

Michael S. Moore
Acting Manager, Nuclear Licensing
803.345.4752

February 15, 2018



Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Sir/Madam:

Subject: VIRGIL C. SUMMER NUCLEAR STATION
DOCKET NO. 50-395
OPERATING LICENSE NO. NPF-12
MODIFIED NPDES PERMIT NO. SC0030856

As a requirement of the Operating License NPF-12, Appendix B, for the Virgil C. Summer Nuclear Station, South Carolina Electric & Gas Company hereby submits a copy of National Pollutant Discharge Elimination System Permit No. SC0030856.

The South Carolina Department of Health and Environmental Control has made a minor modification to the permit to remove all references to Outfall 012. This outfall now has coverage under the NPDES General Permit for Storm Water Discharges Associated with Industrial Activity. The permit modification date was issued on February 1, 2018, with an effective date of February 1, 2018. This permit ensures that all discharges from the plant to Monticello Reservoir and Broad River meet the Federal and State guidelines.

If there are any questions, please contact Ms. Susan B. Reese at (803) 345-4591.

Very truly yours,

A handwritten signature in black ink that reads "Michael S. Moore".

Michael S. Moore

SBR/MSM/hk
Attachment
w/o attachment unless noted

c: J. E. Addison
W. K. Kissam
J. B. Archie
J. H. Hamilton
G. J. Lindamood
W. M. Cherry
C. Haney

S. A. Williams
NRC Resident Inspector w/attachment
K. M. Sutton
NSRC
RTS (LTD 286, CR-11-05986)
File (814.07-1, RR 7800)
PRSF (RC-18-0022) w/attachment



January 31, 2018

GEORGE A LIPPARD
VICE PRESIDENT, NUCLEAR PLANT OPERATIONS
SCE&G
PO BOX 88
JENKINSVILLE, SC 29065

RE: Minor Modification to NPDES Permit No. SC0030856
SCE&G/V C SUMMER NUCLEAR STAT
Fairfield County

Dear Mr. Lippard:


The South Carolina Department of Health and Environmental Control has made a minor modification to the NPDES Permit issued to the above-referenced facility.

1. All references to Outfall 012 have been deleted from the permit. This outfall now has coverage under the NPDES General Permit for Stormwater Discharges Associated with Industrial Activity.
2. The page numbers of the permit have been changed.

The effective date of the modification is February 1, 2018.

Enclosed is(are) your revised permit page(s). Please replace the page(s) in your current permit with the enclosed page(s). If you have any questions, please contact Melanie K Townley at 803-898-4223.

Sincerely,


Patty Barnes
NPDES Administration

Enclosure
e-mail: EPA

Al Peeples, MIDLANDS REGION BEHS COLUMBIA
COLUMBIA EQC LAB
Melanie Hindman, BOW/WPC Enforcement
Melanie K Townley, Industrial Section Permit Engineer

National Pollutant Discharge Elimination System Permit

(for Discharge to Surface Waters)

This NPDES Permit Authorizes

SCE&G

Virgil C. Summer Nuclear Station

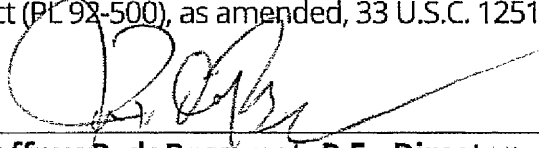
to discharge from a facility located at

**Highway 215
Jenkinsville, SC
Fairfield County**

to receiving waters named

**Outfall 001 and 014: Monticello Reservoir
Outfall 003: Broad River/Parr Reservoir**

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 48-1-10 *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

Issue Date: May 7, 2014

Effective Date: June 1, 2014

Modification Issue Date: February 1, 2018

Expiration Date¹: May 31, 2019

Permit No.: SC0030856

Modification Effective Date: February 1, 2018

¹ This permit will continue to be in effect beyond the expiration date if a complete timely re-application is received pursuant to Regulation 61-9.122.6 and signed per Regulation 61-9.122.22.



S.C. Department of Health and
Environmental Control

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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. "Blowdown" means the minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practices.
- E. "Bottom ash" means the ash that drops out of the furnace gas stream in the furnace and in the economizer sections. Economizer ash is included when it is collected with bottom ash (40 CFR 423.11(f)).
- F. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- G. "Chemical metal cleaning waste" means any wastewater resulting from the cleaning of any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning (40 CFR 423.11(c)).
- H. "Coal pile runoff" means the rainfall runoff from or through any coal storage pile (40 CFR 423.11(m)).
- I. 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 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 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 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.

- J. "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.
- K. "Daily maximum" is the highest average value recorded of samples collected on any single day during the calendar month.
- L. "Daily minimum" is the lowest average value recorded of samples collected on any single day during the calendar month.
- M. The "Department" or "DHEC" shall refer to the South Carolina Department of Health and Environmental Control.
- N. "Fly ash" means the ash that is carried out of the furnace by the gas stream and collected by mechanical precipitators, electrostatic precipitators, and/or fabric filters. Economizer ash is included when it is collected with fly ash (40 CFR 423.11(e)).
- O. 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).
- P. 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.
- Q. "Groundwater" means the water below the land surface found in fractured rock or various soil strata.
- R. "Low volume waste sources" include, but are not limited to: wastewaters from wet scrubber air pollution control systems, ion exchange water treatment systems, water treatment evaporator blowdown, laboratory and sampling streams, boiler blowdown, floor drains, cooling tower basin cleaning wastes, and recirculating house service water systems. Sanitary and air conditioning wastes are not included (40 CFR 423.11(b)).
- S. The "maximum or minimum" is the highest or lowest value, respectively, recorded of all samples collected during the calendar month. These terms may also be known as the instantaneous maximum or minimum.
- T. "Metal cleaning waste" means any wastewater resulting from cleaning [with or without chemical cleaning compounds] any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning, and air preheater cleaning (40 CFR 423.11(d)).
- U. "Monitoring well" means any well used to sample groundwater for water quality analysis or to measure groundwater levels.

- V. The “monthly average”, other than for fecal coliform, E. Coli and enterococci, is the arithmetic mean of all samples collected in a calendar month period. The monthly average for fecal coliform, E. Coli 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 daily discharges made during the month.
- W. “Once through cooling water” means water passed through the main cooling condensers in one or two passes for the purpose of removing waste heat (40 CFR 423.11(g)).
- X. The “PCA” shall refer to the Pollution Control Act (Chapter 1, Title 48, Code of Laws of South Carolina).
- Y. 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. It is also referred to as the reporting limit.
- Z. “Quarter” is defined as the first three calendar months beginning with the month that this permit becomes effective and each group of three calendar months thereafter.
- AA. “Quarterly average” is the arithmetic mean of all samples collected in a quarter.
- BB. “Recirculated cooling water” means water which is passed through the main condensers for the purpose of removing waste heat, passed through a cooling device for the purpose of removing such heat from the water then passed again, except for blowdown, through the main condenser (40 CFR 423.11(h)).
- CC. “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.
- DD. “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.
- EE. “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.
- FF. “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.

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 shall 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. 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, if applicable. 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. A roster of operators associated with the facility's operation and their certification grades shall be submitted to the DHEC/Bureau of Water/Water Pollution Control Division. For existing facilities, this roster shall be submitted within thirty (30) days of the effective date of this permit. For new facilities, this roster must be submitted prior to placing the facility into operation. Additionally, any changes in operator or operators (including their certification grades) shall be submitted to the Department as they occur.
6. Wastewater Sewer Systems
 - a. Purpose. This section establishes rules for governing the operation and maintenance of wastewater sewer systems, including gravity or pressure interceptor sewers. It is the purpose of this section to establish standards for the management of sewer systems to prevent and/or minimize system failures that would lead to public health or environmental impacts.

- b. Applicability. This section applies to all sewer systems that have been or would be subject to a DHEC construction permit under Regulation 61-67 and whose owner owns or operates the wastewater treatment system to which the sewer discharges.
- c. General requirements. The permittee must:
 - (1) Properly manage, operate, and maintain at all times all parts of its sewer system(s), to include maintaining contractual operation agreements to provide services, if appropriate;
 - (2) Provide adequate capacity to convey base flows and peak flows for all parts of the sewer system or, if capital improvements are necessary to meet this standard, develop a schedule of short and long term improvements;
 - (3) Take all reasonable steps to stop and mitigate the impact of releases of wastewater to the environment;
and
 - (4) Notify the Department within 30 days of a proposed change in ownership of a sewer system.

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) Records of any necessary calibrations must be kept.
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 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 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 the Department 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 the Department 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. 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)(a) The mass value for a pollutant collected using a grab sample shall be calculated using the 24-hour totalized flow for the day the sample was collected (if available) or the instantaneous flow 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. Grab samples should be collected at a time representative of the discharge.
 - (b) The mass value for a pollutant collected using a composite sample shall be calculated using the 24-hour totalized flow measured for the day the sample was collected and either the concentration value actually achieved or the value as determined from the procedures in (1) or (2) above, as appropriate.
5. The PCA 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 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 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 only 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 years per violation, or by both.

L. Reporting requirements

1. Planned changes.

The permittee shall give written notice to DHEC/Bureau of Water/Water Facilities 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 Pollution Control 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. Monitoring periods are calculated beginning with the permit effective date unless otherwise stated elsewhere in this permit. If the permit is modified, monitoring periods are calculated beginning with the modification effective date for those items that are part of the modification unless otherwise stated 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 groundwater or 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/Water Pollution Control Division
Data and Records Management 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) (or in the laboratory report from the analyzing laboratory) 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) (or the laboratory report from the analyzing laboratory) shall be submitted to:

S.C. Department of Health and Environmental Control
Bureau of Water/Water Pollution Control Division
Data and Records Management 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 as stated in Part V of the permit postmarked no later than the 28th day of the month following the end of the monitoring period, unless otherwise stated elsewhere in this permit. Two copies of these results shall be submitted to:

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

- (4) All other reports required by this permit shall be submitted postmarked no later than the 28th day of the month following the end of the monitoring period, unless otherwise stated elsewhere in this permit. Two copies of these reports shall be submitted to:

S.C. Department of Health and Environmental Control
Bureau of Water/Water Pollution Control Division
Data and Records Management 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 date 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	DHEC Regional Area	Phone No.
Fairfield, Lexington, Newberry, Richland	Midlands Region BEHS Columbia	803-896-0620

*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 to the address in Part II.L.4.a(4) 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 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 Pollution Control 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:

α BHC	Mercury
β BHC	Mirex
δ BHC (Lindane)	Octachlorostyrene
BHC	PCBs
Chlordane	Pentachlorobenzene
DDD	Photomirex
DDE	1,2,3,4-Tetrachlorobenzene
DDT	1,2,4,5-Tetrachlorobenzene
Dieldrin	2,3,7,8-TCDD
Hexachlorobenzene	Toxaphene
Hexachlorobutadiene	

- 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 Water Facilities 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.1-7 of this section, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the DHEC/Bureau of Water/Water Pollution Control 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 µg/l);
 - (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 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 µg/l);
 - (2) One milligram per liter (1 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/ Water Facilities 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. Limitations 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 final outfall serial number 001: once through non-contact cooling water and low volume waste regulated at internal outfalls 004 and 007. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration			
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Sampling Frequency	Sample Type
Flow	MR ¹ , MGD	MR ¹ , MGD	-	-	Continuous	Continuous ²
pH	-	-	Min 6.0 su, Max 8.5 su ³		1/Month	Grab
Discharge Temperature ⁴	-	-	MR ¹ °F	113°F	Continuous	Continuous
Intake Temperature ⁵	-	-	MR ¹ °F	MR ¹ °F	Continuous	Continuous
Bromide ⁶	-	-	MR ¹ mg/l	MR ¹ mg/l	1/Month	Grab

¹MR: Monitor and Report

²See Part II.J.1

³See Part I.S

⁴Discharge samples shall be collected in accordance with "a" below.

⁵Intake samples shall be monitored on the inlet side of the main condenser.

⁶See Part V.A.2

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after the combination of all waste streams but prior to mixing with the receiving stream.
- b. There shall be no addition of chlorine to the main condenser cooling system or to the other cooling services.

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 internal outfall serial number 004: low volume waste. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Sampling Frequency	Sample Type
Flow	MR ¹ , MGD	MR ¹ , MGD	-	-	1/Month	Calculation ²
Total Suspended Solids	-	-	30 mg/l	100 mg/l	1/Month	Grab
Oil and Grease	-	-	15 mg/l	20 mg/l	1/Month	Grab

¹MR: Monitor and Report ²004 Flow shall be the sum of the flows from each continuously monitored steam generator blowdown line.

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after the discharge of steam generator blowdown treatment but prior to mixing with other waste streams or the receiving stream.
 - b. Internal Outfall 004 regularly discharges to final outfall 001 however as alternate pathways this discharge may be routed through final outfall 003 or through internal outfall 06A to final outfall 014.
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 internal outfall serial number 007: low volume waste. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Sampling Frequency	Sample Type
Flow	MR ¹ , MGD	MR ¹ , MGD	-	-	1/Month	Instantaneous ²
Total Suspended Solids	-	-	30 mg/l	100 mg/l	1/Month	Grab
Oil and Grease	-	-	15 mg/l	20 mg/l	1/Month	Grab

¹MR: Monitor and Report ²See Part II.J.1

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after the discharge from the neutralization basin but prior to mixing with other waste streams or the receiving stream.
- b. Internal Outfall 007 discharges to final outfall 001.

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 final outfall serial number 003: low volume waste and non-chemical metal cleaning waste. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Sampling Frequency	Sample Type
Flow	MR ¹ , MGD	MR ¹ , MGD	-	-	1/Month	Estimate ²
pH	-	-	Min 6.0 su, Max 9.0 su ³		1/Month	Grab
Total Suspended Solids	-	-	30 mg/l	100 mg/l	1/Month	Grab
Oil and Grease	-	-	15 mg/l	20 mg/l	1/Month	Grab

¹MR: Monitor and Report

²See Part II.J.1

³See Part I.S

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after final treatment but prior to mixing with the receiving 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 final outfall serial number 014: the combination of internal outfalls 005, 06A, 06B and 008. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration			
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Sampling Frequency	Sample Type
Flow	MR ¹ , MGD	MR ¹ , MGD	-	-	Continuous	Continuous ²
pH (April-October)	-	-	Min 6.0 su, Max 9.0 su ³		1/Month	Grab
pH (November –March)	-	-	Min 6.0 su, Max 8.5 su ³		1/Month	Grab
Total Phosphorus ⁴	-	-	MR ¹ mg/l	MR ¹ mg/l	1/Month	Grab

¹MR: Monitor and Report

²See Part II.J.1

³See Part I.S

⁴See Part V.A.2

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after the combination of internal outfalls 005, 06A, 06B and 008 but prior to mixing with the receiving stream.

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 final outfall serial number 005: sanitary wastewater. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration			
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Sampling Frequency	Sample Type
Flow	MR ¹ , MGD	MR ¹ , MGD	-	-	1/Month	Instantaneous ²
Biochemical Oxygen Demand (BOD ₅)	-	-	30 mg/l	45 mg/l	1/Month	24 Hr. Comp.
Total Suspended Solids (TSS)	-	-	30 mg/l	45 mg/l	1/Month	24 Hr. Comp.
E.Coli	-	-	126/100 ml	349/100 ml	1/Month	Grab

¹MR: Monitor and Report

²See Part II.J.1

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after discharge from the dechlorination tank but prior to mixing with other waste streams or the receiving stream.
- b. Internal Outfall 005 discharges to final outfall 014.

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 final outfall serial number 06A: low volume waste. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration			
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Sampling Frequency	Sample Type
Flow	MR ¹ , MGD	MR ¹ , MGD	-	-	1/Month	Instantaneous ²
Total Suspended Solids (TSS)	-	-	30 mg/l	100 mg/l	1/Month	Grab
Oil and Grease	-	-	15 mg/l	20 mg/l	1/Month	Grab

¹MR: Monitor and Report

²See Part II.J.1

- Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after discharge from the alum sludge basin but prior to mixing with other waste streams or the receiving stream.
 - Internal Outfall 06A discharges to final outfall 014.
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 final outfall serial number 06B: low volume waste. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration			
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Sampling Frequency	Sample Type
Flow	MR ¹ , MGD	MR ¹ , MGD	-	-	1/Month	Instantaneous ²
Total Suspended Solids (TSS)	-	-	30 mg/l	98 mg/l	1/Month	Grab
Oil and Grease	-	-	15 mg/l	19 mg/l	1/Month	Grab

¹MR: Monitor and Report

²See Part II.J.1

- Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after discharge from the plant waste surge basin but prior to mixing with other waste streams or the receiving stream.
- Internal Outfall 06B discharges to final outfall 014.

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 final outfall serial number 008: low volume waste, non-chemical metal cleaning waste and chemical metal cleaning wastes. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	Mass		Concentration			
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Sampling Frequency	Sample Type
Flow	MR ¹ , MGD	MR ¹ , MGD	-	-	1/Month	Instantaneous ²
Total Suspended Solids (TSS)	-	-	30 mg/l	100 mg/l	1/Month	Grab
Oil and Grease	-	-	15 mg/l	20 mg/l	1/Month	Grab
Total Copper ³	-	-	1.0 mg/l	1.0 mg/l	1/Month	Grab
Iron ³	-	-	1.0 mg/l	1.0 mg/l	1/Month	Grab

¹MR: Monitor and Report

²See Part II.J.1

³Sampling is required only when chemical metal cleaning wastes are discharged. Report "Conditional" on the discharge monitoring report form when chemical metal cleaning waste are not discharged during the monitoring period.

- a. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): after discharge from the plant startup waste holding basin but prior to mixing with other waste streams or the receiving stream.
- b. Internal Outfall 008 discharges to final outfall 014.

B. Whole Effluent Toxicity and Other Biological Limitations and Monitoring Requirements

1. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall 014: the combination of internal outfalls 005, 06A, 06B and 008. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
<i>Ceriodaphnia dubia</i> Chronic Whole Effluent Toxicity @ CTC = 100%	MR %	MR %	1/Permit Term	Grab

See Part V.B.1 for additional toxicity reporting requirements.

MR = Monitor and Report.

The following notes apply only to valid tests. For invalid tests see Part V.B.

- Note 1: The overall % effect is defined as the larger of the % survival effect or the % reproduction effect from DMR Attachment Form 3880.
- Note 2: If only one test is conducted during a month, the monthly average and daily maximum are each equal to the overall % effect.
- Note 3: If more than one test is conducted during a month, the monthly average is the arithmetic mean of the overall % effect values of all tests conducted during the month.
- Note 4: The monthly average to be reported on the DMR is the highest monthly average for any month during the monitoring period. There is no averaging of data from tests from one month to another.
- Note 5: The daily maximum to be reported on the DMR is the highest of the % survival effect or % reproduction effect of all tests conducted during the monitoring period.
- Note 6: When a sample is collected in one month and the test is completed in the next month, the overall % effect applies to the month in which the sample was collected.
- Note 7: Tests must be separated by at least 7 days (from the time the first sample is collected to start one test until the time the first sample is collected to start a different test). There is no restriction on when a new test may begin following a failed or invalid test.
- Note 8: For any split sample:
- a. Determine the % survival effect and % reproduction effect values separately for each test.
 - b. Determine the arithmetic mean of the % survival effects and of the % reproduction effects for all tests.
 - c. The monthly average and daily maximum shall be the higher of the % effect values from (b) above.
 - d. For the purposes of reporting, split samples are reported as an individual sample regardless of the number of times it is split. All laboratories used shall be identified on the DMR attachment and each test shall be reported individually on DMR Attachment Form DHEC 3880 (08/2005).
- 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.

C. Groundwater Monitoring Requirements

- a. Each of the five (5) groundwater monitoring wells (GW 08A, 9, 12, 13A and 15A) shall be sampled by the permittee as specified below:

Parameter	Measurement Frequency	Sample Method
Water Table Elevation, MSL	Semi-annually ¹	Pump or Bailer Method
Ammonia	Semi-annually ¹	Pump or Bailer Method
Field pH	Semi-annually ¹	Pump or Bailer Method
Field Specific Conductance	Semi-annually ¹	Pump or Bailer Method
Total Iron	Semi-annually ¹	Pump or Bailer Method
Total Lead	Semi-annually ¹	Pump or Bailer Method
Nitrate	Semi-annually ¹	Pump or Bailer Method
Sulfate	Semi-annually ¹	Pump or Bailer Method
Total Dissolved Solids	Semi-annually ¹	Pump or Bailer Method
Acrolein	Annually ²	Pump or Bailer Method
Acrylonitrile	Annually ²	Pump or Bailer Method
Benzene	Annually ²	Pump or Bailer Method
Bis (Chloromethyl) Ether	Annually ²	Pump or Bailer Method
Bromoform	Annually ²	Pump or Bailer Method
Carbon Tetrachloride	Annually ²	Pump or Bailer Method
Chlorobenzene	Annually ²	Pump or Bailer Method
Chlorodibromomethane	Annually ²	Pump or Bailer Method
Chloroethane	Annually ²	Pump or Bailer Method
2-Chloroethyl vinyl ether	Annually ²	Pump or Bailer Method
Chloroform	Annually ²	Pump or Bailer Method
Dichlorobromomethane	Annually ²	Pump or Bailer Method
Dichlorodifluoromethane	Annually ²	Pump or Bailer Method
1,1-Dichloroethane	Annually ²	Pump or Bailer Method
1,2-Dichloroethane	Annually ²	Pump or Bailer Method
1,1-Dichloroethene	Annually ²	Pump or Bailer Method
1,2-Dichloropropane	Annually ²	Pump or Bailer Method
1,3-Dichloropropylene	Annually ²	Pump or Bailer Method
Ethylbenzene	Annually ²	Pump or Bailer Method
Methyl bromide	Annually ²	Pump or Bailer Method
Methyl chloride	Annually ²	Pump or Bailer Method
Methylene chloride	Annually ²	Pump or Bailer Method
1,1,2,2-Tetrachloroethane	Annually ²	Pump or Bailer Method
Tetrachloroethylene	Annually ²	Pump or Bailer Method
Toluene	Annually ²	Pump or Bailer Method
1,2-Trans-dichloroethylene	Annually ²	Pump or Bailer Method
1,1,1-Trichloroethane	Annually ²	Pump or Bailer Method
1,1,2-Trichloroethane	Annually ²	Pump or Bailer Method
Trichloroethylene	Annually ²	Pump or Bailer Method
Trichlorofluoromethane	Annually ²	Pump or Bailer Method
Vinyl chloride	Annually ²	Pump or Bailer Method

- b. The permittee shall follow the Groundwater Monitoring Sampling Period and Reporting Deadline in the table below for the coordinating Measurement Frequency indicated in the table (in paragraph a.) above:

Measurement Frequency	Sampling Period	Reporting Deadline
Quarterly (Samples must be taken at least 60 days apart.)	January 1 st – March 31 st	April 28 th
	April 1 st – June 30 th	July 28 th
	July 1 st – September 30 th	October 28 th
	October 1 st – December 31 st	January 28 th
Semi-Annually	January 1 st – March 31 st	April 28 th
	July 1 st – September 30 th	October 28 th
Annually	October 1 st – December 31 st	January 28 th

- c. For new in-ground wastewater treatment units or new land application activities, background groundwater quality data must be submitted prior to final approval to place into operation.
- d. Sample collection methods shall be in accordance with EPA publication SESDPROC 301-R2, dated October 28, 2011. Analytical methods must be EPA-approved, appropriate for the media being analyzed, and must be able to achieve a practical quantitation limit (i.e. reporting limit) below the standard for Class GB groundwater as established in South Carolina Water Classifications and Standards R.61-68 if applicable to the parameter being analyzed.
- e. All groundwater monitoring wells must be properly maintained at all times and are to yield a representative sample of the aquifer. If the groundwater elevation drops to a level that prevents the collection of a sample for two consecutive sampling periods, then this well shall be considered as “rendered unusable.” In accordance with Regulation 61-71, any monitoring well which is destroyed, rendered unusable, or abandoned, shall be reported to the Department, and shall be properly abandoned, revitalized, or replaced. The permittee shall revitalize or replace the dry well within six months after recording the second dry sampling period.
- f. In accordance with R.61-9.505.5(d), “If a deleterious impact to the groundwaters of the State from the permitted use or disposal practices is documented through groundwater monitoring levels exceeding the standards set forth in R.61-68 or a significant adverse trend occurs, then it will be the obligation of the permittee as directed by the Department to conduct an investigation to determine the vertical and horizontal extent of groundwater impact. The Department may require remediation of the groundwater to within acceptable levels for groundwater as set forth in R.61-68.”

D. Sludge Monitoring Requirements

Not applicable to this permit.

E. Soil Monitoring Requirements

Not applicable to this permit.

Part IV. Schedule of Compliance

A. Schedule(s)

Not applicable to this permit.

- 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 14 days following each scheduled date.

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. Where the permit limitation Part III 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) in Part III, the PQL and analytical method stated below shall be used for reporting results.

Parameter	Analytical Method	PQL
Bromide	300.0, 300.1	2000 µg/l
Total Copper	200.7, 200.8, 200.9, SM3113B	10 µg/l
Total Zinc	200.7, 200.8, SM3113B	10 µg/l
Total Phosphorus	365.1 (Rev. 2.0 13), 365.3, 365.4 or SM 4500 P, E or F	50 µg/l

3. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
4. 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, cooling tower blowdown or recirculated cooling water, boiler blowdown, and air washer water. Maintenance chemicals shall be defined as any man-induced additives that may be added to the 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 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 the following documentation on-site for each maintenance chemical used. The information shall be made available for on-site review by Department personnel during normal working hours.
 - (1) Material Safety Data Sheets (MSDS) including name, general composition, and aquatic toxicity information (i.e., NOEC or LC50) for each chemical used;

- (2) Quantity of each chemical used,
- (3) Frequency and location of use (including outfall to which it flows), and
- (4) Information, samples and/or calculations which demonstrate compliance with items (a) – (e) above.

- g. The permittee shall submit the information in (f) above with each permit renewal application.
- h. The Department may request submittal of the information in (f) above at any time to determine permit compliance and may modify this permit to include additional monitoring and/or limitations as necessary to protect water quality.

B. Whole Effluent Toxicity and Other Biological Requirements

1. Chronic Toxicity (For Outfalls 014)

- 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%, 84% and 100% 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 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.

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

- 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.
- f. All valid toxicity test results shall be submitted on the DHEC Form 3880 (08/2005) 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 three (3) tests have 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 was 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 Requirements

1. Within 120 days of the effective date of this permit, the permittee shall submit to the Department:
 - a. Current site map(s) with labeling that illustrate the components of the wastewater treatment plant (such as basins, tanks, piping, sludge treatment, etc.), groundwater monitoring wells, streams and other waterbodies, property boundaries, and any on-site production wells.
 - b. The ground level elevation and the top of the casing elevation of each groundwater monitoring well measured to within 0.01 feet above mean sea level, unless another measurement accuracy is approved by the Department.

D. Sludge Requirements

1. Sanitary sludges shall be disposed of at Greenway Disposal LLC in Irmo, SC in accordance with the agreement/approval letter from the receiving facility dated August 14, 2012. Written approval from the Department must be obtained prior to use of other sludge disposal methods.
2. Alum sludge may be land applied to a 2-acre site behind the old onsite C&D Landfill at a maximum rate of 750,000 gallons per application, no more than once every year. The permittee must use uniform application practices to prevent ponding or runoff outside the permitted area.

3. Odor Control Requirements

- a. The permittee shall not cause, allow, or permit emission into the ambient air of any substance or combinations of substances in quantities that an undesirable level of odor is determined to result unless preventative measures of the type set out below are taken to abate or control the emission to the satisfaction of the Department. Should an odor problem come to the attention of the Department through field surveillance or specific complaints, the Department may determine, in accordance with section 48-1-120 of the Pollution Control Act, if the odor is at an undesirable level by considering the character and degree of injury or interference to:
 - (1) The health or welfare of the people;
 - (2) Plant, animal, freshwater aquatic, or marine life;
 - (3) Property; or
 - (4) Enjoyment of life or use of affected property.
- b. Should the Department determine that an undesirable level of odor exists, the Department may require:
 - (1) The permittee to submit a corrective action plan to address the odor problem,
 - (2) Remediation of the undesirable level of odor within a reasonable timeframe, and
 - (3) In an order, specific methods to address the problem.

E. Other Conditions

1. The wastewater treatment plant is assigned a classification of Group II-Biological. This classification corresponds to an operator with a Grade of C-Biological. In accordance with Regulation 61-9.122.41(e)(3)(ii)(B), the permittee has submitted a staffing plan justifying a lower grade operator under certain conditions as follows: The Grade C-Biological operator or higher shall be responsible during weekday operation, with the exception of holidays and the Fridays when a Grade C-Biological operator or higher on the A-crew or B-crew is not working. A Grade D-Biological operator or higher shall be responsible on weekends, holidays and on the Fridays when a Grade C-Biological operator or higher on the A-crew or B-crew is not working.
2. The permittee shall maintain an all weather access road to the wastewater treatment plant and appurtenances at all times.
3. The permittee shall monitor all parameters consistent with conditions established by this permit as follows during every calendar month:
 - Outfall 001: Sample on the first (1st) Thursday of the month
 - Outfall 003: Sample tank prior to discharge (only one of the two tanks discharges at a time)
 - Outfall 004: Sample when blowdown is released
 - Outfall 005: Sample on the first (1st) Wednesday of the month
 - Outfall 06A: Sample on the first (1st) Monday of the month
 - Outfall 06B: Sample on the first (1st) Monday of the month
 - Outfall 007: Sample the first (1st) discharge of each month

Outfall 008: Sample once per discharge occurrence but need not be more than once per month
Outfall 014: Sample on the first (1st) Thursday of each month

If this day falls on a holiday, sampling shall be conducted on the next business day. If no discharge occurs on this day, the permittee shall collect an effluent sample during the monitoring period on a day when there is a discharge. If there is no discharge during the entire monitoring period, report "no discharge" for all parameters. Additional monitoring as necessary to meet the frequency requirements of this permit shall be performed by the permittee.

4. The permittee shall 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.
5. The permittee shall not store coal, soil nor other similar erodible materials in a manner in which runoff is uncontrolled, nor conduct construction activities in a manner which produces uncontrolled runoff unless such uncontrolled runoff has been specifically approved by SCDHEC. "Uncontrolled" shall mean without sedimentation basin or other controls approved by SCDHEC.
6. The permittee shall notify the affected downstream water treatment plant(s) of any emergency condition, plant upset, bypass or other system failure which has the potential to affect the quality of water withdrawn for drinking water purposes. This notification should be made as soon as possible and in anticipation of such event, if feasible, without taking away from any response time necessary to attempt to alleviate the situation.
7. The discharge of any waste resulting from the combustion of chemical metal cleaning wastes, toxic wastes, or hazardous wastes to any waste stream which ultimately discharges to waters of the State is prohibited.
8. 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.