STATE OF WASHINGTON
ENERGY FACILITY SITE EVALUATION COUNCIL
PO Box 43172 • Olympia, Washington 98504-3172

September 14, 2021

Brad Barfuss
Energy Northwest Environmental and Regulatory Programs Manager
P.O. Box 968, Mail Drop PE03
Richland, WA 99352-0968

RE: Notice of Temporary State Waste Discharge Permit No. ST0501312 for the Energy Northwest Columbia Generating Station and Industrial Development Complex Sanitary Waste Treatment and Disposal System, **Revision 1 Effective September 14, 2021**

Dear Mr. Barfuss:

We are writing to notify you that Energy Northwest (EN) is authorized to discharge treated wastewater from the above referenced facility to land as described in the application, subject to the laws and regulations of the State of Washington. This Notice provides courtesy information on statutes, regulations and guidance that apply to this discharge.

The temporary permit authorization is provided by statute, RCW 90.48.200. The Energy Facility Site Evaluation Council (EFSEC) is directed to prescribe the means for monitoring the effects arising from the construction and the operation of energy facilities to assure continued compliance with terms of certification and/or permits issued by the Council pursuant to chapter 90.48 RCW, including state waste discharge permits. RCW 80.50.040(9); *see also* RCW 80.50.150(1).

Your temporary permit consists of this Notice of Temporary Permit and the application. Your application includes the following reports describing treatment system design, operations and maintenance:

- CH2MHill. 1980. Engineering Report for the Sanitary Waste Disposal System, Washington Public Power Supply System.
- CH2MHill. 1982. Operation and Maintenance Manual. Washington Public Power Supply System, Sanitary Waste Disposal System.

The temporary permit is effective July 15, 2021. We received your signed application on March 27, 2018 and updated applications on June 10, 2020 and December 1, 2020. We have accepted the application as complete as of the date of this notice.

Your permit will remain in force for up to five years from the effective date or until further notice, whichever occurs first (RCW 90.48.180). You must submit a new application at least 60 days before permit expiration (i.e. before May 16, 2026) if the discharge of wastewater will continue after the five-year term of the temporary permit (RCW 90.48.170).

EFSEC may act on your application prior to expiration of the temporary permit. EFSEC may also request an updated application if a substantial amount of time passes before acting on your December 1, 2020 application. Current agency staffing levels and competing priorities may result in EFSECs reliance on the temporary permit provided by statute for the foreseeable future.

Compliance with the application and all water pollution laws and regulations will constitute compliance with the temporary permit. The statutory authorization does not allow you to discharge pollutants not specified in your application or in quantities exceeding those specified in the application, or water pollution laws and regulations.

EFSEC Resolution 300 remains in effect. In the event of a conflict between Resolution 300 and the temporary permit, the temporary permit will control.

Effluent Limitations

WAC 173-221-050 (2) establishes effluent limits for this discharge, reproduced below.

Parameter	Average Monthly[a]	Average Weekly[b]
BOD_5	45 mg/L	65 mg/L
TSS	45 mg/L	65 mg/L
BOD_5 % Removal	65% (minimum)[c]	

Parameter	Monthly Geometric Mean[c]	Weekly Geometric Mean[c]
Fecal Coliform	200 org./100mL	400 org./100mL

Parameter	Minimum[d]	Maximum[d]
pH	6.0 s.u.	9.0 s.u.

a. Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.
b. Average weekly discharge limit means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

c. Ecology provides directions to calculate percent removal, and the monthly and the 7-day geometric mean in Publication No. 04-10-020, Information Manual for Treatment Plant Operators (the "Red Book").

d. The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values.

Groundwater Quality Criteria

WAC 173-200-040 establishes criteria for groundwater that include the following:

Parameter	Not to Exceed Value
Nitrate	10 mg/L
Total Dissolved Solids	500 mg/L
Chloride	250 mg/L
Total Coliform	1 org. / 100 ml

Monitoring, Discharge Monitoring Reports and Records Retention

EFSEC establishes monitoring and reporting requirements in permits using both explicit (RCW 90.48.180) and implicit authority. EFSEC is establishing effluent monitoring in this permit at a frequency consistent with Washington Department of Ecology (Ecology) guidance (Permit Writer's Manual,[1] Chapter 13), including consideration of the infrequent nature of the discharge. Required monitoring for this discharge is as follows:

Parameter	Sample Pt.	Frequency	Sample Type	Analytical Method
Flow	Effluent	Daily	Estimated	
BOD_5	Influent	1 / Month	Grab	SM 5210 B
BOD_5	Effluent	2 / Day	Grab	SM 5210 B
TSS	Influent	1 / Month	Grab	SM 2540 D
TSS	Effluent	2 / Day	Grab	SM 2540 D
Fecal Coliform	Effluent	1 / Month	Grab	SM 9222 D (MF)
pH	Effluent	1 / Month	Grab	SM 4500-H+B
Nitrate + Nitrite	Effluent	1 / Month	Grab	SM4500-NO3- E/F/H
Nitrate + Nitrite	MW14	1 / year	Grab	SM4500-NO3- E/F/H
Total Dissolved Solids	MW14	1 / year	Grab	SM 2540 D
Total Coliform	MW14	1 / year	Grab	SM 9221B, 9222B, 9223B

[1] Department of Ecology Publication # 92-109 Water Quality Program Permit Writer's Manual. Ecology's Implementation Guidance for the Groundwater Quality Standards (Publication # 96-02) contains additional information on the data to establish background levels prior to discharge, while Ecology's Criteria for Sewage Works Design (Publication No. 98-37), the "Orange Book", discusses groundwater monitoring recommendations for leak detection.

The first monitoring period begins on the effective date of the permit. With respect to Discharge Monitoring Reports, the Permittee will:

1. Summarize, report, and submit monitoring data obtained during each quarter on the electronic discharge monitoring report (DMR) form provided by Ecology within the Water Quality Permitting Portal. Include data for each of the above parameters 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. To find out more information and to sign up for the Water Quality Permitting Portal go to Department of Ecology Water Quality Permitting Web Portal guidance.
2. Enter the "No Discharge" reporting code for an entire DMR, for a specific monitoring point, or for a specific parameter as appropriate, if the Permittee did not discharge wastewater or a specific pollutant during a given monitoring period.
3. Report single analytical values below detection as "less than the detection level (DL)" by entering < followed by the numeric value of the detection level (e.g. < 2.0) on the DMR. If the method used did not meet the minimum DL and quantitation level (QL) identified in the permit, report the actual QL and DL in the comments or in the location provided.
4. Report as required by the laboratory method. For bacteria, do not report zero or "too numerous to count" (TNTC); instead, report less than or greater than a non-zero value.
5. Calculate and report an arithmetic average value for each day for bacteria if multiple samples were taken in one day.
6. Calculate the geometric mean values for bacteria (unless otherwise specified in the permit) using:
    a. The reported numeric value for all bacteria samples measured above the detection value except when it took multiple samples in one day. If the Permittee takes multiple samples in one day, it must use the arithmetic average for the day in the geometric mean calculation.
    b. The detection value for those samples measured below detection.
7. Report the test method used for analysis in the comments if the laboratory used a method different than those specified above.
8. Calculate average values and calculate total values (unless otherwise specified in the permit) using:
    a. The reported numeric value for all parameters measured between the method detection value and the method quantitation value.
    b. One-half the detection value (for values reported below detection) if the lab detected the parameter in another sample from the same monitoring point for the reporting period.
    c. Zero (for values reported below detection) if the lab did not detect the parameter in another sample for the reporting period.
9. Ensure that DMRs are electronically submitted no later than the dates specified below, unless otherwise specified in this permit.
10. Submit DMRs by the 15th day of the month following the end of the quarterly monitoring period. Quarterly sampling periods are January through March, April through

June, July through September, and October through December. The Permittee must submit the first quarterly DMR on 1/15/2022 for the quarter beginning on 10/1/2021.

11. 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 the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

Permit Violations and Immediate Reporting

In the event the permittee is unable to comply with any of the permit terms and conditions due to any cause, the permittee shall:

- Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem;
- Immediately notify EFSEC of the failure to comply; and
- Submit a detailed written report to EFSEC within thirty days, unless requested earlier by EFSEC, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, and any other pertinent information (WAC 173-216-110 (6)).

For violations of effluent limits or groundwater quality criteria, the permit should immediately repeat sampling and analysis to confirm the violation. Submit the results of any repeat sampling to Ecology within 30 days of sampling.

The Permittee must also immediately report to EFSEC, Ecology, and the Local Health jurisdiction (at the numbers listed below), all:

- Collection system overflows.
- Plant bypasses resulting in a discharge.
- Any other failures of the sewage system (pipe breaks, etc).
- Overflows or leaks of transmission or irrigation pipelines that discharge to a waterbody used as a source of drinking or irrigation water.

EFSEC	(360) 664-1362
Department of Ecology Central Regional Office	(509) 575-2490
Benton Franklin Health District	(509) 450-4313

Operations and Maintenance Manual (O&M Manual)

The O&M Manual for this facility was prepared 39 years ago (1982) although we understand Energy Northwest has adopted Standard Operating Procedures as recently as 2017. In that same year, Energy Northwest indicated it was in the process of revising its O&M Manual. We understand that EN is in the process of updating the O&M Manual for this facility and will

submit the document to EFSEC for review and approval, consistent with RCW 90.48.110. WAC 173-240-080(4) includes a list of topics O&M Manuals must address. The Department of Ecology's Criteria for Sewage Works Design[2] also includes guidance on O&M Manuals, referencing these as "living documents" subject to modification based upon experience.

Groundwater data we reviewed as part of the application show elevated levels of nitrate and total dissolved solids in monitoring wells adjacent to the facility but there are other sources of these pollutants in the area. The O&M Manual (pg. 2-33) recommends annual inspections of the liners and periodic tests that can reveal major leakage. If inspections reveal damage or leakage or if the liners are of an unusual age, Energy Northwest should replace them.

Certified Operator

The operator in responsible charge and the lead operator of a shift are required to hold valid certifications that are consistent with the plant classification. Operators that are not required to be certified are encouraged to seek certification. See WAC 173-230-220 and -330.

Prohibited Discharges

The discharge prohibitions contained in WAC 173-216-060 apply to discharges to the sewer system and treatment works. These prohibitions include:

1) The discharge restrictions and prohibitions of dangerous waste regulations, chapter 173-303 WAC.
2) Waste materials that pass through the treatment works untreated or interfere with its operation or performance.
3) Any liquids, solids or gases which by reason of their nature or quantity are or may be sufficient either alone or by interaction to cause fire or explosion or be capable of creating a public nuisance or hazard to life or are sufficient to prevent entry into the sewers for their maintenance and repair or be injurious in any other way to the operation of the system or the operating personnel.
4) Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the system.
5) Any wastewater having a pH less than 5.0 or greater than 11.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, or personnel of the system, unless the system is specifically designed to accommodate such discharge and the discharge is authorized by a permit under this chapter.
6) Wastewater which would cause the influent temperature to exceed 40°C (104°F), unless the system is specifically designed to accommodate such discharge and the discharge is authorized by a permit under this chapter. In any case, any wastewater having a temperature which will interfere with the biological activity in the system is prohibited.

[2] Department of Ecology Publication # 98-37 WQ. Criteria for Sewage Works Design (Orange Book). January 1978, Revised February 2019.

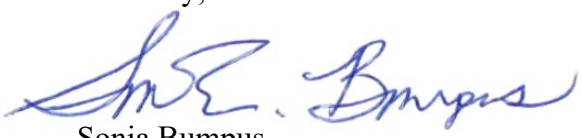
7) Any waste materials, including oxygen demanding waste materials (BOD, etc.), released in either a slug load or continuous discharge of such volume or strength as to cause interference to the system.
8) Any of the following discharges unless approved by EFSEC under extraordinary circumstances, such as lack of direct discharge alternatives due to combined sewer service or need to augment sewage flows due to septic conditions:
    a. Noncontact cooling water in significant volumes.
    b. Stormwater, and other direct inflow sources.
    c. Wastewaters significantly affecting system hydraulic loading, which do not require treatment or would not be afforded a significant degree of treatment by the system.

Judicial Review

This temporary permit authorization is subject to judicial review pursuant to the Administrative Procedure Act, Chapter 34.05 RCW.

If you have any questions or need assistance, please feel free to contact Amy Moon at (360) 664-1362 or amy.moon@utc.wa.gov.

Sincerely,



Sonia Bumpus
EFSEC Manager

By Certified Mail