

Permit No. WA-002496-1
Issuance Date:
Expiration Date:

APPENDIX A

NATIONAL POLLUTANT DISCHARGE ELIMINATION
SYSTEM WASTE DISCHARGE PERMIT

State of Washington
Thermal Power Plant Site Evaluation Council
Olympia, Washington 98504

In Compliance With the Provisions of
Chapter 155, Laws of 1973, (RCW 90.48) as Amended

and

The Federal Water Pollution Control Act Amendments of 1972,
Public Law 92-500

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

Plant Location: Section 17
T. 17N, R 6W W.M.
South of Satsop
Grays Harbor County,
Washington

Receiving Water:
See Page 2

Discharge Location:
See Page 2

Industry Type: Nuclear Steam
Electric Generating Plant
(WPPSS Nos. 3 & 5)

Waterway Segment No.:
See Page 2

is authorized to discharge in accordance with the special and general
conditions which follow.

APPROVED: April 12, 1976

AMENDED: April 26, 1976


Acting Chairman
Thermal Power Plant Site
Evaluation Council

TPS 005479

OUTFALL IDENTIFICATION (1)

<u>OUTFALL</u>	<u>RECEIVING WATER</u>	<u>DISCHARGE LOCATION</u>	<u>WATER SEGMENT NO.</u>
001	Chehalis River	Lat. 46°58'26"N Lo. 123°29'19"W	10-22-12
002	Fuller Creek	Lat. 46°58'22"N Lo. 123°27'43"W	10-22-12
003	Workman's Creek	Lat. 46°57'27"N Lo. 123°27'49"W	10-22-12
004	Fuller Creek	Lat. 46°57'55"N Lo. 123°28'27"W	10-22-12
005	Fuller Creek	Lat. 46°58'1"N Lo. 123°28'20"W	10-22-12
006	Fuller Creek	Lat. 46°58'6"N Lo. 123°28'9"W	10-22-12
007	Fuller Creek	Lat. 46°58'12"N Lo. 123°28'9"W	10-22-12
008	Fuller Creek	Lat. 46°58'22"W Lo. 123°47'21"W	10-22-12
009	Chehalis River	Lat. 46°58'30"N Lo. 123°27'15"W	10-22-12
010	Purgatory Creek	Lat. 46°58'20"N Lo. 123°27'19"W	10-22-12

(1) No pollutant discharge from any construction activity or operation associated with this project is authorized from any outfall other than those ten outfalls identified above.

TPS 005480

SPECIAL CONDITIONS

S.1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the issuance of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge effluents from Outfall Discharge Serial Number 001 subject to the following limitations and monitoring requirements:

TPS 005481

A. LOW VOLUME WASTE SOURCES PORTION OF DISCHARGE SERIAL NUMBER 001 PER UNIT(1)

<u>PARAMETER</u>	<u>EFFLUENT LIMITATIONS (2)</u>		<u>MONITORING REQUIREMENTS (3)</u>	
	<u>Daily Maximum</u>	<u>Daily Average</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>

Total Suspended Solids (lb/day) (mg/l)	70 100	12.5	3 times per week	Grab
pH	Between 6.5 and 8.5 at all times		3 times per week	Grab
Oil and grease (lb/day) (mg/l)	10.5 15	6.3	weekly	Grab
Flow (GPD) (4)	8.4×10^4	$5. \times 10^4$	Each discharge	Log tank contents prior to discharge

Note (1) Permittee shall mix effluent from this source with cooling water blowdown when either cooling tower is operational.

Note (2) When neither cooling tower is operational, low volume wastes must be retained.

Note (3) Permittee shall monitor the effluent from the low volume waste sources for TSS, pH, oil and grease and flow volume prior to mixing with cooling tower blowdown or other in-plant streams.

Note (4) Permittee shall discharge from this source only on an intermittent basis.

TPS 005482

B. RECIRCULATED COOLING WATER BLOWDOWN PORTION OF DIFFUSER DISCHARGE SERIAL NUMBER 001
PER UNIT

PARAMETER	EFFLUENT LIMITATIONS (1)		MONITORING REQUIREMENT	
	Daily Maximum	Daily Average	Minimum Frequency	Sample Type
Temperature	Note (2)		Continuous	Instantaneous
Free Available Chlorine (lb/day) (mg/l)	Note (3) 1.4 0.0013	.5	Continuous (4)	Instantaneous
pH	Between 6.5 and 8.5 at all times		Continuous (5)	Instantaneous
Flow (GPD) (6)	4.03 x 10 ⁶		Continuous	Instantaneous
Copper (mg/l)	0.0013		Weekly	Grab
CFS	6.3			
<p>Note (1) Permittee shall monitor the effluent for temperature, chlorine, pH and flow prior to being mixed with other implant streams.</p> <p>Note (2) The discharge temperature of the recirculated cooling water and component auxiliary cooling system water to the blowdown system shall not exceed either 65° F or the lowest temperature of the recirculated cooling water at the point of release from the circulating system prior to the addition of the makeup water.</p> <p>Note (3) The maximum concentration of total residual chlorine at the outfall shall not exceed 0.0013 mg/l at any time. For compliance, chlorine will be measured at and will be characteristic of the discharge of the unit being chlorinated.</p> <p>Note (4) Continuous recording of total residual chlorine during periods of active chlorination and for 3 hours after recommencing discharge or until chlorine residual reaches an undetectable level.</p> <p>Note (5) Permittee shall include alarm systems for pH control, for chlorine residual, to provide indication of any variance from established limits.</p> <p>Note (6) No discharge is permitted from this source at any time either when instantaneous river velocities are less than 1.0 feet per second at the diffuser, or when instantaneous flow volumes are less than 550 cfs.</p>				

C. METAL CLEANING WASTES PORTION OF DISCHARGE SERIAL NUMBER 001 PER UNIT

<u>PARAMETER</u>	<u>EFFLUENT LIMITATIONS (1)</u>		<u>MONITORING REQUIREMENTS (2)</u>	
	<u>Daily Maximum</u>	<u>Daily Average</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
Total Iron (lb/day)	0.42	0.17	3 times per day when discharging	Grab
Total Copper (lb/day)	0.42	0.17	3 times per day when discharging	Grab
Total Suspended Solids (lb/day)	42 100	5	3 times per day when discharging	Grab
pH	Between 6.5 and 8.5 at all times		3 times per day when discharging	Grab
Oil and Grease (lb/day)	6.3	2.5	3 times per day when discharging	Grab
Oil and Grease (mg/l)	.15			
Flow (GPD)	5 x 10 ⁴	2 x 10 ⁴	Each Discharge	Calculated Total Volume

Note (1) The daily values indicated are permitted for one cleaning operation only and the discharges are limited to one unit at a time. The cleaning operation discharges may be made only at times when river flow volume at the outfall exceeds 6600 cfs.

Note (2) Permittee shall monitor the metal cleaning wastes prior to their confluence with any other discharge stream emitting from the project.

TPS 005484

D. SANITARY SERVICE PORTION OF DISCHARGE SERIAL NUMBER 001 (1)

<u>PARAMETER</u>	<u>EFFLUENT LIMITATIONS (2)</u>		<u>MONITORING REQUIREMENTS (3)</u>	
	<u>Daily Maximum</u>	<u>Daily Average</u>	<u>Minimum Frequency</u>	<u>Sample Type</u>
Biochemical Oxygen Demand (lb/day) (mg/l)	7.5	5.0	Weekly	Composite
Total Suspended Solids (lb/day) (mg/l)	7.5	5.0	Weekly	Composite
Fecal Coliform Bacteria	400 per 100 ml	200 per 100 ml	Weekly	Day shift grab
pH	Between 6.5 and 8.5 at all times		3 times weekly	Day shift grab
Flow (GPD)	2 x 10 ⁴	2 x 10 ⁴	Continuous	Instantaneous
Total Residual Chlorine (mg/l)	0.5 mg/l maximum prior to mixing with cooling tower blowdown		3 times weekly	Grab

Note (1) When neither cooling tower is operational, sanitary wastes must be retained.

Note (2) Permittee shall mix effluent from this source with cooling water blowdown when either cooling tower is operational.

Note (3) Permittee shall monitor the effluent prior to mixing with other implant streams.

TPS 005485

S.2 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL DISCHARGE SERIAL NUMBERS 002, 003, 004, 005, 006, 007, 008, 009, and 010.

During the period beginning with the issuance of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge effluents from Outfall Discharge Serial Numbers 002, 003, 004, 005, 006, 007, 008, 009 and 010 subject to the following limitations and monitoring requirements:

1. pH factor, coliform content, dissolved oxygen, total dissolved gas content and temperature should not exceed normal area runoff amounts.
2. The presence of oil, grease, or polychlorinated biphenyl in outfall discharges will not be tolerated.

A. COLLECTED STORM RUN-OFF DRAINAGE OF DISCHARGE SERIAL NUMBERS 002, 003, 004, 005, 006, 007, 008, 009 and 010

PARAMETER EFFLUENT LIMITATIONS (1)

MONITORING REQUIREMENTS

<u>PARAMETER</u>	<u>EFFLUENT LIMITATIONS (1)</u>	<u>MONITORING REQUIREMENTS</u>
Total Suspended Solids	50 (mg/l) maximum	Minimum Frequency
Settleable Solids (ml/l)	0.1	Once per 1/2 day when there is discharge from the storm collector basins
pH	Between 6.5 and 8.5 at all times	Sample Type
		Once per 1/2 day when there is discharge from the storm collector basins
Flow (2)	Pond Discharges shall not cause tributary creeks to exceed their immediately previous maximum storm levels.	Grab 2-hours after discharge begins

Note (1) Any untreated overflow from facilities designed, constructed and operated to treat the volume of material storage runoff and construction runoff which is associated with a 10-year 24-hour rainfall event shall not be subject to the limitations here stated for total suspended solids, settleable solids, and pH.

Note (2) All ditches must be appropriately routed to sedimentation and erosion control ponds.

TPS 005487

GENERAL CONDITIONS

- G1. No discharge of polychlorinated biphenyl compounds, such as transformer fluid, is permitted. No discharge of materials added for corrosion inhibition including but not limited to zinc, chromium and phosphorus is permitted.
- G2. 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 water supply, (2) entrained from the atmosphere, or (3) quantitatively and qualitatively 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. There shall be no discharge of liquid radioactive wastes during normal plant operations.
- G3. Permittee shall notify the Council no later than 120 days before the date of anticipated first discharge from outfall 001 under this permit.
- G4. Notwithstanding any other condition of this permit, the permittee shall not discharge any effluent which shall cause a violation of any State of Washington water quality criteria or standards as they exist now or hereafter are amended, at discharge points specified by this permit.
- G5. The permittee shall provide an adequate operating staff which is qualified and shall carry out the operation, maintenance, testing and reporting activities required to assure compliance with the conditions of this permit.
- G6. Notwithstanding any other condition of this permit, Permittee shall handle and dispose of all solid waste material from plant operations, including settled silts, sludges, and other wastes from cooling towers, waste retention basins, or any other source in such a manner as to prevent any pollution of ground or surface waters. Further, permittee shall not permit leachate from such solid waste material to cause adverse effect on ground or surface water quality. Prior to the production of solid wastes, the permittee shall obtain Council approval of the proposed method of handling and disposing of solid wastes.
- G7. Whenever a facility expansion, associated construction operation, production increase, or process modification is anticipated which will result in a new or increased discharge, or which will cause any of the conditions of this permit to be exceeded, a new NPDES application must be submitted together with the necessary reports and engineering plans for the proposed changes. No such change

shall be made until plans have been approved and a new permit or permit modification has been issued. If such changes will not violate the effluent limitations specified in this permit, permittee shall notify the Council of such changes prior to such facility expansion, production increase or process modification.

- G8. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under state law or under Section 307(a) of the Federal Act for a toxic pollutant which is present in the permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee shall be so notified.
- G9. If, for any reason, the permittee does not comply with or will not be able to comply with any effluent limitations specified in this permit, the permittee shall:
- a. Immediately take appropriate action to stop, contain, and clean up the unauthorized discharge and correct the problem.
 - b. Provide the Council and Department of Ecology with the following information, in writing, within 48 hours of becoming aware of such conditions:
 - (1) A description of the discharge and cause of noncompliance; and
 - (2) The period of noncompliance, including dates and times; or if not corrected, the anticipated time the noncompliance is expected to continue and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

Compliance with these requirements does not relieve the permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

- G10. The permittee shall at all times maintain in good working order and efficiently operate all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.
- G11. The diversion of any discharge or bypass of any facilities utilized by the permittee to maintain compliance with the terms and conditions of this permit is prohibited, except (a) where unavoidable to prevent loss of life or severe property damage, or (b) where excessive storm drainage or runoff (See Special Condition 2(a) Note (1).) would clearly damage any facilities necessary for compliance with the terms and conditions of this

permit. The permittee shall promptly notify the Council and the Department of Ecology in writing of each such diversion or bypass (See Special Condition 2(A) Note (2).) in accordance with the procedure specified in condition G9.

- G12. Permittee shall install an alternative electric power source capable of operating all electrically powered pollution control and monitoring facilities; or, alternatively, permittee shall certify to the Council that the terms and conditions of this permit will be met in case of a loss of primary power to any pollution control or monitoring equipment by controlling production.

Monitoring

- G13. Permittee shall comply with the Monitoring Program requirements set forth herein:

Monitoring results for the previous quarter shall be summarized on a monthly basis and reported on a Discharge Monitoring Report Form (EPA 3320-1), postmarked no later than the 28th day of the month following the end of the quarter. The first report is due by the 28th day of the first month following the end of the quarter in which the first discharge under this permit occurs. Duplicate signed copies of these, and all other reports required herein shall be submitted to EPA, the Council and DOE at the following addresses:

U.S. EPA Region X
1200 6th Avenue
Seattle, WA 98101
Attention: Permits
Branch

Dept. of Ecology
Olympia, WA 98504

EFSEC
Attention:
Executive Secretary
820 East 5th Ave.
Olympia, WA 98504

- G14. 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 instrumentations, record of analysis performed and calibration and maintenance of 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.
- G15. All samples and measurements made under this program shall be representative of the volume and nature of the monitored discharge.
- G16. The permittee shall record such measurement or sample taken pursuant to the requirements of this permit for the following information: (1) the date, 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 the analyses.

TPS 005490

G17. As used in this permit, the following terms are as defined herein:

- a. The "daily maximum" discharge means the total pollutant discharge by weight during any calendar day and where specified, the maximum permissible pollutant concentration.
- b. The "daily average" discharge means the total pollutant discharge by weight and where specified the average pollutant concentration 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.
- c. "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 collecting day.
- d. "Grab sample" is an individual sample collected in a time span of less than 15 minutes.

G18. All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to regulations published pursuant to Section 304(g) of the Federal Act, or if there is no applicable procedure, shall conform to the latest edition of the following references:

- a. American Public Health Association, Standard Methods for the Examination of Water and Wastewaters.
- b. American Society for Testing and Materials, A.S.T.M. Standards, part 23, Water, Atmospheric Analysis.
- c. Environmental Protection Agency, Water Quality Office Analytical Control Laboratory, Methods for Chemicals Analysis of Water and Wastes.

Alternative methods may be utilized if approval pursuant to 40 CFR 136 or as amended is received by permittee. The Council shall be notified of each such alternative method approved for use.

G19. Except for data determined confidential under Section 308 of the Federal Act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Council and the Regional Administrator. As required by the Federal Act, effluent data shall not be considered confidential. Knowingly making a false statement on any such report may result in the imposition of criminal penalties as provided in Section 309 of the Federal Act.

Other Provisions

- G20. After notice and opportunity for a hearing this permit may be modified, suspended or revoked in whole or in part during its term for cause including but not limited to the following:
- a. Violation of any terms or conditions of this permit;
 - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
 - c. A change in conditions of the receiving waters that requires either a temporary or permanent reduction or elimination of the authorized discharge;
 - d. If any provision of this permit is declared invalid by the courts.
- G21. The permittee shall, at all reasonable times, allow authorized representatives of the Council upon the presentation of credentials:
- a. To enter upon the permittee's premises for the purposes of inspecting and investigating conditions relating to the pollution of, or possible pollution of any of the waters of the State, or for the purpose of investigating compliance with any of the terms of this permit;
 - b. To have access to and copy any records required to be kept under the terms and conditions of this permit;
 - c. To inspect any monitoring equipment or monitoring method required by this permit; or
 - d. To sample any discharge of pollutants.
- G22. Nothing in this permit shall be construed as excusing the permittee from compliance with any applicable, Federal, State or local statutes, ordinances, or regulations.
- G23. 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.
- G24. The permittee shall notify and afford the Council reasonable opportunity to review and comment on completed design drawings, specifications, and operational procedures for facilities including, but not limited to, the following:
- a. Liquid radioactive waste discharge prevention;
 - b. Sanitary sewage treatment;
 - c. Low volume waste treatment, including frequency of discharges;
 - d. Construction run-off ponds;

TPS 005492

- e. Outfalls and diffusers;
- f. River flow measuring stations and tidal effect measuring stations;
- g. Metal cleaning waste discharges;
- h. Water composition and condition stations.

The Council reserves the right to reject any drawing or procedural manuals for failure to conform to conditions stated in this permit and accompanying order. The Council further reserves the right to require amendments to any drawings or procedural manuals to produce conformance with conditions stated in this order or accompanying permit. Nothing contained herein shall be construed to relieve permittee from any liability arising from deficiencies or omissions in drawings, specifications, or operating procedures.

- G25. Prior to the on-site storage of oil and hazardous waste materials the permittee shall obtain Council approval of a spill prevention containment and counter-measure plan which shall include:
- a. A description of the reporting system which will be used to alert responsible facility management and appropriate legal authorities.
 - b. A description of preventive facilities (including overall facility plot) which prevent, contain, or treat spills an/unplanned discharges and a compliance schedule to install any necessary facilities in accordance with the approved plan.
 - c. A list of all hazardous materials used, processed or stored at the facility which may be spilled directly or indirectly into state waters.

Submittal of this plan in accordance with this requirement does not relieve the permittee from compliance with, nor ensure compliance with, the Federal spill prevention requirement contained in 40 CFR part 112 of the Federal Register. Oil Spill Prevention, Containment and Counter-measure Plans prepared in accordance with the above federal requirement may be used in partial fulfillment of this permit requirement.

- G26. Permittee must, where applicable, continuously, efficiently, and assiduously operate all pollutant control facilities required by this permit for the duration of this certification.
- G27. All necessary action must be taken to eliminate any new unforeseen surface runoff problems threatening to cause discharge of pollutants in quantities or concentrations greater than those authorized by this permit. Permittee must obtain Council approval of all such actions and must promptly notify the Council in

TPS 005493

writing of all such problems.

- G28. All construction related bid documents and construction and installation contracts must contain explicit provisions which adequately and specifically inform contractors of contractors' obligations to adhere to all sedimentation and erosion control standards set forth herein. These contracts shall be made available to the Council on request.
- G29. Applicant must monitor and record on a daily basis, water conditions and composition at the water intake location, should its proposed project be authorized, to detect any variation which may have a significant effect on water quality downstream from the diffuser.
- G30. The Council may order applicant to take all appropriate steps, including management of discharges, to maintain water quality conditions. Instantaneous river flow conditions, including any tidal influence, shall be continuously monitored in the vicinity of the diffuser at outfall 001.
- G31. Prior to the start of construction, applicant shall submit to the Council for its review, sedimentation and erosion control plan modifications sufficient to insure that no construction runoff discharges wherein suspended solids concentrations exceed 50 mg/l are made and that water quality criteria will be met at construction runoff discharge points, except on occurrence of specific circumstances described in S 2 (a) and G11 of this permit.
- G32. In addition to complying with other conditions of this permit, applicant must at all times adhere to all standards of practice and performance it committed to in the course of hearings held on April 10, 11, 15, 16 and 17, and July 24 and 25, 1975, in this matter.
- G33. Empirical measurements of turbidity resulting from discharges must be made at earliest possible times for all outfall locations and as necessary thereafter; measurements taken together with measurement methods must be submitted to the Council for the Council's review and determination that water quality criteria relating to turbidity have been met; and applicant must at the earliest practicable date perform such modifications as are necessary and approved by the Council to assure that discharges made at outfall locations 001 through 010 meet state water criteria relating to turbidity without causing such discharges to exceed other limits set herein.
- G34. River flow volumes, which accurately represent outflow conditions immediately above the diffuser pipe, shall be measured on a continuous and permanent recording basis by such method as may be proposed by the permittee and approved by the Council.