



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

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

August 18, 2006

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

Subject: Permit No. WQ0030277

The Parks at Meadowview Subdivision Phase 1A Pressure Sewer Extension Chatham County

Dear Mr. Myers:

In accordance with your permit application received May 17, 2006, and subsequent additional information received August 8, 2006, we are forwarding herewith Permit No. WQ0030277 dated August 18, 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 This permit shall be effective from the date of issuance until rescinded, and shall be subject to the conditions and limitations as specified therein.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 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.



Mr. Michael J. Myers August 18, 2006 Page 2

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. Klimek, P. E.

cc: Chatham County Health Department
Raleigh Regional Office, Water Quality Section (Permit WQ0022870)
Mike Zaccardo, P.E., CE Group, Inc, 11000 Regency Parkway, Suite 410, Cary, NC, 27511
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 continued operation of a pressure sewer collection system consisting of 99 –2.4 HP pump stations with centrifugal pumps, on-site audible and visual high water alarms and approximately 3,000 linear feet of 2-inch pressure sewer, 749 linear feet of 3-inch pressure sewer, 1,225 linear feet of 4-inch pressure sewer, 205 linear feet of 6-inch pressure sewer, 317 linear feet of 8-inch pressure sewer, 2,128 linear feet of 10-inch pressure sewer and a 561 GPM pump station with duplex pumps and on-site audible and visual high water alarms and approximately 5,440 linear feet of 8-inch force main to serve The Parks at Meadowview Subdivision Phase 1A, and the discharge of 24,750 GPD of collected wastewater into the Heater Utilities, Inc's existing sewerage system, pursuant to the application received May 17, 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.

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 Heater Utilities, Inc Wastewater Treatment Facility (Non-Discharge Permit No. WQ0022870) 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. WQ0022870) 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 <u>prior to operation</u> 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:
  - 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. A minimum of 359 gallons of storage capacity above the pump-on activation level to meet the greater of the Permittee response time for service or the longest non-catastrophic power outage of the previous three years 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 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 <u>not</u> be considered as the initial <u>verbal</u> 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.

- 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 18th day of August, 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 WQ0030277

Permit No. WQ0030277 August 18, 2006

System Description:

a pressure sewer collection system consisting of 99 –2.4 HP pump stations with centrifugal pumps, on-site audible and visual high water alarms and approximately 3,000 linear feet of 2-inch pressure sewer, 749 linear feet of 3-inch pressure sewer, 1,225 linear feet of 4-inch pressure sewer, 205 linear feet of 6-inch pressure sewer, 317 linear feet of 8-inch pressure sewer, 2,128 linear feet of 10-inch pressure sewer and a 561 GPM pump station with duplex pumps and on-site audible and visual high water alarms and approximately 5,440 linear feet of 8-inch force main.

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 ( $\square$ periodically, $\square$ weekly, $\square$ 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.