



Serial: RNP-RA/07-0029

APR 26 2007

United States Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET NO. 50-261/LICENSE NO. DPR-23

SUBMITTAL OF RENEWED NATIONAL POLLUTANT  
DISCHARGE ELIMINATION SYSTEM PERMIT NO. SC0002925

Ladies and Gentlemen:

By letter dated January 27, 1989, Carolina Power and Light Company, now doing business as Progress Energy Carolinas, Inc. (PEC), committed to provide the NRC with a copy of changes to the National Pollutant Discharge Elimination System (NPDES) Permit No. SC0002925 for the H. B. Robinson Steam Electric Plant. In accordance with this commitment, PEC is providing as an attachment to this letter a copy of the renewed NPDES Permit from the South Carolina Department of Health and Environmental Control. This permit will become effective May 1, 2007.

If you have any questions concerning this matter, please contact me at (843) 857-1253.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. T. Baucom'.

C. T. Baucom  
Supervisor – Licensing/Regulatory Programs

GRS/grs

Attachment

- c: NRC Resident Inspector, HBRSEP, Unit No. 2 (w/o Attachment)  
Dr. W. D. Travers, NRC, Region II  
L. M. Regner, NRC, NRR (w/o Attachment)

C001

United States Nuclear Regulatory Commission  
Attachment to Serial: RNP-RA/07-0029  
37 pages including cover page

**H. B. ROBINSON STEAM ELECTRIC PLANT**

**NATIONAL POLLUTANT DISCHARGE  
ELIMINATION SYSTEM PERMIT NO. SC0002925**



South Carolina Department of Health  
and Environmental Control

# ***National Pollutant Discharge Elimination System Permit***

for Discharge to Surface Waters

This Permit Certifies That

***Progress Energy/Robinson Plant***

has been granted permission to discharge from a facility located at

***3581 West Entrance Road  
Hartsville, South Carolina  
Darlington County***

to receiving waters named

***Lake Robinson and Black Creek***

in accordance with limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Pollution Control Act of South Carolina (S.C. Code Sections 48-1-20 *et seq.*, 1976), Regulation 61-9 and with the provisions of the Federal Clean Water Act (PL 92-500), as amended, 33 U.S.C. 1251 *et seq.*, the "Act."

Jeffrey P. deBessonnet, P.E., Director  
Water Facilities Permitting Division  
Bureau of Water

***Issue Date: March 8, 2007***

***Expiration Date: April 30, 2011***

***Effective Date: May 1, 2007***

***Permit No.: SC0002925***

## Table of Contents

<b>PART I. Definitions</b> .....	<b>3</b>
<b>PART II. Standard Conditions</b> .....	<b>6</b>
<b>A. Duty to Comply</b> .....	<b>6</b>
<b>B. Duty to Reapply</b> .....	<b>6</b>
<b>C. Need to Halt or Reduce Activity Not a Defense</b> .....	<b>6</b>
<b>D. Duty to Mitigate</b> .....	<b>6</b>
<b>E. Proper Operation and Maintenance</b> .....	<b>7</b>
<b>F. Permit Actions</b> .....	<b>7</b>
<b>G. Property Rights</b> .....	<b>8</b>
<b>H. Duty to Provide Information</b> .....	<b>8</b>
<b>I. Inspection and Entry</b> .....	<b>8</b>
<b>J. Monitoring and Records</b> .....	<b>8</b>
<b>K. Signatory Requirement</b> .....	<b>10</b>
<b>L. Reporting Requirements</b> .....	<b>12</b>
<b>M. Bypass</b> .....	<b>17</b>
<b>N. Upset</b> .....	<b>17</b>
<b>O. Misrepresentation of Information</b> .....	<b>18</b>
<b>PART III. LIMITATION AND MONITORING REQUIREMENTS</b> .....	<b>19</b>
<b>A. Effluent Limitations and Monitoring Requirements</b> .....	<b>19</b>
<b>B. Whole Effluent Toxicity Limitations and Monitoring Requirements</b> .....	<b>28</b>
<b>C. Groundwater Monitoring Requirements</b> .....	<b>29</b>
<b>D. Sludge Monitoring Requirements</b> .....	<b>29</b>
<b>E. Soil Monitoring Requirements</b> .....	<b>29</b>
<b>PART IV. SCHEDULE OF COMPLIANCE</b> .....	<b>30</b>
<b>PART V. OTHER REQUIREMENTS</b> .....	<b>31</b>
<b>A. Effluent Requirements</b> .....	<b>31</b>
<b>B. Whole Effluent and Other Biological Monitoring Requirements</b> .....	<b>32</b>
<b>C. Groundwater Monitoring Requirements</b> .....	<b>34</b>
<b>D. Sludge and Solid Waste Disposal Requirements</b> .....	<b>34</b>
<b>E. Other Conditions</b> .....	<b>35</b>

## **PART I. Definitions**

Any term not defined in this Part has the definition stated in the Pollution Control Act or in "Water Pollution Control Permits", R.61-9 or its normal meaning.

- A. The "Act", or CWA, shall refer to the Clean Water Act (Formerly referred to as the Federal Water Pollution Control Act) Public Law 92-500, as amended.
- B. The "average" or "arithmetic mean" of any set of values is the summation of the individual values divided by the number of individual values.
- C. "Basin" (or "Lagoon") means any in-ground or earthen structure designed to receive, treat, store, temporarily retain and/or allow for the infiltration/evaporation of wastewater.
- D. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- E. A "composite sample" shall be defined as one of the following four types:
  - 1. An influent or effluent portion collected continuously over a specified period of time at a rate proportional to the flow.
  - 2. A combination of not less than eight (8) influent or effluent grab samples collected at regular (equal) intervals over a specified period of time and composited by increasing the volume of each aliquot in proportion to flow. If continuous flow measurement is not used to composite in proportion to flow, the following method will be used: An instantaneous flow measurement should be taken each time a grab sample is collected. At the end of the sampling period, the instantaneous flow measurements should be summed to obtain a total flow. The instantaneous flow measurement can then be divided by the total flow to determine the percentage of each grab sample to be combined. These combined samples form the composite sample.
  - 3. A combination of not less than eight (8) influent or effluent grab samples of equal volume but at variable time intervals that are inversely proportional to the volume of the flow. In other words, the time interval between aliquots is reduced as the volume of flow increases.
  - 4. If the effluent flow varies by less than 15 percent, a combination of not less than eight (8) influent or effluent grab samples of constant (equal) volume collected at regular (equal) time intervals over a specified period of time.

All samples shall be properly preserved in accordance with Part II.J.4. Continuous flow or the sum of instantaneous flows measured and averaged for the specified compositing time period shall be used with composite results to calculate mass.

- F. "Daily maximum" is the highest average value recorded of samples collected on any single day during the calendar month.
- G. "Daily minimum" is the lowest average value recorded of samples collected on any single day during the calendar month.

- H. The "Department" shall refer to the South Carolina Department of Health and Environmental Control.
- I. The "geometric mean" of any set of values is the Nth root of the product of the individual values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered to be one (1).
- J. A "grab sample" is an individual, discrete or single influent or effluent portion of at least 100 milliliters collected at a time representative of the discharge and over a period not exceeding 15 minutes and retained separately for analysis. Instantaneous flow measured at the time of grab sample collection shall be used to calculate quantity, unless a totalizer is used.
- K. "Groundwater" means the water below the land surface found in fractured rock or various soil strata.
- L. The "maximum or minimum" is the highest or lowest value recorded of all samples collected during the calendar month. These terms may also be known as the instantaneous maximum or minimum.
- M. "Monitoring well" means any well used to sample groundwater for water quality analysis or to measure groundwater levels.
- N. The "monthly average", other than for fecal coliform and enterococci, is the arithmetic mean of all samples collected in a calendar month period. The monthly average for fecal coliform and enterococci bacteria is the geometric mean of all samples collected in a calendar month period. The monthly average loading is the arithmetic average of all individual loading determinations made during the month.
- O. The "PCA" shall refer to the Pollution Control Act (Chapter 1, Title 48, Code of Laws of South Carolina).
- P. The "practical quantitation limit (PQL)" is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. It is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed.
- Q. "Quarter" is defined as the calendar quarter beginning in January and proceeding as follows; first (1<sup>st</sup>) quarter will consist of the months of January, February and March, the second (2<sup>nd</sup>) quarter will consist of April, May, and June, the third (3<sup>rd</sup>) quarter will consist of July, August and September, and the fourth (4<sup>th</sup>) quarter will consist of October, November and December.
- R. "Quarterly average" is the arithmetic mean of all samples collected in a quarter.
- S. "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.
- T. "Sludge" means industrial sludge. Industrial sludge is a solid, semi-solid, or liquid residue generated during the treatment of industrial wastewater in a treatment works. Industrial sludge includes, but is not limited to, industrial septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from industrial sludge. Industrial sludge does not include ash generated during the firing of industrial sludge in an industrial sludge incinerator or grit and screenings generated during preliminary treatment of industrial

wastewater in a treatment works. Industrial sludge by definition does not include sludge covered under 40 CFR Part 503 or R.61-9.503.

- U. "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.
- V. "Wastewater" means industrial wastewater. Industrial wastewater is wastewater generated from a federal facility, commercial or industrial process, including waste and wastewater from humans when generated at an industrial facility.
- W. "Weekly average", other than for fecal coliform, is the arithmetic mean of all the samples collected during a one-week period. The weekly average for fecal coliform is the geometric mean of all samples collected during a one-week period. For self-monitoring purposes, weekly periods in a calendar month are defined as three (3) consecutive seven-day intervals starting with the first day of the calendar month and a fourth interval containing seven (7) days plus those days beyond the 28th day in a calendar month. The value to be reported is the single highest of the four (4) weekly averages computed during a calendar month. The weekly average loading is the arithmetic average of all individual loading determinations made during the week.

## **PART II. Standard Conditions**

### **A. Duty to Comply**

The permittee must comply with all conditions of the permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the Pollution Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. The Department's approval of wastewater facility plans and specifications does not relieve the permittee of responsibility to meet permit limits.

1. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
2. Failure to comply with permit conditions or the provisions of this permit may subject the permittee to civil penalties under S.C. Code Section 48-1-330 or criminal sanctions under S.C. Code Section 48-1-320. Sanctions for violations of the Federal Clean Water Act may be imposed in accordance with the provisions of 40 CFR Part 122.41(a)(2) and (3).
3. A person who violates any provision of this permit, a term, condition or schedule of compliance contained within this NPDES permit, or the State law is subject to the actions defined in the State law.

### **B. 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. A permittee with a currently effective permit shall submit a new application 180 days before the existing permit expires, unless permission for a later date has been granted by the Department. The Department may not grant permission for applications to be submitted later than the expiration date of the existing permit.

### **C. 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.

### **D. Duty to Mitigate**

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

#### **E. Proper Operation and Maintenance**

1. The permittee shall at all times properly operate and maintain in good working order and operate as efficiently as possible all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance based on design facility removals, adequate funding, adequate operator staffing and training and also includes adequate laboratory controls and 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 the operation is necessary to achieve compliance with the conditions of the permit.
2. Power Failures. In order to maintain compliance with effluent limitations and prohibitions of this permit, the permittee shall either:
  - a. provide an alternative power source sufficient to operate the wastewater control facilities;
  - b. or have a plan of operation which will halt, reduce, or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.
3. The permittee shall develop and maintain at the facility a complete Operations and Maintenance Manual for the waste treatment facilities and/or land application system. The manual shall be made available for on-site review during normal working hours. The manual shall contain operation and maintenance instructions for all equipment and appurtenances associated with the waste treatment facilities and land application system. The manual shall contain a general description of the treatment process(es), the operational procedures to meet the requirements of E.1 above, and the corrective action to be taken should operating difficulties be encountered.
4. The permittee shall provide for the performance of daily treatment facility inspections by a certified operator of the appropriate grade as defined in Part V.E of this permit. The Department may make exceptions to the daily operator requirement in accordance with R.61-9.122.41(e)(3)(ii). The inspections shall include, but should not necessarily be limited to, areas which require visual observation to determine efficient operation and for which immediate corrective measures can be taken using the O & M manual as a guide. All inspections shall be recorded and shall include the date, time, and name of the person making the inspection, corrective measures taken, and routine equipment maintenance, repair, or replacement performed. The permittee shall maintain all records of inspections at the permitted facility as required by the permit, and the records shall be made available for on-site review during normal working hours.
5. The name and grade of the operator of record shall be submitted to DHEC/Bureau of Water/Water Enforcement Division prior to placing the facility into operation. A roster of operators associated with the facility's operation and their certification grades shall also be submitted with the name of the "operator-in-charge". Any changes in operator or operators shall be submitted to the Department as they occur.

#### **F. Permit Actions**

This permit may be modified, revoked and 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.

### **G. Property Rights**

This permit does not convey any property rights of any sort, or any exclusive privilege nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

### **H. Duty to Provide Information**

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

### **I. Inspection and Entry**

The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:

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

### **J. Monitoring and Records**

1. a. (1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.  
  
(2) Samples shall be reasonably distributed in time, while maintaining representative sampling.  
  
(3) No analysis, which is otherwise valid, shall be terminated for the purpose of preventing the analysis from showing a permit or water quality violation.
- b. Flow Measurements
  - (1) Where primary flow meters are required, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be present 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 capability of that type of device. Devices selected shall be capable of measuring flows with

a maximum deviation of less than 10% from the true discharge rates throughout the range of expected discharge volumes. The primary flow device, where required, must be accessible to the use of a continuous flow recorder.

(2) Where permits require an estimate of flow, the permittee shall maintain at the permitted facility a record of the method(s) used in estimating the discharge flow (e.g., pump curves, production charts, water use records) for the outfall(s) designated on limits pages to monitor flow by an estimate.

(3) Record of any necessary calibrations must be kept. This information shall be made available for on-site review by Department personnel during normal working hours

2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by R.61-9.503 or R.61-9.504), 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 three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

3. Records of Monitoring Information Shall Include:

- a. The date, exact place, and time 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.

4. a. Analyses for required monitoring must be conducted according to test procedures approved under 40 CFR Part 136, equivalent test procedures approved by DHEC's Division of Laboratory Certification or other test procedures that have been specified in the permit.

In the case of sludge use or disposal, analysis for required monitoring must be conducted according to test procedures approved under 40 CFR Part 136, test procedures specified in R.61-9.503 or R.61-9.504, equivalent test procedures approved by DHEC's Division of Laboratory Certification or other test procedures that have been specified in the permit.

b. Unless addressed elsewhere in this permit, the permittee shall use a sufficiently sensitive analytical method that achieves a value below the derived permit limit stated in Part III. If more than one method of analysis is approved for use, the Department recommends for reasonable potential determinations that the permittee use the method having the lowest practical quantitation limit (PQL) unless otherwise specified in Part V of the permit. For the purposes of reporting analytical data on the Discharge Monitoring Report (DMR):

- (1) Analytical results below the PQL conducted using a method in accordance with Part II.J.4.a above shall be reported as zero (0). Zero (0) shall also be used to average results, which are below the PQL. When zero (0) is reported or used to average results, the permittee shall report, in the "Comment Section" or in an attachment to the DMR, the analytical method used, the PQL achieved, and the number of times results below the PQL were reported as zero (0).
  - (2) Analytical results above the PQL conducted using a method in accordance with Part II.J.4.a shall be reported as the value achieved. When averaging results using a value containing a "less than," the average shall be calculated using the value and reported as "less than" the average of all results collected.
  - (3) Mass values shall be calculated using the flow taken at the time of the sample and either the concentration value actually achieved or the value as determined from the procedures in (1) or (2) above, as appropriate.
5. The Pollution Control 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 \$25,000 or by imprisonment for not more than two (2) years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment provided by the Clean Water Act is also by imprisonment of not more than four (4) years.

#### **K. Signatory Requirement**

1. All applications, reports, or information submitted to the Department shall be signed and certified.
  - a. Applications. All permit applications shall be signed as follows:
    - (1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
      - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or
      - (b) The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
    - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

- (3) For a municipality, State, Federal, or other public agency or public facility: By either a principal executive officer, mayor, or other duly authorized employee or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
- (a) The chief executive officer of the agency, or
  - (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator, Region IV, EPA).
- b. All reports required by permits, and other information requested by the Department, shall be signed by a person described in Part II.K.1.a of this section, or by a duly authorized representative of that person. A person is a duly authorized representative if:
- (1) The authorization is made in writing by a person described in Part II.K.1.a of this section;
  - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,
  - (3) The written authorization is submitted to the Department.
- c. Changes to authorization. If an authorization under Part II.K.1.b of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.1.b of this section must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Certification. Any person signing a document under Part II.K.1.a or b of this section shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
2. The PCA 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 reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$25,000 per violation, or by imprisonment for not more than two (2) years per violation, or by both.

## L. Reporting Requirements

### 1. Planned Changes

The permittee shall give written notice to DHEC/Bureau of Water/Industrial, Agricultural and Storm Water Permitting Division as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in R 61-9.122.29(b); or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Part II.L.8 of this section.
- c. The alteration or addition results in a significant change in the permittee's sewage sludge or industrial sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan (included in the NPDES permit directly or by reference);

### 2. Anticipated Noncompliance

The permittee shall give advance notice to the DHEC/Bureau of Water/Water Enforcement Division 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 written notice to the DHEC/Bureau of Water/NPDES Administration. The Department may require modification or revocation and reissuance of the permit to change the name of permittee and incorporate such other requirements as may be necessary under the Pollution Control Act and the Clean Water Act.

- a. Transfers by modification. Except as provided in paragraph b of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under R.61-9.122.62(e)(2)), or a minor modification made (under R.61-9.122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under CWA.
- b. Other transfers. As an alternative to transfers under paragraph a of this section, any NPDES permit may be transferred to a new permittee if:
  - (1) The current permittee notifies the Department at least 30 days in advance of the proposed transfer date in Part II.L.3.b(2) of this section;
  - (2) The notice includes U.S. EPA NPDES Application Form 1 and a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
  - (3) Permits are non-transferable except with prior consent of the Department. A modification under this section is a minor modification, which does not require public notice.

#### 4. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

a. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices including the following:

- (1) Effluent Monitoring: Effluent monitoring results obtained at the required frequency shall be reported on a Discharge Monitoring Report Form (EPA Form 3320-1). The DMR is due postmarked no later than the 28th day of the month following the end of the monitoring period. One original and one copy of the Discharge Monitoring Reports (DMRs) shall be submitted to:

**S.C. Department of Health and Environmental Control  
Bureau of Water/Compliance Assurance Division  
Permit and Data Administration Section  
2600 Bull Street  
Columbia, South Carolina 29201**

- (2) Groundwater Monitoring: Groundwater monitoring results obtained at the required frequency shall be reported on a Groundwater Monitoring Report Form (DHEC 2110) postmarked no later than the 28th day of the month following the end of the monitoring period. One original and one copy of the Groundwater Monitoring Report Form (DHEC 2110) shall be submitted to:

**S.C. Department of Health and Environmental Control  
Bureau of Water/Water Monitoring, Assessment and Protection Division  
Groundwater Quality Section  
2600 Bull Street  
Columbia, South Carolina 29201**

- (3) Sludge, Biosolids and/or Soil Monitoring: Sludge, biosolids and/or soil monitoring results obtained at the required frequency shall be reported in a laboratory format postmarked no later than the 28th day of the month following the end of the monitoring period. Two copies of these results shall be submitted to:

**S.C. Department of Health and Environmental Control  
Bureau of Water/Water Enforcement Division  
Water Pollution Enforcement Section  
2600 Bull Street  
Columbia, South Carolina 29201**

- (4) All other reports required by this permit shall be submitted at the frequency specified elsewhere in the permit to:

**S.C. Department of Health and Environmental Control  
Bureau of Water/Water Enforcement Division  
Water Pollution Enforcement Section  
2600 Bull Street  
Columbia, South Carolina 29201**

- b. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in R.61-9.503 or R.61-9.504, or as specified in the permit, all valid results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department. The permittee has sole responsibility for scheduling analyses, other than for the sample data specified in Part V, so as to ensure there is sufficient opportunity to complete and report the required number of valid results for each monitoring period.
- c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

5. Twenty-four Hour Reporting

- a. The permittee shall report any non-compliance, which may endanger health or the environment. Any information shall be provided orally to local DHEC office within 24 hours from the time the permittee becomes aware of the circumstances. During normal working hours call:

County	EQC Region	Phone No.
Anderson, Oconee	Region 1- Anderson EQC Office	864-260-5569
Abbeville, Edgefield, Greenwood, Laurens, McCormick, Saluda	Region 1 – Greenwood EQC Office	864-223-0333
Greenville, Pickens	Region 2 – Greenville EQC Office	864-241-1090
Cherokee, Spartanburg, Union	Region 2 – Spartanburg EQC Office	864-596-3800
Fairfield, Lexington, Newberry, Richland	Region 3 –Columbia EQC Office	803-896-0620
Chester, Lancaster, York	Region 3 – Lancaster EQC Office	803-285-7461
Chesterfield, Darlington, Dillon, Florence, Marion, Marlboro	Region 4 – Florence EQC Office	843-661-4825
Clarendon, Kershaw, Lee, Sumter	Region 4 – Sumter EQC Office	803-778-6548
Aiken, Allendale, Bamberg, Barnwell, Calhoun, Orangeburg	Region 5 – Aiken EQC Office	803-641-7670
Georgetown, Horry, Williamsburg	Region 6 – Myrtle Beach EQC Office	843-238-4378
Berkeley, Charleston, Dorchester	Region 7 – Charleston EQC Office	843-953-0150
Beaufort, Colleton, Hampton, Jasper	Region 8 – Beaufort EQC Office	843-846-1030

After-hour reporting should be made to the 24-Hour Emergency Response telephone number 803-253-6488 or 1-888-481-0125 outside of the Columbia area. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances to the address in Part

II.L.4.a(4). 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 reoccurrence of the noncompliance.

b. The following shall be included as information, which must be reported within 24 hours under this paragraph.

(1) Any unanticipated bypass, which exceeds any effluent limitation in the permit. (See R:61-9.122.44(g)).

(2) Any upset which exceeds any effluent limitation in the permit.

(3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours (See R 61-9.122.44(g)). If the permit contains maximum limitations for any of the pollutants listed below, a violation of the maximum limitations shall be reported orally to the DHEC/Bureau of Water/Water Enforcement Division within 24 hours or the next business day.

(a) Whole Effluent Toxicity (WET),

(b) tributyl tin (TBT), and

(c) any of the following bioaccumulative pollutants:

$\alpha$ BHC	Lindane
$\beta$ BHC	Mercury
$\delta$ BHC	Mirex
BHC	Octachlorostyrene
Chlordane	PCBs
DDD	Pentachlorobenzene
DDE	Photomirex
DDT	1,2,3,4-Tetrachlorobenzene
Dieldrin	1,2,4,5-Tetrachlorobenzene
Hexachlorobenzene	2,3,7,8-TCDD
Hexachlorobutadiene	Toxaphene

c. The Department may waive the written report on a case-by-case basis for reports under Part II.L.5.b of this section if the oral report has been received within 24 hours.

#### 6. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Part II.L.4 and 5 of this section and Part IV at the time monitoring reports are submitted. The reports shall contain the information listed in Part II.L.5 of this section.

7. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information to the Industrial, Agricultural and Storm Water Permitting Division. This information may result in permit modification, revocation and reissuance, or termination in accordance with Regulation 61-9.

8. Existing Manufacturing, Commercial, Mining, and Silvicultural Dischargers

In addition to the reporting requirements under Part II.L.1 of this section, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the DHEC/Bureau of Water/Water Enforcement Division of the Department as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, 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  $\mu\text{g/l}$ );
  - (2) Two hundred micrograms per liter (200  $\mu\text{g/l}$ ) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu\text{g/l}$ ) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1  $\text{mg/l}$ ) for antimony;
  - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application;  
or
  - (4) The level established by the Department in accordance with section R.61-9.122.44(f).
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed in the highest of the following "notification levels":
  - (1) Five hundred micrograms per liter (500  $\mu\text{g/l}$ );
  - (2) One milligram per liter (1  $\text{mg/l}$ ) for antimony;
  - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with R.61-9.122.21(g)(7).
  - (4) The level established by the Department in accordance with section R.61-9.122.44(f).

## **M. Bypass**

1. 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 Part II.M.2 and 3 of this section.
2. Notice
  - a. 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 to the DHEC/Bureau of Water/Industrial, Agricultural and Storm Water Permitting Division.
  - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.L.5 of this section.
3. Prohibition of Bypass
  - a. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
    - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (2) 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 adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - (3) The permittee submitted notices as required under Part II.M.2 of this section.
  - b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part II.M.3.a of this section.

## **N. Upset**

1. 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 Part II.N.2 of this section are met. No 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.
2. 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:
  - a. An upset occurred and that the permittee can identify the cause(s) of the upset;

- b. The permitted facility was at the time being properly operated; and
  - c. The permittee submitted notice of the upset as required in Part II.L.5.b(2) of this section.
  - d. The permittee complied with any remedial measures required under Part II.D of this section.
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

**O. Misrepresentation of Information**

- 1. Any person making application for a NPDES discharge permit or filing any record, report, or other document pursuant to a regulation of the Department, shall certify that all information contained in such document is true. All application facts certified to by the applicant shall be considered valid conditions of the permit issued pursuant to the application.
- 2. Any person who knowingly makes any false statement, representation, or certification in any application, record, report, or other documents filed with the Department pursuant to the State law, and the rules and regulations pursuant to that law, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for pursuant to 48-1-320 or 48-1-330.

### PART III. LIMITATION AND MONITORING REQUIREMENTS

#### A. Effluent Limitations and Monitoring Requirements

1. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 001: once through cooling water, wastewater regulated at internal Outfalls 003, 005, 006, 008, 009, 013, and 014 to Lake Robinson.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Monthly Average	Instantaneous Maximum	Monthly Average	Daily Maximum	Sampling Frequency	Sample Type
Flow	-	-	MR, MGD	855 MGD	Daily	Continuous <sup>A</sup> or Pump Logs
pH	-	-	MR, standard units		1/quarter	Grab
Discharge Temperature						
December through February	-	-	-	90 °F	Daily	Continuous
March	-	-	-	92 °F	Daily	Continuous
April	-	-	-	100 °F	Daily	Continuous
May	-	-	-	106 °F	Daily	Continuous
June through September	-	-	-	111.2 °F	Daily	Continuous
October	-	-	-	108 °F	Daily	Continuous
November	-	-	-	100 °F	Daily	Continuous
Dam Release Temperature <sup>D</sup>	-	-	-	91.4 °F	Daily	Continuous
Total Residual Chlorine <sup>B</sup>	-	0.2 mg/l	-	-	1/quarter	Multiple Grabs
Cadmium, total <sup>C</sup>	-	-	MR, mg/l	MR, mg/l	1/month	24 Hr. Composite
Iron, total <sup>C</sup>	-	-	MR, mg/l	MR, mg/l	1/month	24 Hr. Composite

MR = Monitor and Report Results

<sup>A</sup>See Part II.J.1

<sup>B</sup>See Part V.A.3

<sup>C</sup>See Part V.A.10 and A.11

<sup>D</sup> Dam release temperature shall be taken at the S.C. Highway 23 Bridge

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at the discharge canal weir prior to mixing with Lake Robinson.

2. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 003: sewerage from the Clow and Davco I extended aeration sanitary waste treatment plants to the discharge canal, then via Outfall 001 to Lake Robinson.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration		Sampling Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow	-	-	MR, MGD	MR, MGD	1/month	Continuous <sup>A</sup> or Instantaneous <sup>A</sup>
pH	-	-	Min 6.0 su Max 9.0 su <sup>B</sup>		1/month	Grab
Biochemical Oxygen Demand	-	-	30 mg/l	45 mg/l	1/month	24 Hr. Composite <sup>C</sup>
Total Suspended Solids	-	-	30 mg/l	45 mg/l	1/month	24 Hr. Composite <sup>C</sup>
Fecal Coliform	-	-	200/100 ml	400/100 ml	1/month	Grab

MR = Monitor and Report Results

<sup>A</sup>See Part I.J.1

<sup>B</sup>See Part I.L

<sup>C</sup>Composite samples shall be collected in accordance with Part I.E.1, 2, or 3

a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):  
after sewage treatment plant discharge prior to mixing with any other waste stream.

3. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 005: ash transport waters via Outfall 001 to Lake Robinson.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration		Sampling Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow	-	-	MR, MGD	MR, MGD	1/month	Instantaneous <sup>A</sup>
pH	-	-	Min 6.0 su Max 9.0 su <sup>B</sup>		1/month	Grab
Total Suspended Solids	-	-	30 mg/l	100 mg/l	1/month	Grab
Total Suspended Solids entering ash pond <sup>D</sup>	-	-	-	MR	1/quarter	Grab
Oil and Grease	-	-	15 mg/l	20 mg/l	1/month	Grab
Arsenic, total <sup>C</sup>	-	-	MR, mg/l	MR, mg/l	1/month	Grab
Cadmium, total <sup>C</sup>	-	-	MR, mg/l	MR, mg/l	1/month	Grab
Chromium, total <sup>C</sup>	-	-	MR, mg/l	MR, mg/l	1/month	Grab
Copper, total	7.2 lbs/d	22.5 lbs/d	-	-	1/month	Grab
Copper, total, entering ash pond <sup>D</sup>	-	-	-	MR mg/l	1/quarter	Grab
Iron, total	67 lbs/d	220 lbs/d	-	-	1/month	Grab
Iron, total, entering ash pond <sup>D</sup>	-	-	-	MR mg/l	1/quarter	Grab
Lead, total <sup>C</sup>	-	-	MR, mg/l	MR, mg/l	1/month	Grab
Mercury, total <sup>C</sup>	-	-	MR, mg/l	MR, mg/l	1/month	Grab
Nickel, total <sup>C</sup>	-	-	MR, mg/l	MR, mg/l	1/month	Grab
Selenium, total <sup>C</sup>	-	-	MR, mg/l	MR, mg/l	1/month	Grab
Zinc, total <sup>C</sup>	-	-	MR, mg/l	MR, mg/l	1/month	Grab

<sup>A</sup>See Part II.J.1 <sup>B</sup>See Part I.L <sup>C</sup>See Part V.A.10 and A.11 <sup>D</sup>Sample shall be taken of ash sluice water with no metal cleaning waste included.

MR = Monitor and Report Results

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after discharge from the ash pond prior to mixing with any other waste stream.

4. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 006: low volume wastes and chemical metal cleaning wastes from the Radwaste System to the circulating system discharge line, then via Outfall 001 to Lake Robinson.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration		Sampling Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow	-	-	MR, MGD	MR, MGD	1/month	Estimate <sup>A,C</sup>
pH	-	-	Minimum of 6.0 standard units <sup>B</sup>		1/month	Grab <sup>C</sup>
Total Suspended Solids	-	-	30.0 mg/l	100.0 mg/l	1/quarter	Grab <sup>C</sup>
Oil and Grease	-	-	15.0 mg/l	20.0 mg/l	1/quarter	Grab <sup>C</sup>
Total Copper	-	-	1.0 mg/l	1.0 mg/l	1/month <sup>D</sup>	Grab
Total Iron	-	-	1.0 mg/l	1.0 mg/l	1/month <sup>D</sup>	Grab

MR = Monitor and Report Results

<sup>A</sup>See Part II.J.1

<sup>B</sup>See Part I.L

<sup>C</sup>Sampling for all parameters is required if metal cleaning wastes are discharged (unless otherwise specified).

<sup>D</sup>Sampling for total copper and total iron shall be conducted once per occurrence of discharge from the metal cleaning waste source before mixing with other waste streams, but need not be more than once per month.

- a. The radioactive component of this discharge is regulated by the Nuclear Regulatory Commission under the provisions of operating license DPR-23, as amended, and is monitored and reported to the Nuclear Regulatory Commission.
- b. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after discharge from the radwaste treatment system, prior to mixing with any other waste stream

5. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 008: low volume wastes and storm water runoff via Outfall 001 to Lake Robinson, or to Outfall 011 to Black Creek.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration		Sampling Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow	-	-	MR, MGD	MR, MGD	1/month	Continuous <sup>A</sup> or Instantaneous <sup>A</sup>
pH (discharge through Outfall 014)	-	-	Minimum of 6.0 standard units <sup>B</sup>		1/month	Grab
pH (discharge through Outfall 011)			Min 6.0 su Max 9.0 su <sup>B</sup>		1/month	Grab
Total Suspended Solids	-	-	30.0 mg/l	100.0 mg/l	1/month	Grab
Oil and Grease	-	-	15.0 mg/l	20.0 mg/l	1/month	Grab

MR = Monitor and Report Results

<sup>A</sup>See Part II.J.1

<sup>B</sup>See Part I.L

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at a point after discharges from Internal Outfalls 008 and 009 have combined and prior to mixing with any other waste stream, if the combined discharge is routed to Internal Outfall 014, or at the discharge from the Unit No. 1 (East) retention pond prior to mixing with any other waste stream if the discharge is routed to Outfall 011.

6. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 009: low volume wastes and storm water runoff via Outfall 001 to Lake Robinson, or to Outfall 011 to Black Creek.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration		Sampling Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow	-	-	MR, MGD	MR, MGD	1/month	Continuous <sup>A</sup> or Instantaneous <sup>A</sup>
pH (discharge through Outfall 014)	-	-	Minimum of 6.0 standard units <sup>B</sup>		1/month	Grab
pH (discharge through Outfall 011)	-	-	Min 6.0 su Max 9.0 su <sup>B</sup>		1/month	Grab
Total Suspended Solids	-	-	30.0 mg/l	100.0 mg/l	1/month	Grab
Oil and Grease	-	-	15.0 mg/l	20.0 mg/l	1/month	Grab

MR = Monitor and Report Results

<sup>A</sup>See Part II.J.1

<sup>B</sup>See Part I.L

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at a point after discharges from Internal Outfalls 008 and 009 have combined and prior to mixing with any other waste stream, if the combined discharge is routed to Internal Outfall 014, or at the discharge from the Unit No. 2 (West) retention pond prior to mixing with any other waste stream if the discharge is routed to Outfall 011.

7. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 011: miscellaneous wastewater consisting of storm water runoff, intake screen wash, and wastewater treated at internal 008 and 009 to Black Creek.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration		Sampling Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow	-	-	MR, MGD	MR, MGD	1/month	Estimate <sup>A</sup>
pH	-	-	MR <sup>B</sup> , standard units		1/month	Grab

MR = Monitor and Report Results

<sup>A</sup>See Part II.J.1

<sup>B</sup>See Part I.L

a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):  
after the discharge from the yard drain pipe to Black Creek, prior to mixing with any other waste stream.

8. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 013: low volume wastes from steam generator and drainage to the circulating water system discharge line, then via Outfall 001 to Lake Robinson.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration		Sampling Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow	-	-	MR, MGD	MR, MGD	1/month	Estimate <sup>A</sup>
pH			Minimum of 6.0 standard units <sup>B</sup>		1/month	Grab
Total Suspended Solids	-	-	30.0 mg/l	100.0 mg/l	1/quarter	Grab
Oil and Grease	-	-	15.0 mg/l	20.0 mg/l	1/quarter	Grab

MR = Monitor and Report Results

<sup>A</sup>See Part II.J.1

<sup>B</sup>See Part I.L

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):  
after the discharge of the low volume wastewater from the steam generator blowdown, prior to mixing with any other waste stream.

9. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 014: combined low volume wastestreams from internal Outfalls 006, 008, 009, 013 and cooling water system discharge line to the discharge canal, then via Outfall 001 to Lake Robinson.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration		Sampling Frequency	Sample Type
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow	-	-	MR, MGD	MR, MGD	1/month	Estimate <sup>A</sup>
pH	-	-	Maximum of 9.0 standard units <sup>B</sup>		1/month	Grab

MR = Monitor and Report Results

<sup>A</sup>See Part II.J.1

<sup>B</sup>See Part I.L

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after the discharge of the combined low volume waste streams and cooling waters mix at the head of the discharge canal.

**B. Whole Effluent Toxicity Limitations and Monitoring Requirements**

1. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 011: miscellaneous wastewater consisting of storm water runoff, intake screen wash, and wastewater treated at internal 008 and 009 to Black Creek.

Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Quarterly Average <sup>A</sup>	Maximum <sup>A</sup>	Measurement Frequency	Sample Type
Whole Effluent Toxicity Chronic Testing @ CTC= 100%	25 % <sup>B</sup>	40 % <sup>B</sup>	3/quarter <sup>C</sup>	Grab
Whole Effluent Toxicity Chronic Testing-Reproduction @ CTC= 100%	MR % <sup>B</sup>	MR % <sup>B</sup>	3/quarter <sup>C</sup>	Grab
Whole Effluent Toxicity Chronic Testing - Mortality @ CTC= 100%	MR % <sup>B</sup>	MR % <sup>B</sup>	3/quarter <sup>C</sup>	Grab

MR = Monitor and Report Results

<sup>A</sup>Quarterly average is defined as the mean of percent effects for all valid tests performed during the monitoring period following the procedures given in Part V.B.1.d. Maximum is defined as the highest percent effect of all valid tests performed during the monitoring period following the procedures in Part V.B.1.d.

<sup>B</sup> See Part V.B.1 for additional toxicity reporting requirements.

<sup>C</sup> Valid tests must be separated by at least 13 days (from the time the first sample is taken to start one test until the time the first sample is taken to start a different test). There is no restriction on when a new test may begin following a failed or invalid test.

- a. Samples used to demonstrate compliance with the discharge limitations and monitoring requirements specified above shall be taken at or near the final point-of-discharge but prior to mixing with the receiving waters or other waste streams.
- b. If only one valid test is conducted during a month, results from that test must be used to assess compliance with the monthly average limit as well as the maximum limit. If more than one valid test is completed during the month, the mean percent inhibition of all valid tests must be used to demonstrate compliance with the monthly average limit.
- c. Valid test results from split samples shall be reported on the DMR. For reporting an average on the DMR, individual valid results for each test from a split sample are averaged first to determine a sample value. That value is averaged with other sample results obtained in the reporting period and the average of all sample results reported. For reporting the maximum on the DMR, individual valid results for each test from a split sample are averaged first to determine a sample value. That value is compared to other sample results obtained in the reporting period and the maximum of all sample results reported. For the purposes of reporting, split samples are reported as a single sample regardless of the number of times it is split. All laboratories used shall be identified on the DMR attachment.
- d. If Outfalls 008 and 009 have not discharged for the quarter via Outfall 011, then the chronic toxicity testing will not be required.

**C. Groundwater Monitoring Requirements**

(Site ID #16-00568)

1. During the period beginning on the effective date of this permit and lasting through the expiration date, the permittee shall monitor the four (4) groundwater monitoring wells (MW-1, MW-2, MW-3, and MW-4) as specified below:

PARAMETER	MEASUREMENT FREQUENCY	SAMPLE METHOD
Field pH, standard units	Semi-annually <sup>1</sup>	Pump or Direct Measurement
Field Specific Conductance, umhos/cm	Semi-annually <sup>1</sup>	Pump or Direct Measurement
Total Dissolved Solids	Semi-annually <sup>1</sup>	Pump or Direct Measurement
Depth to Water Level tenth/feet	Semi-annually <sup>1</sup>	Pump or Direct Measurement
Arsenic, total, mg/l	Semi-annually <sup>1</sup>	Pump or Bailer Method
Cadmium, total, mg/l	Semi-annually <sup>1</sup>	Pump or Bailer Method
Chromium, total, mg/l	Semi-annually <sup>1</sup>	Pump or Bailer Method
Copper, total, mg/l	Semi-annually <sup>1</sup>	Pump or Bailer Method
Zinc, total, mg/l	Semi-annually <sup>1</sup>	Pump or Bailer Method
Sulfate, mg/l	Semi-annually <sup>1</sup>	Pump or Bailer Method

<sup>1</sup> Semi-annual samples shall be taken in the months of January and July of each year.

- a. All of the groundwater monitoring wells must be properly maintained at all times so that they yield representative aquifer samples.
  - b. Groundwater sample collection methods shall be in accordance with the SCDHEC Environmental Quality Control Environmental Investigations and Standard Operating Procedures and Quality Assurance Manual dated September 2001.
2. Sample collection methods shall be in accordance with EPA – Environmental Investigations Standard Operating Procedures and Quality Assurance Manual, November 2001, or the most recent revision.
  3. All groundwater monitoring wells must be properly maintained at all times.

**D. Sludge Monitoring Requirements**

None

**E. Soil Monitoring Requirements**

None

**PART IV. SCHEDULE OF COMPLIANCE**

A. Schedule(s)

None

- B. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 10 days following each scheduled date.

Not Applicable

## **PART V. OTHER REQUIREMENTS**

### **A. Effluent Requirements**

1. There shall be no discharge of floating solids or visible foam in other than trace amounts, nor shall the effluent cause a visible sheen on the receiving waters.
2. The permittee shall monitor all parameters consistent with conditions established by this permit on the **1st Wednesday** of every calendar month, unless otherwise approved by this Department. If the sampling day falls on a holiday, the permittee will be allowed to sample the second week of the calendar month. Additional monitoring, as necessary to meet the frequency requirements of this permit (Part III.A. Effluent Limitations and Monitoring Requirements) shall be performed by the permittee.
3. Each individual generating unit is not allowed to discharge chlorine for more than two hours in any one day, unless the permittee can demonstrate to SCDHEC that a longer duration discharge is required for macro invertebrate control.
4. Multiple grabs shall consist of grab samples collected at the approximate beginning of the period of Total Residual Chlorine discharge and once every twenty (20) minutes until TRC is no longer quantifiable.
5. Discharge from Lake Robinson Dam during the months of June through September shall be from the lower depths to the extent practicable to assure that the limitations provided for Outfall 001 are not exceeded.
6. The discharge of the intake screen wash water is permitted without limitations or monitoring requirements.
7. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
8. The South Carolina Department of Health and Environmental Control has determined that pursuant to Section 316(a) of the Act that the thermal component of the discharge controlled by the temperature limits for Outfall 001 assures the protection and propagation of a balanced, indigenous population of fish, shellfish, and wildlife.
9. Unless authorized elsewhere in this Permit, the permittee must meet the following requirements concerning maintenance chemicals for the following waste streams: once-through noncontact cooling water, recirculated cooling water, boiler blowdown water, cooling tower blowdown, and air washer water. Maintenance chemicals shall be defined as any man-induced additives to the above-referenced waste streams.
  - a. Detectable amounts of any of the one hundred and twenty-six priority pollutants is prohibited in the discharge, if the pollutants are present due to the use of maintenance chemicals.

- b. Slimicides, algicides and biocides are to be used in accordance with registration requirements of the Federal Insecticides, Fungicide and Rodenticide Act.
  - c. The use of maintenance chemicals containing bis(tributyltin) oxide is prohibited.
  - d. Any maintenance chemicals added to the above-referenced waste streams must degrade rapidly, either due to hydrolytic decomposition or biodegradation.
  - e. Discharges of maintenance chemicals added to waste streams must be limited to concentrations which protect indigenous aquatic populations in the receiving stream.
  - f. The permittee must keep sufficient documentation on-site that would show that the above requirements are being met. The information shall be made available for on-site review by Department personnel during normal working hours.
  - g. The occurrence of instream problems may necessitate the submittal of chemical additive data and permit modification to include additional monitoring and limitations.
10. This permit may be reopened to eliminate monitoring requirements if reasonable potential is determined not to exist or to include limitations if the discharge causes, has the reasonable potential to cause or contributes to an instream water quality violation for Cadmium and Iron at Outfall 001 and Arsenic, Cadmium, Chromium, Lead, Mercury, Nickel, Selenium, and Zinc at Outfall 005 based on one (1) year of data collected at the sampling frequency stated in Part III.
11. When the derived permit effluent limitation based on numeric criteria is below the practical quantitation limit (PQL), the PQL and analytical method stated below shall be considered as being in compliance with the permit limit. Additionally, where the permit requires only monitoring and reporting (MR), the PQL and analytical method stated below shall be used for reporting results.

Parameter	Analytical Method	PQL
Cadmium, total	200.8, 200.9, SM3113B	0.10 µg/l
Iron, total	200.7, 200.8	20 µg/l
Arsenic, total	200.8, 200.9, SM3113B	5.0 µg/l
Chromium, total	200.7, 200.8, 200.9, SM3113B	5.0 µg/l
Lead, total	200.8, 200.9, SM3113B	2.0 µg/l
Mercury, total	1669(sampling)/1631E (analysis)	0.0005 µg/l
Nickel, total	200.8, 200.9, SM3113B	10 µg/l
Selenium, total	200.8, 200.9, SM3113B	5.0 µg/l
Zinc, total	200.7, 200.8, 200.9, 289.1, SM3113B, SM3111B	10 µg/l

12. The permittee shall submit a completed Form 2C permit application for the discharge of coal pile runoff at the time the permit renewal application is submitted.

**B. Whole Effluent and Other Biological Monitoring Requirements**

1. For the requirements identified in Part III.B:

- a. A *Ceriodaphnia dubia* three brood chronic toxicity test shall be conducted at the frequency stated in Part III.B, Effluent Toxicity Limitations and Monitoring Requirements, using the chronic test concentration (CTC) of 100 % and the following test concentrations: 0% (control), 50 %, 60 %, 71 % and 84 % effluent. The permittee may add additional test concentrations without prior authorization from the Department provided that the test begins with at least 10 replicates in each concentration and all data is used to determine permit compliance.
- b. The test shall be conducted using EPA Method 1002.0 in accordance with "Short-Term Methods for Estimating Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," EPA/821/R-02/013 (October 2002).
- c. The permittee shall use the linear interpolation method described in "Short-Term Methods for Estimating Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," EPA/821/R-02/013 (October 2002), Appendix M to estimate the percent effect on survival and reproduction at the CTC according to the equations in d below.
- d. The linear interpolation estimate of percent effect is  $\left(1 - \frac{M_{CTC}}{M_1}\right) * 100$  if the CTC is a tested

concentration. Otherwise, it is  $\left(1 - \frac{M_J - \frac{M_{J+1} - M_J}{C_{J+1} - C_J} * C_J + \frac{M_{J+1} - M_J}{C_{J+1} - C_J} * CTC}{M_1}\right) * 100$ .

The permittee shall report the percent effect on both *Ceriodaphnia dubia* survival and reproduction at the CTC. Overall percent effect is the greater of the percent effect on survival and reproduction. On the DMR Attachment, the permittee shall also report the IC<sub>25</sub> and, using the same test data, the 48-hour chronic LC<sub>50</sub>.

- e. A test shall be invalidated if any part of Method 1002.0 is not followed or if the laboratory is not certified at the time the test is conducted. The permittee has requested the following additional test acceptance criteria (TAC) and variability criteria. As such, tests must be invalidated if the applicable TACs and variability criteria are not met.
  - (1) At least 80% of control organisms must produce 3 broods.
  - (2) Control group reproduction must be less than  $2\bar{X} - 15$ , where  $\bar{X}$  is laboratory average control reproduction. The laboratory shall calculate an overall control group reproduction average from control groups of all valid tests.
  - (3) The most recent valid reference toxicant test must be within laboratory control limits as determined from individual laboratory control charts.
  - (4) The most recent valid reference toxicant test must have been completed less than 30

days prior to the completion of the WET test required by this permit.

- f. All valid toxicity test results shall be submitted on the DHEC Form 3710 entitled "DMR Attachment for Toxicity Test Results" in accordance with Part II.L.4. In addition, results from all invalid tests must be appended to DMRs, including lab control data. The permittee has sole responsibility for scheduling toxicity tests so as to ensure there is sufficient opportunity to complete and report the required number of valid test results for each monitoring period.
- g. The permittee is responsible for reporting a valid test during each monitoring period. However, the Department acknowledges that invalid tests may occur. All of the following conditions must be satisfied for the permittee to be in compliance with Whole Effluent Toxicity (WET) testing requirements for a particular monitoring period when a valid test was not obtained.
- (1) A minimum of five (5) tests has been conducted which were invalid in accordance with Part V.B.1.e above;
  - (2) The data and results of all invalid tests are attached to the DMR;
  - (3) At least one additional State-certified laboratory is used after two (2) consecutive invalid tests were determined by the first laboratory. The name(s) and lab certification number(s) of the additional lab(s) shall be reported in the comment section of the DMR; and
  - (4) A valid test was reported during each of the previous three reporting periods.
- If these conditions are satisfied, the permittee may enter "H" in the appropriate boxes on the toxicity DMR and add the statement to the Comment Section of the DMR that "H indicates invalid tests."
- h. This permit may be modified based on new information that supports a modification in accordance with Regulation 61-9.122.62 and Regulation 61-68.D.

### **C. Groundwater Monitoring Requirements**

See Part III.C.

### **D. Sludge and Solid Waste Disposal Requirements**

1. The sludge generated from the sanitary wastewater treatment plants is approved for disposal in the Town of Cheraw's wastewater treatment plant (NPDES #SC0020249) in accordance with the agreement/approval letter from the Town of Cheraw dated March 26, 2007; or, as a backup or alternate location, the City of Florence WWTP (NPDES #SC0045462) in accordance with the agreement/approval letter from the City of Florence dated March 29, 2007. Written approval from the Department must be obtained prior to disposal of other sludges or use of other sludge disposal methods.
2. All waste oil and solid and hazardous waste (including dry ash and intake screen solids) shall be properly disposed of in accordance with the rules and regulations of the Bureau of Land and Waste Management. No solid wastes or sludges shall be placed into the ash pond for disposal.

#### **E. Other Conditions**

1. The biological wastewater treatment plant has been assigned a classification of **Group III-B** in the Permit to Construct, which are issued by the Department. This classification corresponds to an operator with a **Grade of B-B**. The wastewater treatment ash pond and low volume ponds have been assigned a classification of **Group I-P/C** in the Permits to Construct, which are issued by the Department. This classification corresponds to an operator with a **Grade of D-P/C**.
2. During system operation, the Permittee shall provide for the performance of routine daily biological wastewater treatment plant inspections by a certified operator of the appropriate grade. Also, the Permittee shall provide for the performance of routine twice per week wastewater treatment plant inspections by a certified operator of the appropriate grade of the ash pond and low volume ponds. Weekend and holiday inspections may be performed by an operator with a minimum certification of one grade lower than the certified operator required by the Rules and Regulations of the Environmental Certification Board based on the treatment plant classification designated in this Permit to Construct. The inspection shall include, but is not limited to, areas which require a visual observation to determine efficient operations and for which immediate corrective measures can be taken using the O & M manual as a guide. All inspections shall be recorded and shall include the date, time and name of person making the inspection, corrective measures taken, and routine equipment maintenance, repair, or replacement performed. The certified operator shall review and validate all inspection sheets generated by the weekend and holiday operator. Any unusual or significant problems encountered by the weekend and holiday operator shall be immediately reported to the certified operator who shall initiate corrective action. The Permittee shall maintain all records of inspections at the permitted facility, where possible. The records shall be made available for on-site review during normal working hours.
3. The permittee shall continue to maintain a Best Management Practices (BMP) plan to identify and control the discharge of significant amounts of oils and the hazardous and toxic substances listed in 40 CFR Part 117 and Tables II and III of Appendix D to 40 CFR Part 122. The plan shall include a listing of all potential sources of spills or leaks of these materials, a method for containment, a description of training, inspection and security procedures, and emergency response measures to be taken in the event of a discharge to surface waters or plans and/or procedures which constitute an equivalent BMP. Sources of such discharges may include materials storage areas; in-plant transfer, process and material handling areas; loading and unloading operations; plant site runoff; and sludge and waste disposal areas. The BMP plan shall be developed in accordance with good engineering practices, shall be documented in narrative form, and shall include any necessary plot plans, drawings, or maps. The BMP plan shall be maintained at the plant site and shall be available for inspection by EPA and Department personnel.
4. The permittee shall maintain an all weather access road to the wastewater treatment plant and appurtenances at all times.
5. This permit may be reopened to address compliance with 316(b) requirements for cooling water intake structures upon resolution of the EPA regulations in 40 CFR Part 125 Subpart J.

6. Drawdown of Lake Robinson shall be limited to a maximum of 2.0 feet, as a monthly average, below normal pool elevation (220.0 feet) without a prior approval by the SCDHEC. Such approval may impose more stringent thermal limitations than indicated for Outfall 001 during periods of greater drawdown.
7. The company shall notify the South Carolina Department of Health and Environmental Control in writing no later than sixty (60) days prior to instituting use of any additional maintenance chemicals in the cooling water system. Such notification shall include:
  - a. Name and general composition of the maintenance chemical
  - b. Quantities to be used
  - c. Frequency of use
  - d. Proposed discharge concentration
  - e. EPA registration number, if applicable
  - f. Aquatic toxicity information
8. A calendar day, for all monitoring at Outfall 001, shall be defined as a twenty four (24) hour period ending at noon of that calendar day.
9. At the time of renewal of the NPDES permit, the permittee shall certify that the ash pond(s) provide(s) the necessary minimum wet weather detention volume to contain the combined volume of all direct rainfall, all rainfall runoff to the pond resulting from the 10-year, 24-hour rainfall event, and maximum dry weather plant waste flows which could occur during a 24-hour period. This volume shall be calculated between the top of the sediment level and the minimum overflow discharge elevation. All data necessary to support this certification shall be maintained on-site and shall be available for inspection by SC DHEC personnel.
10. The permittee shall periodically survey all ash pond dikes and toe areas to determine if the structural integrity has been compromised. These inspections shall be performed annually. The permittee shall notify SCDHEC within five (5) days of becoming aware of any structural abnormalities and provide a proposed course of corrective action and implementation schedule.
11. Simultaneous multi-unit chlorination is permitted.
12. This permit no longer covers storm water associated with industrial activity except those storm water discharges specifically identified as discharging through a listed outfall on the limitations pages of this permit. The permittee should obtain coverage for other storm water associated with industrial activity simultaneous to the issuance of this permit to remain covered for those discharges.