-Perfluorooctanoic acid (5:3FTCA)	914637-49-3	1633	5.066 ng/L	40 ng/L
3-Perfluoroheptyl propanoic acid (7:3FTCA)	812-70-4	1633	5.942 ng/L	40 ng/L

Footnotes

- ¹ Detection level (DL) – or method detection limit means the minimum concentration of an analyte (substance) that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results as determined by the procedure given in 40 CFR part 136, Appendix B.
- ² Quantitation Level (QL) – also known as Minimum Level (ML) – The term “minimum level” refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (DL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the DL in a method, or the DL determined by a laboratory, by a factor of 3. For the purposes of NPDES compliance monitoring, EPA considers the following terms to be synonymous: “quantitation limit,” “reporting limit,” and “minimum level”.
- ³ Soluble Biochemical Oxygen Demand – method note: First, filter the sample through a Millipore Nylon filter (or equivalent) - pore size of 0.45-0.50 um (prep all filters by filtering 250 ml of laboratory grade deionized water through the filter and discard). Then, analyze sample as per method 5210-B.
- ⁴ Northwest Total Petroleum Hydrocarbons Diesel Extended Range OR NWTPH Dx – Analytical Methods for Petroleum Hydrocarbons <https://apps.ecology.wa.gov/publications/documents/97602.pdf>
- ⁵ Northwest Total Petroleum Hydrocarbons Gasoline Extended Range OR NWTPH Gx – Analytical Methods for Petroleum Hydrocarbons <https://apps.ecology.wa.gov/publications/documents/97602.pdf>
- ⁶ 1, 3-dichloroproylene (mixed isomers) – You may report this parameter as two separate parameters: cis-1, 3-dichloropropene (10061-01-5) and trans-1, 3-dichloropropene (10061-02-6).
- ⁷ Total Benzofluoranthenes – Because Benzo(b)fluoranthene, Benzo(j)fluoranthene and Benzo(k)fluoranthene co-elute you may report these three isomers as total benzofluoranthenes.
- ⁸ Bis(2-Chloro-1-Methylethyl) Ether – This compound was previously listed as Bis(2-Chloroisopropyl) Ether (39638-32-9)
- ⁹ Chlordane – You may report alpha-chlordane (5103-71-9) and gamma-chlordane (5103-74-2) in place of chlordane (57-74-9). If you report alpha and gamma-chlordane, the DL/PQLs that apply are 14/42 ng/L.
- ¹⁰ PCB 1016 & PCB 1242 – You may report these two PCB compounds as one parameter called PCB 1016/1242.
- ¹¹ Prior to approval of analytical methods for PFAS chemicals under 40 CFR 136, the permittee must use the latest revision of EPA Method 1633. After analytical methods for PFAS chemicals are approved under 40 CFR 136, the permittee may use any sufficiently sensitive approved analytical method. If a laboratory that can analyze PFAS chemicals via Method 1633 is not reasonably available, the permittee may request use of an alternate method and Ecology can approve the alternative method by email.