THE STATE OF SOUTH CAROLINA
BEFORE THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

IN RE: TOWN OF LEXINGTON
COVENTRY WOODS WASTEWATER TREATMENT PLANT
LEXINGTON COUNTY

CONSENT ORDER
11-048-W

The Town of Lexington (Respondent) owns and is responsible for the proper operation and maintenance of the Coventry Woods Wastewater Treatment Plant (WWTP), serving the residents and businesses within its designated service area located at 100 Mallard Lakes Drive in Lexington County, South Carolina.

The Respondent failed to comply with effluent limitations for Ammonia-Nitrogen (NH_3-N) and Total Copper (Cu) as contained in its National Pollutant Discharge Elimination System (NPDES) Permit, SC0026735, as issued by the S.C. Department of Health and Environmental Control (Department). The Respondent also failed to comply with a condition of its NPDES Permit to provide an adequate and functional source or method for supplying power to the WWTP in the event of power failures so as to retain sufficient wastewater transfer and treatment process capabilities to maintain effluent limitations.

Based upon discussions with agents for the Respondent on July 14, 2011, the parties have agreed to the issuance of this Order to include the following Findings of Fact and Conclusions of Law.

FINDINGS OF FACT

1. The Respondent owns and is responsible for the proper operation and maintenance of the WWTP, serving the residents and businesses of its designated service area located

on 100 Mallard Lakes Drive in Lexington County, South Carolina.

2. Department staff issued NPDES Permit, SC0026735, to the Respondent allowing it to discharge treated wastewater into Twelve Mile Creek in accordance with effluent limitations, monitoring requirements and other conditions set forth therein.

3. The NPDES Permit, Part III, A., 1., establishes the final "Effluent Limitations and Monitoring Requirements" for discharges from the WWTP. Discharge Monitoring Reports (DMRs) submitted for the January and March 2011 monitoring periods reported that effluent from the WWTP exceeded the weekly average and monthly average limitations for ammonia-nitrogen (NH_3-N).

4. DMRs submitted for the January, February, March, July and August 2011 monitoring periods reported that effluent from the WWTP exceeded the monthly average limitation for Cu.

5. On April 14, 2011, Department staff issued a Notice of Violation (NOV) to the Respondent for NH_3-N and Cu violations during the January through February 2011 monitoring periods. A written response to the NOV was not required since comments and explanations for the violations were attached to the DMRs. Comments attached to the DMRs reported that the cause for the NH_3-N exceedences in January could not be identified. The March exceedences were attributed to low blower air output. Comments attached to the February DMR reported that additional Cu samples were collected and that contact chamber cleaning was scheduled, which usually improved effluent quality for Cu. A letter dated April 25, 2011, and attached to the March DMR reported that the contact chamber had been cleaned and April effluent samples were in compliance with Cu.

6. On April 5, 2011, the Town of Lexington experienced severe thunderstorms with widespread wind-related damages and power outages. Department staff began conducting inspections of several wastewater collection and treatment systems in the area to assess damages. Power company employees were observed working on supply lines in the vicinity of the WWTP.

7. At approximately 0930 hours, Department staff arrived at the WWTP and observed a by-pass pump operating at the influent pump station and vacuum trucks were onsite attempting to capture wastewater overflowing from the head of the WWTP due to a power outage. Respondent utility staff discovered the outage at 0600 hours. The WWTP flow chart indicates that power had been interrupted at 0400 hours.

8. Department staff inquired about why the back-up power generation system was not being utilized. Utility staff reported that it was not operational. Department staff prompted utility staff to pursue acquisition of a generator. Contact was made with a local contractor to deliver a generator. Department staff prompted utility staff to begin process control sampling to determine the affect of the power outage on wastewater in the WWTP.

9. The Respondent had not completely evaluated other manholes throughout the collection system, but reported a total of five of the seventy-four pump stations had also lost power. Many of the pump stations had emergency power generation capability and staff with pump trucks were monitoring the situation. Discussion ensued relating to providing public notification of the sanitary sewer overflow (SSO).

10. At approximately 1020 hours, Department staff arrived to collect and split stream samples with the Respondent.

11. Department staff discussed the failure of the influent pump station to activate the audible and visual alarm and to transmit a call of pump station operational failure due to the power outage. Respondent indicated that all of these problems would be corrected.

12. The emergency generator was delivered and placed into service at 1215 hours to operate the blowers. A second generator, owned by the Respondent, arrived onsite.

13. At 1315 hours, power was restored to the WWTP and the SSO ceased.

14. Respondent arranged for rental of the one emergency generator until a replacement is delivered and another generator arrived onsite to be used at the head works to the WWTP until permanent back-up generation capability is established.

15. The "Sanitary Sewer Overflow or Pump Station Failure Report Form," dated April 8, 2011, was submitted reporting the estimated volume of wastewater discharged during the event as being 272,000 gallons. Corrective actions were completed on April 7, 2011.

16. On July 14, 2011, Department staff held an enforcement conference with agents for the Respondent to discuss the above Findings of Fact. The issuance of a Consent Order containing a civil penalty was discussed.

CONCLUSIONS OF LAW

Based upon the above Findings of Fact, the Department reaches the following Conclusions of Law:

1. The Respondent is in violation of the Pollution Control Act, S.C. Code Ann. § 48-1-110(d)(2008) and the regulations governing Water Pollution Control Permits, 24 S.C. Code Ann. Regs. 61-9.122.41(a)(1)(Supp. 2010) in that it failed to comply with effluent limits for NH_3-N and Cu as set forth in its NPDES Permit.

2. The Respondent is in violation of the Pollution Control Act, S.C. Code Ann. § 48-1-110(d)(2008) and the regulations governing Water Pollution Control Permits, 24 S.C. Code Ann. Regs. 61-9.122.41(a)(2)(Supp. 2010) in that it failed to comply with the NPDES Permit condition requiring either an alternative power source or "a plan of operation to halt, reduce or otherwise control production and/or all discharges" in the event of a power failure.

3. The Respondent is in violation of the Pollution Control Act, S.C. Code Ann. § 48-1-90(a)(2008) in that it discharged wastewater to the environment, including waters of the State, other than in compliance with a permit issued by the Department.

4. The Pollution Control Act, S.C. Code Ann.§48-1-330 (2008) provides for a civil penalty not to exceed ten thousand dollars ($10,000.00) per day of violation for any person violating the Act or any rule, regulation, permit, permit condition, final determination, or Order of the Department.

NOW, THEREFORE, IT IS ORDERED, CONSENTED TO AND AGREED, pursuant to the Pollution Control Act, S.C. Code Ann. §48-1-50 (2008) and S.C. Code Ann. §48-1-100 (2008), that the Respondent shall:

1. Within thirty (30) days from the execution date of the Order, submit to the Department a Corrective Action Plan (CAP) detailing a) standard operation and maintenance procedures, which will be implemented to enable the WWTP to consistently meet NH_3-N and Cu effluent limitations; and b) corrective actions taken or actions planned to prevent recurrence of the situation whereby the WWTP was left without backup or alternate power generation capabilities.

2. Within thirty (30) days from the execution date of the Order, submit to the Department a report of the routine tests performed on the alternate power source and the influent pump station alarm activation system. Continue to submit this report on a monthly basis by the 10th day of the month following the month covered by the report.

3. Notify the Department Region 3 EQC Columbia Office by telephone at (803) 896-0620 or the 24-hour emergency response number at (803) 253-6488 as soon as is reasonably possible and within 24 hours of any event whereby power to the WWTP is interrupted or other event occurs with the actual or potential for the release of untreated or partially treated wastewater to waters of the State.

Comprehensive Process Control Testing and Evaluation Program

4. Begin a Comprehensive Process Control Testing and Evaluation Program to include, at a minimum, the following determinations:

a) Settleometer tests (SSV_5 and SSV_{30})/daily.
b) Sludge blanket depths in individual clarifiers/at least twice per day (a.m./p.m.).
c) Dissolved oxygen profile throughout individual aeration basin/daily.
d) Microscopic examination/at least once per week.
e) Mixed Liquor Suspended Solids (MLSS) and Mixed Liquor Volatile Suspended Solids (MLVSS) in individual aeration basins/at least three times per week.
f) Select and utilize at least one of the following most commonly used activated sludge process control techniques:

Control Technique	Frequency	Determination
F:M	3/week	Based on 5 day moving average.
MLVSS	3/week	Volatile solids inventory.
SVI	2/month	
MCRT	3/week	Based on 3-5 day moving ave.
SRT	2/month	

F:M = Food to Microorganism Ratio
MLVSS = Mixed Liquor Volatile Suspended Solids
SVI = Sludge Volume Index

MCRT = Mean Cell Residence Time
SRT = Sludge Retention Time

g) Influent, effluent, return sludge, and waste activated sludge flow rates (gpd or mgd)/daily.
h) Return activated sludge and waste activated sludge concentrations (mg/L) and loading (lbs)/at least three times per week.
i) Influent pH, BOD, and TSS, and ammonia at frequency required by permit.
j) Effluent ph, dissolved oxygen, BOD, TSS, and ammonia at frequency required by permit.
k) Rainfall/daily.
l) Prepare a table of all determinations obtained from A – K above for the calendar month with the exception of microscopic examinations (D above) which should be recorded on separate worksheets detailing relative predominance of organisms.
m) Develop trend charts for those tests or parameters which provide the most useful plant performance information on which to base control decisions.

Prepare a written summary report of interpretations of required process control determinations a) – k) and subsequent process adjustment decisions and/or corrective actions based on these interpretations.

Submit to the Department, on a monthly basis, items l) and m) beginning January 1, 2012, to be postmarked no later than the 28th day of the month following the reporting period.

Capacity, Management, Operation and Maintenance Program (cMOM)

5. On or before July 16, 2012, initiate a cMOM audit. This audit should be a comprehensive evaluation of the wastewater collection system (WWCS). The audit shall include, but is not limited to the evaluation of the following: 1) financial review detailing how operation and maintenance of the WWCS will be funded, 2) personnel charts, including job assignments, 3) lift station inspection and maintenance schedules, 4) sewer inspection and cleaning programs, 5) inflow/infiltration evaluations, 6) manhole inspections, 7) detailed logs/records of daily operations, 8) easement/right-of-way

maintenance, 9) sewer use and grease ordinance, 10) a spare parts inventory, and 11) any other components necessary for proper operation and maintenance of the WWCS.

6. Within one hundred eighty (180) days of beginning the cMOM audit, develop and begin implementation of a management, operations and maintenance plan, based on the findings of the audit. The plan shall include all information and programs for the proper management, operation and maintenance of the collection system and contain the following elements: written, well defined purpose(s); written, defined goals; written documentation with specific details; implementation by well trained staff; and written procedures for periodic review.

7. Within one hundred twenty (120) days of beginning the cMOM audit, submit to the Department a corrective action plan (CAP) detailing known deficiencies within the WWCS (pump stations, manholes, line breaks/deterioration, etc.). The CAP shall include a schedule of implementation addressing corrective action to be taken on priority basis as determined by the Respondent. When approved by the Department, the schedule shall become an enforceable part of this Order.

8. Within one hundred twenty (120) days of beginning the cMOM audit and every six (6) months until this Order is closed, submit to the Department a summary report of corrective actions addressing deficiencies in the WWCS.

9. Within thirty (30) days from the execution date of this Order, pay to the Department a civil penalty in the amount of six thousand dollars ($6,000.00).

IT IS FURTHER ORDERED AND AGREED that the Department has assessed a civil penalty in the amount of twenty-three thousand dollars ($23,000.00). The Department suspends seventeen thousand dollars ($17,000.00) provided, however, that this suspension shall be vacated

and the suspended amount shall be due and payable upon notification by the Department should the Respondent fail to meet the requirements of this Order. Further, a violation of the terms of this Order shall be deemed a violation of the South Carolina Pollution Control Act and shall be deemed unlawful, and may subject the Respondent to further enforcement action.

PURSUANT TO THIS ORDER, the penalty due shall be made payable to the South Carolina Department of Health and Environmental Control. Please include the Order number listed above on any submittals relating to this Order, including any check remitted as payment of the civil penalty. All communication regarding this Order and its requirement, shall include the Order number and shall be addressed as follows:

William R. Krecker
WPC Division/Bureau of Water/SCDHEC
2600 Bull Street
Columbia, S.C. 29201

IT IS FURTHER ORDERED AND AGREED that failure to comply with any provision of this Order shall be grounds for further enforcement action pursuant to the Pollution Control Act, S.C. Code Ann.§ 48-1-330 (2008), to include the assessment of additional civil penalties.

IT IS FURTHER ORDERED AND AGREED that this Consent Order governs only the Town of Lexington's, liability to the Department for civil sanctions arising from the matters set forth herein and constitutes the entire agreement between the Department and the Town of Lexington, with respect to the resolution and settlement of the matters set forth herein. The parties are not relying upon any representations, promises, understandings or agreements except as expressly set forth within this Order.

FOR THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Robert W. King, Jr., P.E.
Deputy Commissioner
Environmental Quality Control

Date: 12/4/11

David E. Wilson, Jr., P.E.
Bureau Chief
Bureau of Water

Date: 12-1-11

Glenn Trofatter, Director
Water Pollution Control Division
Bureau of Water

Date: Nov 30 2011

Reviewed by:

Attorney
Office of General Counsel

Date: 12/2/11

WE CONSENT:

TOWN OF LEXINGTON

Britt Poole
Town Administrator

Date: 11/28/14