MEMORANDUM

February 21, 2008

To: Aquifer Protection Section Central Office
   Aquifer Protection Section Regional Supervisors
   Interested Parties

From: Ted L. Bush, Jr., Chief
      Aquifer Protection Section

Subject: Single Family Residence Irrigation Facilities:
         Policy for Facility Closure and Abandonment Procedures

The North Carolina Division of Water Quality has permitted the use of Single Family Residence (SFR) wastewater irrigation systems for many years. Upon adoption of the 15A NCAC 2T rules on September 1, 2006, the property owners permitted for a SFR wastewater irrigation system are now required by 15A NCAC 2T .0607 to close their system when a public or community sewage system becomes available. Due to the risks abandoned systems pose, both as a conduit for contaminants to groundwater and as a hidden danger to the public, the Aquifer Protection Section (APS) requires the following closure and abandonment procedures for SFR waste irrigation facilities:

1. The homeowner must notify APS of their desire to have their SFR wastewater irrigation permit rescinded and their intentions to bring physical closure to an SFR system thirty (30) days prior to the initiation of closure. This notification should include:
   a. A copy of the current permit authorizing the operation of the SFR system.
   b. The reason(s) for closure of the SFR system (e.g. replacement by a different, approved, wastewater system; or connection to a regional sewer system).
   c. A notarized signed statement of proof of ownership of the residence (e.g. copy of Deed, county property tax receipt, or copy of Real Estate Settlement Statement).

2. Closure actions must only be taken after approval is received. All solid waste generated during abandonment of the facility must be disposed of in accordance with Solid Waste Management Rule 15A NCAC 13B. Once closure is approved, the Regional Office must be notified a minimum of 48 hours prior to any deconstruction activities. Abandonment of the
facility should consist of, but not be limited to, the following actions. Any variation from these procedures may be approved by the regional office.

a. Disconnect power at the source to all electrical controls and remove all controls and panels. Remove pump from pump tank and open valves so as to allow any wastewater within the distribution lines to flow back into pump tank.

b. Contract the services of a licensed septic hauler to pump and dispose of all wastewater and residuals stored in the septic, recirculation/storage (if present), and pump tanks. Keep a copy of all receipts for submittal to the Aquifer Protection Section after abandonment is complete.

c. Remove all above ground piping, spray nozzles, etc. from the SFR system starting at the spray head/emitter of highest elevation and working back toward the pump tank. Underground piping may remain in-place with approval from regional office.

d. Remove treatment works such as disinfection units and surface filters. Buried sand filters may remain in-place with approval from regional office.

e. All remaining tanks shall be removed, crushed in place, or filled with an approved inert material, ensuring that all portions of the structures are removed to a minimum of 12 inches below the final ground surface.

f. Coat all surface areas exposed to untreated effluent with hydrated lime and allow an exposure time of a minimum of two hours.

g. Backfill all excavations with clean soil to a natural grade and establish a vegetative cover so as to provide erosion control. These measures are to include providing topsoil and reseeding, or sodding as necessary.

3. Upon completion of the closure, the homeowner must submit the following documentation to the APS, with a final request for rescission:

   a. Dates of all actions taken relative to the procedure.

   b. Copies of any and all receipts or work orders received during the process of deconstruction.

   c. If connected to a municipal or regional sewage system, documentation of connection to the municipal or regional sewage system.

4. Upon receipt of all proper documentation, the APS will consider all actions taken, and if appropriate, will rescind the permit.

JRM

Rev. Feb. 21, 2008
C:\Non-Discharge\SFR\special provisions\SFR Facility closure memo080221.doc