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Permit No. WA-002515-1  
Issuance Date: 9-10-90  
Expiration Date: 9-10-95

NATIONAL POLLUTANT DISCHARGE ELIMINATION  
SYSTEM WASTE DISCHARGE PERMIT

State of Washington  
Energy Facility Site Evaluation Council  
Olympia, Washington 98504

In Compliance With the Provisions of  
Chapters 80.50 and 90.48 Revised Code of Washington as amended

and

The Clean Water Act, as amended  
Public Law 95-217

WASHINGTON PUBLIC POWER SUPPLY SYSTEM  
3000 George Washington Way  
Richland, Washington 99352

Plant Location:  
Section 5, T11N, R28E W.M.  
North of Richland  
Benton County, Washington

Receiving Water:  
Columbia River

Industry Type:  
Nuclear Steam  
Electric Generating Plant  
(WPPSS No. 2)

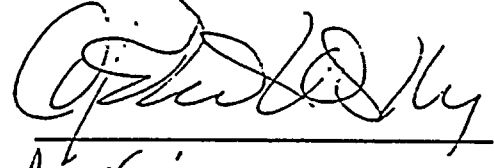
Discharge Location:  
Outfall 001  
Latitude: 46° 28' 17" N  
Longitude: 119° 15' 45" W

Water Segment No.:  
26-03-00

The above-named municipal corporation is authorized to discharge in accordance with the  
special and general conditions which follow.

Approved:

*Sgt. 12, 1990*

  
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Chairman  
Energy Facility Site  
Evaluation Council

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SPECIAL CONDITIONS

S1. EFFLUENT LIMITATIONS

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge effluent from Outfall Discharge Serial Number 001 subject to meeting the following limitations and monitoring requirements:

A. Recirculating Cooling Water Blowdown-Discharge

<u>Parameter</u>	<u>EFFLUENT LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	<u>Daily Maximum</u>	<u>Daily Average</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
Temperature	(Note 1)			
Total Residual Halogen	0.1 mg/l (Note 2)		2 Times per Treatment	Grab
pH	Between 6.5 and 9.0 (Note 3)		Continuous (Note 4)	N/A
Flow (gpd)	9.4 x 10 <sup>6</sup>	5.0 x 10 <sup>6</sup> (Note 5)	Continuous	N/A

Note (1) The temperature of the recirculated cooling water blowdown shall not exceed, at any time, the lowest temperature of the recirculated cooling water prior to the addition of the makeup water, except that the temperature of the blowdown may be less than the temperature of the river.

Note (2) Prior to initiating biofouling treatment, permittee shall terminate all discharges from the recirculating water system to the receiving water until the total residual halogen concentration has been at or below 0.1 mg/l for 15 minutes.

Note (3) The total time during which pH values are outside this range shall not exceed 7 hours and 26 minutes in any calendar month, and no individual excursion shall exceed 60 minutes. An excursion is an unintentional and temporary incident of pH exceedance. No excursions greater than 9.5 or lower than 5.5 are allowed.

Note (4) Permittee shall include an alarm system for the pH control to provide an indication of any variance from established limits.

Note (5) During a period of major dust storm activity, daily average flow up to 5.6 MGD is allowed.

B. Liquid Radioactive Discharges.

The Permittee is allowed on an intermittent basis to discharge a maximum of 285,000 gallons per day of water originating from the liquid radwaste treatment systems. Excess process water shall not be discharged to the river unless sampling and analysis has demonstrated that the water complies with the applicable regulations on liquid radioactive discharges.



S2. MONITORING AND REPORTING REQUIREMENTS

The Permittee shall monitor the operations and efficiency of all treatment and control facilities and the quantity and quality of the waste discharged as specified in S1.

A. Reporting

The results of monitoring required by the Special Condition S1.A shall be summarized by month and reported on a Discharge Monitoring Report (EPA 3320-1), postmarked no later than the 15th day following the end of the month. Duplicate signed copies of the DMRs, shall be submitted to the Council and EPA at the following addresses:

EFSEC  
Mail Stop: PY-11  
Olympia, WA 98504

U.S. EPA Region X  
Attn: Water Compliance Section WD-135  
1200 - 6th Avenue  
Seattle, WA 98101

All other reports required herein will be submitted to the Council only.

B. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the dates the analyses were performed; (3) who performed the analyses; (4) the analytical techniques or methods used; and (5) the results of all analyses.

C. Representative Sampling

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

D. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the Council, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants, contained in 40 CFR Part 136.

E. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendation or at a minimum frequency of at least one calibration every 18 months.

F. Records Retention

The Permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports of recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Council.

### S3. SOLID WASTE DISPOSAL

#### A. Residual Solids Handling

The Permittee shall handle and dispose of all solid waste material in a manner which prevents pollution of state ground or surface water.

#### B. Solid Waste Control Plan

The Permittee shall submit a solid waste control plan to the Council no later than 12 months after permit issuance for review and approval. This plan shall include all solid wastes with the exception of radioactive waste and those solid wastes regulated by Chapters 463-40 and 173-303 WAC (Dangerous Wastes). The plan shall include a general description, composition, source, generation rate and frequency, and disposal methods of these solid wastes. This plan shall be consistent with Chapter 173-304 WAC and any approved local solid waste management plan. The Permittee shall comply with the plan as approved by the Council. The Permittee shall submit an update of the solid waste control plan with the application for permit renewal and approval.

### S4. ACUTE BIOMONITORING STUDY

#### A. General Requirements

Acute toxicity testing of effluent shall be conducted in accordance with the following protocols and monitoring requirements or approved modifications thereof:

1. Testing Procedures - Methods for Measuring the Acute Toxicity of Effluent to Freshwater and Marine Organisms, EPA/600/4-85/013, March 1985.
2. Quality Assurance/Quality Control (QA/QC) - Quality Assurance Guidelines for Biological Testing, EPA/600/4-78-043.

A written report of the toxicity test results and any source investigation shall be submitted to the Council within 60 days after the completion of each test and shall include all relevant information outlined in Section 10, Report Preparation, of Short-Term Methods for Estimation the Chronic Toxicity of Effluent and Receiving Water to Freshwater Organisms, EPA/600/4-85/014, December 1985.

#### B. Initial Biomonitoring Requirements

1. Testing shall be conducted four times during the first 15 months following permit issuance.
2. Testing shall be conducted using three organisms: 1) a salmonid 2) Daphnia pulex and 3) Hyalloella azteca.
3. All reasonable means will be taken to conduct and complete testing of salmonids on continuous flow-through of effluent.
4. Testing of Daphnia pulex and Hyalloella azteca shall be conducted using static biomonitoring methods. The type of sample chosen shall be used consistently.
5. All tests shall measure the response of the organisms for 96 hours in 0 percent (control) and 100 percent effluent concentrations.
6. If the survival rate of any test organisms is less than 80%, the Council will discuss with the permittee the necessity of additional tests or methods of



mitigation such that 80% survival can be achieved.

C. Future Biomonitoring Requirements

The Council will review the results from the initial acute biomonitoring to determine which species will be used in future testing. For the remainder of the permit term, testing shall be conducted two times per calendar year using the single species chosen, with all other requirements remaining the same.

The Council reserves the right to require the submission of a schedule and format of additional tests if the Council or the permittee determines that the makeup of the composite discharge has been altered to the detriment of the environment.

S5. SPILL PLAN

Within six months after the issuance date of the permit, the Permittee shall submit to the Council, for review and approval, a spill control plan for the prevention, containment, and control of spills or unplanned discharges of: 1) petroleum (oil), 2) hazardous substances covered by 40 CFR Part 302, and 3) materials which when spilled, or otherwise released into the environment are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070.

The spill control plan shall include the following:

- A. A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
- B. A description of preventative measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
- C. A list of all oil and chemicals used, processed, or stored at the facility which may be spilled into state waters.

The spill plan shall be updated every two years. The plan and any supplements shall be followed throughout the term of the permit.

GENERAL CONDITIONS

G1. Discharges Authorized.

All discharges and activities authorized herein shall be consistent with the terms and conditions of this permit. Permittee is authorized to discharge those pollutants which are: (1) contained in the untreated water supply, (2) entrained from the atmosphere, or (3) identified in the permit application; except as modified or limited by the special or general conditions of this permit. However, the effluent concentrations in permittee's waste water shall be determined on a gross basis and the effluent limitations in this permit mean gross concentrations and not net addition of pollutants. The discharge of any pollutant more frequently than or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit. The discharge of water treatment additives which were not identified in the permit application shall be subject to Council approval.

G2. Priority Pollutants.

No discharge of polychlorinated biphenyl compounds is permitted. There shall be no detectable discharge of priority pollutants (listed in 40 CFR Part 423, Appendix A)





contained in chemicals added for water treatment.

G3. Dilution Zone.

Permittee shall not discharge any effluent which will cause a violation of any applicable State of Washington Water Quality Standards contained in WAC 173-201, as they exist now or hereafter are amended, outside the mixing zone whose boundaries shall be:

1. The boundaries in the vertical plane shall extend from the receiving water surface to the riverbed;
2. The upstream and downstream boundaries shall be 50 feet and 300 feet, respectively, from the center line of the outfall; and
3. The lateral boundaries shall be separated by 100 feet.

G4. Definitions.

As used in this permit, the following terms are as defined herein:

1. The "daily maximum" discharge means the total discharge by weight or volume during any calendar day and where specified, the maximum permissible pollutant concentration.
2. The "daily average" discharge means the total discharge by weight or volume during a calendar month divided by the number of days in the month that the respective discharges occur. Where less than daily sampling is required by the permit, the daily average discharge shall be determined by the summation of the measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made.
3. "Composite sample" is a sample consisting of a minimum of six grab samples collected at regular intervals over a normal operating day and combined proportional to flow, or a sample continuously collected proportional to flow over a normal operating day.
4. "Grab sample" is an individual sample collected in a time span of less than 15 minutes.

G5. Toxic Pollutant Discharges

The permittee will notify the Council as soon as it knows or has reason to believe that any toxic pollutant not limited by the special conditions of this permit will be discharged on a routine or frequent basis at levels exceeding the notification levels of 40 CFR 122.42(a)(1) or on a non-routine or infrequent basis at levels exceeding the notification levels of 40 CFR 122.42(a)(2).

G6. Compliance With Other Laws and Statutes

Nothing in this permit shall be construed as excusing the permittee from compliance with any applicable federal, state or local statutes, ordinances, or regulations.

G7. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

G8. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance and funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

G9. Bypass of Treatment Facilities

Per 40 CFR 122.4(m), the bypass or intentional diversion of waste streams from any portion of waste treatment facilities is prohibited except:

1. When the bypass does not cause effluent limitations to be exceeded and it is necessary to perform essential maintenance to assure efficient operation;
2. Where the bypass was unavoidable to prevent loss of life or severe property damage;
3. When there are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime.

Anticipated bypasses, other than those in (1) above, shall be reported to the Council as far in advance as possible for the Council's approval. Unanticipated bypasses shall be reported to the Council in accordance with the procedure specified in General Condition G11.

G10. Upset Conditions

Per 40 CFR 122.41(n), an upset is an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations 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 technology-based permit effluent limitations if the permittee can demonstrate through 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 facility was at the time being properly operated;
3. The permittee submitted notice of the upset as required by General Condition G11; and
4. The permittee complied with any remedial measures required under this permit.

**G11. Noncompliance Reporting**

1. The following occurrences of noncompliance shall be reported orally within 24 hours from the time the permittee becomes aware of the circumstances:
  - (a) any noncompliance which may endanger health or the environment.
  - (b) any unanticipated bypass which exceeds any effluent limitation in the permit (see General Condition G9).
  - (c) any upset which exceeds any effluent limitation in the permit (see General Condition G10).
  - (d) violation of a maximum daily discharge limitation for any of the pollutants listed in Special Conditions S1.A. of this permit.
2. A written report shall also be submitted to the Council within five working days of the time that the permittee becomes aware of the circumstances. The written description shall contain:
  - (a) a description of the noncompliance and its cause;
  - (b) the period of noncompliance, including exact dates and times;
  - (c) the estimated time noncompliance is expected to continue if it has not been corrected; and
  - (d) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
3. The Council may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

**G12. Other Noncompliance Reporting.**

Instances of noncompliance not required to be reported within 24 hours shall be reported on the discharge monitoring reports (Special Condition S2.A). The reports shall contain the information listed in General Condition G11.

**G13. Inspection and Entry.**

The permittee shall allow authorized representatives of the Council, upon the presentation of credentials and such other documents as 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 any records that must be kept under the terms of this permit;
3. To inspect at reasonable times any monitoring equipment or method of monitoring



required in this permit;

4. To inspect at reasonable times any collection, treatment, or discharge facilities; and
5. To sample at reasonable times any discharge of pollutants.

**G14. Permit Modifications**

The Permittee shall submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will 1) result in a new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants, or 2) violates the terms and conditions of this permit.

**G15. Permit Modified or Revoked**

This permit may be modified, revoked or reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation upon such pollutant in the permit, the Council shall institute proceedings to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

**G16. Duty to Provide Information.**

The permittee shall furnish to the Council, within a reasonable time, any information which the Council 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 shall also furnish to the Council, upon request, copies of records required to be kept by this permit.

**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.

1. Toxic Pollutants. The permittee shall 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 established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
2. Penalties for Violations of Permit Conditions. Violations of conditions of this permit are subject to enforcement actions and penalties as provided for in Chapter 80.50 RCW. Except as provided in permit Conditions G9, Bypass of Treatment Facilities and G10, Upset Conditions, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

**G18. Duty to Reapply**

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.

G19. Additional Monitoring

For good cause shown, the Council may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

The permittee will notify the Council within 48 hours of analysis if any downstream in-river monitoring indicates concentrations of any parameter above water quality standards.

G20. Property Rights.

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

G21. Transfers.

This permit may be transferred to a new permittee if:

1. the current permittee notifies the Council at least 30 days in advance of the proposed transfer date;
2. the notice includes a written agreement between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
3. The Council does not notify the existing permittee and the proposed new permittee of its intent to modify, or revoke the reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (b) above.

G22. Liability.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject.

G23. Signatory Requirement.

All applications, reports or information submitted to the Council shall be signed and certified as provided for under 40 CFR 122.22.

G24. 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 6 months per violation, or by both.

