National Pollutant Discharge Elimination System Permit

(for Discharge to Surface Waters)

This NPDES Permit Authorizes

GRAND STRAND WATER & SEWER AUTHORITY

Schwartz, Myrtle Beach & Bucksport Regional WWTPs

to discharge from a facility located at

Schwartz WWTP: 1 Schwartz Plant Road, Myrtle Beach, SC 29588
Myrtle Beach WWTP: 3220 Mr. Joe White Avenue, Myrtle Beach, SC 29577

Horry County

to receiving waters named

Waccamaw River (Combined Discharge from Schwartz & Myrtle Beach WWTPs)

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."

Shawn M. Clarke, P.E., Director
Water Facilities Permitting Division
Bureau of Water

Issue Date:
Effective Date:

DRAFT

Expiration Date[1]:
Permit No.: **SC0037753**

Mar. 03, 2025

[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.

TABLE OF CONTENTS

PART I. Definitions

Any term not defined in this Part has the definition stated in the South Carolina Pollution Control Act (PCA) 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 means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended by Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, and Pub. L. 97-117, 33 U.S.C. 1251 et seq. Specific references to sections within the CWA will be according to Pub. L. 92-500 notation.

B. The "arithmetic mean" of any set of values is the summation of the individual values divided by the number of individual values.

C. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

D. 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. (This method maybe used with prior Department approval.)

   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.

E. "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.

F. "Daily maximum" other than for bacterial indicators (i.e. fecal coliform, E. coli and enterococci) is the highest average value recorded of samples collected on any single day during the calendar month. Daily average for bacterial indicators means the highest arithmetic average of bacterial samples collected for each bacterial indicator species (i.e. fecal coliform, E. coli and/or enterococci) in any 24 hour period during a 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" or "SCDES" shall refer to the South Carolina Department of Environmental Services.

I. The "geometric mean" of any set of values is the N^{th} 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.

K. The "instantaneous maximum or minimum" is the highest or lowest value recorded of all samples collected during the calendar month.

L. 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. Monthly average (for bacterial indicators only) means the calendar month (i.e., 28 days, 29 days, 30 days, or 31 days) geometric mean of all bacterial samples collected [for each of the bacterial indicator species (i.e., E. coli, enterococcus, and/or fecal coliform)] during that calendar month. The monthly average loading is the arithmetic average of all daily discharges made during the month.

M. "POTW" means a treatment works as defined by section 212 of the Clean Water Act, which is owned by a state or municipality (as defined by section 502[4] of the CWA). This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature or a regional entity composed of two (2) or more municipalities or parts thereof. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality, as defined in section 502(4) of the CWA, which has jurisdiction over the Indirect Discharges to and the discharge from such a treatment works.

N. "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.

O. "Privately owned treatment works" means any device or system which both is used to treat wastes from any facility whose operator is not the operator of the treatment works and is not a POTW.

P. “Quarter” is defined as the first three calendar months beginning with the month that this permit becomes effective (unless otherwise specified in this permit) and each group of three calendar months thereafter.

Q. “Quarterly average” is the arithmetic mean of all samples collected in a quarter.

R. “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.

S. “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.

T. “Weekly average”, is the arithmetic mean of all the 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 daily discharges made during the week.

U. "Ultimate Oxygen Demand" (UOD) is the oxygen consumed by aquatic microbes in metabolizing the remaining organic and nitrogenous matter in the effluent from the permittee's wastewater treatment plant. This demand is expressed in pounds per day and is calculated by multiplying the effluent carbonaceous biochemical oxygen demand (CBOD5) concentration by the F-ratio and adding that to 4.57 times the effluent ammonia (NH3-N) concentration and multiplying the sum by the flow and the constant 8.34. The UOD loading is the arithmetic average of all individual loading determinations made during the sampling period.

U.O.D.(lbs/day) = [{CBOD5(mg/l) * F-ratio} + {NH3-N(mg/l) * 4.57}] * Flow(MGD)* 8.34

F-ratio = 1.50

Combined (Outfall 01D) UOD (lbs/day) = Schwartz WWTP UOD + Myrtle Beach WWTP UOD

Legend (See Effluent Limitations and Monitoring Requirements)

Abbreviation	Meaning/Definition
BOD_5	5-Day Biochemical Oxygen Demand
$CBOD_5$	Carbonaceous 5-Day Biochemical Oxygen Demand
UOD	Ultimate Oxygen Demand
TSS	Total Suspended Solids
DO	Dissolved Oxygen
TRC	Total Residual Chlorine
NH_3-N	Ammonia Nitrogen
24 Hr C	24 Hour Composite
Cont.	Continuous
Cal	Calculated
Eff.	Effluent
Inst.	Instantaneous

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. a. 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.

   b. It is the responsibility of the permittee to have a treatment facility that will meet the final effluent limitations of this permit. The approval of plans and specifications by the Department does not relieve the permittee of responsibility for compliance.

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 a valid NPDES permit, or the State law is subject to the actions defined in the State law.

B. Duty to reapply

1. 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. Any POTW with a current effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, 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)

2. If a privately owned treatment works as defined in Part I.N, wishes to continue an activity regulated by this permit after the expiration date of this permit, the privately owned treatment works must apply for and obtain a new permit. A privately owned treatment works 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. A roster of operators associated with the facility's operation and their certification grades shall be maintained onsite and be made available to the Department upon request.

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 SCDES 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. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

   b. Flow Measurements

   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 is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of not greater than 10 percent 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.

   c. 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.

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 or, in the case of sludge use or disposal specified in R.61-9.503, unless other test procedures have been specified in the permit

   b. Unless addressed elsewhere in this permit, the permittee shall use a sufficiently sensitive analytical method for each sample 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 from methods available in 40 CFR 136 or otherwise specified in the permit shall be reported as zero (0), provided the PQL is below the value specified in Part V.G.5 and the result is also below the PQL. 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 'General Report Comments' section of 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 from methods available in 40 CFR 136 or otherwise specified in the permit shall be reported as the value achieved, even if the PQL is below the value specified in Part V.G.5. When averaging results using a value containing a < the average shall be calculated using the value and reported as < the average of all results collected.

      3. (a) 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) 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 the Department 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 SCDES/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 notice to SCDES/Bureau of Water/NPDES Administration Section. 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. (See section 122.61; in some cases, modification or revocation and reissuance is mandatory.)

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 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 subparagraph may also be a minor modification under section 122.63.

4. Monitoring reports

Monitoring results shall be reported at the intervals specified in the permit. Monitoring periods are calculated beginning with the permit effective date, unless otherwise stated elsewhere in this permit. If the permit is modified, the effective date of the modification is used to begin calculation of the monitoring period for those items that are part of the modification unless otherwise stated elsewhere in this permit.

a. Monitoring results must be reported online through an electronic Discharge Monitoring Report (DMR) or schedule 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. The completed DMR must be submitted through ePermitting no later than 11:59 PM on the 28th day of the month following the end of the monitoring period.

The permittee shall use the DMR system through ePermitting. If the permittee encounters technical difficulties using the DMR system, contact SCDES at epermittinghelp@des.sc.gov for technical assistance. Please contact the Compliance Manager for your permit to obtain approval to submit paper DMRs until the technical issue is resolved.

(2) Groundwater Monitoring:

Groundwater monitoring results obtained at the required frequency shall be reported on a Groundwater Monitoring Report (GMR). The GMR must be submitted through ePermitting no later than 11:59 PM on the 28th day of the month following the end of the monitoring period.

The permittee shall use the GMR schedule in ePermitting. If the permittee encounters technical difficulties using the GMR schedule, contact SCDES at epermittinghelp@des.sc.gov for technical assistance. Please contact the Compliance Manager for your permit to obtain approval to submit paper GMRs until the technical issue is resolved.

(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 on a schedule submitted through ePermitting no later than 11:59 PM on the 28th day of the month following the end of the monitoring period.

The permittee shall submit reports through ePermitting. If the permittee encounters technical difficulties using the report schedule, contact SCDES at epermittinghelp@des.sc.gov for technical assistance. Please contact the Compliance Manager for your permit to obtain approval to submit paper reports until the technical issue is resolved.

(4) All other reports and submissions required by this permit shall be submitted through ePermitting no later than 11:59 PM on the 28th day of the month following the end of the monitoring period unless otherwise specified in this permit.

The permittee shall submit reports through ePermitting. If the permittee encounters technical difficulties using the report schedule, contact SCDES for technical assistance at epermittinghelp@des.sc.gov. Please contact the Compliance Manager for your permit to obtain approval to submit paper reports until the technical issue is resolved.

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 report 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/system owner (or applicable representative) (hereafter permittee/system owner) shall report any non-compliance that meets the criteria in Part II.L.5.b. Any information shall be provided orally or electronically to the local SCDES office as soon as possible but no later than 24 hours from the time the permittee/system owner becomes aware of the circumstances. During normal working hours (8:30 AM - 5:00 PM Eastern Standard Time) call the appropriate regional office in the table below.

County	**SCDES Region**	**Phone No.**
Georgetown, Horry, Williamsburg	Pee Dee Region BEHS Myrtle Beach	843-238-4378

* After hour reporting should be made to the 24-hour Emergency Response telephone number 1-888-481-0125.

A follow-up report shall also be provided to SCDES within 5 days of the time the permittee/system owner becomes aware of the circumstances. For sanitary sewer overflows (SSOs), the 'WW Sewer System Overflow or Pump Station Failure Reporting' schedule in ePermitting should be used. For all other non-compliance meeting the criteria of II.L.5.b, the '5-Day Reporting' schedule in ePermitting should be used. If the permittee encounters technical difficulties using the reporting schedules in ePermitting, a written submission using SCDES Form 3685 (or submission with equivalent information) should be submitted to the address below. For ePermitting technical assistance, contact SCDES at epermittinghelp@des.sc.gov. 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.

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

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 below (See R 61-9.122.44(g)):

i. Total Residual Chlorine (TRC)

ii. Whole Effluent Toxicity (WET)

(4) Any non-compliance which may endanger human health or the environment.

(5) Any spill or release that reaches the surface waters of the State.

(6) Any spill or release that exceeds an estimated 500 gallons.

[Note: When investigating a potential release due to a problem with a pump station, the investigation should include an evaluation of upstream manholes.]

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.

8. Domestic treatment works

All POTWs must provide adequate notice to the Department of the following:

(1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to sections 301 or 306 of CWA if it were directly discharging those pollutants; and

(2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

(3) For purposes of this paragraph, adequate notice shall include information on:

(i) The quality and quantity of effluent introduced into the POTW, and

(ii) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

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 SCDES/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 permit (24-hour reporting).

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

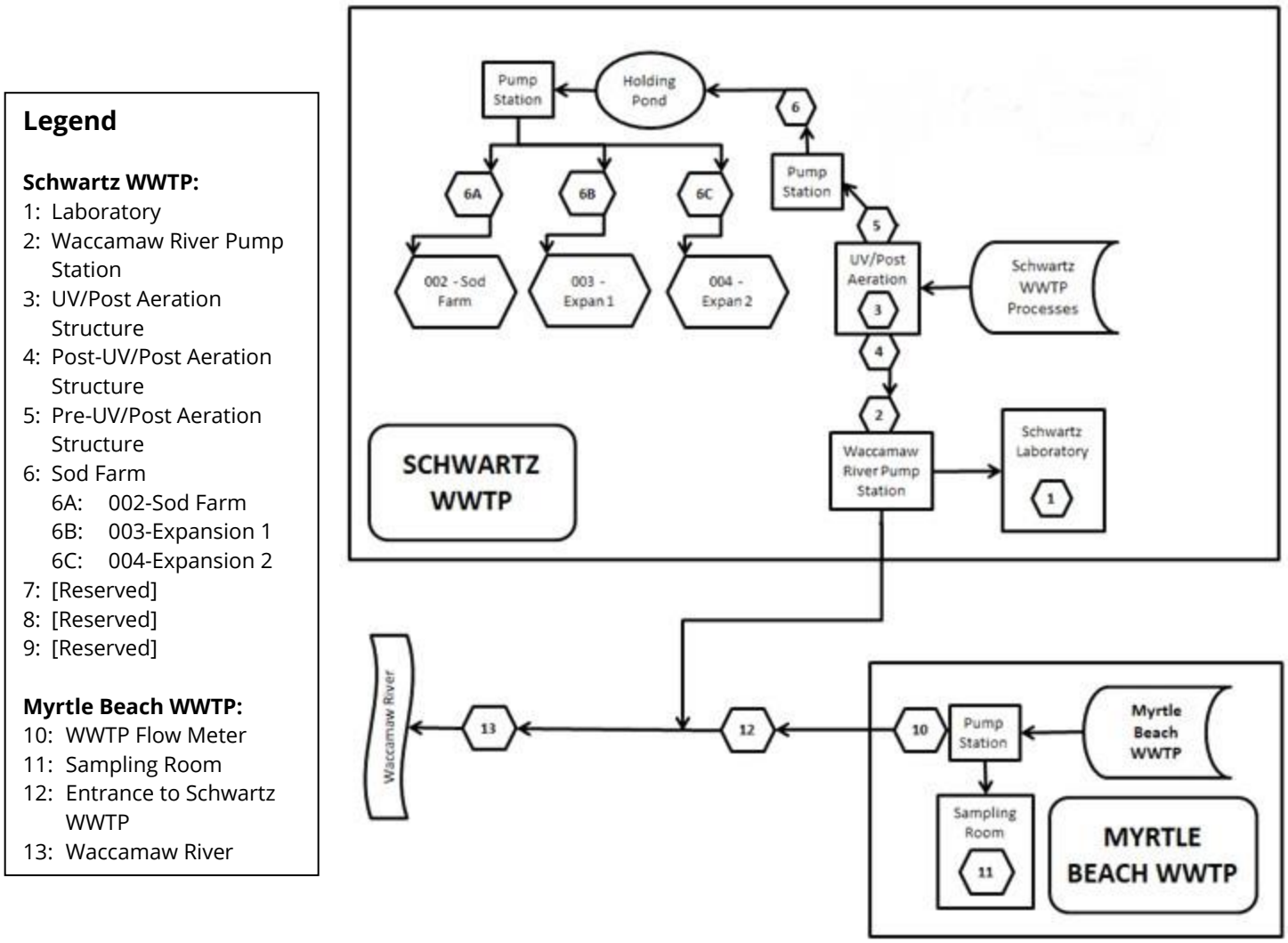
1. Any person making application for a NPDES discharge permit or filing any record, report, or other document pursuant to a regulation of the Department, shall certify that all information contained in such document is true. All application facts certified to by the applicant shall be considered valid 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

Note: Refer Figure #1 below for all outfall/sampling point locations.

Figure #1:



A. Effluent Limitations and Monitoring Requirements

1. **FINAL LIMITS** -- **Treated Effluent at the Schwartz WWTP** -- During the period beginning on the effective date of this permit and lasting until the expiration date or until the last day of the month in which the Approval to Place into Operation at 24.35 MGD expansion for the Schwartz WWTP is issued, whichever is sooner, the permittee is authorized to discharge the following under serial number designated as 01A. Such discharge shall be limited and monitored by the permittee as specified below:

Average design flow: 19.35 MGD									
EFFLUENT CHARACTERISTICS	**DISCHARGE LIMITATIONS**						**MONITORING REQUIREMENTS**		
	Pounds per Day			Other Units					
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point ①
Flow ②	---	---	---	MR MGD	MR MGD	---	Daily	Calc.	Effluent ②
$CBOD_5$ (Mar-Oct)	2,873	4,309	---	17.8 mg/l	26.7 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
$CBOD_5$ (Nov-Feb)	4,034	6,052	---	25 mg/l	37.5 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
TSS	4,841	7,262	---	30 mg/l	45 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
NH_3-N (Mar-Oct)	2,421	3,631	---	15 mg/l	22.5 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
NH_3-N (Nov-Feb)	MR	MR	---	MR mg/l	MR mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
$CBOD_5$ (% Removal) ④	---	---	---	85% (Minimum)	---	---	1/Month	Calc.	---
TSS (% Removal) ④	---	---	---	85% (Minimum)	---	---	1/Month	Calc.	---

① See Part III, Figure #1 for sampling point locations.

② The calculated flow to be reported here shall be determined as follows:
Flow = {Sum of flows measured at locations (#4 + #6)}

③ See Part V.A.3. ④ See Part V.H.

Note: All mass calculations shall be done using the flow as determined in item ② above.

2. **FINAL LIMITS** -- **Treated Effluent at the Schwartz WWTP** -- During the period beginning on the first day of the month after the Approval to Place into Operation for the Schwartz WWTP at 24.35 MGD is issued and lasting until the expiration date or until the last day of the month in which the Approval to Place into Operation for the Schwartz WWTP at 29.35 MGD is issued, whichever is sooner, the permittee is authorized to discharge the following under serial number designated as 01A. Such discharge shall be limited and monitored by the permittee as specified below:

Average design flow: 24.35 MGD									
EFFLUENT CHARACTERISTICS	**DISCHARGE LIMITATIONS**						**MONITORING REQUIREMENTS**		
	Pounds per Day			Other Units					
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point ①
Flow ②	---	---	---	MR MGD	MR MGD	---	Daily	Calc.	Effluent ②
$CBOD_5$ (Mar-Oct)	3,615	5,422	---	17.8 mg/l	26.7 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
$CBOD_5$ (Nov-Feb)	5,077	7,615	---	25 mg/l	37.5 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
TSS	6,092	9,139	---	30 mg/l	45 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
NH_3-N (Mar-Oct)	3,046	4,569	---	15 mg/l	22.5 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
NH_3-N (Nov-Feb)	MR	MR	---	MR mg/l	MR mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
$CBOD_5$ (% Removal) ④	---	---	---	85% (Minimum)	---	---	1/Month	Calc.	---
TSS (% Removal) ④	---	---	---	85% (Minimum)	---	---	1/Month	Calc.	---

① See Part III, Figure #1 for sampling point locations.
② The calculated flow to be reported here shall be determined as follows:
Flow = {Sum of flows measured at locations (#4 + #6)}
③ See Part V.A.3. ④ See Part V.H.

Note: All mass calculations shall be done using the flow as determined in item ② above.

3. **FINAL LIMITS** -- **Treated Effluent at the Schwartz WWTP** -- During the period beginning on the first day of the month after the Approval to Place into Operation for the Schwartz WWTP at 29.35 MGD is issued and lasting through the expiration date or through the last day of the month in which the Approval to Place into Operation for the Schwartz WWTP at 34.35 MGD is issued, whichever is sooner, the permittee is authorized to discharge the following under serial number designated as 01A. Such discharge shall be limited and monitored by the permittee as specified below:

Average design flow: 29.35 MGD									
EFFLUENT CHARACTERISTICS	**DISCHARGE LIMITATIONS**						**MONITORING REQUIREMENTS**		
	Pounds per Day			Other Units					
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point ①
Flow ②	---	---	---	MR MGD	MR MGD	---	Daily	Calc.	Effluent ②
$CBOD_5$ (Mar-Oct)	4,357	6,536	---	17.8 mg/l	26.7 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
$CBOD_5$ (Nov-Feb)	6,119	9,179	---	25 mg/l	37.5 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
TSS	7,343	11,015	---	30 mg/l	45 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
NH_3-N (Mar-Oct)	3,672	5,508	---	15 mg/l	22.5 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
NH_3-N (Nov-Feb)	MR	MR	---	MR mg/l	MR mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
$CBOD_5$ (% Removal) ④	---	---	---	85% (Minimum)	---	---	1/Month	Calc.	---
TSS (% Removal) ④	---	---	---	85% (Minimum)	---	---	1/Month	Calc.	---

① See Part III, Figure #1 for sampling point locations.
② The calculated flow to be reported here shall be determined as follows:
Flow = {Sum of flows measured at locations (#4 + #6)}
③ See Part V.A.3.
④ See Part V.H.

Note: All mass calculations shall be done using the flow as determined in item ② above.

4. **FINAL LIMITS** -- **Treated Effluent at the Schwartz WWTP** -- During the period beginning on the first day of the month after the Approval to Place into Operation for the Schwartz WWTP at 34.35 MGD is issued and lasting until the expiration date, the permittee is authorized to discharge the following under serial number designated as 01A. Such discharge shall be limited and monitored by the permittee as specified below:

Average design flow: 34.35 MGD									
EFFLUENT CHARACTERISTICS	**DISCHARGE LIMITATIONS**						**MONITORING REQUIREMENTS**		
	Pounds per Day			Other Units					
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point ①
Flow ②	---	---	---	MR MGD	MR MGD	---	Daily	Calc.	Effluent ②
$CBOD_5$ (Mar-Oct)	5,099	7,649	---	17.8 mg/l	26.7 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
$CBOD_5$ (Nov-Feb)	7,162	10,743	---	25 mg/l	37.5 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
TSS	8,594	12,892	---	30 mg/l	45 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
NH_3-N (Mar-Oct)	4,297	6,446	---	15 mg/l	22.5 mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
NH_3-N (Nov-Feb)	MR	MR	---	MR mg/l	MR mg/l	---	5/Week③	24 Hr C	Effluent (Location #1)
$CBOD_5$ (% Removal) ④	---	---	---	85% (Minimum)	---	---	1/Month	Calc.	---
TSS (% Removal) ④	---	---	---	85% (Minimum)	---	---	1/Month	Calc.	---

① See Part III, Figure #1 for sampling point locations.

② The calculated flow to be reported here shall be determined as follows:
Flow = {Sum of flows measured at locations (#4 + #6)}

③ See Part V.A.3.

④ See Part V.H.

Note: All mass calculations shall be done using the flow as determined in item ② above.

5. **FINAL LIMITS** – **Discharge from The Schwartz WWTP to Waccamaw River** -- During the period beginning on the effective date of this permit and lasting until the last day of the month in which the Approval to Place into Operation is issued for the Schwartz WWTP at 24.35 MGD, 29.35 MGD or 34.35 MGD, or the expiration date, whichever is sooner, the permittee is authorized to discharge the following under serial number designated as **01B**. Such discharge shall be limited and monitored by the permittee as specified below:

Following limits are based on the average design flow of: 19.35 MGD									
EFFLUENT CHARACTERISTICS	**DISCHARGE LIMITATIONS**						**MONITORING REQUIREMENTS**		
	Pounds per Day			Other Units					
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point ①
Flow	---	---	---	MR MGD	MR MGD	---	Daily	Cont.	Effluent (Location #4)
Total Phosphorus⑤	MR	MR	---	MR mg/l	MR mg/l	---	1/Month	24 Hr C	Effluent (Location #1)
Total Nitrogen §,⑤	MR	MR	---	MR mg/l	MR mg/l	---	1/Month	Calc.	Effluent (Location #1)
DO	---	---	---	6.0 mg/l Minimum at all times			Daily	Grab	Effluent (Location #2)
pH	---	---	---	6.0 - 8.5 Standard Units			Daily	Grab	Effluent (Location #1)
UOD②	MR ③	MR ③	---	---	---	---	5/Week④	Calc.	---

① See Part III, Figure #1 for sampling point locations.
② See Part I.U.
③ The reported value shall be the monthly average and weekly average Ultimate Oxygen Demand poundage for the GSWSA/Schwartz WWTP.
④ See Part V.A.3. ⑤ See Part V.G.5

§ This should be reported as a sum of TKN and Nitrate/Nitrite Nitrogen sampling. See Part V.G.5.

Note 1: UOD to be determined using the flow measured at location #4, $CBOD_5$ and NH_3-N measured at location #1

Note 2: Total Phosphorus and Total Nitrogen mass to be determined using the flow measured at location #4, Total Phosphorus and Total Nitrogen measured at location #1

6. **FINAL LIMITS** – **Discharge from The Schwartz WWTP to Waccamaw River** -- During the period beginning on the first day of the month after the Approval to Place into Operation is issued for the Schwartz wastewater treatment plant at either 24.35 MGD, 29.35 MGD or 34.35 MGD and lasting through the expiration date, the permittee is authorized to discharge the following under serial number designated as **01B**. Such discharge shall be limited and monitored by the permittee as specified below:

Following limits are based on the average design flow of: 22.4 MGD									
EFFLUENT CHARACTERISTICS	**DISCHARGE LIMITATIONS**						**MONITORING REQUIREMENTS**		
	Pounds per Day			Other Units					
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point①
Flow	---	---	---	MR MGD	MR MGD	---	Daily	Cont.	Effluent (Location #4)
Total Phosphorus⑤	MR	MR	---	MR mg/l	MR mg/l	---	1/Month	24 Hr C	Effluent (Location #1)
Total Nitrogen §,⑤	MR	MR	---	MR mg/l	MR mg/l	---	1/Month	Calc.	Effluent (Location #1)
DO	---	---	---	6.0 mg/l Minimum at all times			Daily	Grab	Effluent (Location #2)
pH	---	---	---	6.0 - 8.5 Standard Units			Daily	Grab	Effluent (Location #1)
UOD②	MR③	MR③	---	---	---	---	5/Week④	Calc.	---

① See Part III, Figure #1 for sampling point locations.
② See Part I.U.
③ The reported value shall be the monthly average and weekly average Ultimate Oxygen Demand poundage for the GSWSA/Schwartz WWTP.
④ See Part V.A.3 ⑤ See Part V.G.5

§ This should be reported as a sum of TKN and Nitrate/Nitrite Nitrogen sampling. See Part V.G.5.

Note 1: UOD to be determined using the flow measured at location #4, $CBOD_5$ and NH_3-N measured at location #1

Note 2: Total Phosphorus and Total Nitrogen mass to be determined using the flow measured at location #4, Total Phosphorus and Total Nitrogen measured at location #1

7. **FINAL LIMITS** – **Discharge from Myrtle Beach WWTP to Waccamaw River:** During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge from outfall serial number **01C**. Such discharge shall be limited and monitored by the permittee as specified below:

Following limits are based on the average design flow of: 22.4 MGD									
EFFLUENT CHARACTERISTICS	**DISCHARGE LIMITATIONS**						**MONITORING REQUIREMENTS**		
	Pounds per Day			Other Units					
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point①
Flow	---	---	---	MR MGD	MR MGD	---	Daily	Cont.	Effluent (Location #10)
$CBOD_5$	4,670	7,473	---	25 mg/l	40 mg/l	---	5/Week②	24 Hr C	Effluent (Location #11)
TSS	5,604	8,407	---	30 mg/l	45 mg/l	---	5/Week②	24 Hr C	Effluent (Location #11)
NH_3-N	2,055	3,082	---	11 mg/l	16.5 mg/l	---	5/Week②	24 Hr C	Effluent (Location #11)
Total Phosphorus⑥	MR	MR	---	MR mg/l	MR mg/l	---	1/Month	24 Hr C	Effluent (Location #11)
Total Nitrogen §,⑥	MR	MR	---	MR mg/l	MR mg/l	---	1/Month	Calc.	Effluent (Location #11)
DO	---	---	---	6.0 mg/l Minimum at all times			Daily	Grab	Effluent (Location #12)
pH	---	---	---	6.0 - 8.5 Standard Units			Daily	Grab	Effluent (Location #12)
UOD③	MR④	MR④	---	---	---	---	5/Week②	Calc.	---
$CBOD_5$ (% Removal) ⑤	---	---	---	85% (Minimum)	---	---	1/Month	Calc.	---
TSS (% Removal) ⑤	---	---	---	85% (Minimum)	---	---	1/Month	Calc.	---

① See Part III, Figure #1 for sampling point locations. ② See Part V.A.3. ③ See Part I.U.

④ The reported value shall be the monthly average and weekly average Ultimate Oxygen Demand poundage for the GSWSA/Myrtle Beach WWTP.

⑤ See Part V.H. ⑥ See Part V.G.5.

Note 1: UOD to be determined using the flow measured at location #10, $CBOD_5$ and NH_3-N measured at location #11

Note 2: Total Phosphorus and Total Nitrogen mass to be determined using the flow measured at location #10, Total Phosphorus and Total Nitrogen measured at location #11

8. [Reserved]

9. a. **FINAL LIMITS** – **Combined Discharge from the Schwartz and Myrtle Beach WWTPs to Waccamaw River** -- During the period beginning on the effective date of this permit and lasting until the last day of the month following the date an approval to place into operation for the Schwartz WWTP is issued to discharge 22.40 MGD to Waccamaw River or through the expiration date, the permittee is authorized to discharge from outfall serial number **01D**.

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

EFFLUENT CHARACTERISTICS	Following limits are based on the average design flow of: 41.75 MGD ①				MONITORING REQUIREMENTS		
	DISCHARGE LIMITATIONS						
	Pounds per Day		Other Units				
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point ④
TRC ②	90.53	156.7	0.258 mg/l	0.446 mg/l	5/Week ③	Grab	Effluent (Location #13)

① 41.75 MGD is the sum of flows from Schwartz WWTP (19.35 MGD) and Myrtle Beach WWTP (22.40 MGD)
② See Part V.G.5
③ See Part V.A.3.
④ See Part III, Figure #1 for sampling point locations.

9. b. **FINAL LIMITS** – **Combined Discharge from the Schwartz and Myrtle Beach WWTPs to Waccamaw River** -- During the period beginning on first of the month following the date an approval to place in operation to discharge 22.40 MGD to Waccamaw River from Schwartz WWTP is issued and lasting through the expiration date, the permittee is authorized to discharge from outfall serial number **01D**.

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

EFFLUENT CHARACTERISTICS	Following limits are based on the average design flow of: 44.80 MGD ①				MONITORING REQUIREMENTS		
	DISCHARGE LIMITATIONS						
	Pounds per Day		Other Units				
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point ④
TRC ②	89.7	186.9	0.242 mg/l	0.417 mg/l	5/Week③	Grab	Effluent (Location #13)

① 44.80 MGD is the sum of flows from Schwartz WWTP (22.40 MGD) and Myrtle Beach WWTP (22.40 MGD)
② See Part V.G.5
③ See Part V.A.3.
④ See Part III, Figure #1 for sampling point locations.

10. a. **FINAL LIMITS** – **Combined Discharge from the Schwartz and Myrtle Beach WWTPs to Waccamaw River** -- During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge from outfall serial number **01D**.

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

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS		
	Pounds per Day			Other Units					
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point①
UOD②	5,463.58 ③	MR ③	---	---	---	---	5/Week④	Calc.	---
Total Mercury (Hg) ⑤	MR	---	MR	MR mg/l	---	MR mg/l	1/Year	Grab	Effluent (Location #13)

① See Part III, Figure #1 for sampling point locations.
② See Part I.U.
③ The reported value shall be the cumulative poundage from the GSWSA/Schwartz WWTP and GSWSA/Myrtle Beach WWTP based on samples collected as follows:
For the GSWSA/Schwartz WWTP use the flow measured at location #4, $CBOD_5$ and NH_3-N measured at location #1
For the GSWSA/ Myrtle Beach WWTP use the flow measured at location #10, $CBOD_5$ and NH_3-N measured at location #11
④ See Part V.A.3.
⑤ See Part V.G.5

Note: The permittee shall maintain a record of UOD data for the GSWSA/Schwartz WWTP and GSWSA/Myrtle Beach WWTP and should provide the UOD data upon request.

10. b. **FINAL LIMITS** – **Combined Discharge from the Schwartz and Myrtle Beach WWTPs to Waccamaw River** -- During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge from outfall serial number **01D**.

If each E. coli daily maximum (as defined by R.61-68.B.29) during a calendar month reporting period is **less than or equal to** 349 MPN/100 ml **or** the provisions of R.61-68.E.14(c)(12), included as "Bacteria Supplemental Data Sheet" at the end of Part V of this permit, were **not** met, then the following limits apply:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point①
E. coli (MPN/100ml)	126	349	5/Week②	Grab	Effluent (Location #13)

Otherwise, report "Conditional Monitoring-Not Required" on the Discharge Monitoring Report (DMR) form for this portion (Part III.A.10.b) of the permit, and report all E. coli data for this monitoring period in 10.c below.

10. c. **FINAL LIMITS** – **Combined Discharge from the Schwartz and Myrtle Beach WWTPs to Waccamaw River** -- During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge from outfall serial number **01D**.

If any E. coli daily maximum (as defined by R.61-68.B.29) during a calendar month reporting period is **greater than** 349 MPN/100 ml **and** in each instance the provisions of R.61-68.E.14(c)(12), included as "Bacteria Supplemental Data Sheet" at the end of Part V of this permit, **were** met, then the following limits apply:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Individual Sample Maximum	Measurement Frequency	Sample Type	Sample Point ①
E. coli (MPN/100ml)	126	800*	5/Week②	Grab	Effluent (Location #13)

* For this reporting period only.

Otherwise report "Conditional Monitoring-Not Required" on the Discharge Monitoring Report (DMR) form for this portion (Part III.A.10.c) of the permit, and report all E. coli data for this monitoring period in 10.b above. In addition, if data is reported in item 10.c, the "Bacteria Supplemental Data Sheet" contained in Part V of this permit **must** be attached to the Discharge Monitoring Report (DMR) and signed by the authorized DMR representative, documenting compliance with the provisions of R.61-68.E.14(c)(12). If this attachment is not included with the DMR submittal, the permittee may **not** use this portion (Part III.A.10.c) for reporting E. coli data.

Note for 10.b and 10.c above: Sample results reported should include all data collected for this monitoring period including any additional E. coli samples that might be collected under the provisions of R.61-68.E.14(c)(12).

① See Part III, Figure #1 sampling point locations.
② See Part V.A.3.

11. [Reserved]

12. a. **FINAL LIMITS – Discharge to Land Application Site from The Schwartz WWTP– Existing Turf Farm (126 Acres) – Summer Discharge Only (April through October):** 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 serial number 002. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS		
	Pounds per Day		Other Units					
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point ①
Flow	---	---	0.7 MGD	0.7 MGD	---	Daily	Cont.	Effluent (Location #6A)
Carbonaceous Biochemical Oxygen Demand - 5 Day ($CBOD_5$)	146	219	25 mg/l	37.5 mg/l	---	2/Month	24 Hour Composite ②	Effluent (Location #5)
Total Nitrate (N)	---	---	MR mg/l	MR mg/l	---	2/Month	24 Hour Composite ②	Effluent (Location #5)
Dissolved Oxygen	---	---	1.0 mg/l Minimum at all times			Daily	Grab	Effluent (Location #5)
pH	---	---	6.0 – 9.0 Standard Units			Daily	Grab	Effluent (Location #5)

① See Part III, Figure #1 for sampling point locations.

② Composite samples to be collected using the procedure outlined in Part I.D.4. This method has been approved by the Department for samples collected at Location #5 only.

12. b. **FINAL LIMITS** – **Discharge to Land Application Site from The Schwartz WWTP– Existing Turf Farm (126 Acres) – Summer Discharge Only (April through October):** 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 serial number 002. Such discharge shall be limited and monitored by the permittee as specified below:

If each E. coli daily maximum (as defined by R.61-68.B.29) during a calendar month reporting period is **less than or equal to** 349 MPN/100 ml **or** the provisions of R.61-68.E.14(c)(12), included as "Bacteria Supplemental Data Sheet" at the end of Part V of this permit, were **not** met, then the following limits apply:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point①
E. coli (MPN/100ml)	126	349	2/Month	Grab	Effluent (Location #5)

Otherwise, report "Conditional Monitoring-Not Required" on the Discharge Monitoring Report (DMR) form for this portion (Part III.A.12.b.) of the permit, and report all E. coli data for this monitoring period in 12.c. below.

12. c. **FINAL LIMITS** – **Discharge to Land Application Site from The Schwartz WWTP– Existing Turf Farm (126 Acres) – Summer Discharge Only (April through October):** 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 serial number 002. Such discharge shall be limited and monitored by the permittee as specified below:

If any E. coli daily maximum (as defined by R.61-68.B.29) during a calendar month reporting period is **greater than** 349 MPN/100 ml **and** in each instance the provisions of R.61-68.E.14(c)(12), included as "Bacteria Supplemental Data Sheet" at the end of Part V of this permit, **were** met, then the following limits apply:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Individual Sample Maximum	Measurement Frequency	Sample Type	Sample Point①
E. coli (MPN/100ml)	126	800*	2/Month	Grab	Effluent (Location #5)

* For this reporting period only.

Otherwise report "Conditional Monitoring-Not Required" on the Discharge Monitoring Report (DMR) form for this portion (Part III.A.12.c.) of the permit, and report all E. coli data for this monitoring period in 12.b. above. In addition, if data is reported in item 12.c., the "Bacteria Supplemental Data Sheet" contained in Part V of this permit **must** be attached to the Discharge Monitoring

Report (DMR) and signed by the authorized DMR representative, documenting compliance with the provisions of R.61-68.E.14(c)(12). If this attachment is not included with the DMR submittal, the permittee may **not** use this portion (Part III.A.12.c.) for reporting E. coli data.

Note for 12.b. and 12.c. above: Sample results reported should include all data collected for this monitoring period including any additional E. coli samples that might be collected under the provisions of R.61-68.E.14(c)(12).

① See Part III, Figure #1 for sampling point locations.

13. a. **FINAL LIMITS – Discharge to Land Application Site from The Schwartz WWTP – Turf Farm Expansion, Phase I (33 Acres) – Summer Discharge Only (April through October) --** 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 serial number 003. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS		
	Pounds per Day		Other Units					
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point ①
Flow	---	---	0.4 MGD	0.4 MGD	---	Daily	Cont.	Effluent (Location #6B)
Carbonaceous Biochemical Oxygen Demand - 5 Day ($CBOD_5$)	83	125	25 mg/l	37.5 mg/l	---	2/Month	24 Hour Composite ②	Effluent (Location #5)
Total Nitrate (N)	---	---	MR mg/l	MR mg/l	---	2/Month	24 Hour Composite ②	Effluent (Location #5)
Dissolved Oxygen	---	---	1.0 mg/l Minimum at all times			Daily	Grab	Effluent (Location #5)
pH	---	---	6.0 – 9.0 Standard Units			Daily	Grab	Effluent (Location #5)

① See Part III, Figure #1 for sampling point locations.

② Composite samples to be collected using the procedure outlined in Part I.D.4. This method has been approved by the Department for samples collected at Location #5 only.

13. b. **FINAL LIMITS** – **Discharge to Land Application Site from The Schwartz WWTP – Turf Farm Expansion, Phase I (33 Acres) – Summer Discharge Only (April through October) --** 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 serial number 003. Such discharge shall be limited and monitored by the permittee as specified below:

If each E. coli daily maximum (as defined by R.61-68.B.29) during a calendar month reporting period is **less than or equal to** 349 MPN/100 ml **or** the provisions of R.61-68.E.14(c)(12), included as "Bacteria Supplemental Data Sheet" at the end of Part V of this permit, were **not** met, then the following limits apply:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point①
E. coli (MPN/100ml)	126	349	2/Month	Grab	Effluent (Location #5)

Otherwise, report "Conditional Monitoring-Not Required" on the Discharge Monitoring Report (DMR) form for this portion (Part III.A.13.b.) of the permit, and report all E. coli data for this monitoring period in 13.c. below.

13. c. **FINAL LIMITS** – **Discharge to Land Application Site from The Schwartz WWTP – Turf Farm Expansion, Phase I (33 Acres) – Summer Discharge Only (April through October) --** 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 serial number 003. Such discharge shall be limited and monitored by the permittee as specified below:

If any E. coli daily maximum (as defined by R.61-68.B.29) during a calendar month reporting period is **greater than** 349 MPN/100 ml **and** in each instance the provisions of R.61-68.E.14(c)(12), included as "Bacteria Supplemental Data Sheet" at the end of Part V of this permit, **were** met, then the following limits apply:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Individual Sample Maximum	Measurement Frequency	Sample Type	Sample Point①
E. coli (MPN/100ml)	126	800*	2/Month	Grab	Effluent (Location #5

* For this reporting period only.

Otherwise report "Conditional Monitoring-Not Required" on the Discharge Monitoring Report (DMR) form for this portion (Part III.A.13.c.) of the permit, and report all E. coli data for this monitoring period in 13.b. above. In addition, if data is reported in item 13.c., the "Bacteria Supplemental Data Sheet" contained in Part V of this permit **must** be attached to the Discharge Monitoring Report (DMR) and signed by the authorized DMR representative, documenting compliance with the provisions of R.61-68.E.14(c)(12). If this attachment is not included with the DMR submittal, the permittee may **not** use this portion (Part III.A.13.c.) for reporting E. coli data.

Note for 13.b. and 13.c. above: Sample results reported should include all data collected for this monitoring period including any additional E. coli samples that might be collected under the provisions of R.61-68.E.14(c)(12).

① See Part III, Figure #1 for sampling point locations.

14. a. **FINAL LIMITS – Discharge to Land Application Site from The Schwartz WWTP – Turf Farm Expansion, Phase II (62 Acres) – Summer Discharge Only (April through October) --** 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 serial number 004. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS					MONITORING REQUIREMENTS		
	Pounds per Day		Other Units					
	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point ①
Flow	---	---	0.694 MGD	0.694 MGD	---	Daily	Cont.	Effluent (Location #6C)
Carbonaceous Biochemical Oxygen Demand - 5 Day ($CBOD_5$)	145	217	25 mg/l	37.5 mg/l	---	2/Month	24 Hour Composite ②	Effluent (Location #5)
Total Nitrate (N)	---	---	MR mg/l	MR mg/l	---	2/Month	24 Hour Composite ②	Effluent (Location #5)
Dissolved Oxygen	---	---	1.0 mg/l Minimum at all times			Daily	Grab	Effluent (Location #5)
pH	---	---	6.0 – 9.0 Standard Units			Daily	Grab	Effluent (Location #5)

① See Part III, Figure #1 for sampling point locations.

② Composite samples to be collected using the procedure outlined in Part I.D.4. This method has been approved by the Department for samples collected at Location #5 only.

14. b. **FINAL LIMITS – Discharge to Land Application Site from The Schwartz WWTP – Turf Farm Expansion, Phase II (62 Acres) – Summer Discharge Only (April through October) --** 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 serial number 004. Such discharge shall be limited and monitored by the permittee as specified below:

If each E. coli daily maximum (as defined by R.61-68.B.29) during a calendar month reporting period is **less than or equal to** 349 MPN/100 ml **or** the provisions of R.61-68.E.14(c)(12), included as "Bacteria Supplemental Data Sheet" at the end of Part V of this permit, were **not** met, then the following limits apply:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Point①
E. coli (MPN/100ml)	126	349	2/Month	Grab	Effluent (Location #5)

Otherwise, report "Conditional Monitoring-Not Required" on the Discharge Monitoring Report (DMR) form for this portion (Part III.A.14.b.) of the permit, and report all E. coli data for this monitoring period in 14.c. below.

14. c. **FINAL LIMITS – Discharge to Land Application Site from The Schwartz WWTP – Turf Farm Expansion, Phase II (62 Acres) – Summer Discharge Only (April through October) --** 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 serial number 004. Such discharge shall be limited and monitored by the permittee as specified below:

If any E. coli daily maximum (as defined by R.61-68.B.29) during a calendar month reporting period is **greater than** 349 MPN/100 ml **and** in each instance the provisions of R.61-68.E.14(c)(12), included as "Bacteria Supplemental Data Sheet" at the end of Part V of this permit, **were** met, then the following limits apply:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Individual Sample Maximum	Measurement Frequency	Sample Type	Sample Point①
E. coli (MPN/100ml)	126	800*	2/Month	Grab	Effluent (Location #5)

* For this reporting period only.

Otherwise report “Conditional Monitoring-Not Required” on the Discharge Monitoring Report (DMR) form for this portion (Part III.A.14.c.) of the permit, and report all E. coli data for this monitoring period in 14.b. above. In addition, if data is reported in item 14.c., the “Bacteria Supplemental Data Sheet” contained in Part V of this permit **must** be attached to the Discharge Monitoring Report (DMR) and signed by the authorized DMR representative, documenting compliance with the provisions of R.61-68.E.14(c)(12). If this attachment is not included with the DMR submittal, the permittee may **not** use this portion (Part III.A.14.c.) for reporting E. coli data.

Note for 14.b. and 14.c. above: Sample results reported should include all data collected for this monitoring period including any additional E. coli samples that might be collected under the provisions of R.61-68.E.14(c)(12).

① See Part III, Figure #1 for sampling point locations.

B. Whole Effluent Toxicity Limitations and Monitoring Requirements

1. **FINAL LIMITS -- Combined Discharge from the Schwartz and Myrtle Beach WWTPs to Waccamaw River:** During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge from outfall serial number 01D to Waccamaw River.

   Such discharge shall be limited and monitored by the permittee as specified below at location #13 identified in Part III, Figure #1:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Daily Minimum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Ceriodaphnia dubia Chronic Whole Effluent Toxicity @ CTC= 21.2%	---	25 %	40 %	2/Year	24 hour composite[1]
Ceriodaphnia dubia LC_{50} – 48 hour Acute[2]	MR	---	---	2/Year	Calculated
Ceriodaphnia dubia IC_{25} – 7day Chronic	MR	---	---	2/Year	Calculated

See Part V.B. for additional toxicity reporting requirements.
MR = Monitor and Report.
[1]See Part I.E.
[2]The permittee shall report the LC_{50} at 48-hours from the chronic WET test.

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.

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 IC_{25} and LC_{50}, the daily minimum is the lowest average value recorded of samples collected on any single day during the calendar month.
e. 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, and each test shall be reported individually on DMR Attachment for Whole Effluent Toxicity Results (in ePermitting).

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 Requirements

1. Groundwater Monitoring Requirements for the GSWSA/Schwartz WWTP

a. Each of the groundwater monitoring wells at the land application sites identified in Table A below shall be sampled by the permittee as specified below:

Parameter	Measurement Frequency	Sample Method
Ammonia (NH_3)	Annually	Pump or Bailer Method
Nitrate (N)	Annually	Pump or Bailer Method
Field pH	Annually	Pump or Bailer Method
TDS	Annually	Pump or Bailer Method
Field Specific Conductance	Annually	Pump or Bailer Method
Depth to Groundwater (Report within 0.01 feet)	Annually	Tape
Groundwater Elevation (Report within 0.01 feet above mean sea level)	Annually	Tape

b. For purposes of Groundwater Monitoring, the following measurement frequency table shall be utilized:

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

c. For new spray irrigation sites, background groundwater quality data must be submitted prior to final approval to place into operation.

d. Sample collection methods shall be in accordance with the EPA Region 4 Groundwater Sampling Operation Procedure, EPA publication SESDPROC 301-R4 or the most recent version of the EPA Region 4 Groundwater Sampling Operation Procedure.

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."

Table A:

Outfall Serial Number	Land Application Site Description and Area	Number of Groundwater Monitoring wells
002	Existing Turf Farm (126 acres):	3
003	Turf Farm Expansion, Phase I (33 acres):	2
004	Turf Farm Expansion, Phase II (62 acres):	2

g. Groundwater monitoring data must clearly identify each land application site to distinguish each site from the other land application site.

2. Groundwater Monitoring Requirements for the GSWSA/Myrtle Beach WWTP

   a. Each of the three (3) groundwater monitoring wells numbered MW-1, MW-2 and MW-5R shall be sampled by the permittee as specified below (BOW Site ID 00771):

Parameter	Measurement Frequency	Sample Method
Ammonia (NH_3)	Annually	Pump or Bailer Method
Nitrate (N)	Annually	Pump or Bailer Method
Field pH	Annually	Pump or Bailer Method
TDS	Annually	Pump or Bailer Method
Field Specific Conductance	Annually	Pump or Bailer Method
Depth to Groundwater (Report within 0.01 feet)	Annually	Tape
Groundwater Elevation (Report within 0.01 feet above mean sea level)	Annually	Tape
Silver	Annually	Pump or Bailer Method
Arsenic	Annually	Pump or Bailer Method
Barium	Annually	Pump or Bailer Method
Cadmium	Annually	Pump or Bailer Method
Chromium	Annually	Pump or Bailer Method
Mercury	Annually	Pump or Bailer Method
Lead	Annually	Pump or Bailer Method
Selenium	Annually	Pump or Bailer Method

   b. For purposes of Groundwater Monitoring, the following measurement frequency table shall be utilized:

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

   c. For new spray irrigation sites, background groundwater quality data must be submitted prior to final approval to place into operation.

   d. Sample collection methods shall be in accordance with the EPA Region 4 Groundwater Sampling Operation Procedure, EPA publication SESDPROC 301-R4 or the most recent version of the EPA Region 4 Groundwater Sampling Operation Procedure.

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."

g. Groundwater monitoring data must clearly identify each land application site to distinguish each site from the other land application site.

D. Sludge Disposal Requirements

1. GSWSA/Tip Top Effluent Reuse Site (ND0078921)

The permittee may land apply sludge in accordance with the GSWSA/Tip Top Effluent Reuse Site Sludge Program Approval. This Program Approval shall be incorporated into and become a part of this permit. All conditions included in this letter approval shall become a requirement of this NPDES permit.

2. GSWSA/Yauhannah Tree Farm NPDES Permit

The permittee may land apply sludge in accordance with the GSWSA/Yauhannah Tree Farm NPDES Permit (SC0048461).

3. GSWSA/Bucksport Regional Compost Facility ND Permit

The permittee may land apply sludge in accordance with the GSWSA/Bucksport Regional Compost Facility ND Permit (ND0088455).

4. Sludge Transportation and Disposal

i. Sludge solids will be removed from this facility and transported to the Lee County Landfill #312411-1101 and/or the Horry County Solid Waste Landfill #261001-1102 under the following conditions. If an alternative sludge disposal facility is required, the permittee shall apply in writing to the SCDES/Bureau of Water requesting written approval for sludge disposal. An up-to-date letter of acceptance from the facility that will accept the sludge for disposal or reuse shall be included with the request.

a. All containers or tanks for sludge collection and transportation shall be structurally sound and shall be constructed to prevent leakage or spillage of any kind while in the process of pumping, storage, or transportation.

b. The total volume of sludge transported shall not exceed the volume specified in the letter of acceptance of the receiving facility, nor shall it exceed the capacity of the receiving facility.

c. All transportation of sludge shall be in accordance with the rules and regulations of the State Department of Transportation and other agencies as applicable.

d. The Permittee is responsible for the transportation and disposal of all sludge, including but not limited to: spills, accidents, unauthorized leaks, or other hazards which may occur during transport until the approved receiving facility has contractually assumed responsibility for the sludge.

ii. Hazardous sludge must be managed and transported in accordance with R.61-79.

iii. Transportation of sludge may be revoked or suspended if the Permittee fails to comply with transportation or disposal requirements.

E. Land Application Requirements

1. Buffer Zones (Serial Discharges 002, 003 & 004)

   a. Adjacent land must be protected from odor and blowing spray by a buffer zone extending approximately 100 feet beyond the spray influence. The width of this zone may be reduced, with SCDES approval, if the residential property can be screened by vegetation and/or other means. The permittee must ensure that as undeveloped lots are developed, the buffer zones will continue to meet these requirements. Directional and reduced radius nozzles may be used to reduce the area of spray influence to meet these buffer requirements. Directional and reduced radius nozzles shall also be required to prevent direct spaying of treated effluent into surface waters.

   b. SCDES reserves the right to reduce spray capacity and/or prohibit discharge of treated effluent to any spray application area based upon site conditions or buffer zone requirements. The permittee will be responsible for obtaining additional spray capacity and/or discharge capacity at other sites to offset any reduction in application to the Turf Farm sites.

F. Instream Biological Assessment

   Not applicable to this permit.

Part IV. Schedule of Compliance

A. Schedule(s)

1. a. The permittee shall submit the following to the Department as an update to the pretreatment program previously approved by to be determined (120 days of effective date):

    1. The headworks analysis shall be recalculated to incorporate any changes in stream limits, removal rates, POTW design capacity, 7Q10 flows, etc. This includes evaluation of the need for local limits as defined under R.61-9.403.5(c) and (d). The headworks analysis must take into consideration the Water Classifications and Standards for the permittee's receiving waters to the satisfaction of the Department.

    2. Reevaluation of industrial allocation of pollutants.

    3. Submittal of the latest version of the sewer use ordinance, with proposed revisions to comply with latest pretreatment regulations (R.61-9.403) and a legal opinion as required under Phase IB of a pretreatment program submittal.

    4. Submittal of new pretreatment questionnaires for all regulated Industrial Users.

    5. A list of any industries that have commenced discharging to the POTW since the last update.
    6. Submittal for approval of draft revised Industrial User Permits.

    7. Submittal of a comprehensive list showing what industries discharge to this treatment facility and the category each falls under, if any.

    8. Submit an Enforcement Response Plan for approval in accordance with R.61-9.403.8(f)(5).

    9. The permittee shall demonstrate to the Department's satisfaction that the update to the overall pretreatment program complies with the latest R.61-9.403.

    10. The Department may require the permittee to provide any additional testing, information, calculations and/or reports that would be appropriate to document compliance with this requirement prior to concurrence with the revisions to the pretreatment program.

    11. The Department will review the pretreatment program update and revised headworks analysis to determine if this permit requires modification or revocation and reissuance to include specific effluent metals/toxics monitoring and/or metals/toxics limitations.

    b. Within 60 days after final approval by the Department, the permittee shall implement the approved changes and/or revisions to the pretreatment program.

    c. Within no less than 30 days of the due date of the Pretreatment Program Update, the permittee shall request an extension, if needed, through ePermitting using the “Wastewater NPDES/ND Domestic/Municipal – Modification” form.

2. 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 through ePermitting no later than 11:59 PM on the 14th day following each scheduled date.

Part V. Other Requirements

A. Effluent Limitations and Monitoring Requirements

1. Influent samples at the Schwartz WWTP and Myrtle Beach WWTP taken in compliance with the monitoring requirements specified in Part III, shall be taken at the following location(s): nearest accessible point prior to any primary treatment unit (e.g. after the bar screen and before primary treatment).

2. Effluent samples, for the Schwartz WWTP and Myrtle Beach WWTP taken in compliance with the monitoring requirements specified in Part III.A shall be taken at the locations identified in Part III, Figure #1. The parameters specific to a given sampling point have been identified on the limits pages in Part III.A.

3. Schwartz & Myrtle Beach WWTP: For 5/Week monitoring frequency, at least one discrete sample shall be collected on 5 separate days of the week.

4. 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.

5. There shall be no ponding on the land disposal sites and the sites must be properly operated and maintained.

6. The land disposal site must be operated to prevent runoff.

7. Samples shall be collected in accordance with Part I.

8. MR = Monitor and Report only.

B. Effluent Toxicity Limitations and Monitoring Requirements

1. Acute Toxicity

Not applicable to this permit.

2. Chronic Toxicity - For the requirements identified in Part III.B.1:

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 21.2% and the following test concentrations: 0% (control), 4%, 14%, 21.2%, 32%, and 65% effluent 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. 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 using the DMR Attachment for Whole Effluent Toxicity Results through ePermitting, and in accordance with Part II.L.4. In addition, results from all invalid tests must be included with this DMR Attachment, 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 to be submitted using the DMR Attachment for Whole Effluent Toxicity Results through ePermitting;

(3) At least one additional State-certified laboratory was used after two (2) consecutive invalid tests were determined by the first laboratory. The laboratory ID number(s) of the additional lab(s) shall be reported using the DMR Attachment for Whole Effluent Toxicity Results in ePermitting; and

(4) A valid test was reported during each of the previous three reporting periods.

If these conditions are satisfied, the permittee may enter "*3*" in the appropriate boxes on the toxicity DMR and add the statement to the Comment Section of the DMR that "*3* 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.

3. Biological Assessment

Not applicable to this permit.

C. Groundwater Requirements

See Part III. C.

D. Sludge Disposal Requirements

1. Class I sludge management facilities (includes but is not limited to all facilities with pretreatment programs, Publicly Owned Treatment Works (Facility) with a design flow rate equal to or greater than 1 Million gallons per day, and Facility's that serve 10,000 people or more) shall submit the following to EPA Region 7 (Attn: Water Enforcement Branch, EPA Region 7, 11201 Renner Boulevard, Lenexa, KS 66219, and a copy submitted through ePermitting to the Department:

   a. The information in 40 CFR Part 503.17(a) except the information in 503.17(a)(3)(ii), 503.17(a)(4)(ii) and 503.17(a)(5)(ii), for the appropriate requirements on February 19 of each year.

   b. The information in 40 CFR Part 503.17(a)(5)(ii)(A) through (a)(5)(ii)(G) on February 19 of each year when ninety (90) percent or more of any of the cumulative pollutant loading rates in Table 2 of 503.13 is reached at a site.

      The requirements to send information to EPA Region 7 will remain in effect until the State of South Carolina is delegated the sludge program under 40 CFR Part 123 or 40 CFR Part 501. The permittee is also required to send a copy of the information to the Department under the requirements of R.61-9.503.

   c. Until such time as a specific federal sludge disposal permit is issued under the provisions of 40 CFR Part 503, the direct enforceability (§ 503.3(b)) of the sludge standards requires that the permittee shall not use or dispose of sewage sludge through practice for which requirements are established in 40 CFR Part 503, except in accordance with those requirements. If the Department includes State sludge permit requirements under R.61-9.503, the conditions of that permit shall apply in addition to any requirements under 40 CFR Part 503.

2. a. The permittee must obtain prior Departmental approval of planned changes in the facility when the alteration or addition results in a significant change in the permittee's 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 of disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

   b. The sludge disposal permit may be modified or revoked and reissued if there are material and substantial alterations or additions to the permitted facility or activity (including a change or changes in the permittee's sludge use or disposal practice) which occurred after the permit issuance which justify the application of permit conditions which are different from or absent in the existing permit.

3. The sludge disposal permit may be terminated if there is a change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit.

4. Periodic inspections will be conducted by Department authorized representatives to ensure compliance with State regulations and permit stipulations. Any necessary modification to this permit may be based upon these evaluations.

5. Records of monitoring required by the permits related to sludge use and disposal activities must be kept at least five (5) years (or longer as required by 40 CFR Part 503 or R.61-9.503).

6. Sludge monitoring procedures shall be those specified in 1) R.61-9.503; 2) 40 CFR Part 503; 3) 40 CFR Part 136; or 4) other procedures specified in the sludge permit (in that order of "preference" depending on the availability and applicability of a particular method at the time the sludge permit is issued).

7. The permittee shall submit the results of all sludge monitoring if done more frequently than required by the sludge permit. The permittee may be required to maintain specific records at the facility and on request may also be required to furnish them to the Department.

8. Odor Control Requirements

   The permittee shall use best management practices normally associated with the proper operation and maintenance of a sludge wastewater treatment site, any sludge storage or lagoon areas, transportation of sludges, and all individual activities permitted under R.61-9.503 to ensure that an undesirable level of odor does not exist.

   a. The permittee is required to prepare an odor abatement plan for the sewage sludge treatment sites, any sludge storage or lagoon areas, and land application or surface disposal sites. It must be noted this state regulation that went into effect on June 27, 2003, and continues in effect, required permittees that land-apply sludge to prepare the plan by December 24, 2003. Otherwise, the permittee had until June 27, 2004 to prepare the plan and this requirement remains in effect. The plan must have included the following topics:

      (1) Operation and maintenance practices which are used to eliminate or minimize undesirable odor levels in the form of best management practices for odor control.

      (2) Use of treatment processes for the reduction of undesirable odors;

      (3) Use of setbacks.

      (4) Contingency plans and methods to address odor problems for the different type of disposal/application methods used.

   b. Unless otherwise requested, prior to issuance of a new or expanded land application disposal permit (either NPDES or ND), the Department may review the odor abatement plan for compliance with this Part (503.50). The Department may require changes to the plan as appropriate.

c. No permittee may 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. When an odor problem comes 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.

d. After determining 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. In accordance with R.61-9.503.50(e), if the permittee fails to control or abate the odor problems addressed in this section within the specified timeframe, the Department may revoke disposal/application activities associated with the site or the specific aspect of the sludge management program.

E. Land Application

See Part III. D.

F. Pretreatment

1. Pretreatment Regulations and Program Requirements

a. The permittee's Pretreatment Program was originally approved on September 23, 1996 and the update was approved on April 11, 2007. The Permittee shall provide a subsequent update to the approved updated pretreatment program through ePermitting as specified in the Schedule of Compliance in Part IV. of this permit.

b. In addition to the discharge monitoring reports submitted in accordance with Part II.L.4., the Permittee shall also submit through ePermitting using the “Pretreatment Performance Summary” schedule, copies of the following with the discharge monitoring reports on or before the 28th of January and July.

- The names of any non-domestic dischargers with the categorical citation, type of industrial user, and any other information required within the Pretreatment Performance Summary report.

- Any Letters of Acceptance issued to, or Contracts entered into with, non-domestic dischargers during the previous quarter.

- The names of any non-domestic dischargers that are in violation of any limits, either specific or general, imposed as part of the Pretreatment Program and an explanation of the action(s) being carried out to bring them into compliance.

- Any schedules of compliance agreed to by or imposed on a non-domestic discharger for the purpose of bringing said discharger into compliance with the established discharge limits.

- A report showing the number of regulated non-domestic dischargers; the number monitored and/or inspected during the calendar year; the cumulative number monitored and/or inspected during the year to date; and the number in compliance or non-compliance during the calendar year.

c. Permittee shall require all non-domestic dischargers into Permittee's system to comply with pretreatment provisions of the Clean Water Act (Public Law 95-217), as set forth in the General Pretreatment Regulations, 40 CFR Part 403, promulgated thereunder, and with the Permittee's State Approved Pretreatment Program (R.61-9.403).

2. Prohibited Discharges

In accordance with 24 S.C. Reg. Ann. §61-9.403, the Permittee shall prohibit in its sewer use ordinance and pretreatment program regulations (if a pretreatment program is approved by the Department) the discharge of pollutant(s) into its treatment works by any non-domestic source(s), if such pollutant(s) may inhibit or interfere with the operation or performance of the works. Further, the Permittee shall prohibit in its sewer use ordinance and pretreatment program regulations (if a pretreatment program is approved by the Department) the introduction of the following pollutants into its treatment works:

a. Pollutant(s) which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21.

b. Pollutant(s) which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such discharges.

c. Solid or viscous pollutant(s) in amounts which will cause obstruction to the flow in the POTW resulting in interference.

d. Any pollutant, including oxygen demanding pollutants, (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.

e. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40°C (104°F) unless the Department, upon request of the POTW, approves alternate temperature limits.

f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause

interference or pass through.

g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems.

h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

Upon development of specific limits for these pollutant categories, either in an approved POTW Pretreatment Program or otherwise, such limits shall be deemed prohibitions for the purpose of Section 307(d) of the Act and shall be enforceable in lieu of the general prohibitions set forth above.

G. Additional Operational Requirements

1. a. The GSWSA/Schwartz Wastewater Treatment Plant is assigned a classification of Group IV-B (Biological) in the Permit to Construct which is issued by the Department. This classification corresponds to an operator with a grade of A.

b. The GSWSA/Myrtle Beach Wastewater Treatment Plant is assigned a classification of Group IV-B (Biological) in the Permit to Construct which is issued by the Department. This classification corresponds to an operator with a grade of A.

2. GSWSA/Schwartz Wastewater Treatment Plant and GSWSA/Myrtle Beach Wastewater Treatment Plant are assigned a Reliability Classification of Class I, in accordance with Section 67.400 "Reliability Classifications" of the Standards for Wastewater Facility Construction: R.61-67.

3. For parameters with a sample frequency of once per month or greater, the Permittee shall monitor (at least one sample) consistent with conditions established by this Permit on the first (1st) Wednesday of every calendar month, unless otherwise approved by the Department. (For example; with a once per week (01/07) sampling frequency, the permittee shall monitor one weekly sample on the day of the week noted during the monthly DMR reporting period.)

For parameters with a sampling frequency of less than once per month (if any), the permittee shall monitor these parameters on specific date noted above on any of the months during the appropriate reporting period unless otherwise approved by the Department. (For example, with a once per quarter (1/90) sampling frequency, the permittee may monitor on the day of the week noted in either the first, second or third month in the quarterly reporting period.)

For parameters requiring multiple samples for a single test the Permittee may collect the samples on any date during the reporting period, unless otherwise approved by the Department. The permittee must notify the Department of the planned sampling dates upon request.

In accordance with R.61-9.122.41(j)(1)(iii), the Department may waive compliance with the permit requirement for a specific sampling event for extenuating circumstances. Additional monitoring, as necessary to meet the frequency requirements of this Permit (Part III.A., III.B., and III.C., if applicable) shall be performed by the Permittee.

4. [Reserved]

5. For purposes of reporting, the Permittee shall use the reporting threshold equivalent to the PQL listed below and conduct analyses in accordance with the method specified below:

Parameter	Analytical Method	PQL
Total Cadmium	①	0.00010 mg/l
Total Copper	①	0.010 mg/l
Total Lead	①	0.0020 mg/l
Total Zinc	①	0.010 mg/l
Total Mercury	EPA 1669 (sampling); EPA 1631E (analysis) Low Level Mercury Method	0.50 ng/l
Total Residual Chlorine	①	0.050 mg/l
Nitrate-Nitrite as N §	①	0.020 mg/l
Total Kjeldahl Nitrogen*	①	0.10 mg/l
Total Phosphorus	①	0.050 mg/l

§ Since there is no EPA accepted method to directly measure total nitrogen, total nitrogen should be reported as a sum of the values of TKN and Nitrate-Nitrite Nitrogen sampling.

① The Permittee must use a suitable analytical method (40 CFR Part 136 approved) from a SCDES certified laboratory with a PQL equal to or lower than the PQL listed above. If the permittee is using a PQL below the PQL listed above, then for purposes of reporting, the lower PQL shall be used in accordance with Part II.J.4.b.

H. Secondary Treatment - Percent Removal (BOD_5, $CBOD_5$ and TSS)

1. In accordance with R.61-9.133.102,103 and 105, the 30 day average percent removal for BOD_5, $CBOD_5$ (if applicable) and TSS have been identified in Part III.A, "Effluent Limitations and Monitoring Requirements". For purposes of reporting the 30-day average percent removal for BOD_5, $CBOD_5$ (if applicable) and TSS across the treatment plant, the permittee shall conduct <u>influent</u> and <u>effluent</u> sampling for BOD_5, $CBOD_5$ (if applicable) and TSS during a 30-day reporting as follows:

<u>Influent Sampling</u>:

- At a minimum during any 30-day reporting period, collect grab or composite influent sample(s) at a frequency identified in Part III.A. The procedure to collect a composite sample shall be in accordance with Part I.D and a grab sample shall be in accordance with Part I.I.
- If only one influent sample is collected during any 30-day reporting period (provided this meets the minimum frequency specified in Part III.A), then that sample shall be considered as the 30-day average influent concentration for a given parameter.
- If more than one influent samples are collected during the 30-day reporting period, then all individual values for a given parameter shall be averaged to determine the 30-day average influent concentration.

Effluent Sampling:

- Effluent data collected for permit compliance can be used, provided sufficient samples are collected to meet the frequency specified in Part III.A.
- If more than one effluent samples are collected during the 30-day reporting period, then all individual values for a given parameter shall be averaged to determine the 30-day average effluent concentration.

Percent Removal Determination:

- Determine the 30-day average percent removal for a given parameter using the formula below:

$$\textit{30-day average percent removal} = \frac{C_{\text{inf luent}} - C_{effluent}}{C_{\text{inf luent}}} \times 100$$

where:

$C_{influent}$ = Average of all influent samples collected during the 30-day reporting period in (mg/l).

$C_{effluent}$ = Average of all effluent samples collected during the 30-day reporting period in (mg/l).

2. The Department may substitute either a lower percent removal requirement or a mass loading limit for the percent removal requirements set forth in section 133.102(a)(3), section 133.102(a)(4)(iii), section 133.102(b)(3), section 133.105(a)(3), section 133.105(b)(3) and section 133.105(e)(1)(iii) provided that the permittee satisfactorily demonstrates that:

   (a) The treatment works is consistently meeting, or will consistently meet, its permit effluent concentration limits but its percent removal requirements cannot be met due to less concentrated influent wastewater,

   (b) To meet the percent removal requirements, the treatment works would have to achieve significantly more stringent limitations than would otherwise be required by the concentration-based standard. In accordance with R.61-9.133.101(j), "Significantly more stringent limitation" means BOD_5 and TSS limitations necessary to meet the percent removal requirements of at least 5 mg/l more stringent than the otherwise applicable concentration-based limitations (e.g., less than 25 mg/l in the case of the secondary treatment limits for BOD5 and TSS), or the percent removal limitations in section 133.102 and section 133.105, if such limits would, by themselves, force significant construction or other significant capital expenditure.

   (c) The less concentrated influent wastewater is not the result of excessive I/I. The determination of whether the less concentrated wastewater is the result of excessive I/I will use the definition of excessive I/I in 40 CFR 35.2005(b)(16) plus the additional criterion that inflow is non-excessive if the total flow to the POTW (i.e., wastewater plus inflow plus infiltration) is less than 275 gallons per capita per day.

I. Wastewater Design Flow

   a. For the purposes of identification of the treatment capacity (under R.61-67.300.A.8) and for a determination of whether or not a POTW is required to develop a pretreatment program (under R.61-9.403.a), the design flows are:

      Schwartz WWTP: 19.35 MGD, 24.35 MGD, 29.35 MGD and 34.35 MGD

Myrtle Beach WWTP: 22.4 MGD.

Previous permit had a note here detailing the year-round and seasonal disposal capacity for the Schwartz WWTP. This it is not appliable anymore and hence deleted. Schwartz does not send flow to Tip Top Farm and there are only 3 (three) sod farms and not 5 (five) land application sites under this permit. The current constructed and disposal capacities are listed below.

Schwartz WWTP constructed capacity: 19.35 MGD
Myrtle Beach WWTP constructed capacity: 22.40 MGD
Combined current constructed capacity = 19.35 + 22.40 = 41.75 MGD

Schwartz WWTP current disposal capacity: 22.40 MGD
Myrtle WWTP current disposal capacity: 22.40 MGD
Combined current disposal capacity = 22.40 + 22.40 = 44.80 MGD

Disposal allowed from Shwartz WWTP during Summer Only (April – October)
Existing Turf Farm (126 acres – Outfall 002): 0.70 MGD
Turf Farm Expansion, Phase I (33 acres – Outfall 003): 0.40 MGD
Turf Farm Expansion, Phase II (62 acres – Outfall 004): 0.694 MGD
Total = 0.7+0.4+0.694 = 1.794 MGD

b. For NPDES billing (under R.61-30.2.b), the "actual flow" limit for this wastewater treatment facility shall be identified as the design flow of:

Schwartz WWTP: 34.35 MGD
Myrtle Beach WWTP: 22.4 MGD.

J. Water Treatment Plant Notification

The permittee shall notify the following downstream water treatment plants of any emergency condition, plant upset, bypass or other system failure, which has the potential to affect the quality of water withdrawn for drinking purposes:

(1) Georgetown County Water & Sewer Authority (S22102)
(2) Grand Strand Water & Sewer Authority (S26101)

This notification should be made as soon as possible and in anticipation of such an event, if feasible, without taking away any response time necessary to attempt to alleviate this situation.

BACTERIA WORKSHEET

MONITORING PERIOD

YEAR MO DAY			YEAR MO DAY
FROM		TO	

Select the outfall	☐ 01-D: Schwartz + Myrtle Beach to Waccamaw River ☐ 002: Existing Turf Farm (126 Acres) ☐ 003: Turf Farm Expansion, Phase I (33 Acres) ☐ 004: Turf Farm Expansion, Phase II (62 Acres)	Select the current daily maximum limit	☐ 349 MPN/100 ml (E.coli) ☐ 104 MPN/100 ml (Enterococci) ☐ 501 MPN/100 ml (Enterococci) ☐ 43 MPN/100 ml (Fecal coliform)

1. Report data and sample time for daily maximum bacteria value greater than the permitted limitation.

Sample Result (MPN/100 ml) §	Sample Date (mm/dd/yyyy)	Sample Time (24 Hr. Format)	Parameter
	/ /	: hrs	☐ E.coli ☐ Enterococci ☐ Fecal coliform

§ Sample result above must be less than or equal to 800 MPN/100 ml for E. coli and Enterococci or less than or equal to 200 MPN/100 ml for Fecal Coliform.

2. Two additional bacterial samples collected within 48 hours of the original sample result (of item #1) that exceeded the daily maximum limitation.

Sample Number	Sample Result (MPN/100 ml)	Sample Date (mm/dd/yyyy)	Sample Time (24 Hr. Format)	Parameter
1.		/ /	: hrs	☐ E.coli ☐ Enterococci ☐ Fecal coliform
2.		/ /	: hrs	☐ E.coli ☐ Enterococci ☐ Fecal coliform

The two additional sample results in item #2, do not exceed the daily maximum bacteria limits in the permit and were collected within 48-hours of the original sample result of item #1.

☐ Yes ☐ No*

3. Report the total number of bacterial samples collected in the previous twelve months: _____
(If requested, this data must be provided to the Department to verify this information)

4. Choose one of the following:
   a. ☐ The number from item #3 above is less than 120; and no more than one (1) bacterial sample exceeded the daily maximum limit in the previous twelve (12) months, and that value is identifed in item #1 above.

b. ☐ The number in item #3 above is 120 samples or more, and no more than four (4) individual bacterial samples exceeded the daily maximum limit in the previous twelve (12) months, and those values were:

Sample Number	Sample Result (MPN/100 ml)	Sample Date (mm/dd/yyyy)	Parameter
1.	Same as Item #1 above	Same as Item #1 above	Same as Item #1 above
2.		/ /	☐ E.coli ☐ Enterococci ☐ Fecal coliform
3.		/ /	☐ E.coli ☐ Enterococci ☐ Fecal coliform
4.		/ /	☐ E.coli ☐ Enterococci ☐ Fecal coliform

c. ☐ Neither (a) **nor** (b) above is true*.

5. The following statements are true:
   a. The disinfection equipment and wastewater solids handling system were fully functional and operating during this monitoring period.
   b. There is neither an existing Consent Order nor Adminstrative Order is associated with the facility's operation of this disinfection system.
   c. The laboratory data included with this report is sufficiently sensitive to accurately represent the effluent bacteria concentrations. No values for the monitoring period were reported as ">" greater than.

* If you check any of the starred boxes or if statements 5(a), (b) or (c) are not true, then the provisions of R.61-68.E.14(c)(12) are **not** met, and limits in Part III. A. 10.b; 12.b; 13.b or 14.b apply.

* If you did not check any of the starred boxes, **and** if statements 5(a), (b) and (c) are true, then the provisions of R.61-68.E.14(c)(12) are met, and limits in Part III. A. 10.c; 12.c; 13.c or 14.c apply.