

Smith, Kellye

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WD0659

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**From:** Kellye Smith [REDACTED]  
**Sent:** Friday, August 22, 2008 5:05 PM  
**To:** NBAFProgramManager  
**Subject:** NBAF Support in Flora, MS

1|24.5 | I am writing to show my support for the NBAF prospective Flora, MS site.

As a resident of the state of Mississippi and a close neighbor to the Flora area, I would feel privileged to be a part of protecting our nation's security against bioterrorism. I wholeheartedly believe this facility to be safe and secure and having this in our area would only mirror the fantastic opportunities available to our area.

We have everything you are looking for in a potential site. Great quality of life, cooperation for a development of this scale, phenomenal educational institutions, and the physical location itself!

Please strongly consider Flora as the selected location for this facility! We would feel honored to have it here!

With sincere thanks!

Kellye Smith

Comment No: 1

Issue Code: 24.5

DHS notes the commentator's support for the Flora Industrial Park Site Alternative.

Smith, L

Page 1 of 2

WD0793

**From:** L. Smith [REDACTED]  
**Sent:** Monday, August 25, 2008 5:00 PM  
**To:** NBAFProgramManager  
**Subject:** Siting NBAF

Ladies and Gentlemen,

I am writing to express my thoughts about the siting of NBAF. I understand the concerns of residents of Long Island, New York about the possibility of hosting a level-4 facility on Plum Island due to its proximity to heavily populated areas. Siting such a facility on the mainland could pose even greater risk. Ideally the facility could be placed in the most remote territory of the US such as an isolated island in the South Pacific but that could pose logistical difficulties, would be less attractive to researchers, and would involve political issues with nearby populations which would feel less of a stake in the important work done at the lab.

After looking over the potential sites from which one will be selected it seems those in Georgia and North Carolina are poor choices. Both areas are biologically diverse and dense due to the rich forest ecosystems and mild and humid climate. Wild animals - mammals, fish, insects, and birds are very abundant and not only would be affected by a mishap, but would also be vectors for spreading disease very rapidly to domestic animal populations and to humans for zoonotic diseases. The potential for accidents is largely ignored in an EIS which might be described as over confident and overly optimistic. Over time funding-lapses, human error, minor and major terrorism, and natural disasters are a certainty. In addition to being surrounded by woodlands and farmland, these two sites share with Plum Island a proximity to large human population centers (Atlanta, and Raleigh/Durham).

While local officials in North Carolina and in Georgia are often in favor of such a project, their constituent local citizens are generally opposed, especially when they find out that the lab will be level 4. Sites under consideration in Mississippi, Kansas, and Texas may have a much more receptive community. Mississippi is poor and needs high-tech operations with highly educated workers paying taxes. But it shares many of the same environmental issues with Georgia and North Carolina. Kansas is drier and less biologically dense and diverse. The area is also further from major metropolitan areas. But the Texas site has the best location in my opinion since it is closest to the Mexican border. Mexico and Latin America are likely to be the source of many new diseases entering the US in the next century and especially as the climate becomes warmer.

The Athens site is the only one with which I have great familiarity. It is directly overlooking a small "river" which is nevertheless a major aquifer in the surrounding counties. Even though it is on the county-line, it is also very close to heavily populated areas of Athens/Clarke County. Clarke County is the smallest county in the state and despite (or rather because of) being the home of The University of Georgia is quite poor. Given the patterns of growth over the last decades it is most likely the scientists will pay taxes in Oconee County while Clarke County will have the bills for infrastructure which the EIS gives very little real consideration.

Many friends of mine on the faculty at UGA are opposed to this project but afraid to speak out at this time due to the administration's support for the lab. Ordinary citizens are almost uniformly opposed as well. At a recent town meeting every speaker in favor of the lab coming to Athens was from a business concern or a scientist who would hope to be directly involved. 90% of the speakers opposed to the lab were ordinary citizens who represent many more. I know that Georgia citizens are largely distrustful of the federal government and would likely become more

Comment No: 1                      Issue Code: 5.0

DHS notes the commentor's concern. DHS believes that experience shows that facilities utilizing modern biocontainment technologies and safety protocols, such as would be employed in the design, construction, and operation of NBAF, would enable NBAF to be safely operated on the mainland. As described in Section 2.4.3 of the NBAF EIS, other potential locations to construct the NBAF were considered during the site selection process but were eliminated based on evaluation by the selection committee. It was suggested during the scoping process that the NBAF be constructed in a remote location such as an island distant from populated areas or in a location that would be inhospitable (e.g., desert or arctic habitat) to escaped animal hosts/vectors; however, the evaluation criteria called for proximity to research programs that could be linked to the NBAF mission and proximity to a technical workforce. The Plum Island Site is an isolated location as was suggested while still meeting the requirements listed in the EOI.

Comment No: 2                      Issue Code: 13.0

DHS notes the commentor's concern regarding biological resources in the vicinity of the potential NBAF sites. Analysis of Gap Analysis Program data from individual states shows that the overall diversity of breeding wildlife species in the vicinity of the South Milledge Avenue Site is lower than the diversity of breeding species in the vicinity of the Manhattan Campus Site (EIS Section 3.8.4.1.4), Plum Island Site (EIS Section 3.8.6.1.4), and Umstead Research Farm Site (EIS Section 3.8.7.1.4) sites; and is only slightly higher than the diversity of species at the Flora Industrial Park site (EIS Section 3.8.5.1.4). Ungulate (hoofed mammals) wildlife would be most susceptible to the foreign animal diseases that would be studied at the NBAF. The diversity of wild ungulate species is highest in the vicinity of the Manhattan Campus Site (EIS Section 3.8.4.1.4) and the Texas Research Park Site (EIS Section 3.8.8.1.4). The ranges of potential arthropod vectors for Rift Valley fever encompass all of the six NBAF sites. The relative risks associated with each of the sites are addressed in Section 3.14. The potential impacts of an accidental release on wildlife are addressed in Section 3.8.9. Although the NBAF EIS acknowledges the potential for significant impacts on wildlife in the event of an accidental release, the risk of such a release is extremely low (see Section 3.14). It has been shown that modern biosafety laboratories can be safely operated in populated areas and in areas with abundant wildlife. State-of-the-art biocontainment facilities such as the Centers for Disease Control and Prevention in downtown Atlanta, Georgia, employ modern biocontainment technologies and safety protocols, such as would be employed in the design, construction, and operation of NBAF. Furthermore, the purpose of NBAF is to combat diseases that could have significant effects on wildlife. Research at the NBAF would include the development of vaccines for wildlife that could prevent adverse impacts from a foreign introduction.

Comment No: 2                      Issue Code: 19.0

DHS notes the commentor's concerns regarding an accidental release of pathogen from the NBAF, the establishment of that pathogen in native wildlife or vectors such as mosquitoes, and the potential need to eradicate the vectors through aerial spraying. The NBAF would be designed, constructed,

and operated to ensure the maximum level of public safety and to fulfill all necessary requirements to protect the environment. The NBAF would provide state-of-the-art operating procedures and biocontainment features to minimize the potential for outside insect vector penetration, laboratory-acquired infections, vector escape and accidental releases. A discussion of insectary operations is contained in Chapter 2, Section 2.2.1 and elsewhere in the NBAF EIS. Chapter 2, Section 2.2.1.1 (Biosafety Design) of the NBAF EIS, also provides a discussion of the biosafety fundamentals, goals and design criteria for the NBAF operation. In addition, information has been added to Chapter 2 regarding operations and containment of arthropod vectors. Chapter 3, Section 3.14 and Appendix E of the NBAF EIS, investigates the chances of a variety of accidents that could occur with the proposed NBAF and consequences of potential accidents. Accidents could occur in the form of procedural violations (operational accidents), natural phenomena accidents, external events, and intentional acts each of which has the potential to release a vector. Although some "accidents" are more likely to occur than others (e.g., safety protocol not being followed), the chances of an accidental release of a vector are low. DHS would have site-specific Standard Operating Procedures (SOP) and response plans in place prior to the initiation of research activities at the proposed NBAF. In addition, oversight of NBAF operations, as described in Chapter 2, Section 2.2.2.6 of the NBAF EIS, will be conducted in part by the Institutional Biosafety Committee (IBC), which includes community representative participation, and the Animal Research Policy and Institutional Animal Care and Use Committee (APHIS). An analysis of potential consequences of a pathogen (e.g. Rift Valley fever virus) becoming established in native mosquito populations surrounding both the South Milledge Avenue site and the Umstead Research Farm site are specifically addressed in Chapter 3, Section 3.8.9 and Section 3.10.9 as well as in Section 3.14.4 (Health and Safety). Section 3.10.9 discusses the relative suitability of the regional climate of the both the South Milledge Avenue site and the Umstead Research Farm site to promote mosquito survival and virus spread based on the extensive discussion contained in Section 3.4.7 of the NBAF EIS. As such, the RVF response plan would include a mosquito control action plan, and the potential consequences of pesticide use in mosquito control would be evaluated during the preparation of a site specific response plan.

Comment No: 2                      Issue Code: 21.0

DHS notes the commenter's concerns regarding the impact of a pathogen release on the local population, livestock industry, businesses and infrastructure. The NBAF would be designed, constructed, and operated to ensure the maximum level of public safety and to fulfill all necessary requirements to protect the environment. Chapter 3, Sections 3.8.9, 3.10.9, and 3.14 (Health and Safety), and Appendices B, D, and E of the NBAF EIS, provide a detailed analysis of the consequences from a accidental or deliberate pathogen release. Pathogen release scenarios include for example, an analysis of the potential consequences of Rift Valley Fever (RVF) virus becoming established in native mosquito populations. Chapter 3, Section 3.14 and Appendix E of the NBAF EIS, investigates the chances of a variety of accidents that could occur with the proposed NBAF and consequences of potential accidents, including releases due to weather events. The chances of an

accidental release are low. Although some "accidents" are more likely to occur than others (e.g., safety protocol not being followed), the chances of an accidental release based on human error are low in large part due to the design and implementation of biocontainment safeguards in conjunction with rigorous personnel training. For example, as described in Chapter 2, Section 2.2.2.1 of the NBAF EIS, all laboratory staff would receive thorough pre-operational training, as well as ongoing training, in the handling of hazardous infectious agents, understanding biocontainment functions of standard and special practices for each biosafety level, and understanding biocontainment equipment and laboratory characteristics. Appendix B to the EIS describes biocontainment lapses and laboratory acquired infections. Laboratory-acquired infections have not been shown to be a threat to the community at large. As set out in Chapter 3, Section 3.14.3.4 of the NBAF EIS, employees and contractors will be screened prior to employment or engagement and monitored while working, among other security measures. In addition, oversight of NBAF operations, as described in Chapter 2, Section 2.2.2.6 of the NBAF EIS, will be conducted in part by the Institutional Biosafety Committee (IBC), which includes community representative participation, and the Animal Research Policy and Institutional Animal Care and Use Committee (APHIS). Should the NBAF Record of Decision call for the design, construction, and operations of the NBAF, site specific protocols would then be developed in coordination with local emergency response agencies and would consider the diversity and density of populations, including institutionalized populations, residing within the local area. The need for an evacuation under an accident conditions is considered to be a very low probability event. DHS would have site-specific standard operating procedures and emergency response plans in place prior to the initiation of research activities at the proposed NBAF. DHS believes that experience shows that facilities utilizing modern biocontainment technologies and safety protocols, such as would be employed in the design, construction, and operation of the NBAF, would enable the NBAF to be safely operated.

DHS also notes the commentor's concerns regarding the risk of a potential accident or terrorist event. The NBAF would be designed, constructed, and operated to ensure the maximum level of public safety and to fulfill all necessary requirements to protect the environment. As described in Chapter 3 and summarized in Section 2.5 of the NBAF EIS, the impacts of activities during normal operations at any of the six site alternatives would likely be minor. Chapter 3, Sections 3.8.9, 3.10.9, and 3.14 (Health and Safety), and Appendices B, D, and E of the NBAF EIS, provide a detailed analysis of the consequences from a accidental or deliberate pathogen release. Should the NBAF Record of Decision call for the design, construction, and operations of the NBAF then site specific protocols would be developed, in coordination with local emergency response agencies that would consider the diversity and density of populations residing within the local area. DHS would have site-specific standard operating procedures and response plans in place prior to the initiation of research activities at the proposed NBAF. Chapter 3, Section 3.14 and Appendix E of the NBAF EIS, addresses accident scenarios, including external events such as a terrorist attack. A separate Threat and Risk Assessment (TRA) was developed outside of the EIS process in accordance with the requirements

stipulated in federal regulations. The TRA is "For Official Use Only" and is not available for public review. The purpose of the TRA was to identify potential vulnerabilities and weaknesses associated with the NBAF and are used to recommend the most prudent measures to establish a reasonable level of risk for the security of operations of the NBAF and public safety. Because of the importance of the NBAF mission and the associated work with potential high-biocontainment biological pathogens, critical information related to the potential for adverse consequences as a result of intentional acts has been incorporated into the NEPA process. Security would be provided by a series of fencing, security cameras, and protocols. In addition, a dedicated security force would be present on-site. Additional security could be provided via cooperation with local law enforcement agencies. The TRA and security actions that would be implemented, based on TRA recommendations, are confidential due to NBAF security considerations.

Comment No: 3                      Issue Code: 15.0

DHS notes the commentor's opinion regarding the final site alternatives. DHS held a competitive process to select potential sites for the proposed NBAF as described in Section 2.3.1 of the NBAF EIS. A team of Federal employees representing multi-department component offices and multi-governmental agencies (DHS, U.S. Department of Agriculture [USDA], and Department of Health and Human Services [HHS]) reviewed the submissions based primarily on environmental suitability and proximity to research capabilities, proximity to workforce, acquisition/construction/operations, and community acceptance. Ultimately, DHS identified five site alternatives that surpassed others in meeting the evaluation criteria and DHS preferences, and determined that they, in addition to the Plum Island Site, would be evaluated in the EIS as alternatives for the proposed NBAF. A Record of Decision (ROD) that explains the final decisions will be made available no sooner than 30 days after the NBAF Final EIS is published.

Comment No: 4                      Issue Code: 5.6

DHS notes the commentor's support for the Texas Research Park Site Alternative due to its proximity to the Mexican border.

Comment No: 5                      Issue Code: 21.0

DHS notes the commentor's statement.

Comment No: 6                      Issue Code: 12.2

DHS notes the commentor's watershed concerns. The NBAF EIS Section 3.13.4 describes the Waste Management processes that would be used to control and dispose of NBAF's liquid and solid waste. Sections 3.3.3 and 3.7.3 describe standard methods used to prevent and mitigate potential spills and runoff affects. As described in Section 2.3.1, DHS's site selection process incorporated site selection criteria that included, but were not limited to, such factors as proximity to research capabilities and workforce. As such, some but not all of the sites selected for analysis as reasonable

alternatives in the NBAF EIS are located in suburban or sem-urban areas. It has been shown that modern biosafety laboratories can be safely operated in populated areas. An example is the Centers for Disease Control and Prevention in downtown Atlanta, Georgia, where such facilities employ modern biocontainment technologies and safety protocols, such as would be employed in the design, construction, and operation of NBAF.

Comment No: 7                      Issue Code: 15.2

DHS notes the commentor's concern. Funding for the design, construction, and operations for the NBAF will come from the Federal Government. Proposals for offsets to the site infrastructure (part of the construction costs) were requested by the Federal government. The decision as to what to offer (land donation, funding, other assets) is solely at the discretion of the consortium, state and local officials as part of the consortium bid site package. The amount of funding and how the funding is paid for (bonds, taxes, etc) is determined by the state and local government officials and not the decision of the Federal government.

Comment No: 8                      Issue Code: 2.0

DHS notes the commentor's opinion that the citizens of Georgia lack trust in the federal government. Section 3.14 and Appendix E of the NBAF EIS state that the specific objective of the hazard identification is to identify the likelihood and consequences from accidents or intentional subversive acts. In addition to identifying the potential for or likelihood of the scenarios leading to adverse consequences, this analysis provides support for the identification of specific engineering and administrative controls to either prevent a pathogen release or mitigate the consequences of such a release. The NBAF would provide state-of-the-art operating procedures and biocontainment features to minimize the potential for laboratory-acquired infections and accidental releases. The risk of an accidental release of a pathogen is extremely low. Appendix B describes biocontainment lapses and laboratory acquired infections. Laboratory-acquired infections have not been shown to be a threat to the community at large. Should the NBAF Record of Decision call for the design, construction, and operation of the NBAF then site-specific protocols would be developed, in coordination with local emergency response agencies that would consider the diversity and density of human, livestock, and wildlife populations residing within the local area. DHS would have site-specific standard operating procedures and response plans in place prior to the initiation of research activities at the proposed the NBAF.

Smith, L

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WD0793

cont. | 8 | 2.0

and more resentful of such a lab being situated in our area.  
Thank you for your consideration of my concerns.  
Sincerely,  
L. Smith

Smith, Ph.D., William

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WD0458

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**From:** William Smith [wsmith@emporia.edu]  
**Sent:** Friday, August 22, 2008 3:08 PM  
**To:** NBAFProgramManager  
**Subject:** SUSPECT: Comment of siting NBAF in Manhattan, Kansas

1| 24.4

I strongly support siting the NBAF in Manhattan, Kansas. NBAF belongs in Kansas on the merits due to our unique ability to protect America's food supply and agricultural economy. KSU and Manhattan have been developing and supporting services for over a hundred years for this and related programs.

\*\*\*\*\*  
 William L. Smith, Ph. D.  
 Professor and Chair  
 Business Administration and Education Department  
 Director, Center for Business and Economic Development  
 Sam Walton Fellow  
 School of Business  
 Emporia State University  
 Campus Box 4058, 1200 Commercial  
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 620-341-5729  
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 wsmith@emporia.edu  
<http://www.emporia.edu/business/bachome.php>  
<http://www.emporia.edu/business/cbedhome.php>

\*\*\*\*\*  
 Dr. Bill ;-)  
 Personal Blog: <http://flinhillsofkansas.blogspot.com/>  
 William L. (Bill) Smith, Ph. D.  
 President, Flint Hills Tourism Coalition, Inc.  
 Representing the 22 counties of the Kansas Flint Hills  
[www.kansasflin hills.travel](http://www.kansasflin hills.travel)

Comment No: 1      Issue Code: 25.4  
 DHS notes the commentor's support for the Manhattan Campus Site Alternative.



**Snelson, DVM, Harry**

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WD0842

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**From:** Harry Snelson [snelson@aaav.org]  
**Sent:** Monday, August 25, 2008 7:38 PM  
**To:** NBAFProgramManager  
**Subject:** NBAF DEIS comments  
**Attachments:** 20080825 NBAF DEIS.doc

Please find attached comments concerning the NBAF Draft EIS.

Harry Snelson, DVM  
American Association of Swine Veterinarians  
Director, Communications  
PO Box 1291  
Burgaw, NC 28425  
B: (910) 221-5316  
F: (910) 221-5317  
snelson@aaav.org

Snelson, DVM, Harry

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902 1<sup>st</sup> AVENUE • PERRY, IA 50220 • USA • PHONE 515-465-5255 • FAX 515-465-3832 • aasv@aasv.org

August 25, 2008

U.S. Department of Homeland Security;  
 Science and Technology Directorate;  
 James V. Johnson;  
 Mail Stop #2100;  
 245 Murray Lane, SW; Building 410;  
 Washington, DC 20528

Re: Comments on the National Bio and Agro-Defense Facility Draft Environmental Impact Statement

Dear Mr. Johnson,

- 1| 1.0 The American Association of Swine Veterinarians (AASV) supports plans to address facility needs that enhance the ability of the USDA and DHS to conduct research, diagnostics and training on diseases affecting animal agriculture.
- 2| 5.1 This mission is currently conducted at the Plum Island Animal Disease Center located on Plum Island off the New York coast. This facility is over 50 years old and in need of replacement or significant renovation and expansion to enable USDA to adequately meet its mission to "protect United States animal industries and exports against catastrophic economic losses caused by foreign animal disease (FAD) agents accidentally or deliberately introduced into the U.S."
- 3| 1.0

The DHS, which currently provides operational management of the Plum Island facility and is charged with protecting agriculture as a critical infrastructure, has determined that this mission can be best achieved by constructing a new facility, the National Bio and Agro-Defense Facility (NBAF). The location of the new facility is currently under consideration.

The AASV offers the following comments with regards to the proposed NBAF:

- 4| 1.0 1. The facility design, operation and research direction should focus on enhancing the mission of USDA to prevent, diagnose and treat foreign animal diseases and to increase the training opportunities afforded veterinarians and animal health officials.
- 5| 21.0 2. The location of the facility should be determined after a thorough scientific review of potential sites assessing such factors as environmental impact, resource availability, public perception, accessibility, construction and operation costs, and risk of disease transmission to susceptible livestock and wildlife populations. A thorough analysis of the potential impact to the animal agriculture industry of an intentional or accidental release of pathogenic organisms from the facility should be conducted as part of the site selection process.
- 6| 15.0 The risk assessment conducted by DHS as part of the Draft Environmental Impact Statement appears inadequate to fully estimate the economic impact associated with the release of a foreign animal disease in the U.S. The economic consequences extend well beyond the local impact. The unencumbered interstate and international movement of livestock and livestock products is essential. For example, swine producers in North Carolina ship 25,000 pigs per day across state lines to off-site nursery and grow-out facilities. On any given day, thousands of truckloads of livestock and poultry move across state lines. Exports account for almost 20% of domestic pork production. All of these movements would cease upon the confirmation of a foreign animal disease outbreak in the U.S. resulting in catastrophic losses to animal agriculture nationwide.
- 7| 23.0 3. The design of the facility should be based on an estimation of the scope of work to be conducted at the facility developed in collaboration with livestock veterinarians, researchers, industry stakeholders and the

Comment No: 1      Issue Code: 1.0

DHS notes the commentator's support for the proposed research that would be conducted within the NBAF.

Comment No: 2      Issue Code: 5.1

DHS notes the commentator's statement.

Comment No: 3      Issue Code: 1.0

DHS notes the commentator's support for the proposed research that would be conducted within the NBAF. DHS's mission is to study foreign animal and zoonotic (transmitted from animals to humans) diseases that threaten our agricultural livestock and agricultural economy. The purpose of the NBAF would be to develop tests to detect foreign animal and zoonotic diseases and develop vaccines (or other countermeasures such as antiviral therapies) to protect agriculture and food systems in the United States.

Comment No: 4      Issue Code: 1.0

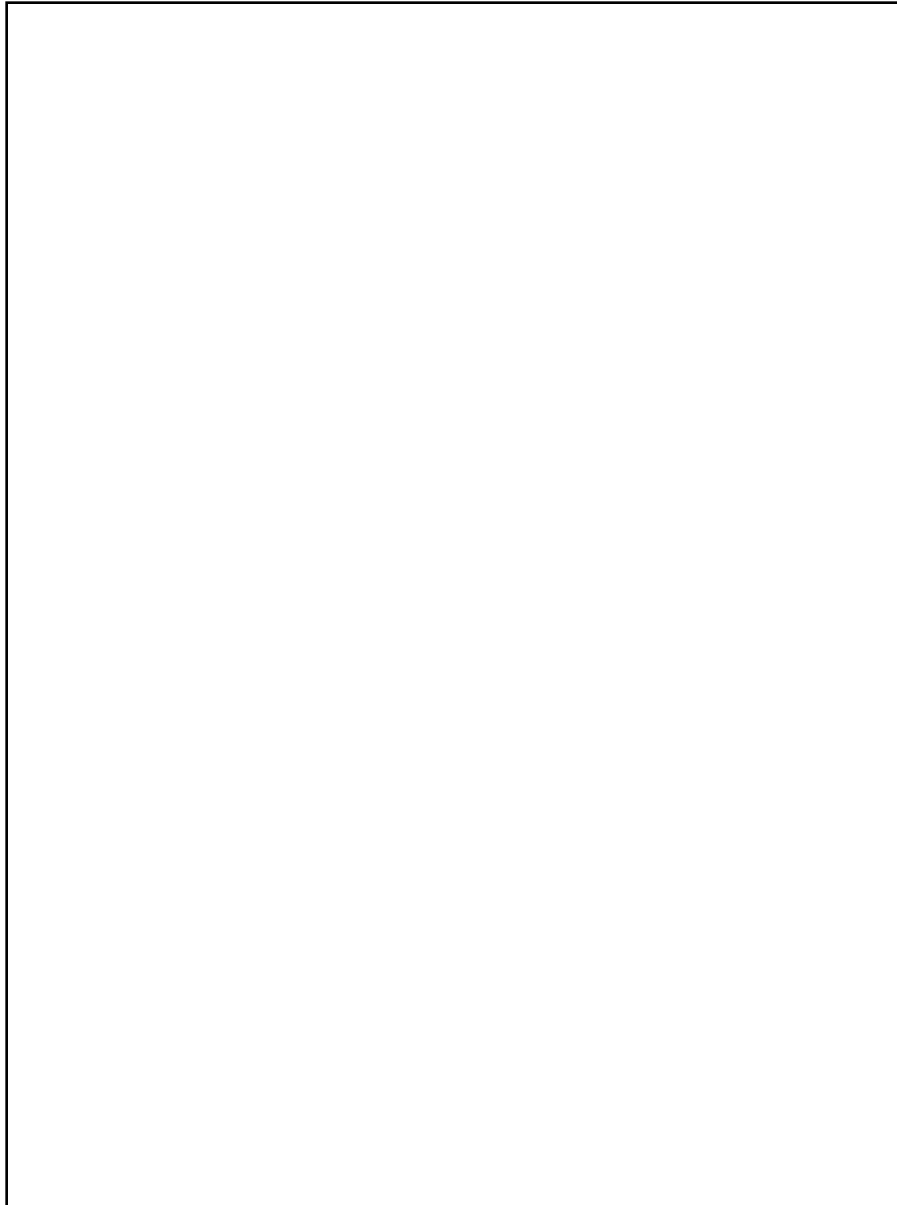
DHS notes the commentator's support for the proposed research that would be conducted within the NBAF.

Comment No: 5      Issue Code: 21.0

DHS notes the commentator's statement. As summarized Section 3.1 of the NBAF EIS, DHS analyzed each environmental resource area in a consistent manner across all the alternatives to allow for a fair and objective comparison among the alternatives. DHS has identified its Preferred Alternative in Section 2.6 in accordance with Council on Environmental Quality regulations (40 CFR 1502.14(e)) for implementing NEPA. The Preferred Alternative is one that an agency believes would best fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. Several factors will affect the decision on whether or not the NBAF is built, and, if so, where. The NBAF EIS itself will not be the sole deciding factor. The decision will be made based on the following factors: 1) analyses from the EIS; 2) the four evaluation criteria discussed in Section 2.3.1; 3) applicable federal, state, and local laws and regulatory requirements; 4) consultation requirements among the federal, state, and local agencies, as well as federally recognized American Indian Nations; 5) policy considerations; and 6) public comment. The DHS Under Secretary for Science and Technology Jay M. Cohen, with other department officials, will consider the factors identified above in making final decisions regarding the NBAF. A Record of Decision that explains the final decisions will be made available no sooner than 30 days after the NBAF Final EIS is published.

Comment No: 6      Issue Code: 15.0

Chapter 3, Section 3.14 and Appendix E of the NBAF EIS investigate the chances of a variety of accidents that could occur with the proposed NBAF and consequences of potential accidents, DHS



cannot guarantee that the NBAF would never experience an accident; however, the risk of an accidental release of a pathogen from the NBAF is extremely low. The economic impact of an accidental release, including the impact on the livestock-related industries, is presented in Chapter 3, Section 3.10.9 and Appendix D of the NBAF EIS. The major economic effect from an accidental release of a pathogen would be a potential ban on all U.S. livestock products until the country was determined to be disease-free.

Comment No: 7                      Issue Code: 23.0

DHS notes the commentor's concerns that no detailed description of the scope of work has been shared with stakeholder organizations. DHS will provide specifics if the NBAF is to be built and after the site is selected.

Snelson, DVM, Harry

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WD0842

cont. | 7 | 23.0

USDA. To date, no detailed description of the scope of work has been shared with stakeholder organizations. It is difficult to assess the appropriateness of the NBAF proposal without an understanding of the ability of the facility to meet the current and future needs of the animal agriculture industry.

In summary, the AASV supports the development of a facility that enhances research, diagnostics and training to enable the USDA to conduct its mission to protect U.S. animal industries and exports against catastrophic economic losses resulting from the introduction of a foreign animal disease. It is our concern, however, that the current process being employed is inadequate to select the most appropriate site for the future facility. The location of this facility should be determined based on a thorough analysis of potential sites with regards to the accidental or intentional exposure of susceptible livestock and wildlife species to pathogenic organisms and the subsequent economic impact to the U.S. animal agriculture industry. This consideration, along with access to necessary resources, should be of paramount importance when evaluating potential locations.

The AASV appreciates the opportunity to comment on the National Bio and Agro-Defense Facility Draft Environmental Impact Statement.

Sincerely,

Harry Snelson, DVM  
Communications Director  
American Association of Swine Veterinarians

Snoweiss, Howard

Page 1 of 1

WD0260

**From:** Howard Snoweiss [REDACTED]  
**Sent:** Thursday, August 14, 2008 9:02 AM  
**To:** NBAFProgramManager  
**Subject:** Plum Island

Gentlemen:

1|25.1 I am writing to express my concerns and objections to any further use of Plum Island. It is well known that there are many unsafe and undesirable diseases stored and experimented with at this facility. The documented origin and spread of Lymes Disease in our area and around the country is only one of these dangerous effects, not to mention the storage of anthrax and many diseases unsafely delivered form around the world. The non existent security makes it a major terrorist target that is a threat not only to the eastern end of Long Island, but to New York city itself. Additionally, the age and obsolesce of the facility, both Lab 258 and 101, make it totally unacceptable and dangerous. Further use of this facility, and especially at a higher level of danger, should be prohibited and the facility removed, abandoned, and safely closed.

Howard Snoweiss  
[REDACTED]Comment No: 1      Issue Code: 25.1

DHS notes the commentor's opposition to the Plum Island Site Alternative.

Comment No: 2      Issue Code: 21.1

DHS notes the commentor's concern. The NBAF would be designed, constructed, and operated to ensure the maximum level of public safety. Regardless of location, the NBAF would have the levels of protection and control required by applicable DHS security directives. Section 3.14 and Appendix E of the NBAF EIS address accident scenarios, including external events such as a terrorist attack. A separate Threat and Risk Assessment (TRA) was developed outside of the EIS process in accordance with the requirements stipulated in federal regulations. The purpose of the TRA was to identify potential vulnerabilities and weaknesses associated with the NBAF and are used to recommend the most prudent measures to establish a reasonable level of risk for the security of operations of the NBAF and public safety. Because of the importance of the NBAF mission and the associated work with potential %high-consequence biological pathogens%, critical information related to the potential for adverse consequences as a result of intentional acts has been incorporated into the NEPA process.

Comment No: 3      Issue Code: 23.0

DHS notes the commentor's concerns and agrees that the PIADC should be replaced with NBAF.

Snyder, Pam

Page 1 of 1

WD0507

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**From:** Pam Snyder [Pam\_Snyder@hillspet.com]  
**Sent:** Friday, August 22, 2008 2:30 PM  
**To:** NBAFProgramManager  
**Subject:** Fw: Your immediate support is needed! Make your voice heard!

1|24.4 | I support NBAF in Kansas!!

**Pam Snyder**

Hill's Pet Nutrition, Inc | Broker Manager

☎: 785.368.5498 (office) | ☎: 785.368.5525 (fax) | ☎: 954.609.9257 (cell)

📍: 400 SW 8th Ave | Topeka, Kansas | 66603

✉: [pam\\_snyder@hillspet.com](mailto:pam_snyder@hillspet.com)

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Comment No: 1      Issue Code: 24.4

DHS notes the commentor's support for the Manhattan Campus Site Alternative.

**Spann, Kathryn**

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**WD0766**

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**From:** Kathryn Spann [kathryn6668@yahoo.com]  
**Sent:** Monday, August 25, 2008 3:53 PM  
**To:** James V. Johnson  
**Subject:** DEIS comment  
**Attachments:** DEIS formal comment v4.doc

Please see attached comment.

Spann, Kathryn

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WD0766

August 25, 2008

U.S. Dept. of Homeland Security  
 Science and Technology Directorate  
 James V. Johnson  
 Mail Stop 2100  
 245 Murray Lane SW  
 Building 410  
 Washington, D.C. 20528

Re: DEIS for National Bio- and Agro- Defense Facility

Dear Mr. Johnson,

The Granville Non-Violent Action Team submits the following comments on the Draft Environmental Impact Statement ("DEIS"). Left margin references are to pages within the DEIS.

In light of the significant amount of information which is flat-out absent from the DEIS, such that no comment can be made except to point out the absence of information, inclusion of this information in the FEIS is insufficient to comply with NEPA unless a further public comment period is provided for input on information first appearing in the FEIS.

The DEIS is initially deficient in failing to include any discussion whatsoever of the costs which each host site is expected to bear. The NBAF Feasibility Study states that the host state/locality are expected to pay for the concrete pad for the NBAF, for all utilities to be extended to a point 5 feet away from the facility walls, and for the Central Utilities Plant, among other items. See NBAF Feasibility Study at pdf pages 14 and 15, available at [http://www.thememoryhole.org/dhs/nbaf/dhs\\_nbaf-feasibility-study.pdf](http://www.thememoryhole.org/dhs/nbaf/dhs_nbaf-feasibility-study.pdf) ("the following items are not included in the [\$451, now updated to 523, million] project budget noted above, and will require in-kind project contributions: mobile non-fixed program specific scientific equipment, CUP [central utilities plant], and all site utilities beyond five feet of the buildings"). We note that Homeland Security has expressed a preference for the host area to provide these items. See pages 10-11 of May 22, 2008 prepared testimony of Jay Cohen, Homeland Security Undersecretary for Science and Technology before the House Committee on Energy and Commerce, Subcommittee on Oversight and Investigations, available at [http://energycommerce.house.gov/cmte\\_mtgs/110-oi-hrg.052208.Cohen-Testimony.pdf](http://energycommerce.house.gov/cmte_mtgs/110-oi-hrg.052208.Cohen-Testimony.pdf). Accordingly, the DEIS must include a list of the items sought to be charged against the host site, together with cost estimates for these items. We note that Homeland Security is in possession of this data, which is set forth on a site-specific basis, although entirely redacted, in the NBAF Site Cost Analysis, available at [http://www.dhs.gov/xlibrary/assets/nbaf\\_site\\_cost\\_analysis.pdf](http://www.dhs.gov/xlibrary/assets/nbaf_site_cost_analysis.pdf) (PDF, 118 pages - 33 MB). The DEIS must include a comprehensive -- unredacted -- list of such items, with site-specific cost estimates, so that all decision-makers (not only Homeland Security) may have this information before them.

1| 23.0

Comment No: 1 Issue Code: 23.0

DHS notes the commentor's statement. The preliminary costs found in Section 2.5.1 were obtained from the preliminary Site Cost Analysis and were included only to provide the readers with a general idea of the cost of construction and operation of the NBAF. As the process continues, the cost of constructing and operating the NBAF will be refined. The cost of training both DHS and first responder personnel will be included in the final cost for the project. It has not yet been determined.

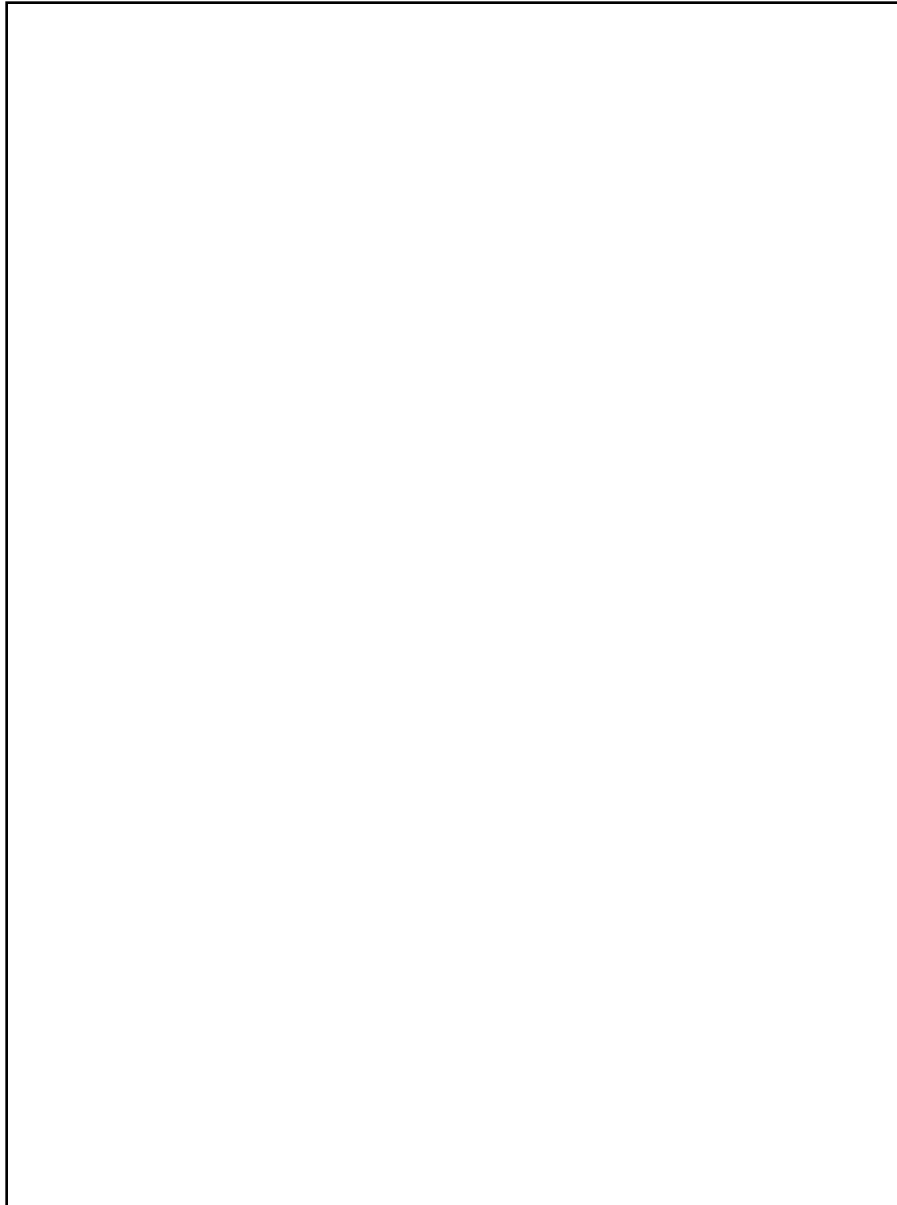
As stated in Section 2.2.2, the NBAF may be operated as a Government Owned/Government Operated Facility (GOGO) or as a Government Owned/Contractor Operated Facility (GOCO). A program management plan, which sets forth management, supervisory, and contracting activities between the Federal government and a contractor would be prepared for NBAF if it is decided that the NBAF would be GOCO. Decisions related to whether NBAF would be operated as either a GOGO or GOCO would not be made until after the Record of Decision is issued, if a decision is made to build NBAF and a site is selected. This decision and associated management and contracting arrangements associated with it are not within the scope of the NBAF EIS and the NEPA process.

As discussed in Section 2.2 of the NBAF EIS, DHS prepared the NBAF Conceptual Design and Feasibility Study which describes the programmatic, technical, and non-site-specific requirements for the NBAF to determine the feasibility of the project and to prepare a preliminary conceptual design. Based on the conceptual design and other sources as cited in the NBAF EIS, a description of the construction and operational aspects for the NBAF was developed for the purposes of analyzing the potential environmental impacts and utilizing site-specific data for each candidate site. As noted throughout the NBAF EIS, potential environmental impacts were assessed based on conservative assumptions to ensure that the maximum potential effects were identified across all resource areas and at all site locations, so as to allow for a fair comparison among the alternatives evaluated. By using a conceptual facility design and bounding case parameters for assessing potential environmental impacts from construction and operations, DHS has adhered to its obligations under NEPA to integrate the NEPA process with other planning processes at the earliest possible time to ensure that planning and decisions reflect environmental values, to avoid delays later in the process, and to head off potential conflicts as set forth in Council on Environmental (CEQ) regulations (40 CFR 1501.2). It would not be practical to prepare actual building and construction plans, as noted by the commentor, until a site is selected and the potential maximum impacts have been assessed.

DHS notes the commentor's concerns about long-term funding for the NBAF to ensure safe operations. The U.S. Congress and the President are responsible for determining funding priorities for government programs. DHS spends funds in accordance with congressional intent. DHS would maintain the NBAF and ancillary facilities in compliance with applicable environmental, safety, and health requirements and provide for safe operation and maintenance.

DHS notes the commentor's concern that all possible pathogens to be studied at the NBAF are not





listed in the NBAF EIS. The pathogens to be studied at the NBAF as provided in Chapter 2, Section 2.2.1 of the NBAF EIS include Foot and Mouth Disease virus, Classical Swine Fever virus, Vesicular Stomatitis virus, Rift Valley Fever virus, Nipah virus, Hendra virus, and African Swine Fever virus. Should the NBAF be directed to study any pathogens not included in the list of pathogens included in the NBAF EIS, DHS and USDA would conduct an evaluate of the new pathogen(s) to determine if the potential challenges and consequences were bounded by the current study. If not, a new risk assessment would be prepared and a separate NEPA evaluation may be required.

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It appears that this cost is the difference between the total project cost of \$705,363,565 (see NBAF Site Cost Analysis at Section 4, page 3) and the lower construction cost figure of \$523,711,811 (see NBAF Site Cost Analysis at Section 5, page 1) that Homeland Security is using for its budgeting purposes. That difference equals **\$181,651,754**. This number is borne out by the costs entailed in building the Galveston National Laboratory, cited elsewhere in the DEIS for comparison (see page 3-60). That laboratory, which is approximately 1/3 the size of the NBAF, had a "total construction cost" of \$167 million, with federal government spending of \$110 million and a "local share" of \$58.6 million. See <http://www.utmb.edu/GNL/about/index.shtml>.

1 cont. | The figures listed above do not include the cost of training first responders (which is not included  
23.0 | in DHS's security budget) and the cost of necessary improvements to transportation  
2 | 15.0 | infrastructure between I-85 and the NBAF site.  
3 | 17.0 |  
4 | 3.0 |

Further, the DEIS must detail what if any local, state and property taxes the NBAF will pay.

5 | 19.3 | We also note the complete absence of any discussion about impact of quarantine or evacuation  
6 | 15.3 | on the 7,000 institutionalized individuals in Butner – where can 5,000 inmates be moved? How  
can guards go to and from work? How can nurses, technicians, cafeteria workers go to and from  
work at the Murdoch Center and Umstead Hospital and the new Central Regional Mental Health  
Facility? How can Homeland Security ensure that even the rumor of a significant incident at the  
NBAF does not lead to complete flight of the staff, leaving very vulnerable individuals with no  
care at all? Although the DEIS references plans, in the event of a foot and mouth disease release,  
to "completely close all or part of either the infected zone or the surveillance/movement control  
zone," and notes that this "would have significant impacts on facilities, employees and residents  
in the enclose area" (see page 3-216), there is no discussion of how this would impact these  
vulnerable populations.

1 cont. | We also note the complete absence of any discussion about facility security: to what extent are  
23.0 | local first responders expected to meet these needs? Will security be handled by a private  
7 | 21.3 | contractor? How will fire be handled? How will scientists be screened to avoid another Bruce  
Ivins/Ft. Detrick/Anthrax incident? Given the March 2008 Government Accountability Office  
("GAO") report detailing extremely substandard performance by the Federal Protective Service  
in its mission of providing security for federal facilities such as this, and the history of security  
deficiencies at Plum Island as detailed in the GAO's September 2003 report, the DEIS cannot  
ignore this issue.

1 cont. | The DEIS also is grossly deficient in failing to include any actual design plans – and more  
23.0 | particularly, site-specific non-conceptual design plans. The conceptual plans given provide no  
detail whatsoever which would enable the reviewer to ascertain the alleged robustness of the  
containment systems, or the full range of environmental impacts that the actual structure to be  
built may implicate. With no renderings to detail the many complex systems upon which the all-  
important issue of containment is dependent, the risk analysis is meaningless. In the absence of  
actual plans, the NEPA process has been reduced to a purely hypothetical exercise and can  
provide no real-world guidance. Further, the absence of design specifics means that the public

Comment No: 2 Issue Code: 15.0

DHS notes the commentor's concern. The potential economic effects of an accidental release, including the impacts from an FMD outbreak are discussed in Section 3.10.9 and Appendix D. Although, the risk is low, the EIS acknowledges that a virus released to the environment could become established and result in significant economic harm through damage to the livestock industry (culling and export bans) from FMD or through increased public health costs associated with the treatment of humans infected with the causal agent of RVF or Nipah. The study cited for RVF likely represents a worst-case scenario because the effects estimated in that study would arise from a terrorist action.

Infrastructure costs were analyzed and included in the final costs provided in the EIS. Additionally, the Site Cost Report is available on the NBAF Web Site for public review.

Comment No: 3 Issue Code: 17.0

DHS notes the commentor's concern regarding the infrastructure improvements and associated costs required for the NBAF operation at the Umstead Research Farm site. Section 3.3.7 and Section 3.11.7 of the NBAF EIS includes an assessment of the current utility and transportation infrastructure at the Umstead Research Farm Site, the potential impact and effects from construction and operation of the NBAF, and the planned utility and transportation improvements to meet the operational requirements of the NBAF. While the potential costs of proposed actions are not a factor in the environmental impact analysis presented in the NBAF EIS, cost information of the NBAF Alternatives is summarized in Section 2.5, Table 2.5.1-1 of the NBAF EIS to provide pertinent information to the DHS Under Secretary for Science and Technology so that he may make a more informed decision with respect to the alternatives presented in the NBAF EIS. Infrastructure costs were analyzed and included in the final costs provided in the NBAF EIS. Additionally, the Site Cost Analysis Report, available on the NBAF Web Site for public review and discussed in Section 2.6, is one of several reports that will be considered in addition to the NBAF EIS, in selecting the Preferred Alternative for the Final EIS and ROD.

Comment No: 4 Issue Code: 3.0

DHS notes the commentor's question. It is unknown how much property tax the federal government would pay annually for the site. Should a decision be made to build NBAF, DHS would meet all federal, state and local regulations. DHS notes the commentor's question regarding whether oversight of NBAF operations would include representatives from local municipalities. Procedures and plans to operate the NBAF will include the Institutional Biosafety Committee, which will include community representatives as described in Section 2.2.2.6 of the NBAF EIS. Should a decision be made to build NBAF and the site selected, DHS would begin transition and operational planning which would include consideration of policies and procedures for public participation, education, and also public advisory initiatives. After DHS determines the viability and nature of such a public advisory and oversight function, appropriate roles and responsibilities would be defined.

Comment No: 5                      Issue Code: 19.3

DHS notes the commentor's concerns regarding the impact of an accident and subsequent potential evacuation on the hospitalized and institutionalized population and the low-income and minority population. The NBAF would be designed, constructed, and operated to ensure the maximum level of public safety and to fulfill all necessary requirements to protect the environment. Section 3.14 and Appendix E of the NBAF EIS investigate the chances of a variety of accidents that could occur with the proposed NBAF and consequences of potential accidents. The chances of an accidental release are low. %Appendix B to the NBAF EIS describes biocontainment lapses and laboratory acquired infections in the United States and world-wide. Laboratory-acquired infections have not been shown to be a threat to the community at large. Should the NBAF Record of Decision call for the design, construction, and operations of the NBAF at the Umstead Research Farm Site then site-specific protocols would be developed, in coordination with local emergency response agencies that would consider the diversity and density of populations, including institutionalized populations, residing within the local area. The need for an evacuation under accident conditions is considered to be very low probability event. An evacuation would not be necessary if FMDV were accidentally released from NBAF, since FMDV is not a public health threat. DHS would have site-specific standard operating procedures and emergency response plans in place prior to the initiation of research activities at the proposed NBAF.

Comment No: 6                      Issue Code: 15.3

DHS notes the commentor's concern about an emergency response and accidental release. As described in Section 2.3.1 of the NBAF EIS, DHS's site selection criteria included, but were not limited to, such factors as proximity to research capabilities and workforce. As such, some but not all of the sites selected for analysis as reasonable alternatives in the NBAF EIS are located in suburban or semi-urban areas. Nevertheless, it has been shown that modern biosafety laboratories can be safely operated in populated areas. An example is the Centers for Disease Control and Prevention in downtown Atlanta, Georgia, where such facilities employ modern bio-containment technologies and safety protocols, such as would be employed in the design, construction, and operation of NBAF.

Section 3.14 investigates the chances of a variety of accidents that could occur with the proposed NBAF and consequences of potential accidents. Accidents could occur in the form of procedural violations (operational accidents), natural phenomena accidents, external events, and intentional acts. Although some accidents are more likely to occur than others (e.g., safety protocol not being followed), the chances of an accidental release are low.

Once the Record Of Decision has been signed and prior to the initiation of NBAF operations, a site-specific emergency management plan will be developed that will be coordinated with the local emergency response agencies and will include contingency plans for potentially affected residents

and would include stipulations for any special-needs populations including institutionalized populations. DHS would offer coordination and training to local medical personnel regarding the effects of pathogens to be studied at the NBAF. Emergency management plans would also include training for local law enforcement, health care, and fire and rescue personnel.

Section 3.14 and Appendix E of the NBAF EIS investigate the chances of a variety of accidents that could occur with the proposed NBAF and consequences of potential accidents. DHS cannot guarantee that the NBAF would never experience an accident. However, the risk of an accidental release of a pathogen from the NBAF is extremely low. The economic impact of an accidental release, including the impact on the livestock-related industries, is presented in Section 3.10.9 and Appendix D of the NBAF EIS. The major economic effect from an accidental release of a pathogen would be a potential ban on all U.S. livestock products until the country was determined to be disease-free.

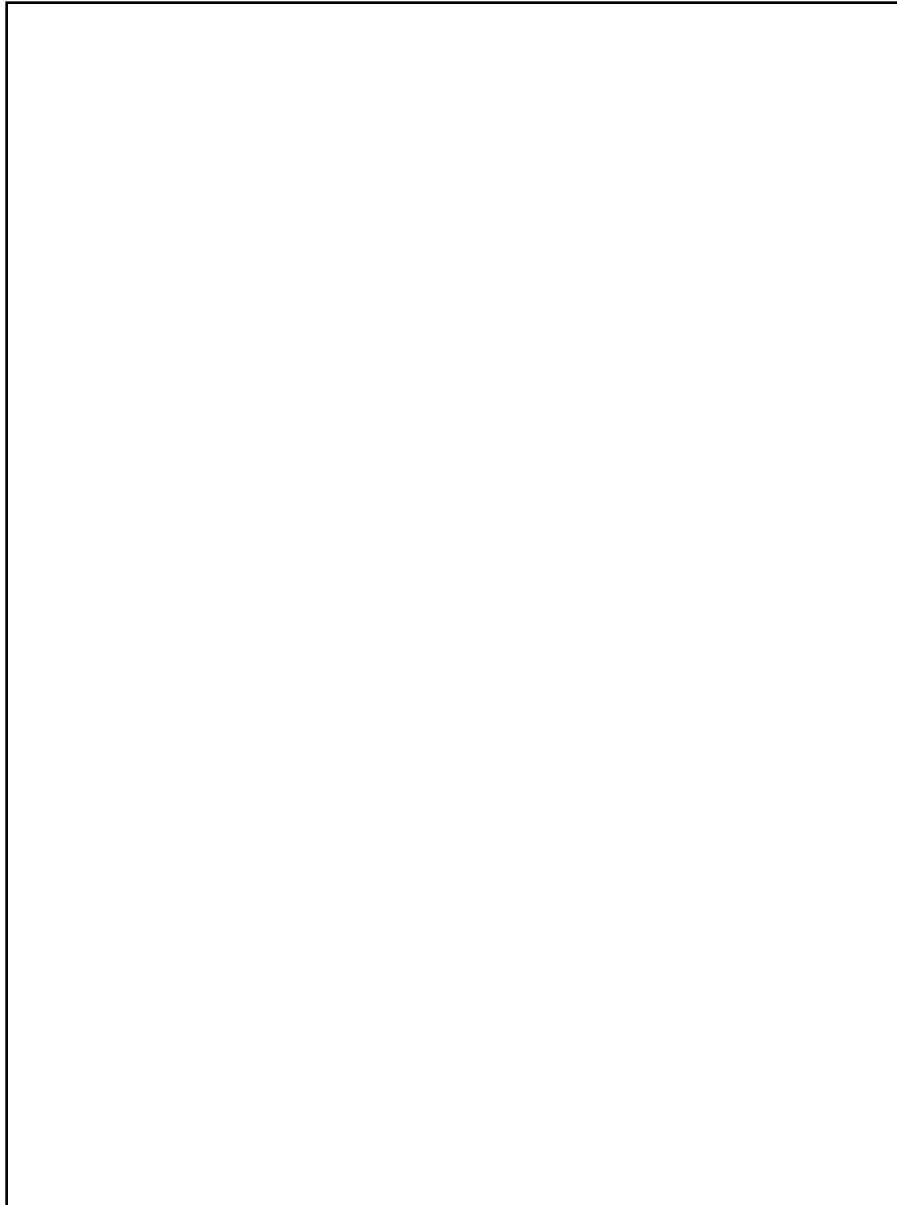
The evaluation of an accidental release of FMD virus, RVF virus, and Nipah virus are presented in Section 3.10.9 and Appendix D of the NBAF EIS. The diseases caused by these three pathogens sufficiently cover the spectrum of outcomes likely to occur if any pathogens to be studied at the proposed NBAF were to release to the surrounding areas.

An environmental justice analysis was conducted which focused on the potential for disproportionately high and adverse impacts to minority and low-income populations during the construction and normal operation of the proposed NBAF. While the assessment identified the occurrence of minority or low-income populations within the region of influence of the site alternative, no disproportionately high and adverse effects to environmental or human resources are evident with any of the alternatives.

An evaluation of the effects of the NBAF on property values was included in Section 3.10.7, which concluded that there would be no expected adverse effect for any of the sites. It is possible that with the relocation of highly skilled workers to the immediate area, property values could increase due to an increase in demand. The DHS is not aware of any empirical evidence that a facility such as the NBAF would reduce property values in the study area.

Section 3.10.1, and Appendix C and D of the NBAF EIS explain the methodology used to define the study area, which is a four-county area for Umstead Research Farm Site Alternative, and the expanded study area which is an eight-county area for the Umstead Research Farm Site Alternative.

The incorrect reference to the "South Milledge Avenue Site" in Section 3.10.7.1.2 of the NBAF EIS will be deleted and replaced with "Umstead Research Farm Site" in the FEIS.



Based on the commentor's references to the Polk Youth Center and Central Regional Psychiatric Hospital, these institutions will be referenced in the NBAF EIS, if appropriate.

Based on commentor's comments, additional sources of hunting and agricultural data will be used in the revised NBAF EIS Chapter 3.10.7, if appropriate.

Comment No: 7                      Issue Code: 21.3

DHS notes the commentor's concern that all possible pathogens to be studied at the NBAF are not listed in the NBAF EIS. The pathogens to be studied at the NBAF as provided in Chapter 2, Section 2.2.1 of the NBAF EIS include Foot and Mouth Disease virus, Classical Swine Fever virus, Vesicular Stomatitis virus, Rift Valley Fever virus, Nipah virus, Hendra virus, and African Swine Fever virus. Should the NBAF be directed to study any pathogens not included in the list of pathogens included in the NBAF EIS, DHS and USDA would conduct an evaluate of the new pathogen(s) to determine if the potential challenges and consequences were bounded by the current study. If not, a new risk assessment would be prepared and a separate NEPA evaluation may be required.

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1 cont. | cannot know how extensive the promised safety systems are, and cannot monitor whether those  
23.0 | systems are cut or diminished due to budgetary constraints or overruns.

4 cont. | Further, there is no discussion about the citizen oversight process which is essential to ensure the  
3.0 | vigorous maintenance of the facility and the vigilant application of biosafety procedures without  
which containment will inevitably fail. Nor is there any reference to independent international  
inspections to ensure compliance with the Biological and Toxin Weapons Convention.

8 | 26.0 | **Table of Contents**

The format makes it needlessly difficult to find subsections. Sections at the first decimal point (e.g., 3.9) should be in bold. Sections at the second decimal point (e.g., 3.9.1) should be underlined or otherwise distinguished in font style.

**Executive Summary**

1 cont. | ES-1 The DEIS notes that “more than 40 contagious foreign animal diseases are currently  
23.0 | recognized as threats to the U.S. agricultural economy.” How many of these are  
currently housed at Plum Island? How many will be housed at the NBAF? We must  
presume that all of them, if they are indeed threats to the U.S., are to be housed there.

Particularly in light of North Carolina’s very significant poultry population, the DEIS should also address two other diseases specifically identified for study at the NBAF in the 350-page *NBAF Conceptual Design and Feasibility Study* commissioned by DHS, dated August 24, 2007 (and referenced at DEIS p. 2-1). Those diseases are Newcastle Disease and avian flu.

ES-3 It should be mentioned that the “small scale vaccine and reagent production” laboratory is expected to house 30-50 liters of pathogens.

Although reference is made to a contractor-operated facility under government oversight, the DEIS is devoid of any analysis of the potential impacts such an arrangement may pose on facility maintenance, security and biocontainment, when decisions that may be fiscally appropriate for the private contractor conflict with the core concerns of ensuring that the highest level of vigilance is maintained to ensure community safety.

Reference is also made to “standard decontamination procedures” if and when the NBAF is decommissioned. But for a lab such as this, which would be larger than any other high-containment lab worldwide and which would be unique in the United States in its large animal research (with attendant unique issues in the disposal of infected waste and carcasses), there can be no “standard decontamination procedures.”

9 | 2.0 | ES-4 No aspect of the 4 listed evaluation criteria (proximity to research capabilities and workforce; acquisition/construction/operations; and community acceptance) has any bearing on the stated intent “to ensure that the NBAF would be located in an environmentally suitable site.”

Comment No: 9 Issue Code: 2.0

DHS notes the commentor’s statement. Environmental consideration was a sub-criteria specified during the site selection process and was particularly evident during the site visits by the government. DHS notes the commentor’s concerns about long-term funding for the NBAF to ensure safe operations. The U.S. Congress and the President are responsible for determining funding priorities for government programs. DHS spends funds in accordance with congressional intent. DHS would maintain the NBAF and ancillary facilities in compliance with applicable environmental, safety, and health requirements and provide for safe operation and maintenance.

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- |    |     |      |   |
|----|-----|------|---|
| 10 | 8.3 | ES-7 | The statements regarding the water and sewer capacity for the Butner site are not accurate, as detailed infra. The Butner site is the only site that would need all-new infrastructure. The EIS must detail here who pays for such infrastructure, and what that cost is anticipated to be, as set forth (but redacted) in the NBAF Site Cost Analysis. |
|----|-----|------|---|
- |    |     |      |   |
|----|-----|------|---|
| 11 | 9.3 | ES-8 | The referenced “alternative modeling” for air quality must be done during the EIS process, with opportunity for public comment, not outside the EIS process. Further, the Butner site is prime farmland; that statement requires correction. Likewise, it must be noted that the Butner site is currently in nonattainment under EPA air quality regulations. |
|----|-----|------|---|
- |         |      |   |  |
|---------|------|---|--|
| 12      | 12.3 | The statement that “all discharged wastewater would meet local discharge requirements” is specious. There are no local or state, or even federal, regulations to govern pathogens of the sort to be studied at the NBAF. Further, the ES fails to note that the waters into which the NBAF would ultimately discharge are impaired, and SGWASA’s permit is undergoing significant scrutiny. |  |
| 4 cont. | 3.0  |   |  |
| 10      | 8.3  |   |  |
| 13      | 18.3 |   |  |
- |    |      |  |  |
|----|------|--|--|
| 14 | 19.1 | The statement that an accidental release of pathogens would affect all sites similarly is not accurate; the Plum Island site would suffer vastly lower impacts in this regard. The statement that the research at the NBAF has the potential to prevent or contain outbreaks of studied diseases has no basis whatsoever in the body of the DEIS; there is no analysis of diseases eliminated or for which widely effective vaccines have been found through the work during Plum Island’s 50+ year history, nor is there any analysis whatsoever of the prognosis for the promised benefit. This statement requires deletion as entirely unsupported. |  |
| 15 | 21.0 |  |  |
- |         |      |  |  |
|---------|------|--|--|
| 6 cont. | 15.3 | The statement that NBAF operation would result in 250 to 350 jobs is disingenuous; the number of jobs expected to be filled by state residents (for the N.C. site, that number is 63) must be stated here, not buried in the text. |  |
|---------|------|--|--|
- |         |      |      |   |
|---------|------|------|---|
| 1 cont. | 23.0 | ES-9 | There is no discussion of who will bear the cost to train law enforcement and fire protection personnel (or what that cost will be), and how those personnel will be kept abreast of operational evolution at the NBAF. |
|---------|------|------|---|
- |    |      |   |  |
|----|------|---|--|
| 16 | 19.0 | The assertion that “the risk of [pathogen] release remains very small” has no basis in the DEIS text, as the risk analysis is based entirely – and explicitly – on assumptions that have no grounding in any actual site-specific or system-specific designs, designs which may vary greatly in the level of containment afforded and impacts threatened. This statement requires deletion. |  |
|----|------|---|--|
- |         |      |   |  |
|---------|------|---|--|
| 6 cont. | 15.3 | The statement that there would be “no long-term, disproportionately high and adverse human health, or environmental effects . . . to low income or minority populations” has no basis in the text. As referenced above, the Butner area is home to more than 7,000 institutionalized individuals, and the general population of the area is disproportionately minority, elderly and low-income. There is no analysis whatsoever of the potential impacts on these populations in the event of a disease release. |  |
| 5 cont. | 19.3 |   |  |

Comment No: 10                      Issue Code: 8.3

DHS notes the commentor’s concerns regarding the treatment and discharge of NBAF generated wastewater by the South Granville Water and Sewer Authority (SGWASA). The impact from the operation of the NBAF at the Umstead Research Farm Site on the SGWASA wastewater treatment infrastructure is discussed in Section 3.3.7.3.4 of the NBAF EIS. The design and operation of the NBAF at the Umstead Research Farm Site would prevent negative impact to the SGWASA Sewage Treatment Facility infrastructure and treatment capabilities. Specifically, as summarized in Section 3.15 of the NBAF EIS, pre-treatment of liquid waste streams would be implemented as necessary to meet treatment facility acceptance criteria, therefore avoiding potential impacts.

DHS notes the commentor’s concern that the receiving waters for the SGWASA wastewater treatment facility discharge are not adequately characterized in the NBAF EIS. Section 3.7.7.1.1 of the NBAF EIS describes the baseline conditions of the surface water resources in the Umstead Research Farm site area and includes a description of 5.2 miles of the Knapp of Reeds Creak from lake Butner to Falls Lake as impaired for biological activity.

DHS notes the commentor’s concern regarding the infrastructure improvements required for the NBAF operation at the Umstead Research Farm site. Section 3.3.7 and Section 3.11.7 of the NBAF EIS includes an assessment of the current utility and transportation infrastructure at the Umstead Research Farm site, the potential impact and effects from construction and operation of the NBAF, and the planned utility and transportation improvements to meet the operational requirements of the NBAF. While the potential costs of proposed actions are not a factor in the environmental impact analysis presented in the NBAF EIS, cost information of the NBAF Alternatives is summarized in Section 2.5, Table 2.5.1-1 of the NBAF EIS to provide pertinent information to the DHS Under Secretary for Science and Technology so that he may make a more informed decision with respect to the alternatives presented in the NBAF EIS. Infrastructure costs were analyzed and included in the final costs provided in the NBAF EIS. Additionally, the Site Cost Analysis Report, available on the NBAF Web Site for public review and discussed in Section 2.6, is one of several reports that will be considered in addition to the NBAF EIS, in selecting the Preferred Alternative for the Final EIS and ROD. Funding for the design, construction, and operations for the NBAF will come from the Federal Government. Proposals for offsets to the site infrastructure (part of the construction costs) were requested by the Federal government. The decision as to what to offer (land donation, funding, other assets) is solely at the discretion of the consortium, state and local officials as part of the consortium bid site package. The amount of funding and how the funding is paid for (bonds, taxes, etc) is determined by the state and local government officials and is not the decision of the Federal government.

DHS notes the commentor’s question regarding the operation of the NBAF in the event of an interruption in the delivery of natural gas. In the event of the loss of natural gas service to the facility, on-site fuel storage to support the operation of the boilers is provided. This storage has been sized to

allow normal operation of the facility for a 30 day period in the unlikely event of the loss of natural gas and both the primary and redundant power feeders. In the event that only natural gas to the facility is lost, the fuel storage would support the boilers for up to 120 days depending on the season.

Comment No: 11                      Issue Code: 9.3

DHS notes the commentor's concern for air quality. The potential effects of NBAF operations on air quality are discussed in Section 3.4 of the NBAF EIS and includes the potential effects from incineration. Site-specific effects at the Umstead Research Farm Site are discussed in Section 3.4.7. Air pollutant concentrations were estimated using SCREEN3, a U.S. EPA dispersion modeling program. Conservative assumptions were used to ensure the probable maximum effects were evaluated. The SCREEN3 modeling estimates combined with the ambient air background concentrations exceeded the PM2.5 national ambient air quality standards thereby substantiating a moderate rating. DHS notes Granville County's redesignation from nonattainment to attainment with a vehicle maintenance program added to the SIP. Once the final design is determined, a more refined air emissions model will be used during the permitting process. The final design will ensure that the NBAF does not significantly affect the region's ability to meet air quality standards.

Comment No: 12                      Issue Code: 12.3

DHS notes the commentor's water quality concerns and DHS acknowledges the current regional drought conditions. Section 3.13.8 of the NBAF EIS describes the Waste Management processes that would be used to control and dispose of NBAF's liquid and solid waste. Sections 3.3.7 and 3.7.7 describe standard methods used to prevent and mitigate potential spills and runoff affects. Section 3.7.7.3.1 describes the South Granville Water and Sewer Authority has having 3 to 4 million gallons per day of excess potable water capacity and could meet NBAF's need of approximately 110,000 gallons per day, which is currently less than 0.4% of the Authority's total current capacity. The NBAF annual potable water usage is expected to be approximately equivalent to the amount consumed by 210 residential homes.

Comment No: 13                      Issue Code: 18.3

DHS notes the commentor's concerns regarding infectious waste. As discussed in Section 3.13.2.2 of the NBAF EIS and shown on Table 3.13.2.2-2, all of the waste destined for the sanitary sewer that could potentially contain pathogens will be pretreated in a biowaste gathering and treatment system that includes sterilization and subsequent decontamination in biowaste cookers. Further, Section 3.13.2.2 explains that all of the thermal, disinfection, and decontamination technologies used to treat any type of animal waste generated at the NBAF will meet the operational and validation criteria recommended in "Biosafety in Microbiological and Biomedical Laboratories" to ensure effective treatment. Also, as discussed in Section 2.2.2 of the NBAF EIS, inadequate sterilization is prevented by operational training and the use of standard protocols and SOPs that help to prevent the type of human error that could cause inadequate sterilization. Moreover, Federal, State, and local laws,



regulations, and permits (such as regulations and permits established under the Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act) govern the management of the wastes, emissions, and discharges that would be generated by the NBAF.

DHS notes the commentor's concerns about waste disposal. Section 3.13.2.2 in Chapter 3 of the DHS EIS for the NBAF addresses the wastes that will be generated by the operation of the facility including liquid wastes that will be discharged to the sanitary sewer (see Table 3.13.2-2), and waste solids that will be sent offsite for further treatment and disposal. All of the wastes that would be generated by the primary carcass and pathological waste disposal methods under consideration (i.e., incineration, alkaline hydrolysis, and rendering) are represented on these tables. Because the method of carcass and pathological waste disposal has not yet been determined, Section 3.4. of the EIS (Air Quality) assumes that the treatment technology with the greatest potential to negatively impact air quality, incineration, will be used to assess the maximum adverse impact. Similarly, because alkaline hydrolysis would have the greatest impact on sanitary sewage capacity, Section 3.3 of the EIS (Infrastructure) assumes that alkaline hydrolysis will be used to assess the maximum adverse impact.

DHS did not identify specific solid and hazardous waste management facilities that would accept NBAF-generated construction and operational wastes because a lack of local waste management capacity is not an issue. As discussed in Section 3.13.8.3, the State of North Carolina is a net exporter of both municipal solid and hazardous waste to other jurisdictions.

To the extent that radiological waste is generated by the facility, operational protocols would preclude its discharge into the building plumbing systems. Radiological waste would be collected, packaged, and transported in accordance with applicable state, Nuclear Regulatory Commission (NRC), and Department of Transportation requirements and it would be disposed in NRC-licensed facilities.

DHS notes the commentor's watershed concern. The North Carolina Department of the Environment and Natural Resources (NCDENR) conducts surface water monitoring near Butner on the Knap of Reeds Creek and determined in 1998 that a portion of the creek was only partially supporting biological activity. Currently, 5.2 miles of the Knap of Reeds Creek from Lake Butner to Falls Lake is considered impaired for biological activity. The NCDENR ambient surface water monitoring program has documented elevated manganese, fecal coliform bacteria, and low dissolved oxygen in Knap of Reeds Creek. NCDENR is currently evaluating the need for advanced treatment options of current dischargers, as well as investigating potential contributing sources that may be exacerbating the impaired biological activity of the stream. As of 2004, potential contaminant sources have not been determined, and TMDLs have not been established. North Carolina has EPA-delegated authority for both NPDES storm water and wastewater permitting. Section 3.13.8 describes the Waste Management processes that would be used to control and dispose of NBAF's liquid and solid waste.

Sections 3.3.7 and 3.7.7 describe standard methods used to prevent and mitigate potential spills and runoff affects.

Comment No: 14                      Issue Code: 19.1

DHS notes the commentor's statement. Although the potential for an accident is similar for all sites, the commentor is correct in stating that the economic consequences would be lower for the Plum Island Site Alternative than for the five mainland site alternatives.

Comment No: 15                      Issue Code: 21.0

DHS disagrees with the commentor's statement. Section 3.14 and Appendix E present the methodology, results, and conclusions related to the identification of potential hazards; the analysis of potential postulated accidents; and the evaluation of consequences associated with normal and abnormal NBAF operations. The identification of hazards includes operations with pathogens and other identified risks related to operation of a large high-biocontainment biosafety laboratory. The analysis includes specific evaluation of accidents with potential adverse consequences and intentional acts (perpetrated by adversaries such as terrorists, criminals, employees, extremists, etc.). The methodology took into account The National Academy of Sciences, Committee on Technical Input on Any Additional Studies to Assess Risk Associated with Operation of the National Emerging Infectious Diseases Laboratory, Boston University, National Research Council, letter report that discussed important considerations when developing a risk assessment. Much of that discussion was adopted for presenting the approach taken in the evaluation of potential health and safety impacts from operation of the proposed NBAF.

The specific objective of Section 3.14 and Appendix E through hazard identification, accident analysis, and risk assessment was to identify the likelihood and consequences from accidents or intentional subversive acts. In addition to identifying the potential for or likelihood of the scenarios leading to adverse consequences, the analysis provided support for the identification of specific engineering and administrative controls to either prevent a pathogen release or mitigate the consequences of such a release. The consequence analysis is related specifically to the accidental or intentional release of a pathogen and was developed and presented in a qualitative and or semi-quantitative manner. The fundamental questions addressed in the health and safety analysis included:

- What could go wrong (the sequence of events that could cause an infectious pathogen to escape the laboratory, set up a chain of transmission, and cause infectious disease in the surrounding community)?
- What are the probabilities (likelihood for each type of release) of such a sequence of events?
- What would be the consequences of such a sequence of events (e.g., the impacts of a release

including transmission of disease, morbidity, and mortality)?

Comment No: 16

Issue Code: 19.0

DHS disagrees with the commentor's statement. DHS believes that experience shows that facilities utilizing modern biocontainment technologies and safety protocols, such as would be employed in the design, construction, and operation of the NBAF, would enable the NBAF to be safely operated with a minimal degree of risk, regardless of the site chosen. An example is the Centers for Disease Control and Prevention in downtown Atlanta, Georgia, where such facilities employ modern biocontainment technologies and safety protocols, such as would be employed in the design, construction, and operation of the NBAF. An analysis of potential consequences of a pathogen (e.g. Rift Valley fever [RVF] virus) becoming established in native mosquito populations was evaluated in Sections 3.8.9, 3.10.9, and 3.14 of the NBAF EIS. DHS would have site-specific standard operating procedures (SOP) and response plans in place prior to the initiation of research activities at the NBAF. RVF and foot and mouth disease SOPs and response plans would likely include strategies that are similar. However, the RVF response plan would also include a mosquito control action plan. The potential consequences of pesticide use would be evaluated during the preparation of a site-specific response plan.

Appendix B regarding a review of laboratory acquired infections, was used in the preparation of the risk assessment to assist indevelopment of accident scenarios and potential consequences as well as to inform the reader of the number and types of accidents that have occurred in the past.

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15 cont. |  
21.0

The statement that "transportation of research materials would not significantly increase the risk of a traffic-related incident" misses the mark. The issue here is not traffic accidents, but pathogen releases.

13 cont. | 18.3  
12 cont. | 12.3  
4 cont. | 3.0

The statement that NBAF wastewater "would meet all local wastewater permit requirements" ignores the larger question of the impact in the event that a batch of waste is inadequately sterilized, resulting in the discharge of pathogens ultimately into drinking water supplies. Such pathogens are not regulated by existing laws, and conventional waste treatment facilities lack the resources to test for, much less to treat, such waste.

15 cont. |  
21.0

As detailed infra, the statement that the potential for an accidental or intentional release of pathogens from the NBAF is "none to low" is baseless, given the complete absence of any site-specific designs or final decisions regarding critical aspects of the containment infrastructure and the resulting wholly speculative nature of the risk analysis.

ES-10 The statement that "the overall risk rank was moderate" cannot be sustained, given the DEIS's acknowledgement that all mainland sites would be readily hospitable to pathogen vectors, such that a disease once released could readily become established in the environment. Discounting this high consequence with a shallow and speculative risk analysis is not factually supported or credible.

ES-11 See comments for page 3-511, Table 3.18.2 (which is identical to this Table ES-3).

ES-12 See comments regarding Appendix E. Given that "the risk of accidental release was independent of where the facility was located," there must be greater focus on the site-specific consequences of such a release. Yet the EIS wholly fails in its obligation to provide any substantive analysis on this point. The sections which purport to analyze this issue are devoid of actual analysis.

The referenced Appendix D should include a recitation of the results of the federally-sponsored Crimson Sky simulation of a foot and mouth disease release on the mainland, and should address the concerns identified in the Government Accountability Office's May 2008 report regarding the risks posed by conducting foot and mouth disease research on the mainland U.S.

6 cont. | 15.3

ES-13 Although reference is made to the extensive community concerns regarding institutionalized populations, the issue of the impacts on those populations, particularly in the event of a pathogen release that prompted the imposition of movement restriction zones, is ignored in the DEIS.

### **1.0 Purpose and Need for Proposed Action**

### **2.0 Description of the Proposed Action and Action Alternatives**

#### **2.1 No Action Alternative**

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17  1.0	<p>2-1 The current facility at PIADC already handles BSL-3 and BSL-3Ag research. Only those diseases requiring BSL-4 containment must be done at another facility. Moreover, the U.S. has constructed 10 new BSL-4 facilities since 2001, leading to a vastly expanded domestic capacity for BSL-4 research. The statement that the expanded mission requirements could not be met in the absence of the NBAF is wholly conclusory (as is the statement at 2-27), and fails to give substantive reasons why this work could not be conducted within existing U.S. Government BSL-4 laboratory capacity.</p>
<b>2.2.1 Construction Requirements</b>	
1 cont.  23.0 18  23.0	<p>2-1 How much area will parking and any other facilities cover? Will poultry or birds of any species be housed at the NBAF?</p>
1 cont.  23.0 15 cont.  21.0 2 cont.  15.0 16 cont.  19.0	<p>2-2 The DEIS fails to identify all the diseases currently housed at the PIADC facility which NBAF is slated to replace. It is thus impossible to determine if the 3 diseases selected for detailed analysis are sufficiently representative of the characteristics of the other diseases which will be housed at NBAF, upon PIADC's decommissioning or transfer of part or all of those diseases to NBAF, for purposes of creating an accurate analysis of the potential worst-case health, environment and economic consequence scenarios.</p>
7 cont.  21.3	<p>The DEIS should also address two other diseases specifically identified in the <i>NBAF Feasibility Study</i>, Newcastle Disease and avian flu. Avian flu has specific relevance for North Carolina, given its large commercial poultry operations and pig farms. (The latter being relevant because of the flu virus's demonstrated tendency to reassort while infecting pigs, enabling the virus to mutate in manners that permit it to become infectious to other mammals, including humans. See Greger, <a href="http://birdflubook.com/a.php?id=58">Bird Flu: A Virus of Our Own Hatching</a> (Nov. 2006); which may be viewed at <a href="http://birdflubook.com/a.php?id=58">http://birdflubook.com/a.php?id=58</a> The consequences of a potential release of the highly contagious Newcastle disease (which has mortality rates up to 90%) must also be analyzed in the EIS, particularly given the potential devastation of North Carolina's significant poultry population.</p>
13 cont.  18.3	<p>2.2 Although there is reference to the use of a gamma irradiator to inactivate samples for shipment, the DEIS fails to discuss the method for disposal of radioactive waste produced by the facility.</p>
1 cont.  23.0 7 cont.  21.3	<p>Insects studied at the lab must all be sterile to avoid potential reproduction in the event of a release of study insects from the NBAF.</p>
15 cont.  21.0	<p>The DEIS fails to analyze the potential for a disease release as a result of the training of outside veterinarians, in the event that they fail to comply with BMBL protocols requiring them to refrain from interacting with any animals, e.g., for at least 72 hours following their contact with animals infected with FMD. The DEIS fails to analyze the possibility for such training to be accomplished entirely through the referenced distance learning training module to mitigate the potential risks associated with such contact.</p>
6	

Comment No: 17	Issue Code: 1.0
<p>DHS notes the commentor's statement. As stated in Chapter 1 of the NBAF EIS, there are no existing BSL-4 facilities in the U.S. capable of conducting large animal research as is proposed for the NBAF. The PIADC does not have BSL-4 laboratory or animal space, and the existing PIADC facilities are inadequate to support a BSL-4 laboratory.</p>	
Comment No: 18	Issue Code: 23.0
<p>DHS notes the commentor's concern. There are currently no avian diseases designated for study at the NBAF. Therefore, no birds will be housed at the facility. Should DHS be instructed to study avian diseases at the NBAF at some future date, a separate NEPA action would be required.</p>	

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2.3 The DEIS states that large-scale vaccine production would require an industry partner. The DEIS fails to state whether such an industrial plant could be constructed within the NBAF site, in the same manner that the British government research lab in Pirbright, England (where the 2007 foot and mouth disease outbreak originated) is adjacent to and conjoined with the Merial vaccine production facility.

The DEIS fails to examine the potential of disease cross-contamination arising out of the "hotel suite" design concept, whereby research spaces are not dedicated to a particular species, much less to a particular disease subject.

1 cont. | 23.0

The DEIS fails to specify the "facility-specific standard operating procedures (SOPs) that would be developed according to USDA guidelines prior to commissioning and operation of the NBAF. Because operating protocols are as essential to disease containment as the building structure, it is impossible to adequately evaluate the risk of an accidental release in the course of those protocols without being able to evaluate the protocols themselves and the manner in which they may differ from the BMBL. This is as fundamental a failure as the lack of site-specific building designs in the DEIS.

Although it is stated at page 2-3 that each critical zone would be a box-within-a-box with hardened structural systems, it is stated at page E-24 that some of the highest-containment spaces will include windows. In general, the outside walls of the facility are the outside walls of the lab.

2-4 Although "multiple layers of security" are referenced, there is no indication as to who will provide that security. The Federal Protective Service has recently been found by the Government Accountability Office ("GAO") to suffer from gross deficiencies, which are not addressed here. See GAO Report 08-476t, "Preliminary Observations on the Federal Protective Service's Efforts to Protect Federal Property." Nor is there any indication of the extent to which NBAF security will be assigned in part or *in toto* to local law enforcement, see e.g. GAO Report 03-847, "Actions Needed to Improve Security at Plum Island Animal Disease Center," or the extent to which local law enforcement will actually be notified of such reliance, trained for and informed of the biosafety and biosecurity hazards within the NBAF, and who will bear the cost for such training. It is not indicated whether private security contractors, such as Field Support Services, Inc., which currently handles the majority of security duties at PIADC, will perform those functions at the NBAF. Nor is there any discussion of the staffing and training for firefighting functions, whether NBAF-based or reliant on local first responders.

It is impossible to evaluate the promised use of sustainable building practices in the absence of a plan for each site.

**2.2.2 Operation of the Proposed NBAF**

2-4 The DEIS states that NBAF could be a government-owned, contractor-operated facility. The DEIS fails to analyze the extent to which operation by private contractors has the potential to compromise facility maintenance (which is essential to biosafety for the surrounding community) in the event of cost-cutting shortchanges or a strike, as occurred

Comment No: 1 Issue Code: 23.0

DHS notes the commentor's concern regarding the small-scale vaccine and reagent production laboratory (current good manufacturing practice or cGMP module is part of the NBAF). Under the Virus-Serum-Toxin Act, the USDA/APHIS, Veterinary Service's Center for Veterinary Biologics is responsible to license all veterinary biologics (vaccines, antisera, bacterins, and diagnostic reagents and test kits). The cGMP module would support the development and eventual licensure of vaccines and anti-viral therapies discovered at NBAF and would operate in accordance with cGMPs described in U.S. Code of Federal Regulations (21 CFR Parts 210/211/600 and 610).

The cGMP module would have the ability to develop up to 30 liters of vaccine; however, it should be noted that no live FMD virus vaccines would be developed in this facility, only recombinant or inactive virus fragments would be used. Since the cGMP facility would be housed within the main NBAF building and no live FMD virus would be used for vaccine production, the type of incident that occurred at the Pirbright facility in the United Kingdom would not occur.

NBAF research studies would provide consistent/reproducible data on products and processes of biological countermeasures, which would allow technology transfer to industry partners/contract manufacturers (not in the NBAF) for scale-up and commercial product manufacturing. The industry/manufacture would be selected using an open competition.

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1 cont.   23.0	at the current facility in PIADC, as reported in GAO Report 03-847, "Improving Security at Plum Island Animal Disease Center."
4 cont.   3.0 1 cont.   23.0	<p>2-5 Outside inspection of the NBAF only once over a 3-year period is grossly inadequate to ensure proper oversight, maintenance and compliance with biosafety protocols. CDC inspections should occur randomly, without advance announcement, at intervals of approximately 6 months, and should be performed by an individual with extensive experience not only in BSL-3 and BSL-4 settings, but also in the BSL-3Ag context.</p> <p>NBAF must maintain a log of all incidents such as accidental disease exposures and biosecurity lapses such as missing vials and animals, which should be available for public inspection at all times. Such logs should be maintained by a biosafety officer with high-level training in biosafety.</p> <p>The EIS must include an exploration of actual protocols for emergency situations, such as animal escapes, fires, facility malfunctions, and medical emergencies; without this, it is impossible to adequately assess the risks posed by this specific facility.</p>
20   18.3	2-6 Supervising laboratory staff must not only have training in the subject area of research, but must also have extensive experience in the supervised research matter, e.g., large animal high-containment infectious disease research, insectary high-containment infectious disease research, or BSL-4 disease vaccine reagent work.
13 cont.   18.3	<p>The DEIS is grossly inadequate in failing to specify the waste treatment mechanisms to be used at the contemplated facility, without which it is impossible to evaluate the potential impacts to air, water, and other aspects of the respective sites' environs.</p> <p>Although the DEIS states that the "efficiency" of waste treatment would be verified by reference to heat and biological indicators, this is not adequate to ensure public safety. Each batch of waste released from the facility must be DNA-tested to ensure that pre-treatment fully eliminates the subject disease organisms before release into the environment.</p> <p>The selected waste treatment system(s) pose additional environmental impacts not contemplated within the DEIS. For example, chemical disinfection (utilizing "corrosives/irritants, flammables, sensitizers, toxics, teratogens, and carcinogens," as listed at p. 2-8) within such a massive facility can further impair the already-impaired Knap of Reeds Creek, into which facility waste would ultimately be discharged, where the South Granville Water and Sewer Authority does not have the means to test for or remove such chemicals during its treatment process. Incineration, which is noted as the benchmark standard in the USDA ARS 242.1 Facilities Design Standards, and as being "considered the most effective method for disposal of infected carcasses," poses significant air quality impacts. As redundancy and multiple carcass disposal technologies are expressly contemplated, all potential impacts from each such method needs to be detailed in the EIS in the absence of a conclusive decision to use one particular disposal technology. There is also no discussion of the potential use of and impacts upon area</p>

Comment No: 20	Issue Code: 18.3
<p>DHS notes the commentor's concerns regarding wastes and waste disposal. As discussed in Section 3.13.2.2 of the NBAF EIS and shown on Table 3.13.2.2-2, all of the waste destined for the sanitary sewer that could potentially contain pathogens will be pretreated in a biowaste gathering and treatment system that includes sterilization and subsequent decontamination in biowaste cookers. Further, Section 3.13.2.2 explains that all of the thermal, disinfection, and decontamination technologies used to treat any type of animal waste generated at the NBAF will meet the operational and validation criteria recommended in "Biosafety in Microbiological and Biomedical Laboratories" (Centers for Disease Control and Prevention and NIH 2007) to ensure effective treatment. Also, as discussed in Section 2.2.2 of the NBAF EIS, inadequate sterilization is prevented by operational training and the use of standard protocols and SOPs that help to prevent the type of human error that could cause inadequate sterilization. Moreover, Federal, State, and local laws, regulations, and permits (such as regulations and permits established under the Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act) govern the management of the wastes, emissions, and discharges that would be generated by the NBAF.</p> <p>Section 3.13.2.2 in Chapter 3 of the DHS EIS for the NBAF addresses the wastes that will be generated by the operation of the facility including liquid wastes that will be discharged to the sanitary sewer (see Table 3.13.2-2), and waste solids that will be sent offsite for further treatment and disposal. All of the wastes that would be generated by the primary carcass and pathological waste disposal methods under consideration (i.e., incineration, alkaline hydrolysis, and rendering) are represented on these tables. Because the method of carcass and pathological waste disposal has not yet been determined, Section 3.4. of the EIS (Air Quality) assumes that the treatment technology with the greatest potential to negatively impact air quality, incineration, will be used to assess the maximum adverse impact. Similarly, because alkaline hydrolysis would have the greatest impact on sanitary sewage capacity, Section 3.3 of the EIS (Infrastructure) assumes that alkaline hydrolysis will be used to assess the maximum adverse impact.</p> <p>As discussed in Section 3.13.2.2 of the EIS, operational protocols would preclude the discharge of radiological waste into the NBAF plumbing systems. Radiological waste would be collected, packaged, and transported in accordance with applicable state, Nuclear Regulatory Commission (NRC), and Department of Transportation requirements and it would be disposed in NRC-licensed facilities. However, experiments/procedures that would generate radiological waste are not currently part of the planned mission of the NBAF.</p>	

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13 cont.   18.3	landfills (including which landfill will be used), or the possible creation of a landfill at the NBAF site itself, with the attendant impacts on groundwater and surface water (particularly at the North Carolina site, given the steep slope of the site toward a tributary of Falls Lake).
1 cont.   23.0	There is also no discussion of the additional risks posed by plans to locate the waste treatment facilities in a BSL-2 space, without the protections afforded by the higher containment levels, although the pathogen load in the waste material is elsewhere acknowledged as a significant risk factor.
2-7	The DEIS fails to specify the procedure for after-hours disease sample deliveries (particularly those of select agent materials), including the method for securing such deliveries, and the disposal of such materials in the event that no "responsible official" is notified in advance by the shipper.
2-8	The DEIS likewise fails to analyze the risks of a package that is shipped or received without perfect adherence to the packaging biosafety protocols, nor does it analyze the risk that a shipment could be sent to an improper recipient.
4 cont.   3.0	2-9 The EIS should specify the manner in which community representatives on the Institutional Biosafety Committee will be selected. The list of biological agents stored and studied at the NBAF must be publicly available to ensure proper community oversight. That list is not publicly available at PIADC, with significant detrimental effects on oversight and accountability.
1 cont.   23.0	2-9 <b>2.2.3 Decommissioning of the Proposed NBAF</b> The EIS must state the anticipated life expectancy of the NBAF. It fails to analyze the potential "future uses" to which the NBAF could be transitioned. The decommissioning of the NBAF should be performed pursuant to the NEPA process to ensure public input on any repurposing or potential residual contamination.
22 cont.   5.3S	2-24 <b>2.3.6 Alternative Site Selection Process: Butner Site</b> Figure 2.3.6-2 We note that the conceptual design places the lab in the extreme northwest corner of the subject site, which is not consonant with the frequently stated purpose for the large 249-acre site: to provide a sizeable buffer around the lab. Is the rest of the site being reserved for additional labs or facilities? A landfill? We note that it is not likely that a separate NEPA process would be performed for additional facilities placed on the site.
23   22.0	2-28 <b>2.5 Summary of Environmental Impacts and Costs</b> The site selection criteria were not designed to ensure mitigation of environmental effects, as their primary emphasis lay in proximity to certain infrastructure and workforce (see 2-10). It appears that DHS has dismissed out of hand the actual impacts posed by this massive project, and determined that no mitigation is therefore necessary. This is neither credible nor supported by the DEIS itself, which acknowledges some highly significant impacts.
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Comment No: 22	Issue Code: 5.3
DHS identified a 30-acre minimum size as one of the site selection criteria. The remainder of the 249-acre site would not be affected by the NBAF, and DHS has no plans for the additional area.	
Comment No: 23	Issue Code: 22.0
DHS notes the commenter's concern. Section 3.15 provides a list of mitigative measures for resources that may be implemented with the NBAF. DHS would comply with any monitoring measures required by local, state, or Federal agencies.	



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1 cont.   23.0 24   23.3	<p>2-29 The absence of any concrete design plans – and still less of any site-specific design plans -- wholly frustrates any effort to examine the stated preliminary cost estimates, most particularly for construction and maintenance. There is no discussion whatsoever as to the method, assumptions and designs from which those conclusory numbers were derived. Further, we note that the construction estimate for the Butner site is listed at \$523,711,811, although the total project estimate for the NBAF if sited in Butner has been identified as \$705,363,565 (see NBAF Site Cost Analysis at Section 4, page 3). The DEIS must detail who is anticipated to bear the difference in cost between these two figures.</p>
25   26.0	<p><b>2.6 Preferred Alternative</b></p> <p>2-50 The “additional studies” referenced here presumably include the NBAF Site Cost Analysis, the Feasibility Study, and similar reports prepared by the NBAF Design Partnership. All such documents – <u>in unredacted form</u> – must be included in the Final EIS.</p> <p><b>3.0 Affected Environment and Consequences</b></p> <p><b>3.1 Introduction</b></p> <p>The lack of actual, non-conceptual site-specific design details for the NBAF, the associated vaccine production facility, and the planned insectary bars meaningful review of virtually all actual site-specific impacts of the planned facility.</p>
6 cont.   15.3 26   20.0	<p>3-1, 2 Although reference is made to an environmental justice assessment, and although the Butner site is located in an area significantly populated by elderly and severely disabled individuals and minorities (many of whom are institutionalized and would be in a dire situation in the event that a disease release prevented or frightened institutional workers from continuing with their duties), the DEIS is devoid of an analysis of the impact of a potential release on these populations. Still less is there any analysis of potential alternatives and mitigation to avoid these grossly disproportionate impacts. The DEIS is entirely inadequate in this regard. The statement that “no disproportionately high or adverse effects to environmental or human resources are evident with any of the alternatives” lacks any basis.</p>
23   22.0	<p><b>3.1.2 Operations</b></p> <p>3-4 We note that the Butner site is the only site that would require significant new infrastructure in all 5 categories: potable water, electricity, natural gas, sanitary sewer, and roadways. As the DHS calculations presume that the host site will bear the cost of such infrastructure improvements, those costs must be detailed in the FEIS.</p>
1 cont.   23.0 10 cont.   8.3	<p><b>3.2 Land Use and Visual Resources</b></p> <p><b>3.2.7 Butner Site</b></p> <p>3-25 Light pollution, which has impact far beyond the site and bears collateral impacts not only on the human population but also on wildlife for which this largely undeveloped area serves as habitat, is a significant issue at this site. That impact, which is not</p>
27   7.3 28   13.3	

<p><u>Comment No: 25</u>      <u>Issue Code: 26.0</u></p> <p>All materials used in analysis and preparation of the NBAF EIS will be included in the Administrative Record. In addition, DHS made available on its website (<a href="http://www.dhs.gov/nbaf">www.dhs.gov/nbaf</a>), on or about August 11, 2008, the key supporting documents which are expected to assist the DHS decision maker in making a final decision about NBAF. These documents include the Site Cost Analysis, Site Characterization Study, and Plum Island Facility Closure and Transition Cost Study, and other documents.</p> <p><u>Comment No: 26</u>      <u>Issue Code: 20.0</u></p> <p>DHS notes the commenter's concern. The risks and associated potential effects to human health and safety were evaluated in Section 3.14 of the Draft EIS. The risks were determined to be low for all site alternatives. The impacts analysis specifically included consideration of environmental justice concerns to include an assessment of the potential for disproportionately high and adverse effects to minority or low-income populations, as further described in Section 3.1 of the NBAF EIS. No disproportionately high and adverse effects to environmental or human resources are evident for the proposed Umstead Research Farm Site from normal facility operations.</p> <p><u>Comment No: 27</u>      <u>Issue Code: 7.3</u></p> <p>DHS notes the commenter's concern regarding light pollution from the Umstead Research Farm Site which is described in Section 3.2.7. DHS recognizes that the NBAF would be a distinctive visible feature and would alter the viewshed of the area. Nighttime lighting could be mitigated with the use of shielded lighting and/or shielded fixtures that direct light downwards and can be used to keep light within the boundaries of the site and use of the minimum intensity of lighting that is necessary to provide adequate security.</p> <p><u>Comment No: 28</u>      <u>Issue Code: 13.3</u></p> <p>DHS notes the commenter's concern regarding the potential effects of the NBAF on wildlife and endangered species in the vicinity of the Umstead Research Farm Site. Security requirements at the proposed NBAF would require continuous outdoor nighttime lighting. Nighttime lighting has the potential to impact wildlife through astronomical and ecological light pollution. Lighting would have the potential for adverse impacts (e.g., repulsion and interference with foraging behavior and migration) on resident wildlife immediately adjacent to the NBAF. The NBAF would employ the minimum intensity of lighting that is necessary to provide adequate security. Mitigative measures, such as shielded lighting, will be considered in the final design of the NBAF. However, the use of shielded lighting would minimize the potential for impacts in adjacent habitats. Compared to high-rise buildings and tele-communication towers, the height of the facility would be low (maximum of 90 feet). Given the relatively low profile of the building and the use of mitigative measures, significant lighting impacts on migratory birds would not be likely to occur.</p> <p>Sections 3.8.7.1.4 and 3.8.7.1.5 of the NBAF EIS provide descriptions of wildlife and endangered species that occur in the vicinity of the Umstead Research Farm Site. Furthermore, Section 3.8.7.1.5</p>
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describes the results of surveys for endangered species and potential habitat that were conducted at the proposed Umstead Research Farm Site. The potential effects of the proposed NBAF on wildlife and endangered species are addressed in Sections 3.8.7.2.4, 3.8.7.2.5, 3.8.7.3.4, and 3.8.7.3.5. The potentially impacted areas consist of disturbed scrub-shrub habitat that has been impacted by a recent clear cut. Approximately 200 acres of scrub-shrub habitat would be retained; along with streams, stream buffers, and mature forested communities that occur on the property. The EIS acknowledges the presence and importance of successional (i.e., scrub-shrub) habitats for neotropical migratory bird species. However, given the disturbed condition of the potential project area and the 200 acres of scrub-shrub habitat that would be retained, the NBAF is not likely to have significant long-term impacts on these species. The EIS indicates that the site does not contain suitable habitat for terrestrial rare or endangered species. All of the known rare and endangered species occurrences in the area are separated from the NBAF by major roads and are at least 0.7 mile from the NBAF boundary. Small headwater streams on site represent marginal potential habitat for rare mussel species that are known to occur outside of the proposed NBAF site; however, neither these streams nor their required Neuse River Watershed vegetated buffers would be impacted by the proposed NBAF.

None of the diseases that have currently been identified for potential study at the NBAF are known to have adverse effects on birds. The potential effects of an accidental release on other wildlife and the response measures that could be employed are described in Section 3.8.9 of the NBAF EIS. Table 3.8.9-1 describes the potential strategies for response that could be considered in the event of an accidental release. Depopulation or population reduction is one of ten potential FMD response strategies developed by the National Park Service. However, the National Park Service recommends the use of other strategies or combinations of strategies to avoid depopulation (see Table 3.8.9-1). A more likely scenario would include one or more of the non-lethal measures described in Table 3.8.9-1. Although the NBAF EIS acknowledges the potential for significant impacts on white-tailed deer and other species of wildlife in the event of an accidental release, the risk of such a release is extremely low (see Section 3.14). It has been shown that modern biosafety laboratories can be safely operated in populated areas and in areas with abundant wildlife. State-of-the-art biocontainment facilities such as the Centers for Disease Control and Prevention in downtown Atlanta, Georgia, employ modern biocontainment technologies and safety protocols, such as would be employed in the design, construction, and operation of NBAF. Furthermore, the purpose of NBAF is to combat diseases that could have significant effects on wildlife. Research at the NBAF would include the development of vaccines for wildlife that could prevent adverse impacts from a foreign introduction.

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27 cont. | 7.3  
29 | 22.3

adequately explored in the DEIS, is exacerbated by the existing light pollution from the nearby Federal Correctional Facility. We note that there is no consideration of whether this issue can be mitigated at all by using down-lighting and other light-pollution mitigative features. Likewise, building massing of potentially 90 feet (up to 9 or 10 stories) on the hilltop site is significantly out of scale with the surrounding area. This issue must be addressed.

**3.3 Infrastructure**  
**3.3.7 Butner Site**

**3.3.7.1 Affected Environment**

10 cont. |  
10.3

3-48 The DEIS states that electricity would be supplied by Duke power through three substations, two of which would be built for the NBAF. The DEIS must include the cost of these substations, and must indicate who will pay for these two new substations. Further, the placement of these new substations will pose additional environmental impacts themselves, which must be addressed in the DEIS.

We note that the DEIS is devoid of any consideration of the potential impact on the electrical supply and resulting impacts on containment systems, due to the ice storms which commonly occur in the winter in this region, which can cause extensive power outages through downed power lines.

3-49 SGWASA's permit is currently under review, and the discussion of its capacity requires revision; see infra at discussion of DEIS page 3-359.

**3.3.7.3 Operation Consequences**

12 cont. | 12.3

3-50 The estimated annual consumption (which reflects an average daily usage of 108,000 gpd) appears disproportionately low in light of the pre-expansion peak usage figure of more than twice that amount: 275,000 gpd.

Further, in light of the increasing frequency of drought-based water shortages in the region, and the vast anticipated water usage of the NBAF, and the anticipated 50-year lifespan of the facility, it would be environmentally irresponsible not to incorporate reuse and reclamation technologies in the NBAF design, regardless of whether such technologies are required at the moment.

1 cont. | 23.0  
10 cont. | 8.3

We note that, despite the significant building surface area and significant fuel and electrical needs, and the long anticipated life of the facility there is no discussion of any attempt to incorporate solar technologies to mitigate electrical and fuel consumption. Such technologies could play a significant role in providing primary, secondary or tertiary power, fuel and hot water supply needs for the facility, as well as boosting redundancy and reducing impacts on area infrastructure needs. The NBAF appears to ignore "green" or lower impact building and power technologies. These technologies require discussion in connection with the consideration of the environmental impacts of the facility.

Comment No: 29

Issue Code: 22.3

DHS notes the commentor's concerns regarding mitigation. Section 3.15 provides a list of mitigative measures for resources that may be implemented with the NBAF. DHS would comply with any monitoring measures required by local, state, or Federal agencies.

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10 cont. | 8.3

There is no discussion of the costs to supply the additional infrastructure required to support the NBAF's electricity needs at the Butner site. Those costs, including the cost to construct the Central Utility Plant, must be inserted, together with a statement as to whether those costs will be born by Homeland Security or are expected to be born by the host site, or Duke Power's ratepayers.

3-51 The SGWASA sewage pretreatment requirements must be reviewed in light of whatever revisions are mandated by new conditions imposed by the NC Division of Water Quality in connection with SGWASA's permit renewal application which is currently pending.

**3.4 Air Quality****3.4.1 Methodology**11 cont. |  
9.3

3-57 The air quality information provided is so deficient as to bar meaningful commentary. As it stands, "the proposed pathological waste disposal method for the NBAF has not been determined" and might include an incinerator, with attendant air quality implications. Further, there is no "air emission data for the proposed NBAF, such as but not limited to process data, emission source data, and operating schedules." Ultimately, the DEIS may have a section designated "air quality" but it has no exploration whatsoever of real-world impacts posed by the facility. Still less does it explore potential site-specific, design-specific impacts. The words that appear in this section are useless and irrelevant.

3-60 The Galveston National Laboratory is not, standing alone, a valid comparator to the NBAF for purposes of estimating construction emissions, as Galveston is less than 1/3 the size of the NBAF, at 174,000 total gross square feet. See <http://www.utmb.edu/GNL/about/index.shtml>. Any figures for Galveston must be multiplied by 3; further, the comparison must account for site-specific design details and waste treatment details for the NBAF, as compared to those employed at the Galveston lab.

**3.4.7 Butner Site****3.4.7.1 Affected Environment**

3-80 This section must be updated to reflect the April 15, 2008 U.S.E.P.A. designation of the 8-county region that includes Granville County as a non-attainment area for ozone pollution. This region is the only one in the State without an agreement with the E.P.A. to clean the air. This section also fails to reflect the E.P.A.'s new standards, which were changed in February 2008.

**3.4.7.3 Operation Consequences**

10 cont. | 8.3

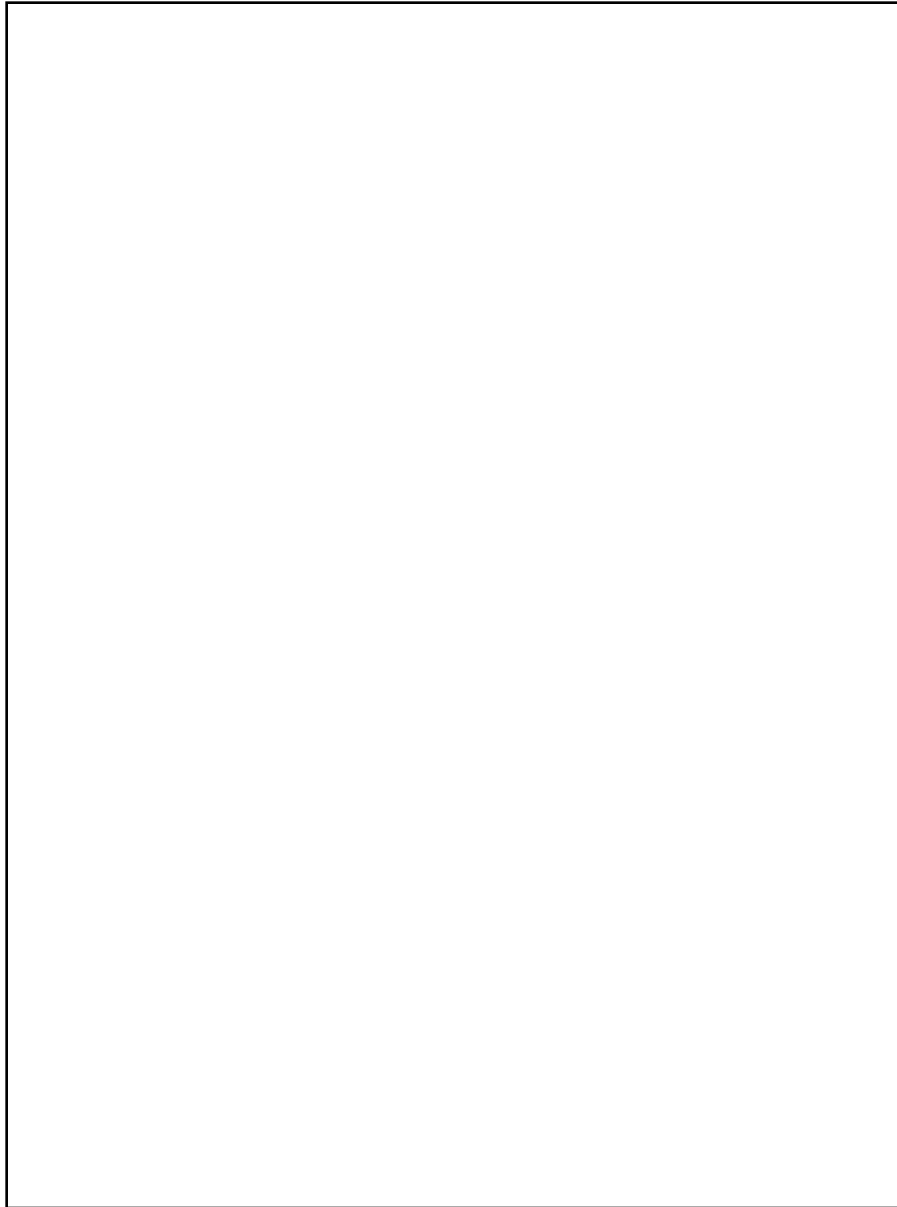
3-81 The DEIS fails to reference an interruptible natural gas supply. All commercial rated customers can be cut off from natural gas during extremely cold weather as natural gas is sent to residential customers for heating. The Allied Siegr chemical plant in Moncure was forced to connect a new boiler as a residential customer (complete with its own separate supply line from the highway and its own home gas meter) because they could not burn a higher sulfur content fuel as standby (No. 2 fuel oil) until advanced air

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11 cont.   9.3		modeling was completed and a cold snap was predicted. The commercial natural gas to the rest of the plant was shut off for 72 hours.
10 cont.   8.3		Further, if the NBAF design ultimately includes incinerators, the air permit will require test demonstration of compliance with air toxics standards. If the NBAF uses a significant quantity of chlorinated disinfectants or chlorinated water as cleanup, it will be difficult to demonstrate compliance with the chlorine emission limits without equipping the incinerator(s) with emission reduction controls. Such controls are usually wet scrubbers, resulting in water quality problems which must be addressed in the relevant sections of the DEIS. Due to potential damage to concrete rebar in the receiving publicly owned treatment works ("POTW"), high chlorine content wastewater is usually not allowed to be sent to a POTW. These issues must be addressed in the EIS.
11 cont.   9.3 30   17.3		The DEIS further fails to take into account the air quality impacts resulting from the anticipated vast increase in traffic in the vicinity of the site.
		<b>3.5 Noise</b>
31   10.3 27   20.3	3-94	Although the C.A. Dillon school is directly adjacent to the Butner site, the DEIS is devoid of any evaluation of the noise impacts upon the already-troubled residents of that facility during the 4 years of construction. This disproportionate impact implicates environmental justice concerns that must be addressed. Four years of significant noise is not a mere "temporary effect" in the course of the education of young people, particularly those who are already struggling in the academic system.
		<b>3.6 Geology and Soils</b>
32   11.3	3-114	The DEIS fails to note the existence of a fault line which runs along Knap of Reeds Creek near Range Road, directly adjacent to the proposed site.
		<b>3.7 Water Resources</b>
		<b>3.7.2 Construction Consequences</b>
		<b>3.7.2.2 Storm Water</b>
12 cont.   12.3	3-148	This site slopes steeply toward the already-impaired Knap of Reeds Creek. The facility is anticipated to require 244,235 cubic yards of cut and 216,701 cubic yards of fill. See NBAF Site Cost Analysis at 2-11. The mere statement that BMPs will mitigate stormwater runoff effects is inadequate.
		<b>3.7.3 Operation Consequences</b>
		<b>3.7.3.2 Storm Water</b>
1 cont.   23.0 4 cont.   3.0	3-149	The DEIS fails to address the potential stormwater implications of the animals at the proposed NBAF. If a herd of cattle (presumably only healthy cattle would be kept outside) is maintained on the property, the concentrated animal feedlot regulations may be implicated, due to runoff from manure and urine on the steeply sloping site, which feeds into the already impaired Knap of Reeds Creek.
		The DEIS also fails to address the impact of such a vast quantity (30 acres) of impervious surface on site runoff to Knap of Reeds Creek. See DEIS at 3-204. Just across the

	<u>Comment No: 27</u>	<u>Issue Code: 20.3</u>
	DHS notes the commentor's concern. The risks and associated potential effects to human health and safety were evaluated in Section 3.14 of the Draft EIS. The risks were determined to be low for all site alternatives. The impacts analysis specifically included consideration of environmental justice concerns to include an assessment of the potential for disproportionately high and adverse effects to minority or low-income populations, as further described in Section 3.1 of the NBAF EIS. No disproportionately high and adverse effects to environmental or human resources are evident for the proposed Umstead Research Farm Site from normal facility operations.	
	<u>Comment No: 30</u>	<u>Issue Code: 17.3</u>
	DHS notes the commentor's concern about the impact to air quality from a large increase in the average daily traffic volume due to NBAF operations at the Umstead Research Farm Site. This projected large increase in traffic volume from NBAF operations, as reported in Section 3.11.7.3.1 of the NBAF Draft EIS, was based on incorrect values for current average daily traffic (ADT) on the primary traffic corridors that would service the NBAF. The corrected values for current average daily traffic volume on Range Road of 381 vehicles per day (traffic increase of 2.6%) and on Old Highway 75 of 5,500 vehicles per day (traffic increase of 0.2%) demonstrate that the projected impact to the traffic and transportation infrastructure from NBAF operations at the Umstead Research Farm Site, to include the impact to air quality, would be low. DHS has modified the NBAF EIS to reflect these corrections. As to air quality, the potential effects of NBAF operations on air quality are discussed in Section 3.4 of the NBAF EIS. Section 3.4.3.3.2 describes the emissions from employee and service vehicles as estimated from The Emissions Factor 2002 Burden Model for California Air Resource Board. Section 3.4.7 describes site-specific effects at the Umstead Research Farm Site. Air pollutant concentrations were estimated using SCREEN3, a U.S. EPA dispersion modeling program. Conservative assumptions were used to ensure the probable maximum effects were evaluated. Once the final design is determined, a more refined air emissions model will be used during the permitting process. The final design will ensure that the NBAF does not affect the region's ability to meet air quality standards.	
	<u>Comment No: 31</u>	<u>Issue Code: 10.3</u>
	DHS notes the commentor's concern regarding potential noise affects. As described in Sections 3.5.7.1, 3.5.7.2 and 3.5.7.3 of the NBAF EIS, most audible operational noises would emanate from traffic and the facility's heating, cooling, and filtration systems; the four year construction period would result in temporary noise consequences.	
	<u>Comment No: 32</u>	<u>Issue Code: 11.3</u>
	DHS notes the commentor's concerns regarding earthquakes. Section 3.6.1 of the NBAF EIS describes the methodology used to assess each site's potential seismic consequences; Section 3.6.7 specifically describes the Umstead Research Farm Site; and Section 3.6.7.1 mentions the Jonesboro Fault east of Raleigh. The NBAF would be built to meet or exceed all applicable building codes for	



seismic safety. Section 3.14.3.2 further addresses NBAF design criteria and accident scenarios associated with natural phenomena events such as earthquakes.

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12 cont.   12.3	<p>Durham County line, impervious surface construction is limited to 6% of parcel area, in order to protect the Neuse River watershed of which the subject site is a part. This facility poses a huge impact to water quality.</p> <p>Likewise, the DEIS wholly ignores the potential water quality impact of the 500,000 gallons of diesel fuel storage tanks which is planned in conjunction with the Central Utility Plant, to support the planned thirty-day operation of the facility in the event of a power or natural gas disruption. See NBAF Feasibility Study at Section 4.10, page 2. The DEIS has wholly failed to consider the consequences to groundwater and stormwater in the event of a leak from this/these storage tank(s).</p>
34   5.1	<p>The agencies who will be in charge of the NBAF have demonstrated a very poor track record with this issue at the Plum Island site. As referenced at DEIS page 3-338, an underground fuel oil pipe leak was discovered at Plum Island (which stores approximately 650,000 gallons of petroleum products) in 1995. Evidently, nothing was done for <u>five years</u>, until 2000, when an “automated fuel recovery system was installed.” 4,500 gallons of fuel oil was removed. This evidently was not the only such spill, as others are referenced at that page. Further, apparently “lack of funding has prevented the complete remediation of these areas.” DEIS at 3-338. The historically demonstrated reality of such funding shortages must be taken into account in the EIS.</p>
9 cont.   2.0	
	<b>3.7.7.3.3 Groundwater</b>
12 cont.   12.3	<p>3-150 As Homeland Security has yet to determine the manner in which it will dispose of facility waste, such that we cannot know whether a landfill for facility waste will be constructed within the 249-acre site, as at Plum Island, it is impossible to state whether groundwater (and surface water) will be adversely impacted by facility operations. This issue must be addressed in the EIS.</p>
	<b>3.8 Biological Resources</b>
	<b>3.8.7 Butner Site</b>
	<b>3.8.7.1 Affected Environment</b>
	<b>3.8.7.1.5 Threatened and Endangered Species</b>
28 cont.   13.3	<p>3-199 In light of the acknowledged presence of numerous rare and endangered species (“including one of the largest populations of the federally endangered smooth coneflower in the United States”) in the immediate vicinity of the site, the DEIS must reflect a thorough on-site examination to determine the extent to which these species are actually present at the site. A mere “database review” is inadequate.</p>
	<b>3.8.7.2 Construction Consequences</b>
3-203	See comments for page 3-149.
	<b>3.8.9 Potential Operational Consequences for Wildlife</b>
3-213	This section must include an examination of the potential impacts on avian wildlife in the event of a release of diseases such as the two avian diseases which are identified in the NBAF Feasibility Study.

	<p><u>Comment No: 34</u>                      <u>Issue Code: 5.1</u></p> <p>DHS notes the commentor’s concerns regarding safe facility operations. The NBAF would be designed, constructed, and operated to ensure the maximum level of public safety and to fulfill all necessary requirements to protect the environment. As described in Chapter 3 and summarized in Section 2.5 of the NBAF EIS, the impacts of activities during normal operations at any of the six site alternatives would likely be minor. DHS would maintain the NBAF and ancillary facilities in compliance with applicable environmental, safety, and health requirements and provide adequate funding for safe operation and maintenance.</p>
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**3.8.9.1 Foot & Mouth Disease**

15 cont. | 3-214 The promise set forth here that DHS would develop a site-specific Standard Operating  
21.0 Procedure to deal with control of wildlife in the event of a foot and mouth disease release is wholly inadequate to address this critical issue. There are no models or examples of this situation being addressed ever before by any entity. This is an absolutely vital issue in considering whether foot and mouth disease can safely be studied on the mainland. Failure to address this issue in depth in the DEIS, now, on a site-specific basis is a gross deficiency and must be remedied. The extensive and for all practical purposes unmitigatable presence of deer at all of the mainland sites is a critical shortcoming in the plan to site the NBAF on the mainland.

Homeland Security's responses to questions posed on this issue during the DEIS hearing process highlight how grossly ill-considered this issue has been to date, and how essential it is to fully evaluate the issue before a decision is made about the siting of the NBAF.

18 cont. | 13.3 For example, the DEIS refers to "population reduction" of animals such as deer, which  
15 cont. | 21.0 are widely endemic to the Butner area and are both susceptible to and carriers of FMD. Homeland Security and USDA officials stated variously at those hearings that such population control would be conducted through use of poison and/or through hunting. Both of these threaten additional risks to the larger environment, specifically because it is well-known that deer dying from poison, gunshot or being struck by an arrow will seek a water source. Infected deer dying in or adjacent to streams and other water bodies threatens to increase the spread of FMD through the water supply. Further, how would such poison be dispersed, and with what potential effects upon domestic and domesticated animals that may come across the poison?

**3.8.9.2 Rift Valley Fever**

16 cont. | 3-218 As with FMD, the lack of a concrete plan to address an outbreak of Rift Valley Fever is a  
19.0 critical failing in the plan to site the NBAF at any mainland location. Further, the contemplated "repeated aerial spraying [for mosquitoes] . . . over an extended period of time" poses environmental and human health effects that must be addressed in the EIS. The DEIS's facile dismissal of the potential consequences in reliance on a putative "extremely low probability of an accidental release" is grossly inadequate, particularly in light of the extensive shortcomings, detailed below, in the risk analysis methodology employed in the DEIS.

**3.8.9.4 Beneficial Effects**

17 cont. | 3-220 This section is no more than puffery. To be meaningful, it should detail those diseases  
17.0 which have actually been eradicated through, or now have broadly effective vaccines because of, the research which was conducted over the course of Plum Island's 50+-year history. This listing would reveal how naïve and aspirational the alleged "beneficial effects" truly are.

**3.10 Socioeconomics**  
**3.10.1 Methodology**



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6 cont. | 15.3

3-227 Although the DEIS references “anticipated changes in . . . housing values”, it fails to consider the potential adverse impact on property values in the vicinity of the proposed facility, much as property values decline next to nuclear facilities or prisons. This must be addressed.

Further, although the DEIS notes that “school-aged children and the elderly are a sensitive population groups that have additional needs and require additional services,” the DEIS failed to consider the impacts on the more than 7,000 institutionalized individuals that live in the immediate vicinity of the Butner site.

### 3.10.7 Butner Site

#### 3.10.7.1 Affected Environment

3-297 The DEIS should include Orange and Chatham Counties in the “expanded area of study” for the agricultural and livestock vulnerability analysis and discussion; they are as close to the site as Franklin County, and closer than many parts of Wake, Halifax and Mecklenburg Counties.

3-282 The source for the livestock census figures (see Appendix C, table C-92) is given as “DHS 2007.” These figures should come from the NC Department of Agriculture and/or the NC State Agricultural Extension office, and should be broken out by species. Likewise, the value of the North Carolina livestock and poultry population should be taken from these sources.

The number of jobs (248) associated with hunting in the 8 counties appears to be significantly understated. We are uncertain what source is referenced by “MIG 2006”, which is the cited source in the DEIS. According to the Congressional Sportsmen’s Foundation, hunting generates 8,800 jobs in North Carolina. See [www.sportsmenslink.org](http://www.sportsmenslink.org). The EIS must analyze the potential impact on this hugely significant economic activity in the event of a release. Although that impact is fleetingly acknowledged at DEIS page 3-216, by reference to plans to “reduce or depopulate infected wildlife in either the infected zone or the surveillance/movement control zone” in the event of a foot and mouth disease release, there is no discussion of (1) how or why culling would be limited to infected animals, or (2) how this process would impact the hunting sector of the North Carolina economy.

3-283 Under the “Population” heading the reference to the “South Milledge Avenue site” should be corrected to the “Umstead Farm site”, and population figures should be checked to confirm that they are for the correct site. Also, there is no reference to the Polk Youth Center or the new Central Regional Psychiatric Hospital and their respective residents.

33 | 20.3

3-284 Although reference is made to the 3 low to medium security prisons in the Butner Federal Correctional Complex, the DEIS fails to mention the Butner Federal Medical Center, which houses male inmates of all security levels, and is the largest medical/psychological facility of the entire federal prison system. The prisons and other

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33 cont. |  
20.3

referenced institutions raise significant environmental justice issues which are not addressed at all in the DEIS.

6 cont. |  
15.3

Also, the DEIS apparently fails to take into account the number of African-Americans housed in the Butner Federal Correctional Complex, which is disproportionately significantly greater than the population at large.

3-285 The "study area" appears to expand or constrict based on convenience – sometimes it is the Town of Butner, and other times extends through 8 counties. For purposes of the Age discussion, the focus should be on the Town of Butner, which has a significantly high elderly population.

3-288 There is no discussion whatsoever of what if any training has been received by Butner first responders which would be relevant to an emergency at the NBAF. Nor is there any discussion of the cost of providing such training, and whether that cost would be born by the locality, the state or DHS. Nor is there any discussion of what if any abilities area medical centers may have to deal with outbreaks of the diseases to be studied at the NBAF.

**3.10.9 Accidental Release Scenario**

**3.10.9.5 Butner Site**

7 cont. | 21.3

3-309 This section as a whole is utterly, grotesquely deficient and shockingly specious – all three paragraphs of it. The DEIS fails to include any discussion of the possible impacts of an accidental release of the two poultry diseases referenced in the NBAF Feasibility Study, namely Newcastle Disease and avian flu. Given North Carolina's extremely substantial poultry sector, the DEIS must fully explore the impacts of a potential release of these diseases. As detailed above, the livestock numbers should be based upon NC Department of Agriculture and NC Agricultural Extension Office data.

33 cont. | 20.3

There is no discussion of possible mitigating responses in the event of a release; no discussion of the impact of a release upon the more than 7,000 institutionalized individuals who live within 3 miles of the site; no discussion of the potential for quarantines or culling of livestock populations and wildlife populations; no discussion of emergency responses; only the most cursory positing of economic loss.

6 cont. | 15.3

The DEIS fails to explore the possible impact of a release of Nipah virus. Nor is there any discussion of the containment of and potential release of any animal or zoonotic prion diseases.

The DEIS fails to explore the impacts of a release given the no-action alternative. Under the no-action alternative, certainly foot and mouth disease will continue to be studied at Plum Island. Review of release impacts given the no-action alternative must detail the history of containment breaches and pathogen releases at Plum Island.

Although the study area for the Agricultural part of the Socioeconomic section included 8 counties, the DEIS has improperly limited the focus in this section to the livestock

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7 cont. | 21.3

population of the Town of Butner. There must be a discussion not only of the 8-county study area, but of the potential impact upon entire State in the event of a release.

**3.11 Traffic and Transportation**  
**3.11.7 Butner Site**

35 cont. |  
17.3

3-322 There is no discussion of the expected number of trips of heavy equipment and construction vehicles (e.g., dump trucks carrying soil, backfill and building materials) to and from the site over the anticipated 4-year construction period, nor of the wear and tear on area roadways as a result of that increased usage, nor of the costs to maintain and repair those roadways, nor of whether that cost will be borne locally or by Homeland Security.

3-324 The DEIS fails to examine the traffic impacts on the full 4-mile corridor between I-85 (which will surely be the main route to the site) and the site. It must also detail the roadway and traffic signal improvements which are anticipated to be necessitated by the proposed lab, together with the cost of such improvements and whether those improvements must be paid locally or will be paid by DHS.

The DEIS states that the site "would be accessed primarily from Range Road." Does this mean that most employees are expected to live in Durham County and come from the southwest? There is no analysis whatsoever of the paths expected to be impacted by the anticipated location of the employees of the facility.

6 cont. |  
15.3

Although there is reference to the emergency services vehicles possessed by the Town of Butner, there is no discussion of the adequacy of these services in the event of an emergency at the facility. Nor is there any discussion of the impact of such an emergency on first responders in Durham County, who are equally close to the site.

**3.11.9 Transportation Shipments of Infectious Materials**

3-328 We query whether USDOT data is the most comprehensive source of data regarding incidents in the transportation of pathogens, given the structural disincentives to reporting which were noted in the October 2007 Government Accountability Report on the problems associated with the proliferation of high-containment biological research labs. Further, given the lack of unified oversight of high-containment biological research labs in the U.S., as noted by the October 2007 GAO report, it is unlikely that any sufficiently comprehensive database exists regarding such incidents. See also DEIS page B-1. However, there should be consultation with the CDC to determine what if any data they possess on this topic.

Reference should be made in this section to the incident referenced on page B-9, in which 1,025 vials of anthrax were shipped from Lawrence Livermore National Laboratory, which shipment when received contained 2 vials missing caps and a third vial with a loose cap, and in which a second shipment contained an incorrect number of vials upon receipt, resulting in the exposure of two workers. Likewise, this section should include the incident referenced on page B-11, in which live (rather than dead) anthrax samples were improperly sent from the Children's Hospital and Research Center, leading to the

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34  17.3	<p>exposure of 7 scientists. This section should include the incident referenced at page B-12, in which “an improperly packages shipment [of bird tissue infected with West Nile Virus] containing dry ice burst,” resulting in the exposure of workers at a Fed Ex shipping building. Other such incidents should also be referenced.</p> <p>Further, there needs to be an examination of the potential for an accident in the shipment of pathogens over the anticipated 50-year lifespan of the lab.</p>
	<p><b>3.13 Waste Management</b>  <b>3.13.1 Methodology</b></p>
13 cont.  18.3	<p>3-342 This entire section is deficient, as the DEIS does not indicate the disposal system to be used for the NBAF’s animal and other infectious waste and carcasses. In essence, there is nothing to comment on, because this discussion is wholly contingent and speculative.</p>
	<p><b>3.13.2 Waste Management Impacts Common to All Alternative Sites</b></p>
	<p>3-343 There is no discussion of which landfill(s) and incinerator(s) (e.g., the Person County landfill?) are expected to receive debris and hazardous waste generated both in the course of construction and during operations, and in what volume, and what impacts that waste might have on existing landfill capacity.</p>
	<p><b>3.13.8 Butner Site</b></p>
10 cont.  8.3	<p>3-359 The information regarding SGWASA’s commercial and industrial capacity are outdated, and must be updated not by talking to the Granville Chamber of Commerce (as reflected in the DEIS), but with the Director of SGWASA and the North Carolina Department of Environment and Natural Resources, Division of Water Quality. SGWASA’s operations are already plagued by extensive violations of its permit, which is now is under review. On May 7, 2008 SGWASA received a copy of the draft permit for their facility from the Division. The draft permit contains significant changes from SGWASA’s current operational permit, including a flow limit of 0.2 million gallons per day. Moreover, SGWASA does not currently have a waste water flow recorder, in violation of Division requirements that flow measurements be continuous and recorded. An 18-month compliance schedule was provided to SGWASA allowing them time to acquire fund, design, purchase and install a continuous flow recorder. The Division is currently considering a moratorium on new hookups into SGWASA, until SGWASA demonstrates a track record of compliance. Further, reference to 69,000 gpd is not consistent with other parts of the DEIS, which states that NBAF wastewater flow is expected to range to 150,000 gpd. See page 3-51; see also page 3-360. It appears further inconsistent in that NBAF water usage is expected to range to 275,000 gpd (see DEIS page 3-50); there is no explanation of the 125,000 gpd difference between the intake and outflow. Ultimately, SGWASA is simply in no shape to handle the 150 to 275,000 gallons per day of wastewater that the NBAF is expected to produce even before its expansion. It certainly cannot handle any release of improperly or inadequately treated infected waste from the NBAF. Nor is Knap of Reeds Creek, which is already listed as impaired. See DEIS page 3-146. These existing conditions must be reflected in the discussion at this section.</p>

	<p>Comment No: 34                      Issue Code: 17.3</p>
	<p>DHS notes the commentor’s concerns regarding the handling and transport of packages containing pathogens. The general regulations governing the required NBAF handling and transport of packages containing pathogens, and a discussion of the low risk associated with the shipment of infectious materials is provided in Section 3.11.9 of the NBAF EIS. Section 2.2.2.3 provides detailed information on the handling and transport of packages containing pathogens. Additionally, an analysis of accidental releases during transportation is provided in the NBAF EIS under Section 3.14, Health and Safety. Information regarding the existing road conditions and potential effects to traffic and transportation from the Umstead Research Farm Site Alternative is provided in Section 3.11.7 of the NBAF EIS.</p>
	<p>DHS notes the commentor’s suggestion that the Centers for Disease Control and Prevention be consulted regarding matters involving the transportation. Should the NBAF Record of Decision call for the design, construction, and operations of the NBAF at the Umstead Research Farm site, then operational, safety, security, transportation and emergency protocols and plans would be developed that would consider the diversity and density of human, livestock and wildlife populations residing within the local area. DHS, in consultation with the Centers for Disease Control and Prevention, would develop and implement site-specific standard operating procedures, pathogen transportation plans and emergency response plans prior to the initiation of research activities at the proposed NBAF.</p>

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**3.14 Health and Safety**

25 cont. | See generally the extensive comments below on Appendix E. This section should be combined  
21.0 | with Appendix E (with the Appendix E analysis being moved to this section in toto), because the  
substantial but not exact duplication discourages meaningful review.

**3.14.3.4 Intentional Acts and the Threat Risk Assessment**

15 cont. | 3-434 This section is devoid of meaningful content, as the actual "Threat and Risk Assessment  
21.0 | was developed outside of the EIS process" has been omitted from public review based on alleged  
security grounds. The recent discovery that a Ft. Detrick scientist was responsible for the  
anthrax attacks that provided the justification for the post-2001 rapid proliferation of high-  
containment biological research labs requires that this issue be addressed in the text of the EIS  
with full transparency, and not withheld on putative security justifications. Likewise, the recent  
arrest of Aafia Siddique on charges of terrorism, and the discovery that she possessed a list of  
potential targets that included Plum Island, requires that the community be included in – not  
excluded from – the information regarding the potential for such actions against an NBAF in  
their area.

**3.14.4 Site-Specific Consequences****3.14.4.5 Butner Site**

7 cont. | 3-487, 488 At bottom, the only site-specific comments in this section are a listing of livestock  
21.3 | in the area (undifferentiated as to species, which undercuts its usefulness given the  
different disease profiles of FMD in each species); and statements that "livestock and  
wildlife (deer and boar) in the vicinity of the North Carolina site provides ample  
opportunity for FMDV to establish in the environment upon a release," "the area around  
North Carolina would provide an environment for RVFV to be easily transmitted once  
released," and "the consequences of a large release of Nipah virions would be as severe  
as that of RVFV or FMDV in this area." Despite the inclusion of charts and words, those  
charts and words have no true content that reveals anything about the potential impact,  
and the actual risk of such an impact, in North Carolina.

3-488 The statement that "because of the potential for easy spread of FMDV, RVFV, and Nipah  
virus diseases via infected livestock, wildlife, and vectors, the overall risk for the North  
Carolina site is designated as risk rank II (moderate)" is deeply flawed, because it rests on  
a fundamentally unsound risk assessment methodology, as detailed below in the  
comments on Appendix E. That methodology is necessary so limited as to be  
meaningless, because there are no site-specific design details for the NBAF, and because  
many of the essential containment systems have not even been selected, and thus cannot  
be analyzed. The only thing we know is that if and when one of these diseases is released  
from the NBAF, the consequences will be far-ranging and severe.

**3.15 Mitigation**

3-502 The statement that "all practicable means to avoid or minimize an environmental harm  
from the selected alternative have been incorporated into the design of the NBAF" is a  
meaningless assertion, given the absence of any site-specific designs and indeed of  
fundamental decisions regarding the NBAF's core systems. This sentence must be  
deleted as baseless.

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- 10 cont. | 3-503 Upgrades by local utility providers is not mitigation, in the absence of federal funding to  
8.3 | implement the proposed upgrades, which in the case of the Butner site are required for  
every aspect of utilities.
- 31 cont. | 3-504 No mention is made of any measures to mitigate the noise impact on the C.A. Dillon  
10.3 | School during the four years of construction. Nor is any mitigation indicated for the  
noise associated with the significant increase in traffic to the facility.
- 32 cont. | 11.3 | It does not appear that Granville County or North Carolina have seismic building codes;  
thus, the referenced mitigation has no meaningful yardstick.
- 29 cont. | BMPs are wholly inadequate to mitigate soil erosion, particularly given the steeply  
22.3 | sloping site and huge areas of land to be excavated and filled. State Land Quality  
program for oversight of BMPs is notoriously understaffed, and oversight of projects led  
by federal entities is historically even weaker than that of private projects. Further,  
inspections and enforcement from the State DENR Regional offices weakens with  
distance from the offices, slowing response time and weakening inspection patterns.  
Further, as the Butner site is screened from the roadways by trees, the public will be  
unable to observe sediment and erosion practices and plan violations. There is no local  
jurisdiction or funding for supervision.
- 3-505 The potential for groundwater contamination exists not only during construction, but  
during operations as well, with both chemically and radiologically hazardous substances  
to be employed at the facility, as well as biohazardous materials handled before, during  
and after study procedures. BMPs and a response and mitigation plan do not assure that  
no spills will contaminate the groundwater. Given the fracture geology of this region,  
any contaminants can spread quickly and unpredictably to off-site groundwater,  
potentially impacting private or public drinking water wells, or being released to local  
surface waters from groundwater discharge to streams. The NBAF must include inside  
and outside perimeter shallow and deep aquifer monitoring wells, with at least twice  
annual monitoring for all organisms under study and all toxic or hazardous substances  
used or stored on site at levels reportable under Tier II to the EPA, State CERCLA and  
the local Emergency Planning Committee. Under no circumstances should the NBAF be  
exempt from full accountability for providing such reporting on a timely basis, as well as  
meeting all other LEPC requirements and reporting timely to all emergency responders at  
the site and nearby institutions, residents and businesses.
- We also note that avoidance of wetlands and other habitat disturbances is referenced only  
for the NBAF itself, and not for the extensive infrastructure development (water and  
wastewater lines, electrical and gas supply, and access roads) that would be required for  
the Butner site, or even for the dual perimeter fence. BMPs will not be adequate to avoid  
significant impacts, as detailed in the comments regarding storm water above.
- 3-506 The design features referenced as mitigation are not detailed in any site-specific  
renderings which would enable review of their adequacy or robustness. Further, any such

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29 cont. | 22.3

features are dependent on frequent inspection and redundant checks to ensure proper maintenance and avoidance of structural, filtration or interlock failures. Such inspections should be performed at least quarterly by independent agencies and not relegated to onsite government or contract staff. In addition, local emergency responders who have been trained in bio-safety procedures and standards must be allowed to participate in these inspections at least annually in order to report to responding units, local officials and the public the status of all systems and procedures at the facility.

1 cont. | 23.0

The fact that an arthropod colony will be developed and maintained at the facility only increases the risk that already infected vectors could facilitate a release of pathogens into surrounding wildlife and potentially to livestock and human populations. No reproductively capable arthropods can be safely maintained at the NBAF. Instead, all disease vectors must be bred offsite, completely sterilized and shipped to the site free of all infection. The number of vector arthropods must be catalogued for each exposure study, and within 2 days of study initiation all such arthropods must be captured, accounted for and killed.

Planning for containment and elimination of exposed animals must long pre-date the installation of any animals, disease organisms or insect vectors at the site, and must be pre-approved by local and state elected officials, emergency management and a local advisory body. It is completely inadequate to develop such plans "in the event of a release."

6 cont. | 15.3

Economic impacts may be made less likely through the proposed (but yet undocumented) design features, but are not eliminated. The resulting impact to agriculture, public health and recreational tourism would be at least regional in the southeast and potentially nationwide if FMD, RVFV or another select agent were released from the NBAF. The estimated economic impacts are, as detailed infra, underestimated by one to two orders of magnitude.

13 cont. | 18.3  
12 cont. | 12.3  
28 cont. | 13.3

3-507 The EIS must consider not only the potential for waste streams to "exceed local [sewage treatment facility] acceptance criteria," but also the potential for that waste to exceed critical effluent concentrations for BOD, nitrogen and other typical parameters, particularly at the Butner site, given that SGWASA discharges to a federally recognized impaired low flow stream and downstream public drinking water reservoir suffering from low dissolved oxygen, excess algal growth due to high nutrient inputs, and toxicity.

Even more critical is the impact of organisms, as yet uncharacterized as to their ultimate form and volume (given the lack of a decision regarding waste treatment systems for the infected animal waste and carcasses), which are completely unregulated by the Clean Water Act. It is utterly unjustifiable on the basis of public health, economics and liability to ask a publicly owned and operated wastewater treatment works to accept and treat such waste streams. No possible utility upgrade could reduce the potential for the release of dangerous pathogens which are unregulated under the Clean Water Act and which the operators have no means to analyze or treat, nor do they have any means to prevent that waste from mixing with other waste streams.

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4 cont. | 3.0 3-508 CDC/NIH and OSHA inspections are infrequent and not always unannounced, violations are unenforced, and there is inadequate public disclosure of security and operational procedures. The cited mitigation is inadequate to ensure worker safety and health. Nor can primary containment be relied upon to prevent laboratory-acquired infections and releases, given the ultimate certainty of human error in the operation of such a vast facility over decades.

Likewise, infrequency of inspections and the fact that they are not always unannounced can be expected to result in inadequate maintenance and repair of secondary containment, inadequate supervision and security practices. There are few if any regulatory consequences for violations, inadequate public disclosure of security and operational incidents.

35 | 24.1 3-509 **3.16 Unavoidable Adverse Impacts**  
All of the listed impacts can be mitigated by building at the Plum Island site, an 840-acre uninhabited island.

15 cont. | 21.0 Also listed in this section should be impacts associated with a pathogen release from the proposed facility, because given the size and complex mission of this facility, and the inevitability of human error coupled with structural deterioration over time, such impacts are inevitable. Only siting at Plum Island can mitigate those impacts.

25 cont. | 26.0 3-509 **3.17 Relationship Between Short-Term Uses of the Environment and Long-Term Productivity**  
Here, as with the “unavoidable adverse impacts,” the adverse impacts are not comparable for all sites: the impacts on the Plum Island site are far less than at any of the mainland sites. Further, the putative benefits from the lab are not site-specific. Nor in fact are those benefits supported by any analysis whatsoever in the DEIS; this statement is merely an ipse dixit assertion of no substance.

3-511 **3.18 Summary of Significant Effects**  
Again, the DEIS contains no analysis whatsoever to support any of the entirely speculative putative “beneficial effects.” In the absence of detailed and documented support, the final 4 rows must be deleted from Table 3.18.2.

11 cont. | 9.3 As there is no substantive information regarding the systems to be used at the NBAF which would impact air quality, and as the Butner site is mischaracterized as holding “attainment” status when in fact it is not, the characterization of air quality impacts as “minor” is baseless. The same comment applies to water quality, given the impaired water bodies which would be fed by the NBAF and the lack of any definitive waste treatment details. The same also applies to waste management.

33 cont. | 20.3 The assertion of minimal environmental justice impacts at the Butner site is appallingly off-base, given the large population of institutionalized individuals in the immediate area, who would fall within the zone of restricted movement in the event of a release, and

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DHS notes the commentor's opposition to the Umstead Research Farm Site Alternative in favor of the Plum Island Site Alternative.



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33 cont. | 20.3 | given the disproportionately large minority and elderly population in the immediate vicinity of the site.

15 cont. | 21.0 | This summary is also risible in its failure to take into account the effects of a potential release, which is the 900-pound gorilla that Homeland Security elects to ignore. Normal operations constitute only the tip of the environmental impact iceberg for a facility such as this; it is the inevitable eventual release that poses the catastrophically significant impact, and that impact is entirely absent from this chart.

**Appendix B Review of Biocontainment Lapses and Laboratory-Acquired Infections**

B-1 The reference to a suggestion that “an overall decrease in LAI can be expected” must be qualified against the statistics regarding LAIs; only if the rate of LAIs caused by human error is decreasing can this be stated with any validity.

16 cont. | 19.0 | B-2 There is nothing to indicate that the NIAID record is predictive of, comparable to or relevant to the NBAF, in terms of containment risks (most particularly the special containment issues posed by large animal infectious diseases research in which there is no primary containment barrier such as a biosafety cabinet, and where containment is complicated by the large volume of waste and carcasses from the infected animal subjects). Inclusion of this section is statistically irrelevant and ultimately misleading. There should instead be a detailed review of the operational history of the Plum Island laboratory, and other high-containment large-animal research facilities worldwide.

B-5 The full CDC compilation of 111 Select Agent incidents should be included in the DEIS.

**Appendix C Socioeconomics Tables**

**Appendix D Potential Economic Consequences of Pathogen Releases from the Proposed NBAF**

2 cont. | 15.0 | D-1 The DEIS grossly understates the economic impact of the 2001 FMD outbreak in England as a mere \$5 billion. The Animal and Plant Health Inspection Service (“APHIS”) of our own USDA states in its August 8, 2007 white paper entitled, CEI Impact Worksheet: Foot and Mouth Disease, United Kingdom, that “[m]ore than 6 million animals were slaughtered, costing an estimated 17 billion dollars.” This requires correction to reflect the full cost of the UK outbreak, to enable the reader to accurately assess the true potential consequences of a FMD outbreak in the far larger livestock industry in the U.S., and in particular the hog industry in North Carolina, which can greatly amplify the consequences of a foot and mouth release.

The DEIS’s estimate of the economic consequences of a FMD outbreak in the U.S. is likewise grossly understated. The USDA issued its Economic Research Report No. 57 in May 2008, entitled “Economic Impacts of Foreign Animal Disease.” That lengthy study states at page 1 that “[t]he potential losses from an FMD outbreak in California are estimated to range between \$8.5 and \$13.5 billion (Ekboir). A substantial share of those estimated losses, \$6 billion, is attributed to an embargo on U.S. meat exports. Paarlberg,

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Lee and Seitzinger (2002) estimate that an FMD outbreak similar to the one that occurred in the U.K. during 2001 could generate U.S. farm income losses [as distinct from total economic losses] of \$14 billion.”

- 2 cont. | 15.0
- D-1 The DEIS fails to include any site-specific risk or economic modeling of a potential disease release.
- D-3 Because NBAF’s stated body of research includes genetic modification of disease organisms, it is improper to exclude Nipah Virus from the potential consequence analysis merely on the basis that its current vector does not occur in the Western hemisphere. We must anticipate that the Nipah flying fox fruit bat vector will be brought to NBAF for study in conjunction with the study of Nipah (just as NBAF shall host an insectary to study other disease vectors). Further, Nipah has already demonstrated the ability to adapt to other hosts – hence, in part, its zoonotic status. If we believe that a release of Nipah virus will not have consequences for the U.S. if it is released, then there is no reason to study it in the first place as part of NBAF’s biosecurity mission.
- D-4 The DEIS fails to state that animals which do recover from FMD exhibit severely compromised productivity in milk and meat production.
- D-5 Although the DEIS notes that birds, dogs, cats and rodents can carry the disease, it fails to mention horses as potential carriers, and fails to identify the control measures which might be taken against these potential carriers.
- D-8 The statement that “total losses to capital and management over 16 quarters was estimated to range between \$2.773 billion and \$4.062 billion” is misleading. First, the term “capital and management” is not defined here so as to let the reader know what items of economic loss are not included in that estimate. Second, this approach is not an apples-to-apples comparison, since elsewhere the DEIS variously speaks of “GDP losses” (D-1), “impacts to the livestock industry” (D-7), “cost [to the] agricultural sector” (D-7). The DEIS must state the total economic loss to all sectors of the U.S. economy (including but not limited to livestock losses, lost business from trade bans and decline in U.S. consumption, lost business to feed suppliers, tourism and losses in economic sectors other than agriculture, and government costs in implementing control measures) in the event of an FMD release, and it must do so clearly, up front, and in the Executive Summary as well.
- Presumably, the losses to the U.S. livestock industry in the event of an FMD outbreak similar in scale to the 2001 U.K. outbreak would fall somewhere between the \$10 billion and \$30 billion numbers referenced at D-7, with total U.S. economic losses (including government costs and economic impact to other sectors of the economy) would be significantly higher. This number must appear in the FEIS.
- The EIS must reflect a worst-case scenario analysis; there is no basis for limiting the estimate to 16 quarters, nor is any such basis for this arbitrary number discussed in the source study. Indeed, the source study cited in the DEIS states that “[a]nimal losses and

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2 cont. | 15.0

duration of the FMD outbreak are sensitive to the conditions assumed for the outbreak, i.e., that it started on small pig farms and was confined to them. Alternative scenarios could result in higher costs than reported in this analysis." USDA ERR-57 at p. vii.

6 cont. |  
15.3

- D-9 The DEIS fails to state the value of all cloven-hoofed animals in North Carolina.
- D-11 Although the DEIS elsewhere references attempts to control a potential Rift Valley Fever outbreak by larvaeciding mosquito breeding grounds, it fails to detail the impacts of such a campaign in an area such as the Butner site, which is in close proximity to 5 major drinking water reservoirs.
- D-13,
- D-14 The DEIS must include the \$50 billion potential consequence in Executive Summary
- D-14 The DEIS fails to list the various potential insect hosts (including various tick species and biting fly species) with a matrix of which diseases currently present at PIADC together with those contemplated for the NBAF, reflecting which disease can be carried by each such host present in the environment for each site. A list is given of diseases to which one species of mosquito is receptive (*Aedes albopictus*), but this is not sufficient to afford a reasonable evaluation of the potential worst case scenario, including the potential for diseases released to remain present in the environment through seasonal changes.
- D-16 Given that pig farms suffer the most from outbreaks of Nipah Virus, the EIS must detail the potential impact of a Nipah outbreak upon North Carolina's very large commercial pig production.
- D-19 The DEIS needs to describe the extent to which quarantines would restrict human movement, and the geographic area expected for quarantine under a worst-case scenario analysis.
- D-21 The DEIS needs to explain how hypothetical statistics for the Australian pig industry are predictive of or comparable to the U.S. pig industry, and why the calculation cannot simply be performed for the U.S. pig industry, which may operate quite differently, given the intensive methods used particularly in North Carolina, which may well increase the effect of an outbreak.

**Appendix E Accidents Methodology**15 cont. |  
21.0

This section is comprehensively flawed, because the lack of actual site-specific designs requires virtually all information to be assumed. (See page E-67: "Event trees require knowledge of potential initiating events (equipment failures, system upsets, operator errors, etc.) that could cause potential accidents and knowledge of safety system functions and procedural steps that could mitigate the effects of each initiating event."; there's a complete lack of any concrete information to use as a starting point.) Many of those assumptions are, as detailed below, demonstrably inapt. For example, it is assumed that the facility is always new, and will thus

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have a lower systems failure rate, even though that number is occasionally taken out across the anticipated 50-year life of the facility. The facility will not be new for most of its lifespan.

A more appropriate approach, with greater grounding in real-world events, would be as follows: list all accidents which have occurred at BSL-3, BSL-3Ag and BSL-4 facilities nationwide over the past ten years; to account for underreporting in accordance with the pattern documented in *High Containment Biosafety Laboratories: Preliminary Observations on the Oversight of the Proliferation of BSL-3 and BSL-4 Laboratories in the United States*, by the U.S. Government Accountability Office, October 4, 2007, multiply the number of accidents by the factor of underreporting to get an adjusted figure; categorize the accidents in terms of consequence and assign percentage distributions; determine the number of total square feet of BSL-3, BSL-3Ag and BSL-4 space in the examined facilities; divide the number of accidents by that total number of square feet; multiply that number by the total number of BSL-3, BSL-3Ag and BSL-4 space square feet at the NBAF; multiply that number by 5 to reflect the anticipated lifespan of the NBAF; multiply that number by the percentage distributions of accident consequence categories. By using a distribution of all high-containment facilities, the suggested approach will reflect different systems and personnel failure rates across a variety of facility ages, which will also more properly reflect changes in rates over the life of the NBAF itself.

The Appendix E analysis also is flawed because it treats each event as having an independent probability. This is not accurate, given the domino effects that emergent events can generate, such as poor human responses under stress situations.

The analysis used in Appendix E is also flawed because it fails to include the vaccine production facility in the square footage, nor does it include the large amount of disease matter expected to be housed at that facility. It also fails to include space and personnel outside the BSL-3, BSL-3Ag and BSL-4 areas, such as the areas which will treat infected waste which are in a lower containment level but have a potential high consequence in the event of for example a sewer break (as happened both at Ft. Detrick and at the government lab in Pirbright, England), even though those areas and personnel will have interactions with infectious material.

It is further flawed in failing to take into account the risk of a terrorist incident, a strike or a disgruntled employee's bad acts, a possible sewer leak of untreated infectious waste, or a landfill or incinerator accident (which cannot be discounted given that DHS has yet to select waste disposal systems).

E-6 The DEIS is inadequate because it fails to apply the risk analysis to the actual designs to be used at each site. As noted, risk analysis techniques used in the DEIS were qualitative rather than truly quantitative, given this lack of actual designs for review. Without an actual design, the pronouncements in this section are speculative and insufficient to provide real-world guidance to decisionmakers.

E-7 Discussions about "mitigated risk" are inadequate, given the lack of an actual design reflecting the putative mitigation systems and the equal lack of the actual biosafety protocols to be used at the subject facility. As stated at this page, "[b]ecause the NBAF is currently at the conceptual design stage, much of the detail required to fully characterize

15 cont.]  
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the system failure probabilities does not exist." Under these circumstances, this section is grossly inadequate, regardless of its length.

E-8, 9, 10 The cited data dates to 1981; it is not evident that those failure rates remain applicable.

E-13 Although the DEIS states that there is a "need for a robust and comprehensive emergency response program" which would be "an essential safety control," there is no discussion of who is to provide that program (privately contracted, local, state and/or federal agencies), who bears the cost of that program, who provides the training, or the nature of that training. In the absence of such a discussion, it is impossible to assess the extent to which such a program will or will not mitigate the consequences of a disease release. Also wholly absent is any discussion of facility security systems and staffing, which makes it impossible to realistically evaluate the actual risk that an intentional security breach (either by facility employees or outside actors) could result in a disease release, as occurred for example when a Ft. Detrick scientist appropriated anthrax samples and sent those through the mails.

E-14 The DEIS fails to include worst-case risk analyses for the poultry diseases contemplated in the NBAF Feasibility Study, which DHS has acknowledged will be not only stored but used at the NBAF. The DEIS has no worst-case scenario analysis of potential impacts of a disease release on North Carolina's very significant poultry industry. Likewise, the DEIS fails to include a worst-case scenario and risk analysis for prion diseases, which have unique characteristics in their persistence and in the difficulty in eradicating prion-infectious material. Inclusion of such diseases is essential for a facility that will study animal and zoonotic diseases, which is expressly contemplated to pick up all of PIADC's mission and thus all diseases housed there, and which is expressly intended to be the only such large animal high-containment laboratory.

E-20 The DEIS notes that "[b]ecause training will be performed with select agents, appropriate requirements for security, storage, inventory control, and other features will be included within the design." Without specifying those requirements, it is impossible to determine what deficiencies may exist in those plans, and what impacts those deficiencies might cause. There is also no discussion of what screening will be done in determining the individuals who will be permitted to be students in this "hands-on experience."

Also, although it is noted that "normal protocols to prevent cross-contamination between rooms would not be observed," there is no analysis of the risks posed by this decision.

E-22 The DEIS states that "Several decontamination and sterilization technologies were initially reviewed and will be studied further: chemical, incineration, rendering, autoclave, and alkaline digestion." Without a commitment to a particular system or systems, and the degree of redundancy thereof, it is impossible to perform a realistic assessment of potential failure and impacts.

15 cont.]  
21.0

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E-22 The presence of an insectary in a low-containment BSL-2 space, and the plans for research using insects as disease vectors, including genetic research, highlights the potential for a domino effect in the event of cross-contamination with a disease from a higher-containment area, as has happened at the Plum Island facility. The possibility of this eventuality should be explored.

The need for design details is highlighted by the comment that the North American Foot and Mouth Disease Vaccine Bank will be at a positive pressure in relation to the adjacent corridor, which prompts a recommendation for "improved safety controls." We cannot assess how many other such defects might be present in the ultimate design, since those designs are not presented for our detailed review, as would be "important" to "develop[] . . . the risk assessment," as noted in the DEIS. Just listing the rooms and facilities is not enough; it matters what rooms are adjacent to each other to analyze potential work flow scenarios and points of structural or procedural risk. For example, the DEIS acknowledges that "proper design of process flows prevents cross-contamination of vital research/diagnostic programs." See E-35. The DEIS talks about the location of some rooms, but those locations are not shown in any designs.

E-27 The DEIS fails to indicate any details about the additional BSL-4 space that is contemplated for the vaccine production facility. This additional space necessarily contributes to risk, but is not analyzed. Also, the statement that the vaccine facility would house up to 30-50 liters of disease material appears inconsistent with the statement that the estimated average batch is "assumed to be small, approximately 20L or less" (E-29).

Also, the DEIS itself (at this page and elsewhere throughout this Appendix and the whole) indicates several areas where even the conceptual design requires correction. The EIS must demonstrate actual designs that show the correction of those shortcomings in biosafety and biosecurity.

E-37 Since "infected animal carcasses will exit via the carcass disposal chute located inside the animal necropsy room," the DEIS needs to state where the chute leads (including what containment level the receiving space will be) and the mechanism for ultimate disposal of the infected carcasses.

There should not be a "common [air] supply manifold," to avoid the potential for cross-contamination across BSL levels in the event of pressure imbalances and backfeeds. The "common supply" statement appears to contradict the statement that certain areas "will be served by a dedicated central supply air system."

The "conceptual ventilation systems" are no more useful in the DEIS than the other conceptual systems, for determining actual site-specific impacts of the proposed facility.

E-61 Given the tiny size of the FMD virus, there must be an analysis of whether HEPA filters can capture the disease.

15 cont.]  
21.0

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Source term analyses in Appendix E must also be conducted for the vaccine production facility.

E-62 The letters were sent by a disgruntled Ft. Detrick high-containment lab researcher, not a terrorist, as reflected in the recent extensive news coverage.

E-64,5 Specific criteria need to be established for ductwork, and detailed in the EIS. This is a critical safety issue.

15 cont. | E-65 No basis is given for the assertion that fire heat is likely to destroy any pathogens  
21.0 released.

E-66 The assertion that "fire propagation between laboratories is not likely, even with open doors," is not credible. Indeed, page E-119 states, "The confinement system is essential in preventing a release from the NBAF, thereby maintaining the confinement boundary. Failure of the confinement system to function would be caused by the facility doors (especially exterior doors) not being closed or the ventilation system's HEPA filters not able to perform their function."

Fire can take safety systems and containment systems off line within seconds. In an industrial building, fire is even more catastrophic because of the number of complex computer-based and electronic-based systems used within the facility to provide control and safety. When a fire takes place, those systems cannot be relied on to work correctly.

Fire causes cabling in the walls to fail. Almost 100% of control and containment systems, security systems and management systems rely on the cabling that will be within the walls. Fire very easily brings these systems to a halt; thereafter, they are very expensive to repair and get back to normal functions. Indeed, fire breaks down most normally operating systems within minutes. Electrical and communications cable is fragile and will not survive even a small fire, unless plenum or similar cable is used throughout, which is not detailed in the DEIS. A failure in the containment systems can quite literally open the door to a virus release.

Fire also causes people to leave the building and without people monitoring the viruses, control processes and procedures are not followed, leading to a domino effect which is wholly unaccounted for in this analysis.

It is also likely that local fire departments will not know how to work within a BSL-4 laboratory to avoid compromising containment systems. Likewise, they may well lack the equipment necessary to ensure their safety within the NBAF.

E-68 The DEIS states that "[b]ecause of the lack of design and procedural information on the NBAF, however, fault tree analysis was not performed," and that "the specific operational activities of the NBAF along with the activities of the population outside of the NBAF place site-specific constraints on the potential consequences associated with the inadvertent or intentional release of pathogens from the facility." This information

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should be included in the FEIS for such analysis to be accurately performed. DHS fails to provide even a baseline listing of activities at PIADC which NBAF is to replace.

15 cont.  
21.0

E-69 The reference to reducing the possibility of a laboratory-acquired infection “through the use of effective vaccines” is inappropriate, given the fact that the 8 listed diseases do not have an effective vaccine – hence the putative need for the NBAF.

E-70 The statement that “[t]he facility is designed to severely limit the potential for possible vector-borne transmission . . .” is not consistent with the lack of actual designs in the DEIS.

E-79 As noted here, there is “significant topography” on the site. Specifically, the site slopes steeply downhill toward Knap of Reeds Creek, a tributary of Falls Lake, increasing the potential harm from a failure in containment of infectious waste and/or water-borne transmission. This must be reflected in the risk analysis as a whole, and particularly in E.3.4.5.

13 cont.  
18.3

E-85 It does not appear that there is any real analysis of the waste systems for handling the infected animal waste. The statement that “none of the effluent water from the wastewater plant will contribute directly to any potable water source” is too obscure. Exactly what path will infected animal waste and carcasses take within the facility, and where exactly will it go once it leaves – to SGWASA? And thence to Knap of Reeds, and thence to Falls Lake? There is also a failure to indicate the containment level(s) in which waste treatment will be housed. If in a lower-containment area, why, given the presence of still-infectious material? Design specifics are vital for this analysis.

E-87 If maintenance staff will be involved in the treatment of infected animal waste and carcasses, they must be included in the analysis here; likewise, such areas must be considered in the square footage of the analysis, even if they are not in BSL-3, -3Ag or -4 space.

E-88 Given that elsewhere in the DEIS it is stated that the vaccine production facility will operate 24 hours/day for 365 days/year, it is not valid to assume “a nominal 2,000 hours per year” during which employees will be handling pathogens.

E-90, 93, 102 Although “the overall accident frequency is estimated for the life of the facility, which is assumed to be on the order of 50 years,” (E-90), it is assumed that “[b]ecause the NBAF is a new facility . . . the packages and equipment in use would be new and degradation would not initially be a significant contributor to the failure probability. Procedures and training would be current, and attention-to-detail is expected to be high. The likelihood of encountering degraded transport packages or process equipment may increase with operating history and could be further enhanced by personnel complacency” (E-93). Further, material will be coming in from other labs that may not have new packaging. It is also assumed that “workers are well trained and equipment is in good working order (easily disinfected, cleaned, etc.)” (E-102). The DEIS elsewhere assumes that “because the facility will be new, the probability of degraded containment



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systems (piping, valves, etc.) is relatively low.” (E-113) These assumptions must be corrected; the failure rate for a new facility should not be applied across the 50-year calculations. Also, there is evidence that human error rates are higher at new facilities, when workers are not yet fully familiar with equipment and protocols. This should be taken into account. See *High Containment Biosafety Laboratories: Preliminary Observations on the Oversight of the Proliferation of BSL-3 and BSL-4 Laboratories in the United States*, by the U.S. Government Accountability Office, October 4, 2007.

15 cont.  
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- E-99 The fact that “there are no documented cases of acquiring [Nipah virus] through a [laboratory-acquired infection]” does not mean the probability of such an event is null, particularly given the facts (1) that there has been very little study of Nipah to date, and (2) that human-to-human transmission has been demonstrated. Likewise, though lab workers may not become infected, they can carry FMD on their clothes or in their nasal passageways.
- E-100 The mitigation number must reflect the demonstrated track record of under-reporting in high-containment labs.
- E-105 There needs to be a separate analysis of the potential of a release of infected insects.
- E-113 The statement that “[b]iological materials exiting the sterilization processes or residing in the solid and liquid waste systems leaving the NBAF are expected to be monitored to ensure that proper disinfection has occurred” is inadequate. The DEIS must detail a process by which, and reflect waste treatment designs so that, each batch of waste is comprehensively tested before it leaves the NBAF to ensure that no infectious material remains viable and that there are no “hot spots.” This is essential as the DEIS acknowledges that “Because of the difficulties and uncertainties associated with effectively monitoring biological wastes, the overall potential of detecting biological materials that were inadequately or incompletely sterilized is relatively low. In addition, the systems necessary to confirm with a high degree of certainty that no viable pathogens exist in the biological wastes is limited by human error, time for analysis, the equipment used to analyze the samples, and the design of the sampling or limited by the quality assurance program, etc.” “The accident sequence of most concern is when there is incomplete or inadequate sterilization. Once this occurs, the likelihood that viable pathogens will be released into the environment is high.” E-113
- E-114 The assumption that “the amount of biological materials that remains in a particular sterilizer batch after an inadequate or incomplete operation is estimated to contain a nominal volume of 10 mL solution containing viable pathogens” is nonsensical. This facility will house up to 1000 pigs, and batches will not be processed in ½ ounce portions. The assumption should reflect a treatment failure for a full batch of waste produced by a significant number of the animals which will be housed there.
- E-120 The DEIS must consider the possibility of a fire originating in places other than a laboratory or BSC, particularly given the large quantities of volatile chemicals which will

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be stored at the NBAF for use in cleaning, sterilization and other processes. (See p. E-123.)

No basis is provided for the assumption that "heat from the fire destroys 99% of the available pathogen source term." That assumption is unrealistic. A fire that originates anywhere but the BSC is more likely to damage containment systems than to eliminate 99% of the pathogens. The same error must be corrected at page E-126.

15 cont. | 21.0

E-122 The statement that "the mitigated exposure levels are 100,000 times lower than the unmitigated release" "because of the contribution of the facility structure and its engineered safety barriers in mitigating the initial release" is not valid. The issue here is not whether a fire is unlikely – that is a separate assumption. Once that release occurs, that 100,000 number is irrelevant, because the release has already occurred. Fire suppression systems themselves may contribute additional risk in this facility. The DEIS fails, for example, to consider the situation where fire breaks out, employees evacuate without securing pathogens, sprinkler systems activate, and water from such systems and/or first responders disperses the pathogens in an uncontrolled manner.

Moreover, we have no actual designs for the building, much less the fire suppression systems and any fire-retardance features. The DEIS is inadequate without information detailing such fire-suppression systems. It is thus impossible to evaluate the extent to which building features will or will not impede the spread of a fire. Further, without building designs, we have no benchmark to use to determine whether such systems are later reduced due to budget constraints as the budgeting and construction processes evolve.

1 cont. | 23.0

The NBAF Feasibility Study states that "The entire building will be provided with complete automatic wet fire suppression in accordance with the requirements of NFPA-13, NFPA-14, and applicable codes. Areas subject to freezing will be provided with complete automatic dry sprinkler systems. Class 1 hose cabinets will be provided on each floor as well as where otherwise required based on IBC and NFPA-14 requirements. Fire protection densities will be determined based on the occupancy and use of the sprinklered area. Where it's determined that there is not sufficient pressure to serve sprinkler demand, a stationary fire pump package will be provided to ensure the required sprinkler performances of the facility. Piping materials will be schedule 40 steel throughout, grooved or threaded malleable iron couplings and fittings. Only cut-groove type or threaded joints for galvanized piping."

NFPA-14 systems (i.e., wet fire suppression systems) are inadequate for this application. FM-200 based systems (specifically, dry fire suppression systems) or equivalent should be the minimum requirement for a facility with the sensitive and critical mission of the NBAF. Wet fire suppression is cheap, and will pass basic building codes, but can easily destroy the electronic control systems and containment systems that the NBAF will rely on to keep the pathogens contained. A wet system is for supermarkets and Wal-marts, not for a facility such as the NBAF.

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1 cont.| 23.0

Many fire suppression systems can cause major damage to – and even destroy – the very things they are supposed to protect. The NBAF design must seek to avoid damage – not cause it – and to reduce downtime at the NBAF – not lengthen it. The NBAF should have a fire suppression system that deploys quickly and cleanly and won't leave behind oily residue, particulate, or water. FM-200 fire suppressant stops fires fast; wet systems do not. FM-200 systems reach extinguishing levels in 10 seconds or less, stopping ordinary combustible, electrical, and flammable liquid fires before they cause significant damage. That's the fastest fire protection available, period. When fire is extinguished this quickly, it means less damage, lower repair costs, and an extra margin of safety for people. It also means less downtime and disruption of business.

When the NBAF designers consider the potentially devastating environmental effects of an uncontrolled fire, it's easy to see that an FM-200 system or equivalent is a vital part of an environmentally responsible fire suppression solution for the NBAF facility.

15 cont.|  
21.0

E-123 The statement that a deflagration represents “an improbable event” appears to conflict with the observation of “the potential for flammable or combustible chemicals and natural gas is supplied to be routinely used in the facility.”

E-129 An earthquake would have a very different accident progression than a hurricane or tornado, with different dispersal mechanisms and consequences. A unitary analysis is not appropriate.

E-131 The statement that a hurricane or tornado should not occur during the life of the facility (see also p. E-133) is not factually supportable vis-à-vis the Butner site. Indeed, on page E-132 it states that “tornado or hurricane events are a significant potential at the proposed sites and occur with wind speeds in excess of 150 mph. Under those circumstances, the currently proposed NBAF would catastrophically fail if designed to the proposed criteria of 119 mph.” North Carolina ranks third in the nation in hurricane strikes (see <http://www.erh.noaa.gov/mhx/2007NCHurricaneGuide.pdf>), and experienced the following hurricanes of more than 119 mph in the past 20 years: Andrew (1992); Fran (1996); Floyd (1999); Isabel (2003); Charley (2004). Further, the tornado strikes to the area, such as those referenced at page 3-80, must be accounted for in this section.

E-135 The assumption that exposure generated by a release in a hurricane would be by aerosol is too narrow. A breach in containment could lead to the release of infected animals or insects, or to spills of infectious material being swept into adjacent waterways.

E-142 The DEIS fails to analyze disposal methods for the “radioactive materials within the facility.” Nor does it detail the potential environmental impacts associated with such materials.

34 cont.|  
17.3

E-143 The DEIS fails to take into account the fact that the Butner site is within the landing path for Raleigh-Durham Airport, leading to an increased risk of an aircraft crash accident. Nor does it take into account the larger size of the airplanes that serve this major airport. (The DEIS considered only the aircraft “of the size and configuration as those that

Spann, Kathryn

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34 cont. | commonly take off and land at smaller airports in the vicinity of the proposed NBAF  
17.3 | sites.”) The Manhattan, Kansas airport is not comparable. See E-145.

15 cont. | E-150 The DEIS contains no design details to evaluate the claim that “preventative features”  
21.0 | will provide effective containment in the event of an aircraft crash.

E-160 The statement that “significant releases of pathogens from the NBAF as a result of  
accidents could be expected to occur only from the higher containment areas” is not  
valid, given that the waste treatment system is to be placed in only BSL-2 containment.

Sincerely,

/s/

Kathryn C. Spann  
Steering Committee Member  
on behalf of the  
Granville Non-Violent Action Team  
4720 Bahama Road  
Rougemont, North Carolina 27572  
919.477.5653

Spear, Chris

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WD0640

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**From:** Chris Spear [REDACTED]  
**Sent:** Friday, August 22, 2008 7:55 PM  
**To:** NBAFProgramManager  
**Subject:** Support NBAF in Flora

Dear sirs,

1|24.5 As a young professional working in the greater Jackson area, I appreciate the development opportunities our community maintains.

With international business, media, and cultural events, Jackson is one of America's best places for professionals to be involved

2|15.5 and make a change. It would be a pleasure to have the National Bio and Agro-Defense Facility in Flora.

1Cont|24.5 I trust that the NBAF will help strengthen the society of young professionals in Jackson, retain existing talent, and draw new

interest to our area. I fully support the National Bio and Agro-Defense Facility's placement in Flora, Mississippi.

Yours sincerely,

Chris Spear

[REDACTED] MS

Comment No: 1                      Issue Code: 24.5

DHS notes the commentor's support for the Flora Industrial Park Site Alternative.

Comment No: 2                      Issue Code: 15.5

DHS notes the commentor's support for the Flora Industrial Park Site Alternative. The economic profile and quality of life of the local region are presented in Section 3.10.5.1 of the NBAF EIS.

Spearing, Paige

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WD0714

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**From:** george spearing [REDACTED]  
**Sent:** Monday, August 25, 2008 12:12 PM  
**To:** NBAFProgramManager  
**Subject:** NO NABF IN ATHENS

1|25.2  
NBAF does not belong in Athens, Georgia. Keep it off of the mainland and on Plum Island. Most local citizens DO NOT want it here, regardless of what local and state officials claim. Accidents do happen and will happen. My children are too precious to expose to this danger.


Paige Spearing

Comment No: 1      Issue Code: 25.2  
DHS notes the commentator's opposition to the South Milledge Avenue Site Alternative.

Stallings, Hannah

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FD0091



Michael F. Bailey, Governor  
 William G. Ross Jr., Secretary  
 North Carolina Department of Environment and Natural Resources  
 Colleen M. Sullivan, Director  
 Division of Water Quality

August 15, 2008

**MEMORANDUM**

**TO:** Malba McGee  
 Department of Environment and Natural Resources

**THRU:** Dianne Reid, Supervisor  
 Basinwide Planning Unit and SEPA Program

**FROM:** Hannah Stallings, SEPA Coordinator  
 Basinwide Planning Unit and SEPA Program *HS*

**SUBJECT:** Draft Environmental Impact Statement  
 Granville County  
 National Bio & Agro Defense Facility (NBAF)  
 DENR#08-0399, DWQ#13995

1|12.3 The Division of Water Quality (DWQ) has reviewed the subject project with regards to the potential siting of the facility in North Carolina. The area proposed is of major concern because of the surface water quality and quantity issues that currently exist in the watershed. Krap of Reeds Creek is a tributary to Falls of the Neuse Reservoir. The creek and the reservoir are currently impaired for aquatic life and a nutrient management strategy is currently under development for the entire Falls of the Neuse Reservoir and its watershed. The Draft Environmental Impact Statement does not sufficiently address a number of issues related to protection and improvement of water quality in Krap of Reeds Creek and the Reservoir.

Our specific comments and concerns are listed below in sequential order per the document's organization. This method does result in repetition of some of the comments; however, we hope you find it useful in fully addressing all the issues throughout the document.

6|8.3 1. ES-7 states that wastewater "Capacity would be available from existing or planned wastewater treatment facilities." If the NBAF will rely on the South Granville Water and Sewer Authority (SGWASA) for treatment of its wastewater flows, NBAF needs to closely coordinate with SGWASA to determine the adequacy of its treatment facilities and needs for expansion.

2. ES-9: Please clarify why the amount of wastewater generated would vary somewhat for each of the potential sites.

3. Page 1-2: While the first bullet on the page states that the facility would be BSL-3 and BSL-4 facility, the second paragraph states that there will be BSL-3Ag research at the facility. The information box on page 1-3 defines BSL-3 and BSL-3Ag facilities differently. DHS should determine what level of research is planned for the NBAF and report this consistently in the DEIS.

2Cont|26.0

Meeting Address  
 1617 West Service Center  
 Raleigh, NC 27601-6157

Phone (919) 897-6204  
 Fax (919) 897-6603

Location  
 51376 Baldhead St  
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Comment No: 1                      Issue Code: 12.3

DHS notes the commentor's water supply concerns and DHS acknowledges current regional drought conditions. As described in Section 3.7.7.3.1 of the NBAF EIS, the South Granville Water and Sewer Authority has 3 to 4 million gallons per day of excess potable water supply and could meet NBAF's need of approximately 110,000 gallons per day, less than 0.4% of the Authority's total current capacity. The NBAF potable water usage is comparable to 210 residential homes annual potable water usage. Section 3.13.8 describes the process that would be used to control and dispose of liquid wastes and Sections 3.3.7 and 3.7.7 describes standard methods used to prevent and mitigate potential spill and runoff affects.

Comment No: 2                      Issue Code: 26.0

DHS notes the commentor's statement and regrets any confusion regarding the research to be conducted at the NBAF. A description of the type of research to be conducted at the NBAF is included in Section 1.1. DHS proposes to conduct BSL-1, BSL-2, BSL-3, BSL-3E, BSL-3Ag, and BSL-4 level research at the NBAF. While DHS used BSL-3 to encompass all BSL-3 references that included BSL-3Ag and BSL-3E, there are some instances where DHS believed that it was important to specifically indicate BSL-3Ag level research.

Comment No: 6                      Issue Code: 8.3

DHS notes commentor's question regarding the projected differences in wastewater volume for each site. Cooling tower blowdown is a major volume contributor to the total wastewater stream for each site. The volume of cooling tower blowdown from each site varies based on ambient temperature and humidity conditions specific to each site's geographic region. This variation in cooling tower blowdown volume, accounts for the variations in projected wastewater volume for each site. Section 3.13 of the NBAF EIS provides general information on the waste streams that would be generated by NBAF operations at each site alternative.

Stallings, Hannah

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Ms. McGee  
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3/18.3:  
2/12.3

4. Page 2-1: Please describe how the waste of "approximately 200 to 300 animals at any given time, including cattle, swine, and sheep" be handled? Will animal waste also be directed to SGWASA? There are already nutrient issues downstream of the proposed site that would be exacerbated by additional nutrient loading to the watershed. SGWASA is participating in the development of the nutrient management strategy for this watershed and understands that it may be necessary for any new dischargers to their system to attain significant nutrient removal prior to discharge to their facility to ensure that SGWASA can meet their NPDES permit limits.

5. While page 2-6 provides discussion of waste disposal in terms of infectious components, it does not address nutrient-bearing animal waste (urine and feces). Please clarify.

4/3.3

6. Page 2-8, Section 2.2.2.3 states that "A site-specific Pollution Prevention Plan would be developed for the NBAF and would include specific procedures for spill prevention and cleanup." Should the North Carolina site be selected, this Plan should be circulated (at least) within DENR prior to submittal of the Final EIS.

4/12.3:  
3Cont.118.3

7. Table 2.3.1-2  
a. Text states that "Operation would result in an estimated 25,500,000 gpy of wastewater, but the NBAF would be designed and operated to prevent adverse effects to the SGWASA Sewage Treatment Facility capabilities." As mentioned in other comments, please clarify whether this total includes animal wastes or just industrial and employee volume.

b. Text states that "Approximately 70,000 gpd of treated sanitary waste would be discharged from the site but would be required to meet all discharge limits." Please clarify what discharge limits this refers to.

5/4.0

8. Page 2-50 states that there are additional studies being conducted to aid DEIS in deciding where to site the NBAF. Will these studies be available for review in the next EIS draft?

7/12.3

9. Page 3-30, section 3.3.7.3.1 - If the Butner site is selected, DHS should submit a drought contingency plan addressing how water use reductions would be instituted and what measures would be taken to ensure that test animals continue to be supplied with adequate potable water. This plan should also address what actions will be taken in the event of a statewide drought requiring the facility to significantly reduce water consumption and overall operation. Such a plan should be submitted to DENR and Butner for review and comment.

10. Section 3.3.7.3.4, Sanitary Sewage

a. Pages 3-51 states that "If a tissue digester is used for carcass disposal, the waste stream from the tissue digester, estimated at 2% of the total discharge volume, would be commingled for discharge with the rest of the NBAF wastewater. The projected wastewater constituents in the tissue digester waste streams include BOD - 10,250 mg/l; COD - 19,600 mg/l; suspended solids - 1,400 mg/l; and pH - 9.48 standard units (NDP 2008)."

i. What other constituents will be present in the tissue digester waste stream? This should be fully characterized.

ii. The values presented seem to be consistent with the "Alkaline Hydrolysis" method of carcass disposal. However, later in the document it says that "A number of different technologies are being considered for the on-site treatment of the estimated 375 to 1,200 euthanized animal carcasses that could be generated at the facility" (page 3-350). The text states that DHS has a lack of experience with the alkaline hydrolysis process and is not certain of its availability.

1. If this is so, why does the DEIS present the constituent concentration for this method versus other methods?

2. The DEIS should present constituent concentrations for each alternative treatment method if one has not yet been selected.

b. The discharge described would meet the criteria of Significant Industrial User (SIU). Therefore, the NBAF would have to apply for an SIU permit from SGWASA. This application would have to include much more detailed information than in the EIS, and DWQ would carefully review the permit and SGWASA's oversight of this unique SIU. In addition to all the regular SIU permitting issues that apply to all SIUs, a few special issues that need to be addressed are:

8/12.3:  
3Cont.118.3

4Cont.13.3:  
1Cont.112.3

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NCDM  
Page 05/23

Comment No: 2 Issue Code: 12.3

DHS notes the commentor's waste disposal concerns. Section 3.3.7.3.4 of the NBAF EIS describes the potential sanitary sewage operational consequences and the SGWASA technically based local influent limits. Sewage acceptance criteria and pretreatment requirements would apply if the NBAF were sited at the Umstead Research Farm Site alternative. Section 3.7.7.1.1 describes 5.2 miles on the Knap of Reeds Creek that was determined in 1998 by NCDENR as only partially supporting biological activity.

Comment No: 3 Issue Code: 18.3

Section 3.13.2.2 of the NBAF EIS discusses the disposition of sanitary sewer wastes, waste solids, and carcass/pathological wastes generated by the NBAF no matter where the NBAF is located. Tables 3.13.2.2-2 and 3.13.2.2-3 list the waste streams that will be generated by the operation of the facility, the origins of these wastes, pretreatment requirements applicable to the waste, and final disposition options. Table 3.13.2.2.4 provides a brief description of and compares three of the technologies being considered for carcass and pathological waste disposal. Wastes associated with animal handling (e.g., washdown of animal holding rooms, waste bedding, euthanized carcasses) are included on all of these tables. As discussed in Section 3.13.8, sanitary sewer wastes generated by the NBAF will be discharged to the South Granville Water and Sewer Authority (SGWAS) if the NBAF is built at the candidate Umstead Research Farm Site.

Comment No: 3 Issue Code: 18.3

The 25,500,000 gallons per year of wastewater that would be generated at the NBAF at the Umstead Research Farm Site is broken down into categories on Table 3.13.2.2-1 in Section 3.13.2.2 of the NBAF EIS. These categories include sterilized wastewater, non-sterilized wastewater, and cooling tower blowdown. The sources of sterilized wastewater and non-sterilized wastewater are shown on Table 3.13.2.2-2, which summarizes the waste streams contributing to sanitary sewer waste, excluding cooling tower blowdown. As shown on the table, this wastewater includes wastes originating from animal handling and industrial and employee volume.

Comment No: 3 Issue Code: 18.3

DHS notes the commentor's concern. The primary disadvantage of alkaline hydrolysis, carried out in a tissue digester, for carcass/pathological waste disposal is that this treatment produces a large amount of liquid effluent that must be monitored and tested, due to potentially high total suspended solids and biological oxygen demand, before it is released to the sanitary sewer (see Table 3.13.2.2-4 in Section 3.13.2.2). The treatment facility design would have to include a blending tank to mix wastewater effluent streams before they are discharged to the sanitary sewer. Once a facility location is chosen, subsequent engineering studies would address the impact of different carcass and pathological waste disposal technologies on wastewater quality to ensure that local wastewater treatment plant limits can be met.



Tables 3.13.2.2-2 and 3.13.2.2-3 summarize the liquid and solid waste streams that will be generated by the NBAF including waste streams originating from animal suites and laboratory areas. As shown on Table 3.13.2.2-2, for example, washdown from animal holding rooms would be treated in a dedicated biowaste gathering and treatment system (that would include sterilization and decontamination) before these wastes would be discharged to the sanitary sewer. As shown on Table 3.13.2-3, waste bedding would be surface disinfected and then autoclaved before it would be sent to an appropriate offsite receiving facility.

Comment No: 4                      Issue Code: 3.0  
DHS notes the commentor's statement.

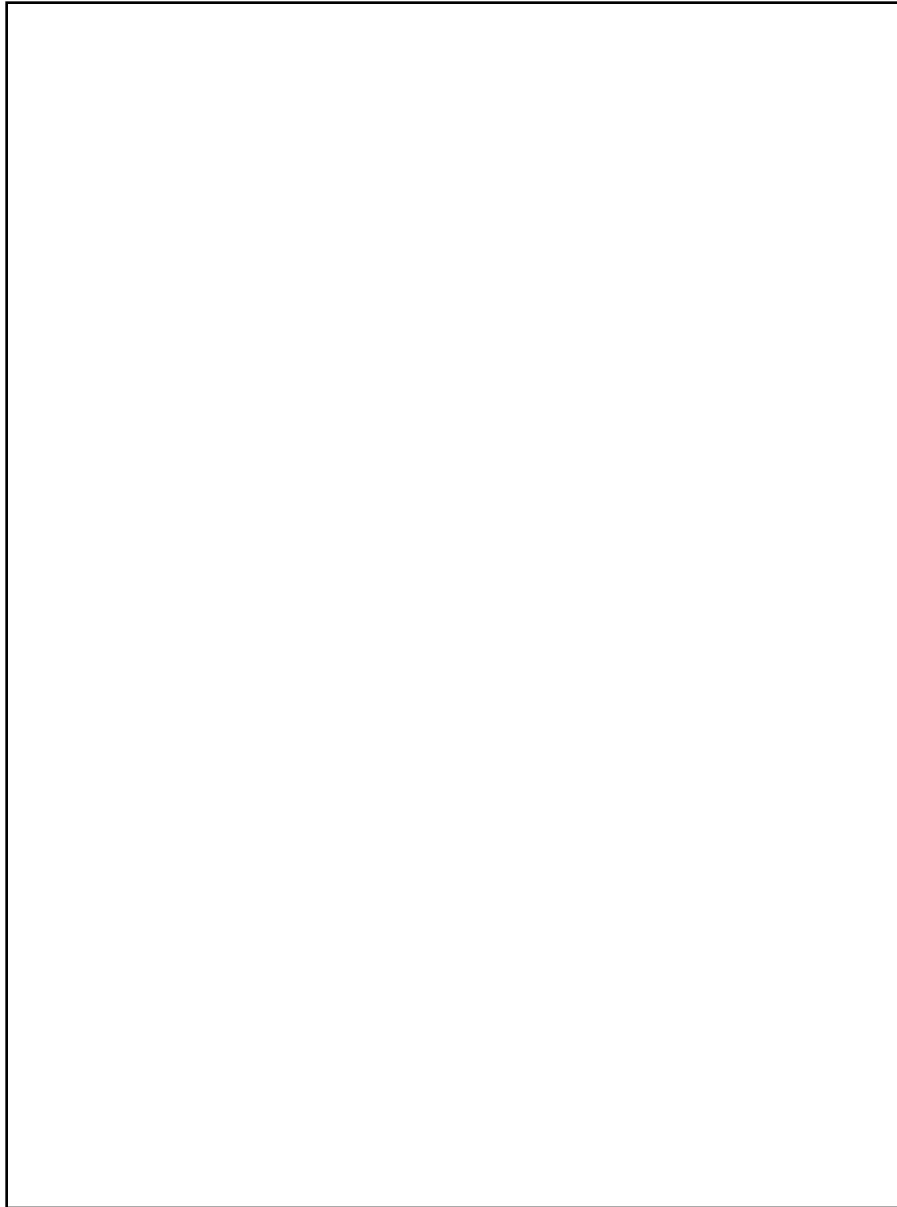
Comment No: 4                      Issue Code: 12.3  
DHS notes the commentor's waste disposal concerns. Section 3.3.7.3.4 of the NBAF EIS describes potential operational sanitary sewage consequences and describes the SGWASA technically based local influent limits. Sewage acceptance criteria and pretreatment requirements would apply if the NBAF were sited at the Umstead Research Farm Site alternative. Chapter 3 Section 3.13.8 describes site specific waste management options and potential consequences.

Comment No: 4                      Issue Code: 3.0  
DHS notes the commentor's statement. Should a decision be made to build NBAF, DHS would meet all federal, state and local regulations.

Comment No: 5                      Issue Code: 4.0  
DHS notes the commentor's statements. The reports are available on the DHS Web page (<http://www.dhs.gov/nbaf>).

Comment No: 7                      Issue Code: 12.3  
DHS notes the commentor's drought concerns and DHS acknowledges current regional drought conditions. As described in Section 3.7.7.3.1 of the NBAF EIS, the South Granville Water and Sewer Authority has 3 to 4 million gallons per day of excess potable water capacity and could meet NBAF's need of approximately 110,000 gallons per day, less than 0.4% of the Authority's total current capacity. The rate of water usage at the NBAF is expected to be equivalent to the rate of water usage at about 210 residential homes. If the Umstead Research Farm Site is selected, DHS should submit a drought contingency plan addressing how water use reductions would be instituted and what measures would be taken in the event of a catastrophic drought.

Comment No: 8                      Issue Code: 12.3



DHS acknowledges the commenter's permitting opinion. If NBAF is constructed and once a site is selected and designs finalized, the facility will acquire those necessary permits potentially including a significant indirect user wastewater permit prior to operational startup.

Stallings, Hannah

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Ms. McGee  
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8/15/2008

4Cont.j3.3;  
7/21.3;  
8/23.0

2Cont.j26.0

1Cont.j12.3

6/12.3:

- i. NBAF must ensure that SGWASA will have full access to pretreatment facilities, as needed. This must cover access during design to review plans to ensure that the WWTP will be protected, access during construction to verify installation as designed, and access once in operation. The access can not be limited to access to areas where wastewater is generated. SGWASA personnel need to access all areas to verify areas of zero generation and/or discharge, containment procedures, etc. NBAF must provide SGWASA personnel with proper credentials, and address any confidentiality issues as well as safety issues so that these do not interfere with SGWASA's prompt access and general Pretreatment Program responsibilities.
- ii. NBAF must address the potential adverse effects of discharge of disinfectant baths to WWTP (inhibition of WWTP bacteria) as part of their application to SGWASA to discharge.
- iii. DWQ is concerned with the adequacy of SGWASA's pretreatment program. Only last year the Raleigh Regional Office of DWQ was involved in an enforcement case with this facility due to its insufficient monitoring and sampling program.

11. Page 3-80, section 3.4.7.2 states that "Construction of the NBAF Unstead Research Farm Site would not have an adverse effect on meteorological or regional climatic conditions. The Manhattan Campus Site would be equipped to withstand the normal meteorological conditions that are present within the geographic area of the selected site."

- a. Please clarify mention of the "Manhattan Campus Site" within a section discussing the Unstead Research Farm Site.
- b. Please clarify what is meant by "normal meteorological conditions" – a 1 year 24-hour storm, a 2 year 24-hour storm?

12. Section 3.7.7.1.1, Surface Water

- a. The proposed facility is located within the headwaters of Knap of Reeds Creek and stormwater runoff from this site will enter an unnamed tributary of this creek. As noted earlier, Knap of Reeds Creek is a tributary of Falls Lake, which is the primary water supply source for the City of Raleigh and at least six (6) other municipalities (Garner, Knightdale, Rolesville, Wake Forest, Wendell, and Zebulon) currently rely on Raleigh for provision of potable water. Any unintentional spills or contamination on the proposed site has the potential to enter Knap of Reeds Creek and Falls Lake. Even a temporary shut down of water pumping activity at the reservoir could result in significant hardship and financial losses to the City of Raleigh and the other municipalities.
- b. Falls Lake is on the 2008 Integrated Report (303(d) category 5) due to elevated chlorophyll a levels due to excess nitrogen and phosphorus in the system. State legislation requires a nutrient management strategy and Federal mandates require the development of a TMDL to address elevated nutrient issues in Falls Lake. Therefore, nutrient loading to Falls Lake will need to be reduced from current levels to address these issues; new sources of nutrient loading will be highly scrutinized.
  - i. Please address how animal waste will be handled.
  - ii. SGWASA will likely be required to reduce its nutrient loading from current levels.
  - iii. Please provide details on NBAF's nutrient management strategy.

13. Page 3-146, section 3.7.7.1.2: Please clarify how stormwater will be controlled so that nutrient loading of Knap of Reeds Creek is prevented. This creek is impaired for aquatic life due to Fair macroinvertebrate bioclassification. This creek is affected by the large volume of stormwater runoff from Butler and has been impacted by the effluent from SGWASA's WWTP.

14. Page 3-150, section 3.7.7.3 states that operation of the NBAF at Butler is not expected to result in groundwater impacts. Groundwater monitoring wells should be established on and adjacent to the proposed facility to monitor potential contamination impacts. Events likely to increase the potential for contamination include unusually heavy rainfall events as well as accidental and/or intentional release of contaminants.

15. Page 3-359, section 3.13.8.3

- a. Please change "SCWASA" to "SGWASA."

NCDM  
 Fax: 919-733-9571  
 Aug 25 2008 10:51 P.04  
 NCDNR  
 9197153868  
 14:35  
 98/22/2008

Comment No: 2      Issue Code: 26.0  
 DHS notes the commentor's statement. The error has been corrected.

Comment No: 4      Issue Code: 3.0  
 DHS notes commentor's statement. Should a decision be made to build NBAF, DHS would meet all federal, state and local regulations.

Comment No: 6      Issue Code: 12.3  
 DHS notes the commentor's stormwater concerns. Section 3.7.1 of the NBAF EIS describes the methodology used in assessing each site alternative's water resources including stormwater. Section 3.7.7.1.1 describes 5.2 miles on the Knap of Reeds Creek that was determined in 1998 by NCDENR as only partially supporting biological activity. Final stormwater and erosion control measures will be developed during the final design phase, but are likely to include sedimentation fencing, vegetated swales, stormwater ponds, pervious pavement, retention/reuse, and potentially innovative technologies.

Comment No: 7      Issue Code: 21.3  
 DHS notes commentor's statement. Should a decision be made to build NBAF, DHS would meet all federal, state and local regulations.

Comment No: 8      Issue Code: 23.0  
 DHS notes commentor's statement. Should a decision be made to build NBAF, DHS would meet all federal, state and local regulations.

Stallings, Hannah

Page 4 of 4

FD0091

Ms. McGee  
Page 4 of 4  
8/16/2008

112.3

b. The text states that "the Knap of Reeds Creek is the receiving waters [for] the City of Burner's wastewater treatment, and Knap of Reeds Creek is currently not meeting all NCDENR, DWQ designated uses." The discussion on cumulative impacts should be broadened to include downstream impacts as well (e.g., Falls Lake nutrient issues).

Please contact me at (919) 907-6434 if I can be of any additional help.

Thank you.

Cc: Danny Smith - BRO  
Jay Zimmerman - BRO  
Nora Deamer - BPU

NCIN  
Fax: 919-753-9571  
P. 05  
Aug 25 2008 10:52  
PAGE 07/23  
9197193069 14:35  
08/22/2008 14:35  
NCDENR

Comment No: 1 Issue Code: 12.3

DHS notes the commenter's water quality concerns. The NBAF will be required to meet sewage acceptance criteria and pretreatment requirements including any nutrient management criteria developed for the Upper Neuse watershed. Section 3.3.7.3.4 of the NBAF EIS describes the SGWASA influent standards and potential operational sanitary sewage consequences if the NBAF were sited at the Umstead Research Farm Site. Section 3.7.7.1 describes 5.2 miles on the Knap of Reeds Creek that was determined in 1998 by NCDENR as only partially supporting biological activity. Chapter 3 Section 3.7.7.1.2 and 3.7.7.2.2 describe potential construction and operational consequences from NBAF including available stormwater control options such as but not limited to grassy swales, retention ponds, pervious pavement, on-site reuse and potentially innovative technology. A drought contingency plan should be developed if applicable to the selected site alternative. The NBAF will be operated in accordance with the applicable protocols and regulations pertaining to stormwater management, erosion control, spill prevention, and waste management including any permit stipulated water resources' monitoring.

Stalvey, Allyson

Page 1 of 1

WD0502

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**From:** Allyson Stalvey [REDACTED]  
**Sent:** Friday, August 22, 2008 1:53 PM  
**To:** NBAFProgramManager  
**Subject:** Athens BioLab

1|25.2 | Please do not put a bio lab in Athens, GA. It is too risky - too many people, animals, water, etc.

Allyson Stalvey  
[REDACTED] GA

Comment No: 1      Issue Code: 25.2  
DHS notes the commentor's opposition to the South Milledge Avenue Site Alternative.

Staples, Rebekah

Page 1 of 1

MD0094

August 21, 2008

U.S. Department of Homeland Security  
Science and Technology Directorate  
James V. Johnson  
Mail Stop #2100  
245 Murray Lane, SW  
Building 410  
Washington, DC 20528

To Whom It May Concern:

Hello. I am a resident of [REDACTED] and wanted to voice my support for the proposed National Bio and Agro Defense Facility in Flora, Miss. As a resident of the Jackson Metro area, I would be proud to have the facility in my region.

I think this would be a great opportunity for Mississippi to become a major player in the fight against bioterrorism. As both a Mississippian and an American, I would be privileged for our area to play a part in protecting the security of our nation. Likewise, I believe the facility itself would not pose a threat to the safety or security of Flora or the surrounding area.

1 | 24.5

Mississippi has a high quality of life, and I also believe that will draw more people to our state who would work in collaboration with the NBAF. In addition, we have top notch educational institutions, as well as a proven business community composed of innovative, respectable leaders who, along with our residents, truly embrace the opportunity of new, high-paying jobs.

Overall, I believe not only will the NBAF have a significant impact in terms of research and economic development for our area, but that Flora, Miss. is the best site for this project, too.

Thanks. If I may be of further assistance, please call on me at [REDACTED]

Sincerely,



Rebekah Staples

Comment No: 1

Issue Code: 24.5

DHS notes the commentor's support for the Flora Industrial Park Site Alternative.

## Stapleton, Deck

## Page 1 of 1

WD0388

**From:** deck stapleton [REDACTED]  
**Sent:** Tuesday, August 19, 2008 10:37 PM  
**To:** NBAFProgramManager  
**Subject:** nbaf in NC

- 1|25.3 | My name is Deck Stapleton. I live in Granville county about 10 miles north of Butner, proposed site for the NBAF. I want to express my strong opposition to locating the NBAF facility in Butner.
- 2|21.3 | DHS has not convinced me that this facility will be safe.
- 3|15.3; | This area has a large mental hospital complex very close to the proposed site as well as a large federal  
 4|19.3 | prison nearby. It would be foolish to locate a biohazard research facility next to these institutions. It would be extremely difficult to evacuate these facilities in the event of an accident at the NBAF.
- 2 cont. | I consider this proposed facility to be a threat to my wellbeing and the wellbeing of my community.  
 21.3; | Opposition to this facility is overwhelming. People here, myself included, plan to do "whatever it takes" to  
 1 cont. | stop this facility. This includes everything from civil disobedience to lawsuits. This facility will not be built  
 25.3 | in Granville county.

Comment No: 1                      Issue Code: 25.3

DHS notes the commentor's opposition to the Umstead Research Farm Site Alternative.

Comment No: 2                      Issue Code: 21.3

DHS notes the commentor's concern regarding the NBAF. The purpose and need for the proposed action is discussed in Chapter 1 of the NBAF EIS. DHS can not guarantee that the NBAF would never experience an accident. However, as discussed in Section 2.2.1.1, modern biosafety design substantially diminishes the chances of a release as the primary design goal is to provide an adequate level of redundant safety and biocontainment that would be integrated into every component of the building. A discussion of human health and safety is included in Section 3.14.

Comment No: 3                      Issue Code: 15.3

DHS is aware of the presence of the health and correctional facilities, described in Section 3.10.7.1 of the NBAF EIS. DHS has held public meetings and conducted outreach efforts to ensure that the surrounding communities, including officials of the health and correctional facilities, are well aware of the proposed action.

Comment No: 4                      Issue Code: 19.3

DHS notes the commentor's concerns regarding the impact of an accident and subsequent potential evacuation on the institutionalized population. The NBAF would be designed, constructed, and operated to ensure the maximum level of public safety and to fulfill all necessary requirements to protect the environment. Section 3.14 and Appendix E of the NBAF EIS investigate the chances of a variety of accidents that could occur with the proposed NBAF and consequences of potential accidents. The chances of an accidental release are low. %Appendix B to the NBAF EIS describes biocontainment lapses and laboratory acquired infections in the United States and world-wide. Laboratory-acquired infections have not been shown to be a threat to the community at large. Should the NBAF Record of Decision call for the design, construction, and operations of the NBAF at the Umstead Research Farm Site then site-specific protocols would be developed, in coordination with local emergency response agencies that would consider the diversity and density of populations, including institutionalized populations, residing within the local area. The need for an evacuation in response to an accident is considered to be a very low probability event. DHS would have site-specific standard operating procedures and emergency response plans in place prior to the initiation of research activities at the proposed NBAF.

Stark, RN, Phyllis

Page 1 of 1

WD0786

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**From:** Phyllis Stark [REDACTED]  
**Sent:** Monday, August 25, 2008 4:45 PM  
**To:** NBAFProgramManager  
**Subject:** Bio facility

1| 25.3 |  
2| 4.3 | I am very much in favor of this coming to NC but was afraid to speak up at the meetings because of the  
3| 5.3 | opposition -- I have a farm and 5 children and 4 grandchildren all living here. I wish that you could have a  
meeting for those of us who are in favor because those in opposition are very vocal and obnoxious!!  
Please consider NC again in this process.  
Thank You,

Phyllis H. Stark, RN  
Public Health Nurse III  
[REDACTED]

Comment No: 1                      Issue Code: 24.3

DHS notes the commentor's support for the Umstead Research Farm Site Alternative.

Comment No: 2                      Issue Code: 4.3

DHS notes the commentor's concerns regarding the NBAF EIS public meeting held in Butner, North Carolina. DHS recognizes that it is not possible to hold a public meeting at a time and place that is convenient to every interested person, and therefore provides alternate means of submitting comments to provide multiple opportunities to participate in the NEPA process. In addition to oral comment at the public meetings, DHS also accepted comments submitted by mail, telephone and fax lines, and online through the NBAF Web page (<http://www.dhs.gov/nbaf>). All comments, both oral and written, received during the comment period were given equal consideration and have been responded to in this NBAF Final EIS.

Comment No: 3                      Issue Code: 5.3

DHS notes the commentor's support for the Umstead Research Farm Site Alternative.



**Stark, RN, Phyllis**

**Page 1 of 1**

WD0780

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**From:** Phyllis Stark [REDACTED]  
**Sent:** Monday, August 25, 2008 4:37 PM  
**To:** NBAFProgramManager  
**Subject:** Please consider North Carolina!!!!!!!!!!!!

1| 4.3 | I wanted to speak at the forums here but the people against the lab are  
2| 5.3 | so loud and vocal that there was no way! I wish you could have a  
3| 4.3 | meeting with those of us who are for the lab being here!!!!!!!!!!!! I have  
a farm and 5 children and 4 grand children all living here and have no  
issue with it being here --in fact would welcome it. We also have many  
friends who feel the same way but were very intimidated by their actions  
and the leader does not even live in North Carolina !!!!!!!!!!! Thank you,  
Phyllis Stark

[REDACTED]

Comment No: 1                      Issue Code: 4.3

DHS notes the commentor's concerns regarding the NBAF EIS public meeting held in Butner, North Carolina. DHS recognizes that it is not possible to hold a public meeting at a time and place that is convenient to every interested person, and therefore provides alternate means of submitting comments to provide multiple opportunities to participate in the NEPA process. In addition to oral comment at the public meetings, DHS also accepted comments submitted by mail, telephone and fax lines, and online through the NBAF Web page (<http://www.dhs.gov/nbaf>). All comments, both oral and written, received during the comment period were given equal consideration and have been responded to in this NBAF Final EIS.

Comment No: 2                      Issue Code: 5.3

DHS notes the commentor's support for the Umstead Research Farm Site Alternative.

Stephens, Eric

Page 1 of 1



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS 31<sup>ST</sup> HUMAN SYSTEMS WING (AFMC)  
BROOKS CITY-BASE TEXAS

TXD008


6 Aug 08

Support of the NBAF Initiative

To Whom It May Concern

1. I strongly support the National Bio and Agro-Defense Facility (NBAF) in San Antonio. Brooks AFB has historically been involved in aerospace medicine using live animal models. The history dates back to the man-in-space program (1950-60s), directed energy & radio frequency radiation research (1970-80s) and more recently, nuclear, biological and chemical terrorism operational development and testing of field capable devices (1990s to the present). Specialized facilities were built with these mission requirements in mind.
2. Brooks has been home to generations of research and operational professionals. These scientists, engineers and medical doctors will be part of the available workforce to support the NBAF.
3. As Brooks facilities are vacated in accordance with DoD missions by Sep 2011, these facilities will be available through the BDA to house NBAF missions. The AF currently occupies over 200K SF of wet lab space.
4. Brooks AFB maintained a non-human primate breeding colony for years. In 2003, the ownership and operation of the colony transferred to the Southwest Foundation for Biomedical Research. The Air Force Research Lab at Brooks currently maintains over 40K SF of vivarium facilities (15K animal care and use plus 25K support space) in 6 buildings.
5. It is because of our history of working with animals in first class facilities with nationally renowned professionals that I can strongly support NBAF in San Antonio.

124.6

  
ERIC L. STEPHENS, SES, DAF  
Director, 31<sup>st</sup> Human Systems Wing

Comment No: 1

Issue Code: 24.6

DHS notes the commentor's support for the Texas Research Park Site Alternative.

Stephens, Winston

Page 1 of 1

WD0163

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**From:** [REDACTED] on behalf of Winston Stephens [REDACTED]  
**Sent:** Sunday, August 03, 2008 4:04 PM  
**To:** NBAFProgramManager  
**Subject:** NBAF in Athens, Georgia

Dear NBAF Program Manager,

1|25.2 | Recent newspaper articles have convinced me that having a number of bio-defense sites around the country, instead of contributing to our safety, would in fact make us more vulnerable. I was already opposed to the location of the proposed site in Athens because I live near the beautiful area that would be destroyed by it.

Now I feel that my opposition is not just selfishness, but in fact a justifiable position given the facts.

Thank you for your attention. Winston Stephens

Comment No: 1      Issue Code: 25.2  
DHS notes the commentor's opposition to the South Milledge Avenue Site Alternative.

Stevenson, Mark

Page 1 of 1

PD0229

August 22, 2008

1|24.4

I support the NBAF in Kansas. This is Mark Stevenson. I live here in [REDACTED] Kansas.

Thank you.

Comment No: 1

Issue Code: 24.4

DHS notes the commentor's support for the Manhattan Campus Site Alternative.

Stewart, Ella

Page 1 of 1

WD0036

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**From:** Ella Stewart [REDACTED]  
**Sent:** Sunday, July 06, 2008 10:28 PM  
**To:** NBAFProgramManager  
**Subject:** Athens site  
**Importance:** High

- 1|24.1 | It seems to me that having this kind of laboratory on an island is much preferable to putting it in close proximity to an area that has both residential and animal populations. It is too much risk and is an unnecessary move! In addition, we are in an extreme drought and when we don't even have water enough for our own use and are trying to conserve what we have, we are definitely not in a position to have what water we do have diverted to a laboratory of this size! What are you thinking!!!
- 2|12.2 |

Comment No: 1                      Issue Code: 24.1

DHS notes the commentor's opposition to the South Milledge Avenue Site Alternative in favor of the Plum Island Site Alternative. As described in Section 2.3.1 of the NBAF EIS, DHS's site selection criteria included, but were not limited to, such factors as proximity to research capabilities and workforce. As such, some but not all of the sites selected for analysis as reasonable alternatives in the NBAF EIS are located in suburban or semi-urban areas. Nevertheless, it has been shown that modern biosafety laboratories can be safely operated in populated areas. An example is the Centers for Disease Control and Prevention in downtown Atlanta, Georgia, where such facilities employ modern biocontainment technologies and safety protocols, such as would be employed in the design, construction, and operation of the NBAF.

Comment No: 2                      Issue Code: 12.2

DHS notes the commentor's drought concerns. As described in Section 3.7.3.3.1, the NBAF at the South Milledge Avenue Site would use approximately 118,000 gallons per day of potable water approximately 0.76% of Athens 15.5 million gallons per day usage. The NBAF potable water usage is comparable to approximately 228 residential homes. The DEIS Section 3.3.3.1.1 describes the current 8-inch potable water force main along South Milledge Avenue is not sufficient to accommodate the NBAF's demand.

Stewart, Ella

Page 1 of 1

WD0164

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**From:** Ella Stewart [REDACTED]  
**Sent:** Sunday, August 03, 2008 4:50 PM  
**To:** NBAFProgramManager  
**Subject:** Lab  
**Importance:** High

1| 25.2 | I am definitely opposed to bringing the lab to Athens, GA. From all the information I am aware of, to place such a lab in a residential area is irresponsible.

2| 5.0 | I have had lab experience working with entities that were highly poisonous and had to be handled with utmost care in special hoods, etc. A lab of the magnitude recommended should be located in a remote area where there is absolute minimal contact with people, animals, etc.

Ella Stewart

Comment No: 1                      Issue Code: 25.2

DHS notes the commentor's opposition to the South Milledge Avenue Site Alternative.

Comment No: 2                      Issue Code: 5.0

DHS notes the commentor's concern. As described in Section 2.4.3 of the NBAF EIS, other potential locations to construct the NBAF were considered during the site selection process but were eliminated based on evaluation by the selection committee. It was suggested during the scoping process that the NBAF be constructed in a remote location such as an island distant from populated areas or in a location that would be inhospitable (e.g., desert or arctic habitat) to escaped animal hosts/vectors; however, the evaluation criteria called for proximity to research programs that could be linked to the NBAF mission and proximity to a technical workforce. The Plum Island Site is an isolated location as was suggested while still meeting the requirements listed in the Expression of Interest.

Stewart, Richard

Page 1 of 1

WD0511

**From:** Richard Stewart [richard@giantcomm.net]  
**Sent:** Friday, August 22, 2008 2:50 PM  
**To:** NBAFProgramManager  
**Subject:** Location for the National Bio and Agro-Defense Facility.

Dear Sir:

1) 5.4

Placing a research center for contagious food animal disease anywhere in the central states, especially in Kansas, borders on criminal intent. The Reston, VA fiasco proves there is no such thing as a totally secure lab. With large animals some outdoor space will be required and Kansas is the epicenter of tomado storms. Please **do not** consider putting the National Bio and Agro-Defense Facility in any state where agriculture is a major factor in sustaining our food supply. The current facility on Plum Island, NY, is located very well – far away from agricultural centers.

Locations under consideration include:

- o Flora Industrial Park, Madison County, Mississippi
- o Kansas State University, Manhattan, Kansas
- o Texas Research Park, San Antonio, Texas
- o Umstead Research Farm, Granville County, North Carolina
- o University of Georgia/South Milledge Ave., Athens, Georgia

2) 24.1

All of which are in areas heavily engaged in food production. Please consider refurbishing the existing facility.

Richard Stewart  
 Statistician, Kansas State University

Comment No: 1      Issue Code: 5.4

DHS notes the commentor's opposition to the Manhattan Campus Site Alternative in favor of the Plum Island Site Alternative due to concerns regarding potential tornado impacts to the NBAF. The NBAF would be designed and built to withstand the normal meteorological conditions that are present within the geographic area of the selected site (hurricanes, tornados, etc.). Given the nature of the facility, more stringent building codes are applied to the NBAF than are used for homes and most businesses, regardless of which NBAF site is chosen. The building would be built to withstand wind pressures up to 170% of the winds which are expected to occur locally within a period of 50 years. This means the building's structural system could resist a wind speed that is expected to occur, on the average, only once in a 500 year period. In the unlikely event that a 500-year wind storm strikes the facility, the interior BSL-3Ag and BSL-4 spaces would be expected to withstand a 200 mph wind load (commonly determined to be an F3 tornado). If the NBAF took a direct hit from an F3 tornado, the exterior walls and roofing of the building would likely fail first. This breach in the exterior skin would cause a dramatic increase in internal pressures leading to further failure of the building's interior and exterior walls. However, the loss of these architectural wall components should actually decrease the overall wind loading applied to the building, and diminish the possibility of damage to the building's primary structural system. Since the walls of the BSL-3Ag and BSL-4 spaces would be reinforced cast-in-place concrete, those inner walls would be expected to withstand the tornado.

Comment No: 2      Issue Code: 24.1


DHS notes the commentor's opposition to the Manhattan Campus Site Alternative and support for upgrading PIADC. However, the proposed NBAF requires BSL-4 capability to meet mission requirements (DHS and USDA). PIADC does not have BSL-4 laboratory or animal space, and the existing PIADC facilities are inadequate to support a BSL-4 laboratory. Upgrading the existing facilities to allow PIADC to meet the current mission would be more costly than building the NBAF on Plum Island, as discussed in Section 2.4.1 of the NBAF EIS.

Stidham, Sue

Page 1 of 2

08/24/2008 22:04 6622835586 MONTGOMERY CO EDP PAGE 01  
FD0060

Sue Stidham  
Executive Director and Manager  
Economic Development Partnership  
701 Summit Street  
P. O. Box 248  
Winona, MS 38967  
662-283-4828(p)  
662-283-5986(f)  
mcedp@cuckwood.net



# Fax

**To:** US Department of Homeland Security **From:** Sue Stidham

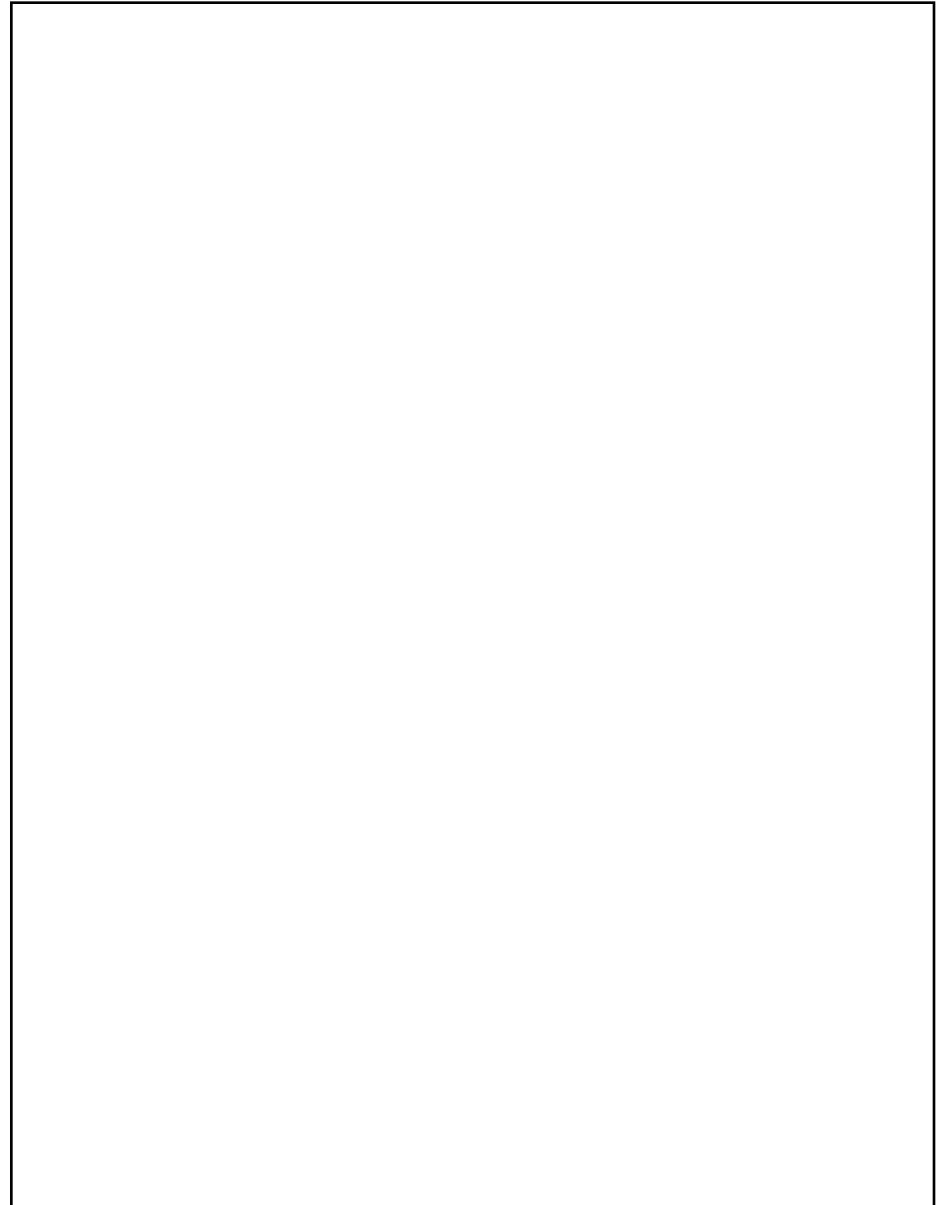
**Fax:** 866-506-6223 **Pages:** 2

**Phone:** 662-283-4828 **Date:** 8/25/2008

**Re:** National Bio and Agro-Defense Facility **CC:**

Urgent  For Review  Please Comment  Please Reply  Please Recycle

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Stidham, Sue

Page 2 of 2

06/24/2008 22:04 6622835986 MONTGOMERY CO EDP PAGE 02  
FD0060

**EDP** Economic Development Partnership of Montgomery County  
The Crossroads of North Mississippi

August 25, 2008

U.S. Department of Homeland Security  
Science and Technology Directorate  
Mr. James V. Johnson  
Mail Stop #2100  
245 Murray Lane, SW  
Building 410  
Washington, DC 20528

Dear Mr. Johnson and the NBAF Committee:

I moved back to Mississippi 17 years ago because of the quality of life that Mississippi offers. As an economic developer it is very important that we bring new jobs to the State. I am located approximately 90 miles from the Flora/Madison County area, however, because of the ripple effect of the jobs that NBAF will bring to the State, we will see more of our area residents employed.

1 | 24.5 | We have an excellent labor force—one that is willing to give a day's work for a day's pay and with a low absenteeism rate. The State of Mississippi would be privileged to be a part of protecting our nation's security against bioterrorism.

Sincerely,  
*Sue Stidham*  
Sue Stidham  
Director

701 Summit Street  
P. O. Box 248 · Winona, MS 38967-0248  
Phone 662-283-4828 · Fax 662-283-5986  
mcedp@duckwood.net · www.mcedp.ms

Comment No: 1

Issue Code: 24.5

DHS notes the commentor's support for the Flora Industrial Park Site Alternative.

Stieben, Lonnie

Page 1 of 1

WD0692

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**From:** Lonnie Stieben [lonnies@sktice.com]  
**Sent:** Monday, August 25, 2008 10:14 AM  
**To:** NBAFProgramManager  
**Subject:** National Bio and Agro-Defense Facility in Manhattan, KS

Dear NBAF Program Manager,

1|24.4 | This email is being sent to express my support for locating the proposed National Bio and Agro-Defense  
Facility at Kansas State University in Manhattan, Kansas.  
As a land grant university located in the breadbasket of food production, KSU is strategically located to  
serve as a world-class research center focused on the protection of America's food supply. The  
university has a long and outstanding history in crop disease research and has also been of  
unmeasureable benefit to the animal-health industry.

2|8.4 | The state of Kansas has also been instrumental in the developing of a Bioscience infrastructure with  
additional support by public investment. Locating the National Bio and Agro Defense Facility at Kansas  
State University will provide an opportunity for these public-private partnerships to expand. Furthermore,  
Kansas State University provides the access to talent and research expertise that will effectively  
complement the protection of America's food supply and agricultural economy.

Lonnie Stieben  
Community Economic Development Mgr.  
Southern Kansas Telephone Co., Inc.  
130 E Ross  
Clearwater, Ks. 67026  
Direct 620-584-8380

Fax 620-584-2268  
E-mail [lonnie.stieben@sktcompanies.com](mailto:lonnie.stieben@sktcompanies.com)

Please note new email address. [lonnie.stieben@sktcompanies.com](mailto:lonnie.stieben@sktcompanies.com)

Comment No: 1                      Issue Code: 24.4

DHS notes the commentor's support for the Manhattan Campus Site Alternative.

Comment No: 2                      Issue Code: 8.4

DHS notes the commentor's statement.

Stillman, Andrea

Page 1 of 3

WD0816

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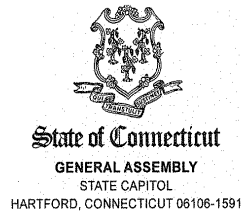
**From:** Driscoll, Sue [Sue.Driscoll@cga.ct.gov] on behalf of Sen. Stillman, Andrea [Andrea.Stillman@cga.ct.gov]  
**Sent:** Monday, August 25, 2008 5:48 PM  
**To:** NBAFProgramManager  
**Subject:** NBAF DEIS Comments  
**Importance:** High  
**Attachments:** PlumIsland.pdf

Please see attached for comments on the NBAF Draft Environmental Impact Statement from Connecticut State Senators Andrea Stillman and Len Fasano.

*Susan Driscoll*  
Legislative Aide to Sen. Stillman  
LOB Rm 3600  
Hartford, CT 06106  
860.240.0589

Stillman, Andrea

Page 2 of 3



WD0816

August 25, 2008

U.S. Department of Homeland Security,  
 Science and Technology Directorate  
 James V. Johnson  
 Mail Stop #2100  
 245 Murray Lane, SW  
 Building 410  
 Washington, DC 20528

Dear Sir,

1| 1.0 We are writing to challenge the proposal to upgrade the Plum Island Animal Disease Center (NY) to a Biosafety Level 4 facility in order to meet the agency's expanding research needs.

2| 5.1 Frankly, we were surprised to learn last year that Plum Island was back in consideration as a potential site for the new National Bio and Agro-Defense Facility. Your agency had originally eliminated Plum Island from the selection process, noting that it would be less expensive to build a new facility on the mainland. Plum Island, according to the DHS, suffered from multiple facility limitations—not enough space, 50-year-old infrastructure, and an insufficient BSL rating.

But now, according to the Draft Environmental Impact Statement, Plum Island is a front-runner for the new NBAF site. As co-Chairs of Connecticut's Long Island Sound Liquefied Natural Gas Task Force, we learned that a Draft EIS is not always a totally neutral investigative document. Results can be skewed and findings highlighted or sublimated, according to the underlying directive. But we also learned that true risks can be ferreted out from the pages of documentation and the right decision can ultimately be made.

3| 19.1 For example, the reason given for Plum Island's new favored status as a finalist in the site search is that, according to the pathogen-release scenario used to evaluate site safety, the economic losses from a foot and mouth disease virus release would be lower at Plum Island than at most of the other potential sites. But we must point out—and insist—that

Comment No: 1 Issue Code: 1.0

DHS notes the State Senators' opposition to the Plum Island Site Alternative.

Comment No: 2 Issue Code: 5.1

DHS notes the State Senators' comments. Although not part of the competitive site selection process, and therefore not evaluated at the same time against the evaluation criteria and preferences through which the Round One and Round Two sites were evaluated, DHS's PIADC was determined by the Selection Authority to be a reasonable sixth alternative site to advance as a reasonable alternative for study in the EIS. This decision was made because PIADC (1) currently performs much of the existing research and houses the existing workforce to assess potential threats to animals from foreign animal diseases and zoonotic diseases, (2) currently fulfills a portion of the goals and mission identified for the NBAF and meets some of the NBAF criteria, including having a skilled workforce used to working in a BSL-3 environment. And, given that DHS did not believe it appropriate to respond to "its own request-for-expression of interest," the PIADC could reasonably be internally evaluated throughout the EIS process. In addition, because NEPA specifically requires that the proposing federal agency evaluate the range of all "reasonable alternatives" to a proposed action, where reasonable alternatives are defined as those which are "practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant," it was deemed prudent to include PIADC among the sites for consideration for construction of NBAF.

Comment No: 3 Issue Code: 19.1

DHS notes the State Senators' statement. As described in Section 2.3.1 of the NBAF EIS, DHS's site selection criteria included, but were not limited to, such factors as proximity to research capabilities and workforce. As such, some but not all of the sites selected for analysis as reasonable alternatives in the NBAF EIS are located in suburban or semi-urban areas. Nevertheless, it has been shown that modern biosafety laboratories can be safely operated in populated areas. An example is the Centers for Disease Control and Prevention in downtown Atlanta, Georgia, where such facilities employ modern biocontainment technologies and safety protocols, such as would be employed in the design, construction, and operation of the NBAF.

Stillman, Andrea

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Plum Island

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4| 15.1

economics should not be the sole deciding factor in a decision affecting the health and safety of the people living and traveling in the area.

cont.|3| 19.1

The Plum Island site is located in the country's most densely populated metropolitan region, which is home to some of the world's largest transportation networks. These include major international airports and rail hubs, domestic marine transportation and worldwide shipping channels, and congested interstate highway systems. We are gravely concerned that you have ignored the possibility of widespread transmission of diseases, both regionally and internationally, which have no known vaccine or therapy.

5| 21.1

In addition, DHS must consider the proximity of Plum Island to New York City, the U.S. Coast Guard Academy, Millstone Nuclear Power Plant, Electric Boat shipyard, and the Naval Submarine Base, New London. Upgrading Plum Island to BSL-4 would increase its "value" to terrorists—and this small section of the East Coast is already carrying more than its fair share of potential terrorist targets.

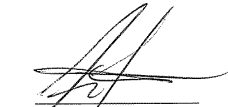
cont.| 2| 5.1

We urge you to remove the Plum Island Animal Disease Center from the list of potential sites for the new BSL-4 National Bio and Agro-Defense Facility.

Sincerely,



Andrea Stillman  
State Senator, 20<sup>th</sup> District



Len Fasano  
State Senator, 34<sup>th</sup> District

cc: M. Jodi Rell, Governor  
Richard Blumenthal, Attorney General  
Donald Williams, Senate President Pro Tempore  
Martin Looney, Senate Majority Leader  
John McKinney, Senate Minority Leader

Comment No: 2

Issue Code: 5.1

DHS notes the State Senators' statement. However, the Plum Island Site Alternative was considered to be a reasonable alternative and has been evaluated along with the other reasonable alternatives in the NEPA process and can not be removed from the potential site alternatives.

Comment No: 4

Issue Code: 15.1

DHS notes the State Senators' statement. As summarized Section 3.1 of the NBAF EIS, DHS analyzed each environmental resource area in a consistent manner across all the alternatives to allow for a fair and objective comparison among the alternatives. DHS has identified its Preferred Alternative in Section 2.6 in accordance with Council on Environmental Quality regulations (40 CFR 1502.14(e)) for implementing NEPA. The Preferred Alternative is one that an agency believes would best fulfill its statutory mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. Several factors will affect the decision on whether or not the NBAF is built, and, if so, where. The NBAF EIS itself will not be the sole deciding factor. The decision will be made based on the following factors: 1) analyses from the EIS; 2) the four evaluation criteria discussed in Section 2.3.1; 3) applicable federal, state, and local laws and regulatory requirements; 4) consultation requirements among the federal, state, and local agencies, as well as federally recognized American Indian Nations; 5) policy considerations; and 6) public comment. The DHS Under Secretary for Science and Technology Jay M. Cohen, with other department officials, will consider the factors identified above in making final decisions regarding the NBAF. A Record of Decision that explains the final decisions will be made available no sooner than 30 days after the NBAF Final EIS is published.

Comment No: 5

Issue Code: 21.1

DHS notes the commentor's concern that the NBAF would be a terrorist target. Section 3.14 and Appendix E of the NBAF EIS address accident scenarios, including external events such as a terrorist attack. A separate Threat and Risk Assessment (designated as For Official Use Only)(TRA) was developed outside of the EIS process in accordance with the requirements stipulated in federal regulations. The purpose of the TRA was to identify potential vulnerabilities and weaknesses associated with the NBAF and are used to recommend the most prudent measures to establish a reasonable level of risk for the security of operations of the NBAF and public safety. Because of the importance of the NBAF mission and the associated work with potential high-consequence biological pathogens, critical information related to the potential for adverse consequences as a result of intentional acts has been incorporated into the NEPA process.

Stokes, Jeanette

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WD0443

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**From:** Jeanette Stokes [REDACTED]  
**Sent:** Wednesday, August 20, 2008 11:47 PM  
**To:** NBAFProgramManager  
**Subject:** National Bio- and Agro Research Facility (NBAF)

To the Program Manager:

1) 25.3 I oppose the building of a National Bio- and Agro Research Facility (NBAF) near Butner North Carolina. I think it is a bad idea and unsafe for the people who live nearby.

Jeanette Stokes  
[REDACTED]

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Comment No: 1

Issue Code: 25.3

DHS notes the commentor's opposition to the Umstead Research Farm Site Alternative.