



Michael F. Easley, Governor

William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E., Director
Division of Water Quality

March 1, 2006

Mr. Michael Myers, Engineering and Compliance Manager
Heater Utilities, Inc.
202 MacKenan Ct.
Cary, NC 27511

Subject: Permit No. WQ0023620 Modification
Chapel Ridge (Buck Mountain)
Subdivision
Pressure Sewer Extension
Chatham County

Dear Mr. Myers:

In accordance with your request for modification received November 29, 2005, and subsequent additional information received February 9, 2006 and February 22, 2006, we are forwarding herewith Permit No. WQ0023620 dated March 1, 2006, to Heater Utilities, Inc. for the construction and operation of the subject wastewater collection extension and continued construction and operation of the previously permitted system. This permit shall be effective from the date of issuance until rescinded, shall void Permit No. WQ0023620 issued August 15, 2005, and shall be subject to the conditions and limitations as specified therein. This modification is to add the pressure sewer system serving Phase 2B to the previously permitted systems for Phase 1 and 2A. Phase 2B consists of pressure sewer line, 166 single family lots and a duplex grinder station for a golf course restroom. Note that an approved flow reduction of 250 gpd/lot was granted in November 2004.

Please pay particular attention to these permit conditions:

- Permit Condition 3 states that this permit is not valid until the Certificate of Public Convenience and Necessity has been issued by the North Carolina Utilities Commission.
- Condition 4 requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2H .0227 or any individual system-wide collection system permit issued to the Permittee.
- Condition 6 indicates that no flow shall be made tributary to the system until the wastewater treatment plant and downstream sewer has been constructed and certified complete.
- Permit Condition 18 grants a variance to power reliability requirements for a duplex station serving a golf course restroom in Phase 2B.

Mr. Myers
March 1, 2006
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Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2H .0200; the Division of Water Quality's (Division) Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; and the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable, unless specifically mentioned herein. Division approval is based on acceptance of the certification provided by a North Carolina-licensed Professional Engineer in the application. It shall be the Permittee's responsibility to ensure that the as-constructed project meets the appropriate design criteria and rules. Failure to comply may result in penalties in accordance with North Carolina General Statute §143-215.6A through §143-215.6C, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within 30 days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. Unless such demands are made this permit shall be final and binding.

Note that the Division has recently reorganized. For our new organizational chart, see http://h2o.enr.state.nc.us/documents/dwq_orgchart.pdf. All sewer related matters are now handled through the Pretreatment, Emergency Response and Collection Systems Unit under the Point Source Branch EXCEPT FOR FAST-TRACK SEWER PERMITTING WHICH CONTINUES TO BE ADMINISTERED THROUGH OUR REGIONAL OFFICES. The Unit is located on the 13th floor of the Archdale building in downtown Raleigh. Please ensure the letterhead information is used for all correspondence to ensure timely delivery.

One set of approved plans and specifications is being forwarded to you. If you need additional information concerning this matter, please contact Marie Doklovic at (919) 733-5083 extension 371.

Sincerely


For Alan W. Klimek, P. E.

cc:Chatham County Health Department
Raleigh Regional Office, Water Quality Section (Permit NC0022870)
Mike Zaccardo, PE, The CE Group Inc. (1051 Pemberton Hill Rd., Ste 101, Apex, NC 27502)
Water Quality Central Files
PERCS (formerly NDPU) Files

NORTH CAROLINA
ENVIRONMENTAL MANAGEMENT COMMISSION
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
RALEIGH
WASTEWATER COLLECTION PERMIT

In accordance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules, and Regulations

PERMISSION IS HEREBY GRANTED TO

HEATER UTILITIES, INC.
Chatham County

FOR THE

construction and operation of a pressure sewer collection system consisting of 166 simplex centrifugal pump stations with on-site audible and visual high water alarms; 1 duplex centrifugal grinder pump station with on-site audible and visual high water alarms; approximately 3,948 linear feet of 2-inch pressure sewer; approximately 3,184 linear feet of 3-inch pressure sewer; approximately 391 linear feet of 4-inch pressure sewer; approximately 2,213 linear feet of 6-inch pressure sewer; and approximately 624 linear feet of 8-inch pressure sewer to serve 166 lots and one golf course restroom in Phase 2B of Chapel Ridge (Buck Mountain) Subdivision, and the discharge of 42,500 GPD of collected wastewater into the Heater Utilities, Inc. Buck Mountain's existing sewerage system, pursuant to the application received November 29, 2005, and subsequent additional information received by the Division, and in conformity with the project plans, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this permit; and,

continued construction and operation of approximately 16,656 linear feet of 8-inch gravity sewer; a pressure sewer collection system consisting of 108 simplex centrifugal grinder pump stations with on-site audible and visual high water alarms; a duplex centrifugal grinder pump station with on-site audible and visual high water alarms (golf course restroom); approximately 2,939 linear feet of 2-inch pressure sewer; approximately 611 linear feet of 2.5-inch pressure sewer; approximately 2,306 linear feet of 3-inch pressure sewer; approximately 1,973 linear feet of 4-inch pressure sewer; a 352 GPM duplex pump station with on-site audible and visual high water alarms, telemetry and portable generator receptacle and approximately 5,297 linear feet of 6-inch force main; and a 573 GPM centrifugal duplex pump station with on-site audible and visual high water alarms, on-site generator with automatic transfer switch and approximately 5,380 linear feet of 8-inch force main to serve 302 lots and a golf course restroom in Phase 1 of Chapel Ridge (Buck Mountain) Subdivision, and the discharge of 76,500 GPD of collected wastewater into the Heater Utilities, Inc. Buck Mountain's existing sewerage system, pursuant to the application received February 17, 2005, and subsequent additional

information received by the Division, and in conformity with the project plans, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this permit; and,

from WQ0028609, the continued construction and operation of approximately 3,009 linear feet of 8-inch gravity sewer; a pressure sewer collection system consisting of 139 simplex centrifugal grinder pump stations with on-site audible and visual high water alarms; approximately 2,570 linear feet of 2-inch pressure sewer; approximately 2,885 linear feet of 3-inch pressure sewer; approximately 2,135 linear feet of 4-inch pressure sewer; approximately 805 linear feet of 8-inch pressure sewer; approximately 3,490 linear feet of 10-inch pressure sewer; and a 226 GPM duplex pump station with on-site audible and visual high water alarms, odor control, and 73 feet of 4-inch force main to serve 210 lots in Phase 2A of Chapel Ridge (Buck Mountain) Subdivision, and the discharge of 52,500 GPD of collected wastewater into the Heater Utilities, Inc. Buck Mountain's existing sewerage system, pursuant to the application received February 15, 2005, and subsequent additional information received by the Division, and in conformity with the project plans, specifications, and other supporting data subsequently filed and approved by the Department of Environment and Natural Resources and considered a part of this permit.

The total allocated flow to the treatment plant to date is 170,500 gallons per day.

This permit shall be effective from the date of issuance until rescinded, shall void Permit No. WQ0023620 issued August 15, 2005, and shall be subject to the following specified conditions and limitations:

1. This permit shall become revocable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2H .0200; the Division of Water Quality's (Division) Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable; and other supporting materials unless specifically mentioned herein.
2. This permit is effective only with respect to the nature and volume of wastes described in the application and other supporting data.
3. This permit is conditional upon issuance of the Certificate of Public Convenience and Necessity from the North Carolina Utilities Commission.
4. The wastewater collection facilities shall be properly maintained and operated at all times. The Permittee shall maintain compliance with an individual system-wide collection system permit for the operation and maintenance of these facilities as required by 15A NCAC 2H .0227. If an individual permit is not required, the following performance criteria shall be met as provided in 15A NCAC 2H .0227:
 - a. The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and any contravention of the groundwater standards in 15A NCAC 2L .0200 or the surface water standards in 15A NCAC 2B .0200.
 - b. A map of the sewer system shall be developed and shall be actively maintained.
 - c. An operation and maintenance plan shall be developed and implemented.

- d. Pump stations that are not connected to a telemetry system shall be inspected every day (i.e. 365 days per year). Pump stations that are connected to a telemetry system shall be inspected at least once per week. This requirement does not apply to pump stations serving a single building associated with a properly permitted pressure sewer system.
 - e. High-priority sewer lines shall be inspected at least once per every six-month period of time.
 - f. A general observation of the entire sewer system shall be conducted at least once per year.
 - g. Inspection and maintenance records shall be maintained for a period of at least three years.
 - h. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 2B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
5. The sewage and wastewater collected by this system shall be treated in the Heater Utilities, Inc. Buck Mountain Wastewater Treatment Facility (Non-Discharge Permit No. WQ0022870) prior to being land applied by spray irrigation.
 6. No flow shall be made tributary to the subject sewer system permitted herein until the downstream sewers (Permit No. WQ0023620) and/or wastewater treatment plant (Permit No. WQ0022870) have been constructed and the engineer's certification has been received by the Division of Water Quality.
 7. This permit is not transferable. In the event there is a desire for the facilities to change ownership, or there is a name change of the Permittee, a formal permit request must be submitted to the Division of Water Quality (Division) accompanied by documentation from the parties involved and other supporting materials as may be appropriate. The approval of this request will be considered on its merits and may or may not be approved.
 8. Construction of the sewers, pump station(s) and force main shall be scheduled so as not to interrupt service by the existing utilities nor result in an overflow or bypass discharge of wastewater to the surface waters of the State.
 9. Per 15A NCAC 2H .0220, upon completion of construction and **prior to operation** of these permitted facilities, the completed Engineering Certification form attached to this permit shall be submitted with the required supporting documents to the address provided on the form. A complete certification is one where the form is fully executed and the supporting documents are provided as applicable.
 10. A copy of the approved plans and specifications shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
 11. Failure to abide by the conditions and limitations contained in this permit; 15A NCAC 2H .0200; the Division's Gravity Sewer Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Station and Force Mains adopted June 1, 2000 as applicable; and other supporting materials may subject the Permittee to an enforcement action by the Division, in accordance with North Carolina General Statutes §143-215.6A through §143-215.6C.

12. The issuance of this permit does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e., local, state, and federal) having jurisdiction, including but not limited to applicable river buffer rules in 15A NCAC 2B .0200, soil erosion and sedimentation control requirements in 15A NCAC Chapter 4 and under the Division's General Permit NCG010000, and any requirements pertaining to wetlands under 15A NCAC 2B .0200 and 15A NCAC 2H .0500.
13. The Permittee shall provide the following items for the pressure sewer system:
- a. Pump on/off elevations located so that 2-8 pumping cycles may be achieved per hour in any centralized pump station serving more than one building.
 - b. At least 24 hours of storage capacity above the pump-on activation level for any simplex pump station serving a single family residence.
 - c. An air relief valve located at all high points along the force main.
 - d. A screened vent for the wet well.
 - e. Fillets located in the wet well(s) at the intersection of the flooring and side walls.
 - f. Three feet of cover (minimum) over the force main or the use of ferrous material where three feet cannot be maintained.
 - g. Sufficient devices to protect the pump station from vandals.
 - h. Flood protection if the pump station is located below the 100-year flood elevation.
 - i. Adherence with the following minimum separations:
 - (i) Storm sewers (vertical) 12 inches
 - (ii) Water mains (vertical-water over sewer) 18 inches or (horizontal) 10 feet
 - (iii) In benched trenches (vertical) 18 inches
 - (iv) Any private or public water supply source, including any WS-I waters or Class I or Class II impounded reservoirs used as a source of drinking water 100 feet
 - (v) Waters classified WS (other than WS-I), B, SA, ORW, HQW, or SB [from normal high water (or tide elevation)] 50 feet
 - (vi) Any other stream, lake or impoundment 10 feet
 - (vii) Any building foundation 5 feet
 - (viii) Any basement 10 feet
 - (ix) Top slope of embankment or cuts of 2 feet or more vertical height 10 feet
 - (x) Drainage systems
 - (I) Interceptor drains 5 feet
 - (II) Ground water lowering and surface drainage ditches 10 feet
 - (xi) Any swimming pool 10 feet
 - (xii) Ferrous sewer pipe with joints equivalent to water main standards, shall be used where these minimum separations cannot be maintained. The minimum separation shall however not be less than 25 feet from a private well or 50 feet from a public water supply well;
14. In the event that the facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those that may be required by this Division, such as the construction of additional or replacement wastewater collection facilities.

15. Noncompliance Notification:

The Permittee shall verbally report to a water quality staff member at the Raleigh Regional Office, telephone number (919) 791-4200, as soon as possible, but in no case more than 24 hours or on the next working day following the occurrence or first knowledge of the occurrence of either of the following:

- a. Any process unit failure, due to known or unknown reasons, that render the facility incapable of adequate wastewater transport such as mechanical or electrical failures of pumps, line blockage or breakage, etc.
- b. Any failure of a pumping station or sewer line resulting in a by-pass directly to receiving waters without treatment of all or any portion of the influent to such station or facility.

Voice mail messages or faxed information is permissible but this shall not be considered as the initial verbal report. Overflows and spills occurring outside normal business hours may also be reported to the Division of Emergency Management at telephone number (800) 858-0368 or (919) 733-3300. Persons reporting any of the above occurrences shall file a spill report by completing Part I of Form CS-SSO (or the most current Division approved form), within five days following first knowledge of the occurrence. This report shall outline the actions taken or proposed to ensure that the problem does not recur. Per Condition I(2), Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control.

16. The Permittee shall maintain on hand for immediate installation a supply of spare, fully operational pump units of each type used in the pressure sewer system. The number of pumps on hand shall not be less than 10 percent of the number of installed units or one unit, whichever is greater.
17. Each pump station shall be clearly and conspicuously posted with the telephone number of the owner/operator of the pressure sewer system and instructions to call the number in the event of high water alarm activation.
18. A variance is granted to waive the power reliability requirement for the duplex station serving the golf course restroom in Phase 2B. In the event of a power outage, the Permittee shall prohibit use of the restroom until such time the power is restored and the station is operating normally.

Permit issued this the 1st day of March, 2006

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION


Alan W. Klimek, P. E., Director
Division of Water Quality

By Authority of the Environmental Management Commission

Permit Number WQ0023620

Permit No. WQ0023620
 March 1, 2006

System Description: a pressure sewer collection system consisting of 166 simplex centrifugal pump stations and one duplex grinder station with on-site audible and visual high water alarms; approximately 3,948 linear feet of 2-inch pressure sewer; approximately 3,184 linear feet of 3-inch pressure sewer; approximately 391 linear feet of 4-inch pressure sewer; approximately 2,213 linear feet of 6-inch pressure sewer; and approximately 624 linear feet of 8-inch pressure sewer to serve 166 lots and golf course restroom in Phase 2B

Complete and submit this form to the permit issuing office as indicated below with the following:

- One copy of the project record drawings (plan & profile views of sewer lines) of the wastewater collection system extension
- Changes to the project should be clearly identified on the record drawings or in written summary form. Permit modifications are required for any changes resulting in non-compliance with this permit, regulations or minimum design criteria.

This project shall not be considered complete nor allowed to operate until this Engineer's Certification and all required supporting documentation have been received by the Division. **Therefore, it is highly recommended that this certification be sent in a manner that provides proof of receipt by the Division.**

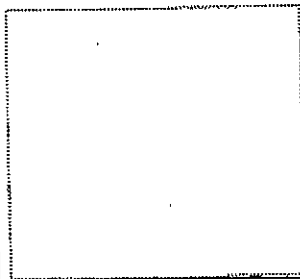
ENGINEER'S CERTIFICATION

Partial

Final

I, _____, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the subject project for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance of this permit; 15A NCAC 2H .0200; the Division of Water Quality's (Division) Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable; and other supporting materials.

North Carolina Professional Engineer's seal, signature, and date:



**SEND THIS FORM & SUPPORTING DOCUMENTATION
 WITH REQUIRED ATTACHMENTS
 TO THE FOLLOWING ADDRESS**

**K MARIE DOKLOVIC, PE
 PRETREATMENT, EMERGENCY RESPONSE & COLLECTION SYSTEMS UNIT
 1617 MAIL SERVICE CENTER
 RALEIGH NC 27699-1617**

The Permittee is responsible for tracking all partial certifications up until a final certification is received. Any wastewater flow made tributary to the wastewater collection system extension prior to completion of this Engineer's Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate enforcement actions.

**NORTH CAROLINA DEPARTMENT OF
 ENVIRONMENTAL AND NATURAL RESOURCES
 DIVISION OF WATER QUALITY
 1617 Mail Service Center
 Raleigh, NC 27699-1617
 Phone: 919-733-5083
 Fax: 919-733-0719**

facsimile transmittal

To: Miki Gaccardo Fax: 919-367-8791
 From: Marie Soklovic Date: 3-2, 2006
 Phone: _____ Pages: 9 including cover
 E-mail: _____

- Urgent For Review Please Comment Please Reply

Subject: _____

