



North Carolina Department of Environment and Natural Resources

Division of Water Quality

Beverly Eaves Perdue
Governor

Coleen H. Sullins
Director

Dee Freeman
Secretary

October 18, 2011

Mr. Richard Mann - Vice Chancellor Finance & Administration
University of North Carolina at Chapel Hill
CB #1000 - 302A South Building
Chapel Hill, North Carolina 27599-1000

Subject: Permit Application WQ0023896
UNC-CH Bingham Facility
Wastewater Irrigation System
Orange County

Dear Vice Chancellor Mann,

On October 14, 2011 the Division of Water Quality's (Division) Aquifer Protection Section issued a letter dated October 14, 2011, to the University of North Carolina at Chapel Hill (UNC-CH), regarding the additional information needed in order to complete the evaluation of the subject permit application. The application was for the modification of Non-Discharge Permit No. WQ0023896, associated with the continued operation of a wastewater irrigation system at the Bingham Facility.

Upon receipt of the letter, the Division received a telephone call from Ms. Mary-Beth Koza to discuss the information requested. One of the issues discussed was language in the next to last paragraph (see General, No.1) that tended to imply the UNC-CH may not be able to operate the spray system in compliance with the permit, if the application rate were to remain at the proposed rate of 8.2 inches per year (in/yr). Specifically, our letter stated, "The Division is concerned that this design will not allow for operational control of the system, which could present possible future non-compliance."

After review of the language in the additional information letter, and discussing the intent of the language with both staff of the Division and UNC-CH, I felt it necessary to send this letter to clarify the intent of the language. It was not the intent of the Division to suggest the UNC-CH could not achieve compliance with the permit. Rather it was intended to point out that the proposed loading rate of 8.2 in/yr does not provide much operational flexibility in the event the facility receives additional water, such as from prolonged storm events, which may require application rates that exceed 8.2 in/yr.

It should be noted that prior to seeking modification of the permit, the existing field on site was permitted to receive treated wastewater up to 24.09 in/yr. A majority of this previously permitted field is included in the proposed irrigation area and is to have a reduced loading rate of 8.2 in/yr. The Division is not aware of any situation, such as ponding or run-off due to the over-application of wastewater effluent, where the existing fields had any difficulty assimilating the treated wastewater at the existing annual loading rate of 24.09 in/yr. The soils comprising the proposed new fields are similar to the soils in the previously permitted field, and should be capable of assimilating more than the requested application rate.

Aquifer Protection Section
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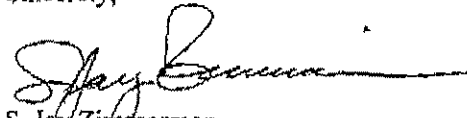
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Therefore, in order to provide flexibility related to operation of the spray fields, the Division recommends the UNC-CH reevaluate the proposed irrigation rate of 8.2 in/yr, and determine whether or not a higher loading rate (not to exceed 24.09 in/yr) can be achieved, or include additional wetted acreage.

If you have any questions concerning this matter, please contact me via email at jay.zimmerman@ncdenr.gov or at (919) 791-4200.

Sincerely,



S. Jay Zimmerman
Environmental Program Supervisor

cc: RRO-APS Files
Aquifer Protection Section Central Files
Ms. Mary-Beth Koza -UNC-CH
Charles D. Riley, Jr., PE - McKim & Creed
Scott J. Frederick, LSS - Soil, Water & Environmental Group, PLLC
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