



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

October 26, 2006

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

Subject: Permit No. WQ0029022  
The Legacy at Jordan Lake, Phase  
2 & 3  
Pressure Sewer Extension  
Chatham County

Dear Mr. Myers:

In accordance with your request for modification received August 2, 2006, and subsequent additional information received October 24, 2006, we are forwarding herewith Permit No. WQ0029022 dated October 26, 2006, to Heater Utilities, Inc. for the construction and continued operation of the subject wastewater collection extension. This permit shall be effective from the date of issuance until rescinded, and shall be subject to the conditions and limitations as specified therein.

Please pay particular attention to Permit Condition 3, which 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.

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.

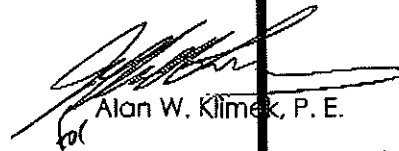
If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within 30 days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of North 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 was reorganized in 2004. All sewer related matters are 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 13<sup>th</sup> floor of the Archdale building in downtown Raleigh. Please ensure the letterhead information is used for all correspondence to ensure timely delivery.

Michael J. Myers  
October 26, 2006  
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One set of approved plans and specifications is being forwarded to you. If you need additional information concerning this matter, please contact Deborah Gore at (919) 733-5083 extension 593.

Sincerely



Alan W. Klimex, P. E.

cc: Chatham County Health Department  
Raleigh Regional Office, Water Quality Section (Permit WQ0024844)  
Mike Zaccardo, P.E., CE Group, 11000 Regency Parkway, Suite 410, Cary, NC, 27511  
Water Quality Central Files  
PERCS Files

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

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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 continued operation of a pressure sewer collection system consisting of 97 – 2.4 HP pump stations with simplex pumps, 16 – 3.5 HP pump stations with simplex pumps, 6 – 6.2 HP simplex pump stations with simplex pumps, on-site audible and visual high water alarms and approximately 2,864 linear feet of 2-inch pressure sewer, approximately 3,128 linear feet of 3-inch pressure sewer, approximately 2,888 linear feet of 4-inch pressure sewer, approximately 818 linear feet of 6-inch pressure sewer to serve The Legacy at Jordan Lake, Phase 2 & 3, and the discharge of 57,120 GPD of collected wastewater into the Homestead Development 's existing sewerage system, pursuant to the application received August 2, 2006, 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.

August 11, 2005 Original Permit

Project description was modified to reflect the name change from the Homestead Phase 1 to the Legacy at Jordan Lake, Phase 1

construction and operation of a pressure sewer collection system consisting of 106, 15-35 GPM simplex pump stations with pre-cast concrete wet well, on-site audible and visual high water alarms; approximately 2,970 linear feet of 2-inch pressure sewer; approximately 2,775 linear feet of 3-inch pressure sewer; approximately 1,045 linear feet of 4-inch pressure sewer; approximately 2,611 linear feet of 6-inch pressure sewer; approximately 2,370 linear feet of 8-inch pressure sewer; and approximately 1,550 linear feet of 10-inch pressure sewer to serve 105, 4-bedroom lots and 1 guard house for The Legacy at Jordan Lake, Phase 2 & 3 Legacy, Phase 1 project, and the discharge of 50,500 GPD of collected wastewater into the Homestead Development 's existing sewerage system, pursuant to the application received August 2, 2006.

This permit shall be effective from the date of issuance until rescinded, 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. 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.
4. The sewage and wastewater collected by this system shall be treated in the Homestead Development Wastewater Treatment Facility (Non-Discharge Permit No. WQ0024844) prior to being land applied by spray irrigation.
5. **No flow shall be made tributary to the subject sewer system permitted herein until the wastewater treatment plant (Permit No. WQ0024844) has been constructed and the engineer's certification has been received by the Division of Water Quality.**
6. 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.
7. 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.

8. 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.
9. A copy of the approved plans and specifications shall be maintained on file by the Permittee for the life of the wastewater collection facilities.
10. 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.
11. 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.
12. 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 which will 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;

13. 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.

**14. 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:

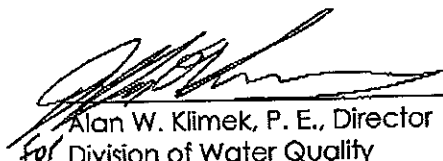
- a. Any process unit failure, due to known or unknown reasons, that render the facility incapable of adequate wastewater transport such as mechanical or electrical failures of pumps, line blockage or breakage, etc.
- b. Any failure of a pumping station or sewer line resulting in a by-pass directly to 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 1(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.

15. 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.
16. 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.

Permit issued this the 26th day of October 2006

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION



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

By Authority of the Environmental Management Commission

Permit Number WQ0029022