

## **UNC responses to questions submitted by Preserve Rural Orange on Feb. 10, 2010**

Re: Information about UNC Research Resource Facility in Bingham Township

1. We need to see an organization chart that shows titles and responsibilities for the research facility. Names and contact do not have to be included if a problem, but we need to understand what the reporting structure is.

An organization chart is attached.

2. We would like to have provided to us what the process is currently and process in the future if stimulus monies are obtained, for transporting, securing and containing the animals that will be housed at the facility.

Ordinarily, animals are transported to the Bingham Facility in University vehicles in species-appropriate transport cages by DLAM staff. Sometimes a vendor or commercial carrier may deliver animals directly to the facility. The animals are never loose during the transport process. One of the purposes of consolidation at the facility is to decrease the number of trips animals make back and forth to campus. Another point is that these dogs in particular (Nichols and Kornegay) are usually bred in colonies on the site, not imported from other locations. Within the facility, animals are housed securely indoors in cages or runs that are compliant with all applicable requirements and accreditation standards.

3. We have information from the facility's web page and in the attached document that shows that UNC houses quarantined primates and rodents at the facility and plans to house up to 26,000 rodents when the expansion is completed. Is this true?

Because of its off-campus location, the facility is used for the temporary preventative quarantine of new animals (mice, birds and some primates) before research animals on main campus are exposed to them. This is not to say that we have infectious animals on the site. We receive animals from highly reputable institutions and vendors. The preventative quarantine is done to make sure that the animals don't have any condition that might affect the research being done.

The current animal facilities at Bingham are designed to house a variety of animal species, including dogs, pigs, primates and rodents. Long-range plans have changed, and we no longer plan to house 26,000 rodents at the facility as part of the expansion. Current capacity for housing mice is approximately 2,000 mice.

4. We would like to have provided to us what the process is for inspection and regulation of the waste treatment systems at the facility. How often will they be inspected, what tests or inspections are done, where is the documentation filed and who is it reported to?

The wastewater treatment systems at the facility are generally inspected several times a week and preventive maintenance is conducting by Facilities Services. During the inspections, meter readings and other pertinent information are recorded. With regard to spray irrigation, regulatory

forms are filled out by the system operator. At the end of the month, forms are given to Environment, Health and Safety for processing regulatory submittal.

5. We would like an electronic copy of the map Gene Bober displayed at the December 14, 2009 meeting.

We have attached a site plan map.

6. What chemicals and pharmaceuticals are used and stored at the facility? We would like copies of all MSDS sheets from the facility's MSDS book.

Attached is a list of chemicals and pharmaceuticals used at the facility and the typical amounts of each on site. We brought to the Feb. 23 meeting the facility's Material Safety Data Sheets notebook. Individual data sheets are readily available online by typing in the name of the chemical or material into a search engine such as Google.

7. What are the safeguards in place to prevent spillage of waste water in the future? If there are incidents in the future what are the timeframes for reporting them to DENR and the neighbors? How will this be communicated in the future?

8. What will be the guidelines for fixing the animal waste treatment system and bringing it into compliance? What standard will the repairs be made to comply to?

9. Are there plans to have waste water reclamation, rain water capture and reclamation systems installed to facilitate a reduction in the well water consumed? If so when will this system be installed and by what % will the usage of well water be reduced? In our previous meeting we heard that 50% of the usage could be reduced.

We will address these wastewater treatment questions together. We have shut down both wastewater treatment systems so that we can make the necessary repairs. We are also in the process of hiring a consultant to do an integrated water study for the facility, including water reclamation and reuse. We are committed to fixing or replacing the systems to make sure that we remain in compliance with DENR regulations and that our water usage is in keeping with our goal to be as sustainable as possible.

DENR requires spills and other violations to be reported within 24 hours. Typically we do this first with a telephone call, followed by an email. Since establishing an email list following the Dec. 14 meeting, Dwayne Pinkney has shared these reports with neighbors soon after they were sent to DENR, often on the same day.

10. When will the spray fields be used and can the neighbors be notified in advance?

No, there are too many variables involved – weather conditions, wind speed and direction, soil conditions – to be able to notify neighbors in advance. However, now that the treatment systems are shut down, the spray irrigation system will not be used again until the systems are repaired. There is also the possibility that we will use a different system that does not require spray irrigation.

11. When will the incinerator be decommissioned, and how often is it tested?

We do not plan to use the incinerator anymore and have made arrangements to use alternative disposal systems off-site. In the near future, plans will be developed to decommission the incinerator according to regulatory guidelines. No testing is conducted on the incinerator.

12. What are the processes available to be used to determine and remediate contamination of the site, ground water and creek and will UNC be using these to determine and remediate the extent of contamination, if any?

We have reported these incidents to DENR and have followed DENR's requirements. The only spills or leaks at the site involved highly treated wastewater that would have been spray irrigated on the site, so there has been no contamination of the site, groundwater or creek and no remediation is required.

13. Are there plans for a laboratory, research space and ongoing and future research in collaborative gene therapy, protein replacement studies and molecular biology at the expanded facility, as described in the UNC March 21, 2006 environmental assessment?

Yes.

14. According to the UNC March 21, 2006 environmental assessment, a new laboratory is part of the construction plans. Will the new DENR permit show the facility to be a pre-clinical testing laboratory in addition to an animal holding facility?

The DENR permit reflects the wastewater generated, not the type of facility. As part of the pending integrated water study, we will be evaluating the wastewater description and making any permitting changes required by DENR.

15. Does the facility now comply with the FDA's Regulations/Guidelines/Policies (21 CFR Part 58) concerning Good Laboratory Practices (GLP) for Pre-Clinical Testing?

There are no ongoing or planned activities at the facility that are subject to those regulations. GLPs are designed for something different from what we do. We are not doing GLP studies. We are not a GLP lab.

16. Does the facility comply with the NC Department of Environmental and Natural Resources (DENR) Medical Waste Management regulations on what must be incinerated, autoclaved, and discharged into the sewage system, and does the sewage system provide tertiary treatment as described under NC DENR 2T Rules for recycled irrigation of effluent?

Yes to both questions. Medical waste does not go into the sewer system. The only medical waste at the Bingham Facility is sharps (discarded needles and syringes). Medical waste rules regarding blood apply only to human blood, not animal blood. We currently have no infectious wastes because the researchers are studying genetic, not infectious, diseases in animals. If we engage in infectious disease studies in the future, we will follow all applicable regulations.

17. Does the facility use NC Regulated Medical Waste regulations for special handling of certain chemotherapy agents which are considered hazardous materials and require special handling?

There are no ongoing or planned activities at the facility that are subject to those regulations. If such agents were planned to be used on-site in the future, we would follow the same protocols for their use and handling as we do on the main campus.

18. Is the facility an active registered and licensed "Research Facility" under AWA with the USDA? When was the last inspection?

Yes. The last inspection by USDA was January 28, 2010. A copy of the report is attached. This inspection covered all the animal facilities at UNC, not just the Bingham Facility. No citations were related to Bingham.

19. Does the repair of the animal wastewater lagoon include a tank and sensor alarm to capture discharges from the under drain and alert the wastewater treatment plant Operator in Responsible Charge (ORC) or the ORC's back-up of any leak immediately?

Until we have further evaluated both systems, we don't know what the exact repairs and improvements will include. Since both systems are currently shut down, nothing is being discharged into the holding ponds at this time.

List of attachments:

1. Bingham Facility organization structure.
2. Site plan map.
3. List of chemicals and pharmaceuticals on site.
4. USDA inspection report.