

South Carolina Department of Health and Environmental Control

Westinghouse Electric Company, LLC

Draft NPDES Permit Renewal

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Introduction to NPDES

- NPDES: National Pollutant Discharge Elimination System
- Regulates the discharge of treated Wastewater to Waters of the State using aquatic life and human health standards
- Permit is effective for 5 years



Introduction to NPDES

- Waters used in the manufacturing process are not wastewater
- Radioactive materials are regulated under the Atomic Energy Act and NRC permitting



Facility Overview

- NPDES permit first issued in 1974
- Currently there are three different wastewater sources that contribute to the discharge:
 - Process Wastewater
 - Contaminated Wastewater
 - Sanitary Wastewater

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Discharge

- Outfall 001 to the Congaree River
 - Each of the three sources are treated separately for pollutants specific to the source
 - After the treatment the sources merge into one and receive additional treatment
 - Wastewater is piped about 4 miles to the River
 - Diffuser is on the end of the pipe approx 22 ft from the bank





Proposed Changes to the Permit

- Updates to standard language and conditions
- Effluent limit changes
 - New tighter limits on the impact to the available Oxygen downstream in the river for the fish and other aquatic biology during critical summer months (March – Oct)
 - Existing Oxygen based limits remain in the winter
 - Dissolved Oxygen (DO) limit will not be less than 5.0 mg/l



Proposed Changes to the Permit - Continued

- Addition of limits for Copper with a compliance schedule to meet the new limit
- Fluoride, Nitrogen, Oil & Grease, Mercury and Uranium are to be monitored as indicator parameters
- New internal outfall to monitor the sanitary treatment system
- Yearly toxicity monitoring will be changed to a 25/40 percent effect limit on a quarterly basis
- In summary the permit requirements are becoming more stringent



Groundwater Monitoring

- This permit is requiring double the number of Groundwater (GW) monitoring wells to assess impacts directly related to the wastewater treatment system
- Detailed description of what must be included in the semi-annual groundwater sampling reports



Other Conditions

- Operations and Maintenance
 - More specific and detailed wastewater treatment pond operation, maintenance and inspection requirements
- Notifications
 - 24 hr notification to DHEC of any non-compliance which may endanger health of the environment
 - Written submission within 5 days





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