

UNC Statement
N.C. Division of Water Quality Public Hearing
White Cross Recreation Center
August 22, 2012

Hello, my name is Bob Lowman. I'm the associate vice chancellor for research at UNC-Chapel Hill. I'm also the person at the University responsible for oversight of the Bingham Facility.

We are here tonight because the University has applied for a modification of its wastewater treatment permit for the Bingham Facility, a facility for housing research animals. In a very few minutes, I would like to highlight a few salient features of our application and explain the rationale behind the system we have proposed.

We are modifying our permit because of changes in our plans for the site. While we once had plans to expand the site and to install a tertiary waste water treatment system, the downturn in the economy and site limitations put a stop to those plans about two years ago.

Instead, we will be refurbishing the smaller domestic wastewater treatment system on the site—a fully permitted system that was not implicated in the citations we received from DENR a couple of years ago. Under this plan, we will limit the amount of wastewater to be treated—a plan fully consistent with the completed square footage on site. In effect, we have decided to be better – but not bigger – at our Bingham facility.

Refurbishing the wastewater treatment system at Bingham will improve performance. To make sure we don't overload the capacity of the soil to absorb the spray irrigation, we have taken a conservative approach in the design of the spray fields and increased their area. Spraying the same volume of water over a larger area provides greater operational flexibility and reduces environmental impacts.

We are also changing our animal husbandry practices so that we can continue to house animals at Bingham in a way that meets the design specifications of the refurbished treatment system. We plan to do that by maintaining all of our animals on dry bedding that will be swept up and disposed of offsite. We also have installed a new, more efficient cage washer that uses far less water than the old one.

Because of these changes, our permit application does not increase the maximum amount of treated wastewater we can apply to the land by spray irrigation: just over 3,500 gallons per day.

We are eager to get started on this project because, for the past 2½ years since we shut down the faulty system, all the wastewater from the site has been pumped and hauled from Bingham to the OWASA wastewater treatment facility. This has been a noisy and smelly process for us and our immediate neighbors. It's also very expensive. We estimate that refurbishment of the system will cost about \$900,000, much less than the cost of continuing pump and haul operations indefinitely.

To sum up, we made some mistakes at Bingham, we're sorry for them, and we've learned from them. That's why we are here tonight with an application modification. Two years ago, we received two citations from DENR for spills of highly treated waste water. One resulted from a broken pipe in the irrigation system. The other resulted from holes in the plastic liner of one of our holding ponds.

Our new application is designed to ensure that these kinds of spills do not happen again. Specifically, the clay-lined pond meets requirements for the soil filtration step of treatment, so leaks should not be an issue. We will also use a higher quality material for the plumbing and spray heads in the irrigation fields to reduce the risk of broken pipes. We are taking the faulty system out of the ground entirely and getting rid of it.

Under our previous permit, we were required to drill monitoring wells and test the water from those wells at regular intervals. Until we started the pump and haul process, we monitored the groundwater at the Bingham site and the test results showed no pattern of contamination. We have tested our own drinking water well and the drinking water well at the former Lombardo property that adjoins ours and also found no concerns.

Under our new permit, we will be required to drill two additional monitoring wells. We welcome this requirement, as it will provide even more assurance that our wastewater treatment is effective and presents no risk of harming the environment or having any negative effect on any of our neighbors.

I hope this brief overview is helpful to DENR in evaluating our application. Thank you for your time and your attention.