AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM INDUSTRIAL PERMIT NO. DC0022004

In compliance with the provisions of the Clean Water Act, as amended, 33 U.S.C. §1251 et seg. (the "Act"),

Potomac Electric Power Company Potomac River Generating Station

is authorized to discharge from a facility located at

1400 North Royal Street Alexandria, VA 22314-1199

to receiving waters named

Potomac River

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

APR 2 0 2000

This permit shall become effective one month from the date of the issuance.

This permit and the authorization to discharge shall expire 5 years from the date of issuance, unless the permittee has submitted a complete and timely application for a new permit, and EPA, through no fault of the permittee, does not issue a new permit before the expiration date of this permit.

Signed this 20th day of April, 2000.

Son M. Capacaga, Acting Division Director

Water Protection Division

U.S. Environmental Protection Agency

Region III

EFELUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 001 Ä

<u>Which discharges wastes from</u>: cooling water (once through cooling water, filter backwash yard drainage, cooling, floor and building roof drains)

The permittee is authorized to discharge during the period beginning the effective date and lasting through the expiration date.

Such discharges shall be limited and monitored by permittee as specified below.

Effluent Characteristics	Discharge Limitations	mitations		ä	Monitoring Requirements	ments
	kg/day (lb/day) Avg. Monthly N	۱۷) y Max Daily	Other units (mg/l) Avg. Monthly Max [mg/l)	Other units (mg/l) Avg. Monthly Max Daily mg/l)	Measurement Frequency	Sample Type
Flow-m³/day (mgd)	N/A	N/A	A/N	. Y/N	Continuous	Calculated
Total Residual Chlorine	N/A	N/A	N/A	0.2**	2/Month	Grab
Heat Rejected (MBTU/HR)*	N/A	N/A	A/N	4286	Continuous	Recorded

There shall be no discharge of substances in amounts that float as debris, scum, oil, or foam to form nuisances in the receiving stream.

at intake and outfall 001 for temperature and at outfall 001 (prior to mixing to any other effluent stream) for all remaining parameters. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

** This facility shall discharge neither free available chlorine nor total residual chlorine from any unit for more than two hours in any one day.

There shall be no discharge of polychlorinated biphenyl compounds (PCB's) to the receiving stream.

*In addition, the facility is required to meet the temperature limits of DCMR §1104.6 (32.2°C maximum, 2.8°C maximum change above ambient) at the edge of a temporary mixing zone granted under Section F.6 of the permit.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 101 Ä

Which discharges wastes from: ash clarifier (coal pile runoff, yard drains for flyash handling)

The permittee is authorized to discharge during the period beginning the effective date and lasting through the expiration date.

Such discharges shall be limited and monitored by permittee as specified below.

Effluent Characteristics	Discharge Lim	imitations			Monitoring Requirements	<u>ients</u>
	kg/day (lb/day) Avg. Monthly	kg/day (lb/day) Avg. Monthly Max Daily	Other units (mg/l) Avg. Monthly Max Daily (mg/l)	mg/ll v Max Daily	<u>Measurement</u> Frequency	<u>Sample</u> T <u>ype</u>
Flow-m³/day (mgd)	N/A	N/A	N/A	N/A	2/Month	Measured
Total Suspended Solids	N/A	N/A	30	100	2/Month	Grab
Oil and Grease	N/A	N/A	15	20	1/Quarter	Grab

The pH shall not be less than 6.0 standard units nor greater than 8.5 standard units and shall be monitored once per month by grab samples.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

There shall be no discharge of substances in amounts that float as debris, scum, oil, or foam to form nuisances in the receiving stream.

after the fly ash clarifier (prior to mixing to any other effluent stream).

There shall be no discharge of polychlorinated biphenyl compounds (PCB's) to the receiving stream.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 102 ä

Which discharges wastes from: wastewater neutralization (demineralizer regenerate, boiler blowdown)

The permittee is authorized to discharge during the period beginning the effective date and lasting through the expiration date.

Such discharges shall be limited and monitored by permittee as specified below.

Effluent Characteristics	Discharge Limi	nitations			Monitoring Requirements	ments
	kg/day (lb/day) Avg. Monthly I	v) r Max Daily	Other units (mg/l) Avg. Monthly Max (mg/l)	Other units (mg/l) Avg. Monthly Max Daily (mg/l)	Measurement Frequency	Sample Type
Flow-m³/day (mgd)	N/A	N/A	N/A	N/A	1/Discharge	Measured
Total Suspended Solids	A/N	N/A	30	100	1/Discharge	Grab
Oil and Grease	N/A	N/A	15	20	1/Discharge	Grab

The pH shall not be less than 6.0 standard units nor greater than 8.5 standard units and shall be monitored once per month by grab samples. There shall be no discharge of substances in amounts that float as debris, scum, oil, or foam to form nuisances in the receiving stream. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

There shall be no discharge of polychlorinated biphenyl compounds (PCB's) to the receiving stream.

effluent from wastewater neutralization tank (prior to mixing with any other effluent stream).

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALLS 003 Which discharges wastes from: bearing cooling water, floor and roof drains ä

The permittee is authorized to discharge during the period beginning the effective date and lasting through the expiration date.

Such discharges shall be limited and monitored by permittee as specified below.

Effluent Characteristics	Discharge Lim	imitations			Monitoring Requirements	ements
	kg/day (lb/day) Avg. Monthly	ay) Iy Max Daily	Other units (mg/l) Avg. Monthly Max (mg/l)	Other units (mg/l) Avg. Monthly Max Daily (mg/l)	, <u>Measurement</u> <u>Frequency</u>	Sample Type
Flow-m³/day (mgd)	N/A	N/A	A/A	V/N	1/Month	Calculated
Total Suspended Solids [NET]*	N/A	N/A	30	100	1/Month	467
Oil and Grease	N/A	N/A	15	20	1/6Months	g 4
						85

The pH shall not be less than 6.0 standard units nor greater than 8.5 standard units and shall be monitored once per month by

There shall be no discharge of substances in amounts that float as debris, scum, oil, or foam to form nuisances in the receiving stream.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): effluent from bearing cooling water and floor and roof drains (prior to mixing with any other effluent stream).

There shall be no discharge of polychlorinated biphenyl compounds (PCB's) to the receiving stream.

^{*}Refer to Section F.3.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALLS 004 Which discharges wastes from: bearing cooling water, floor and roof drains Ą.

The permittee is authorized to discharge during the period beginning the effective date and lasting through the expiration date.

Such discharges shall be limited and monitored by permittee as specified below.

Effluent Characteristics	Discharge Limitations	mitations		*	Monitoring Requirements	nents
8	kg/day (lb/day) Avg. Monthly Max Daily	ay <i>l</i> y Max Daily	Other units (mg/l) Avg. Monthly Max Daily (mg/l)	ng/ll / Max Daily	Measurement Frequency	Sample Type
Flow-m³/day (mgd)	A/N	A/N	N/A	N/A	1/Month	Calculated
Total Suspended Solids [NET]*	A/A	N/A	30	100	1/Month	Grab
Oil and Grease	A/A	N/A	15	20	1/Quarter	Grab

The pH shall not be less than 6.0 standard units nor greater than 8.5 standard units and shall be monitored once per month by grab samples. There shall be no discharge of substances in amounts that float as debris, scum, oil, or foam to form nuisances in the receiving stream. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

effluent from bearing cooling water and floor and roof drains (prior to mixing with any other effluent stream).

There shall be no discharge of polychlorinated biphenyl compounds (PCB's) to the receiving stream.

^{*}Refer to Section F.3.

DC0022004 Page 7 of 22

PART B. GENERAL CONDITIONS

1. 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 may result in an enforcement action; permit termination, revocation and reissuance, or modification; and denial of a permit renewal application.

2. Penalties for Violations of Permit Conditions

The Clean Water Act provides that any person who violates any permit condition or limitation implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act, or any permit condition or limitation implementing of any section, or any requirement imposed in an approved pretreatment program and any person who violates any Order issued by EPA under Section 301(a) of the Act, shall be subject to a civil penalty not to exceed \$27,500 per day for each violation, and to an action for appropriate relief including a permanent or temporary injunction.

Any person who negligently violates Section 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act, any permit condition or limitation implementing any such section, shall be punished by a fine of not less than \$2,500 nor more than \$27,500 per day of such violation, or by imprisonment for not more than 1 year, or by both.

Any person who knowingly violates any permit condition or limitation implementing Section 301, 302, 305, 307, 308, 318, or 405 of the Clean Water Act, shall be punished by a fine of not less than \$5,000 nor more than \$50,000 per day of such violation or by imprisonment for not more than 3 years, or by both.

Any person who knowingly violates any permit condition or limitation implementing Section 301, 302, 305, 307, 308, 318, or 405 of the Clean Water Act, and who knows at the time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine or not more than \$250,000, or by imprisonment of not more than 15 years, or by both.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

4. Permit Actions

This permit may be modified, revoked and reissued, or terminated 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 any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- d. Information newly acquired by the Agency, including but not limited to the results of any studies, planning, or monitoring described and/or required by this permit;
- e. Facility modifications, additions, and/or expansions;
- f. Any anticipated change in the facility discharge, including any new significant industrial discharge or changes in the quantity or quality of existing industrial discharges that will result in new or increased discharges of pollutants;
- g. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
- h. Any revisions of the District of Columbia's water quality standards and 40 C.F.R. § 131.36, which are the basis of the effluent limitations in this permit.

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. When a permit is modified, only conditions subject to modification are reopened.

5. Toxic Pollutants

Notwithstanding paragraph B.4, above, if a 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 Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the permittee so notified. The permittee shall comply with effluent standards or prohibitions establish under section 307(a) of the Clean Water Act for toxic standards 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.

6. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" Section C.3. and "Upsets" Section C.4., nothing in this permit shall be construed to

DC0022004 Page 9 of 22

relieve the permittee from civil or criminal penalties for noncompliance.

7. Oil and Hazardous Substance 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 under Section 311 of the Act.

8. States Laws

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 established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

9. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Severability

The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

11. Transfer of Permit

In the event of any change in ownership or control of facilities from which the authorized discharge emanates, the permit may be transferred to another person if:

- a. The current permittee notifies the EPA, in writing of the proposed transfer at least 30 days in advance of the proposed transfer date;
- b. 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
- c. The EPA does not notify the current permittee and the new permittee of intent to modify, revoke and reissue, or terminate the permit and require that a new application be submitted.

DC0022004 Page 10 of 22

12. Construction Authorizations

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

13. Reopener Clause for Permits

This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Section 301, 302, 304, or 307 of the Clean Water Act, in accordance with the 1987 Chesapeake Bay Agreement based on water quality considerations, and if the effluent standard or limitation so issued or approved:

- a. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b. Controls any pollutant not limited in the permit. The permit, as modified or reissued under this paragraph, shall also contain any other requirements of the Act then applicable.

This permit may be reopened as specified in 40 CFR Part 122.44.

14. Endangered Species

The Fish and Wildlife Service (FWS) has indicated that Hay's Spring Amphipod, a Federally listed endangered species, and the bald eagle, a Federally listed threatened species, occur at several locations near, or in, the District of Columbia. The National Marine Fisheries Service (NMFS) has indicated that the endangered shortnose sturgeon occurs in the Potomac River drainage and may occur within the District of Columbia. The FWS and NMFS indicate that at the present time there is no evidence that the ongoing wastewater discharges covered by this permit are adversely affecting these Federally listed species. Wastewater discharges, construction, or any other activity that adversely affects a Federally listed endangered or threatened species are not authorized under the terms of this permit.

The monitoring required by this permit will allow further evaluation of potential effect on these threatened and endangered species once monitoring data has been collected and analyzed. EPA requires that the permittee submit to FWS and NMFS at the same time it submits to EPA the annual review of the monitoring data which will be used by FWS and NMFS to further assess effects on endangered or threatened species. If these data indicate it is appropriate, requirements of this NPDES permit may be modified to prevent adverse impacts on habitats of endangered and threatened species.

The above referenced annual review of monitoring data is required under this permit to be sent on an annual basis to:

The Fish and Wildlife Service
Threatened and Endangered Species Branch
Chesapeake Bay Office
General Cochrane Drive
Annapolis, MD 21401
Attention: Mr. Andrew Moser

The National Marine Fisheries Service Protected Resource Division 1 Blackburn Drive Gloucester, MA 01930 Attention: Ms. Carrie McDaniels

PART C. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and system 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, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

- 3. Bypass of Treatment Facilities
 - a. Definitions
 - (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
 - (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
 - b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance

to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this section.

c. Notice

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section E.6. (24-hour notice).

d. Prohibition of bypass

- (1) Bypass is prohibited and EPA may take enforcement action against a permittee for bypass, unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (b) There were 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. This condition is not satisfied if the permittee, in the exercise of reasonable engineering judgment, could have installed adequate backup equipment to prevent a bypass during normal periods of equipment downtime and preventative maintenance; and
 - (c) The permittee submitted notices as required under paragraph c. of this section.
- (2) EPA may approve an anticipated bypass, after considering its adverse effects, if EPA determines that it will meet the three conditions listed above in paragraph d.(1) of this section.

4. Upset Conditions

- a. Definition. "Upset" means 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.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such

technology-based permit effluent limitations if the requirements of paragraph c. of this section are met. The determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the specific cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in Section E.6; and
 - (4) The permittee complied with any remedial measures required under Section A.3.
- d. Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent all pollutants from such materials from entering navigable waters, except as authorized in this permit.

PART D. MONITORING AND RECORDS

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit. Monitoring points shall not be changed without notification to and the approval of EPA.

Special monitoring procedures apply to oil storage tanks to be hydrotested. If the sample is above the permit limits, the water will be recirculated and treatment continued until the required limits are achieved.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements are consistent with the accepted capability of that type of device.

3. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

For purposes of this permit, "PCB" includes PCB-1016, PCB-1242, PCB-1254, and PCB-1260, and any other PCBs normally associated with electric equipment. An analysis shall be made for each of the above PCB aroclors at the outfalls where PCB sampling is required, and the total PCB level shall be reported. Where all individual measurements of each aroclor are less than a detection level of 0.3 ug/l, using EPA Method 608, the total PCB level shall be reported as "ND" in the Discharge Monitoring Reports (DMRs). For purposes of evaluating compliance with the "no discharge" PCB limitations in PART A. of this permit, a total PCB level reported as "ND" shall not be considered a violation of this permit.

4. 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.

Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1). Monitoring results obtained during the previous months shall be summarized and reported on a DMR form postmarked no later than the 28th day of the following month. For sampling at a frequency of once per month, the monthly average values shall be the arithematic average of the four most recent sampling results for each parameter. This average shall be reported and tracked as a monthly average.

Duplicate copies of DMR's signed and certified as required by Section E.11., and all other reports required by Section E, Reporting Requirements, shall be submitted to the Regional Administrator and the District of Columbia Government, Environmental Regulation Administration, Water Resources Division at the following address:

U.S. EPA Region III (3WP31)
Water Protection Division
NPDES DMRs
1650 Arch Street
Philadelphia, PA 19103

District of Columbia Government Environmental Health Administration Water Quality Administration 51 N Street, 5th Floor, NE Washington, DC 20002

In addition, a complete set of monitoring results shall be sent to the Fish and Wildlife Service to the name and address specified at Part B.14 of this permit. Such monitoring reports shall be compiled for the preceding year and sent to FWS on or before January 31 of the next calendar year, or otherwise specified by FWS.

6. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the result of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR) form. Such frequency shall also be indicated.

7. Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart 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, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of EPA at any time.

8. Record Contents

Records of monitoring information shall include:

- a. The date, exact place, time and methods of sampling or measurements:
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

9. Inspection and Entry

The permittee shall allow EPA, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises at reasonable times where a regulated facility or activity is located or conducted, or where records are required to be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), processes, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times for the purpose of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

10. Definitions

- a. The "daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- b. The "average monthly discharge limitation" means the highest allowable average of "daily discharge" over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during the month.
- c. The "average weekly discharge limitation" means the highest allowable average of "daily discharge" over a calendar week, calculated and the sum of all daily discharge measured during a calendar week divided by the number of daily discharges measured during the week.
- d. "The maximum daily discharge" limitations means the highest allowable "daily discharge."
- e. Composite Sample A combination of individual samples obtained at regular intervals over a time period. Either the volume of each individual sample in proportional to discharge flow

DC0022004 Page 17 of 22

rates or the sampling interval (for constant volume samples) is proportional to the flow rates over the time period used to produce the composite.

- f. Grab Sample An individual sample collected in less than 15 minutes.
- g. "i-s" (immersion stabilization) a calibrated device is immersed in the effluent stream stabilized a calibrated device is until the reading is stabilized.
- h. The "monthly average" temperature means the arithmetic mean of temperature measurements made on an hourly basis, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar or operating month if flows are of shorter duration.
- i. The "daily maximum" temperature means the highest arithmetic mean of the temperature observed for any two (2) consecutive hours during a 24-hour day, or during the operating day if flows are of shorter duration.
- j. "At outfall XXX" A sample location before the effluent joins or is diluted by any other waste stream, body of water, or substance or as otherwise specified.
- k. Estimate To be based on a technical evaluation of the sources contributing to the discharge including, but not limited to pump capabilities, water meters and batch discharge volumes.
- 1. Non-contact cooling water means the water that is contained in a leak-free system, i.e. no contact with any gas, liquid, or solid other than the container for transport; the water shall have no net poundage addition of any pollutant over intake water levels, except as authorized by this permit.

PART E. REPORTING REOUIREMENTS

1. Planned Changes

The permittee shall give written notice to EPA as soon as possible of any planned physical alterations or additions to the permitted facility, or any change in chemical additives. If EPA determines that any such changes will require a permit modification, it shall so inform the permittee within thirty (30) days so the permittee can submit the appropriate permit application information.

DC0022004 Page 18 of 22

2. Anticipated noncompliance

The permittee shall give advance written notice to EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is not transferable to any person except after notice to EPA as specified in Section A.11. EPA may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

4. Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Section D.5.

5. Compliance Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance may include any remedial actions taken, and the probability of meeting the next scheduled requirement.

6. Twenty-Four Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

The following shall be included as information which must be reported within 24 hours:

- a. Any unanticipated bypass which exceeds any effluent limitation in the permit.
- b. Any upset which exceeds any effluent limitation in the permit.
- c. Violation of a maximum daily discharge limitation for any of the pollutants listed by EPA under 40 C.F.R. § 122.44(g).

DC0022004 Page 19 of 22

EPA may waive the written report on a case-by-case basis if the oral report has been received within 24 hours and the noncompliance does not endanger health or the environment.

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Sections E.1, 4, 5, and 6 at the time monitoring reports are submitted. The reports shall contain the information listed in Section E.6.

8. Changes in Discharges of Toxic Substances

The permittee shall notify EPA in writing as soon as it knows or has reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 ug/1);
 - (2) Two hundred micrograms per liter (200 ug/1) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/1) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/1) for antimony:
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application;
 - (4) The level established by EPA under 40 C.F.R. § 122.44(f).
- b. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- 9. Duty to Provide Information

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

10. 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 shall be submitted

DC0022004 Page 20 of 22

at least 180 days before the expiration date of this permit. EPA may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. In the event that a timely and complete reapplication has been submitted and EPA is unable, through no fault of the permittee, to issue a new permit before the expiration date of this permit, the terms and conditions of this permit are automatically continued and remain fully effective and enforceable.

11. Signatory Requirements

All applications, reports or information submitted to EPA shall be signed and certified as required by 40 C.F.R. § 122.6.

12. Availability of Reports

Unless a business confidentiality claim is asserted pursuant to 40 C.F.R. Part 2, all reports submitted in accordance with the terms of this permit shall be available for public inspection at the offices of the D.C. Environmental Regulation Administration and the Regional Administrator. If a business confidentiality claim is asserted, the report will be disclosed only in accordance with the procedures in 40 C.F.R. Part 2. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

13. Penalties for Falsification of Reports

The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring report or reports of compliance or noncompliance 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.

14. Correction of Reports

If the permittee becomes aware that it submitted incorrect information in any report to EPA, it shall promptly submit the correct information.

DC0022004 Page 21 of 22

F. SPECIAL CONDITIONS

1. Debris collected on the intake trash racks shall not be returned to the waterway.

- 2. To ensure that the pump curves used to calculate the flow at Outfall 001 reasonably reflect the flow capacity by the use of pitot tube method, the flow shall be verified annually for each pump. However, for unit 1 and 2, if pump verification cannot be made on an individual basis, a composite verification shall be acceptable. The pump head will be measured and used to calculate expected flow. Measured and expected flows shall be compared and if these flows differ by more than 10%, then DMR data shall be adjusted.
- 3. As a result of the level of pollutants in the intake water, technology-based limits can be difficult or impossible to meet with BAT/BCT technology, and, under certain circumstances, credit for pollutants in the intake water are allowed. Pursuant to 40 CFR §122.45(g), the permittee is granted a net credit for total suspended solids at Outfall 003 and 004. To justify the need for a net calculation, the permittee shall document and report the levels of total suspended solids at the intakes specified with net limits.
- 4. For a period of six consecutive months following the effective date of the permit, the permittee shall conduct monitoring for mercury at Outfall 004 at a frequency of once per month, using EPA method 245.1. Data for each monitoring event shall be submitted to EPA in the discharge monitoring report. In the event the results of such monitoring show detectable levels of mercury (method detection limit 0.0002 mg/l), (1) the permittee shall continue monitoring for the remainder of the permit term at a frequency of once per month, and (2) the permit may be reopened to impose mercury limits, if EPA determines that there is a reasonable potential that discharges from this Outfall will cause, or contribute to an excursion above the District of Columbia's water quality standard for mercury.
- 5. Storm water discharges are covered under a separate general permit (DCR05A035). It is intended that the general permit shall regulate storm water discharges, and the present permit shall regulate discharges from the outfalls identified herein. However, to the extent that there is a conflict between provisions in the two permits, the more stringent provision shall govern.
- 6. The permittee shall comply with the following schedule which addresses the thermal discharge from Outfall 001. So that the facility may carry out the required activities, the facility is temporarily granted a mixing zone as follows:

FACT SHEET

1. NAME & MAILING ADDRESS OF FACILITY

Potomac Electric Power Company 1900 Pennsylvania Avenue, N.W. Washington, DC 20068

2. NPDES APPLICATION NUMBER: DC0022004

3. RECEIVING WATER: Potomac River

4. SIC CODE: 4911

5. TYPE OF FACILITY: Industrial Plant AND ACTIVITY: Power Generation

6. TYPE OF WASTE: Cooling Water, Waste Water, Drainage AND QUANTITY:

Outfall No.	Average Flow (mgd)
001	344.15
101	.23
102	.10
003	.70
004	.40

- 7. PROPOSED EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS:

 Refer to attached Section A on pages 2-6 of draft permit.
- 8. STATEMENT OF BASIS:
 - A. Statutory or Regulatory Provisions: Clean Water Act
 - B. EPA BAT Guideline: 40 CFR Part 423 Stream Electric

 Power Generating Point Source Category
 - C. State Certification Requirement: yes
- 9. RATIONALE FOR PROPOSED EFFLUENT DISCHARGE LIMITATIONS AND MONITORING REQUIREMENTS:

For all outfalls, pH limits shall be water-quality based. Under District of Columbia Water Quality Standards Regulations, pH levels for all class waters shall be greater than 6.0 and less than 8.5.

DC0022004 Page 2

Outfall 001 is characterized with once-through cooling water, and technology-based limits for the relevant parameters apply. Outlet 001 is also characterized with low volume waste sources, comprised of floor and building roof drains from units 1 and 2; however, total suspended solid and oil and grease effluent limits were not added since these parameters are already monitored at internal outlets 101 and 102. In addition, the high flow makes it difficult to obtain a representative oil and grease sample. Note that the facility shall not discharge neither free available chlorine nor total residual chlorine from any unit for more than two hours in any one day. The temperature limit and monitoring requirements were carried over from the previous permit.

Total Recoverable Zinc was detected at outfall 001 during a full analysis of the intake and effluent characteristics. According to the data, zinc levels at the outfall are similar to those at the intake. Thus, there is a natural background of zinc, well below water quality standards, and zinc limits are not needed.

Outfall 101 is characterized with ash clarification and coal pile runoff, and technology-based limits for the relevant parameters apply. Technology-based limits for ash were used because, any runoff from the coal pile area is first diverted to a sump which flows to the ash clarifier system. The measurement frequency for monitoring oil and grease was relaxed from twice per month to once per quarter based on Region III's Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies (see below). All other monitoring requirements were carried over from previous permit.

Outfall 102 is characterized with wastewater neutralization and low volume waste sources, and technology-based limits for the relevant parameters apply. All monitoring requirements were carried over from previous permit.

Outfall 003 is characterized with low volume waste sources, and technology-based limits for the relevant parameters apply. The measurement frequency for monitoring oil and grease was relaxed from once per month to once per 6 months based on Region III's Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies (see below). All other monitoring requirements were carried over from previous permit.

The permittee had indicated that total recoverable zinc was detected in the intake of outfall 003 with the zinc level being slightly higher than the intake on some occasions. Sampling and testing were conducted over a 24-hour period at the intake and outfall, and the resulting data shows that dissolved zinc levels

DC0022004 Page 3

at the outfall are well below the District of Columbia's acute and chronic water quality standards for zinc (120 ug/l and 110 ug/l, respectively). A reasonable potential test for zinc was conducted using methods in EPA's Technical Support Document For Water Quality-based Toxics Control guidance, and the calculations showed that zinc limits are not needed.

To verify that zinc limits are not needed, the permittee hired a consultant to conduct additional analyses for the intake and outfall of 003, in addition to conducting its own analysis at the PEPCO laboratory. Both sets of results showed that zinc levels were consistently steady and did not substantially increase from the intake to the outfall.

Outfall 004 is characterized with low volume waste sources, and technology-based limits for the relevant parameters apply. The measurement frequency for monitoring oil and grease was relaxed from once per month to once per quarter based on Region III's Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies (see below). All other monitoring requirements were carried over from previous permit.

Total Recoverable Zinc was detected at outfall 004 during a full analysis of the intake and effluent characteristics. According to the data, zinc levels at the outfall are similar to those at the intake. Thus, there is a natural background of zinc, well below water quality standards, and zinc limits are not needed.

The Region III Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies (December 1997) is a document prepared by the regional office of EPA as part of the President's Regulatory Reinvention Initiative. Those facilities that can demonstrate historical compliance and ability to reduce pollutants in the discharge below the levels necessary to meet existing permit requirements qualify for the program. EPA uses the Permit Compliance System (PCS) to calculate, for each eligible parameter, the ratio of the most recent two year, long term effluent average to monthly average limits at each outfall.

Storm water discharges are covered under a separate general permit (DCR05A035).

10. SKETCH OR DETAILED DESCRIPTION OF LOCATION OF DISCHARGES:

Outlet No.	<u>Latitude</u>	<u>Longitude</u>
001	38° 49' 07"	77° 02' 22"
003	38° 49' 14"	77° 02' 25"
004	38° 49' 15"	77° 02' 24"
005	38° 49' 11"	77° 02' 25"

DC0022004 Page 4

006	38° 49'	18"	77°	02'	27"
007	38° 49′	14"	77°	02'	25"
800	38° 49'	14"	77°	02'	25"

- 11. PUBLIC NOTICE NUMBER: ML15
 COMMENT PERIOD FROM 11/02/99 TO 12/02/99
- 12. FOR MORE INFORMATION, CONTACT: Mary A. Kuo (215)814-2390