DC0022004

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### 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:

| <u>Outfall No.</u> | <u>Average Flow (mgd)</u> |
|--------------------|---------------------------|
| 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.



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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



RPAnalysis 003 Zinc 004 Mercury

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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:

| <u>Outlet No.</u> | Latitude    | Longitude   |  |  |
|-------------------|-------------|-------------|--|--|
| 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" |  |  |



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| 006 | 38° 49' | 18" | 77° | 02' | 27" |
|-----|---------|-----|-----|-----|-----|
| 007 | 38° 49' | 14" | 77° | 02' | 25" |
| 008 | 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

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