

Conrad, Gary

Page 1 of 2

PD0133

August 18, 2008

My name is Gary Conrad. I'm calling from ██████████ Kansas. I am a professor in the division of biology at Kansas State University. I am not calling as a representative of Kansas State University. I am calling rather, on my own behalf.

1| 25.4 | I am very concerned about the possibility that a germ warfare lab will be sited here in Manhattan and I am strongly opposed to it.

2| 21.4 | The reason is because we are in the middle of the most productive cattle country in the  
3| 15.4 | United States and it is absolutely ludicrous to site a Level-4 bio security lab in the center of cattle country, when no matter what the statisticians say, even a single mistake by someone working there would result in the release, could result in the release of something that would then spread among the cattle in the mid-west and would cause devastating effects to the American economy and to the food chain.

4| 24.1 | It is so stupid and illogical to site this here that it seems as though it would be sited here only for political reasons. It makes no biological or security sense to site that lab here. It makes much more sense to site the lab back at Plum Island or at some other island farther out in the Atlantic. I think it should be in the Atlantic. Prevailing winds would take any released pathogens eastward farther out into the Atlantic. But it makes no sense to have  
5| 5.0 | it here in the heartland.

6| 21.4 | Let's see what else. I think that...its...it's simply an illogical place to put such a lab. In  
5 cont. | 5.0 | addition, if the bad people who wanted to infiltrate or attack the lab, it is much...it seems to me, I am not a military person, but it seems to me, much easier to defend an island against invading possible bad people, than it would be to defend against a site here in the mid-west.

The proposed site is right in the center of a university, and it's totally illogical. At the edge of a populated university town surrounded by farm land, surrounded by an athletic stadium near by where colleges from all over...several states will be coming periodically in the fall. It's ludicrous...it's a ludicrous place to put something...you have to be free...if there's such a bio security lab, you have to have a free fire zone of protection around it. At the edge of a university. At the edge of a vet school. At the edge of a football stadium. It is a totally stupid place.

1 cont. | 25.4 | So, I am strongly opposed to having that site put here.

So, I think that is the conclusion of my statement, and I say this as a biologist. I am a cellular and developmental biologist. I use sterile technique in all of my research. I will set humility aside and say that I am a very successful research biologist. I use sterile technique and I know how easy it is to...for contamination to accrue in an experiment despite our very best efforts, using the very best bio security instrumentation. So, I speak from experience.

Comment No: 1                      Issue Code: 25.4

DHS notes the commentor's concern regarding the government's intentions for the facility. The NBAF's mission is defensive and would not involve offensive bioweapons research or development. The international treaty known as the Biological and Toxin Weapons Convention, to which the United States is a signatory, prohibits the development, production, stockpiling and acquisition of such weapons. DHS's mission is to study foreign animal, zoonotic (transmitted from animals to humans) and emerging diseases that threaten our agricultural livestock and agricultural economy. NBAF will research the transmission of these animal diseases and develop diagnostic tests, vaccines, and antiviral therapies for foreign animal, zoonotic and emerging diseases. By proposing to construct the NBAF, DHS is following policy direction established by the Congress and the President.

Comment No: 2                      Issue Code: 21.4

DHS notes the commentor's concern regarding the potential consequences from an NBAF accident or pathogen release as the result of human error. As described in 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. Training and inherent biocontainment safeguards reduce the likelihood of a release. 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 external events such as a terrorist attack. 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. The specific objective of the hazard identification, accident analysis, and risk assessment 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 risk of an accidental release of a pathogen is extremely low. As set out in 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 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 APHIS Animal Research Policy and Institutional Animal Care and Use Committee.

Comment No: 3                      Issue Code: 15.4

DHS notes the commentor's concern. The risk of an accidental release of a pathogen is extremely low, but DHS acknowledges that the possible effects would be significant for all sites. The potential

biological and socioeconomic effects of a pathogen release from the NBAF are included in Sections 3.8.9 and 3.10.9 of the NBAF EIS, respectively.

Comment No: 4                      Issue Code: 24.1

DHS notes the commentor's opposition to the Manhattan Campus Site Alternative in favor of the Plum Island Site Alternative based risks to livestock and residents. The NBAF would be designed and constructed using modern biocontainment technologies, and operated by trained staff and security personnel to ensure the maximum level of worker and public safety and least risk to the environment in accordance with all applicable federal, state, and local laws and regulations.

Comment No: 5                      Issue Code: 5.0

DHS notes the commentor's opposition to the five mainland site alternatives.

Comment No: 6                      Issue Code: 21.4

DHS 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. 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. Section 3.14 of the NBAF EIS, addresses 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. 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.

Conrad, Gary

Page 2 of 2

PD0133

4 cont.] 24.1

It makes no sense, also to say that researchers have to come to a bio security lab in the middle of cattle country. If someone wants to work on a very specific research project, they can go to a separate site. They could easily....for someone at a vet school anywhere in the United States, or in Kansas. If they wanted to go and do a research on these diseases, they could fly somewhere and fly to Plum Island and do the research there. They do not have to come here to do it. And I know this from first hand experience because I do marine biology every summer. I drive 2,000 miles one way up to Maine to a marine biology lab and that's where I do my research. So, that's perfectly equivalent to someone, anywhere in the United States having to fly to Plum Island to do bio security research. So that line of argument is totally worthless. It is without basis.

Let's see, anything else. I think that covers it. I would be happy to give more comments if you wish, but those are the sum and sustenance of my opinions. And I'm going to push buttons now to request a copy of the report and also to be added to the mailing list.

So, thank you very much. Thank you for providing this opportunity for giving comments.

Thank you.

Good bye.

## Conrow, Margaret

## Page 1 of 1

PD0295

August 25, 2008

1| 24.1  
2| 5.0

This is Margaret Conrow in [REDACTED], Kansas, and I think the facility should be left on Plum Island or put on another island, and I think even if it costs a lot of money, it should be built on an island, and, even if it is difficult for transportation, to get people there. I heard that was another concern about not having it on an island. I think that's a frivolous, almost a frivolous complaint. It should be on an island and the trouble should be taken to get the people there that need to be there. It's the only safe thing, and only sensible thing to do.

3| 25.4  
2 cont| 5.0

I do not want it in Manhattan, Kansas, and I don't think it should be anywhere on the mainland, certainly not in Manhattan, Kansas.

Thank you. My telephone number is in the phonebook; [REDACTED], Kansas.

Thank you.

Comment No: 1      Issue Code: 24.1

DHS notes the commentor's opposition to the Manhattan Campus Site Alternative in favor of the Plum Island Site Alternative.

Comment No: 2      Issue Code: 5.0

DHS notes the commentor's opposition to the five mainland 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 (i.e., DHS, U.S. Department of Agriculture, and Department of Health and Human Services) 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. 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: 3      Issue Code: 25.4

DHS notes the commentor's statement.

Cook, James

Page 1 of 1

CD0407

**From:** info@athensfaq.org on behalf of Mr. James F. Cook III [REDACTED]  
**Sent:** Monday, August 25, 2008 7:50 PM  
**To:** NBAFProgramManager  
**Subject:** NBAF in Athens, Georgia

Dear NBAF Program Manager,

- 1) 25.2 We are strongly opposed to having NBAF in our community of Athens, GA. The DEIS discloses an "insectary" where disease-spreading mosquitoes and other "vectors" will be bred. It also discloses that any release of pathogen, because of our warm, humid climate, could cause the disease to become permanently established in our community.
- 2) 21.2 I live a mile from the proposed site on the river. We already have the very aggressive tiger mosquitos present. The thought of the possibility of an even more deadly insect sucking my blood terrifies me.

How would DHS respond to a release of mosquitoes and other vectors? The EIS needs to show a detailed plan.

Sincerely,  
 James Cook

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: 21.2

DHS notes the commentor's concerns regarding an accidental release of a vector from the NBAF. 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, 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. An analysis of potential consequences of a pathogen (e.g. Rift Valley fever [RVF] virus) becoming established in native mosquito populations was evaluated in Section 3.8.9 and Section 3.10.9 as well as in Section 3.14 (health and Safety) of the NBAF EIS. DHS would have site-specific standard operating procedures and response plans in place prior to the initiation of research activities at the proposed NBAF. The RVF response plan would also include a mosquito control action plan. In addition, oversight of NBAF operations, as described in 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 APHIS Animal Research Policy and Institutional Animal Care and Use Committee.

Cook, Virginia

Page 1 of 2

FD0018

Is it would you for this please  
Do you approve of it?



~~Just a Note~~ Just a Note

To my recollection the  
bio lab has been on  
Plum Island for many  
years. To my knowledge  
there has never been  
a problem such as release  
of hazardous agents to  
endanger humans or  
cattle. Proven by recent  
news articles from Ft.  
Detriest, Md. and the Ivins  
Case. The people in charge  
on Plum Island at

Just a Note

have a great history.  
Some of the states  
you are considering are  
cattle raising country, seems  
like a compromising situation  
As to the heating  
question for lab workers --  
they compromise the intake  
no doubt the economy will  
change considerably in any  
of these states as soon  
as the federal government



Comment No: 1 Issue Code: 27.0

DHS notes the commentor's information regarding Plum Island's record.

Comment No: 2 Issue Code: 5.0

DHS notes the commentor's opposition to the five mainland site alternatives due to the risk to cattle and preference for the Plum Island Alternative.

1|27.0

2|5.0

Cook, Virginia

Page 2 of 2



FD0018

2 cont. | 5.0

3 | 24.1

~~put~~ builds a lab... why  
 put the whole crew... the  
 animals ~~at risk~~ ~~and~~ ~~in~~ ~~the~~  
 risk when you have ~~enough~~  
 whole space on Plum Island?  
 To build the necessary ~~facility~~.  
 Seems to be the norm  
 these days with government  
 projects - is it's working --  
 change it!  
 personally, I am more  
 scared of Millstone power  
 plant than of Plum Island.  
 I will be touring Plum  
 Island on Aug 24.  
 Mrs Virginia Cook



Comment No: 3

Issue Code: 24.1

DHS notes the commentor's support for the Plum Island Site Alternative.

Cooke, Richard

Page 1 of 1

PD0309

August 25, 2008

1| 25.2 | My name is Dr. Richard Cook. I am definitely against your considering locating the lab  
 2| 6.2 | in Athens, Georgia. You are taking away 67 quality acres of (inaudible) and forest  
 3| 19.2 | grazing land. You are impacting the environment. You are not inclusive in your  
 comments of how you would protect the people from (inaudible) pathogens of laboratory  
 four category, for which there are no known human cures.

4| 24.1 | Take it back to Plum Island. I'm already sick from the impossible mess you made up  
 there.

Thank you.

Bye.

Comment No: 1                      Issue Code: 25.2

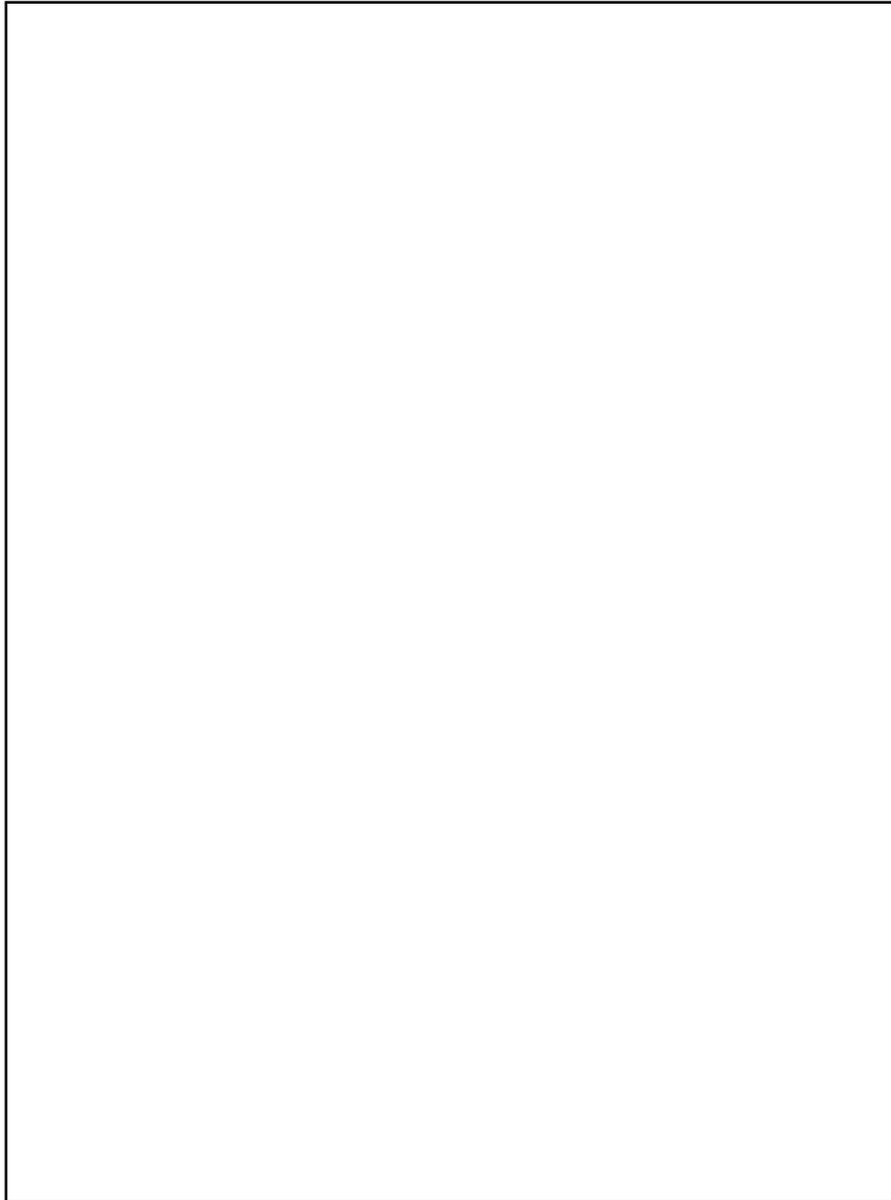
DHS notes the commentor's opposition to the South Milledge Avenue Site Alternative.

Comment No: 2                      Issue Code: 6.2

DHS notes the commentor's concern regarding development of the South Milledge Avenue Site which is described in Section 3.2.3 of the NBAF EIS. A change in land use and loss of grazing land would occur, while only 0.2 acres of forest would be affected; however, current zoning regulations allow for this type of development. The South Milledge Avenue Site is currently zoned as "Governmental", and construction and operation of the NBAF is consistent with this designation. However, the Clarke County Comprehensive Plan designates the South Milledge Avenue Site as "rural", so an amendment to the comprehensive plan may be required. This information has been added to the NBAF EIS in Chapter 3, Section 3.2.3. DHS and USDA would ensure that the NBAF operation at the South Milledge Avenue Site will comply with all applicable local, state, and Federal regulations and policies.

Comment No: 3                      Issue Code: 19.2

DHS notes the commentor's concerns regarding the impact of an pathogen release on the local 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, investigates 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. 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 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 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 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 APHIS Animal Research Policy and Institutional Animal Care and Use Committee. 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 residing within the local area. 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: 4                      Issue Code: 24.1  
DHS notes the commentor's support for the Plum Island Site Alternative.

Cooke, Richard

Page 1 of 2

8/25/2008 MD0071

1| 25.2

Thank you for this opportunity to express my opposition to the suggested location of the Bio-Terror Lab in Athens, Georgia,

Regardless of whether the U. S. Government admits responsibility for, or any complicity in the unfortunate release and/or spread of lyme disease (by the way for which there is no known cure) - and - (by the way, for which there is no medicare support). Both I and my wife as well as well as all of our immediate family, including children & their spouses, plus grand children and my sister-in-law, now must bear the total costs which alone was in excess of \$24,000 (last year) for my wife and myself. We now must bear these continuing mounting costs as well as the debilitating and life threatening results. As a result of this poor security at the Plum island site our careers were drastically affected!

1 cont.| 25.2

**I AM AGAINST THE LAB being located herein Athens, Georgia, at UGA.**

Having attended the public hearings at UGA, and respectfully and extremely carefully evaluated each presentation, both pro and con, several observations and questions remain that were never addressed or if addressed were inadequately answered, as follows.

First, as a former President and Dean of Faculty ay a small college, and having conducted as well as been part of numerous "applicants" presentations, the great majority of those who supported the lab coming to Athens were UGA faculty members who spent an average of over 1 1/2 minutes (out of 3 allowed) informing the panel of their exceptional qualifications. Not only that, but their presentations were almost completely void of any real enthusiastic support for the proposed project. Their bias of seeking a higher paying position was blatantly obvious. Thus, their support was at best "tainted" and should not be heavily weighed in your considerations.

2| 4.2

Secondly; The blatant bias of promised economic rewards reminds me of two applicable quotations from my father (a well respected international banker), "If it seems too good to be true, it is!" and "Follow the green!" In both instances these apply. The promise of numerous jobs for the area was grossly overstated. After carefully estimating the situation as presented through your speakers as well as written documentation, the most positions that I believe would be possible from our labor force was less than 65. One large super market would supply more jobs with most of them in a comparable salary range, and without the potential personal risks. Also, others who spoke in favor were obviously biased toward "what will it do for me?" - not what will the lasting effects upon the community and the individuals who had to remain here, especially in close proximity to the proposed location. Certainly another selfish motivation.

Thirdly; It is more than obvious that "prestige" was a high motivation factor, especially from the UGA officials. Such motivation should not even be considered in light of the potential impacts on the community and individuals that would more than possibly be affected. Only "one human error" (which every member of your "biased panel" reluctantly admitted was certainly possible) would far outweigh the "inflated" promised potential results. Prestige as a motivational factor only guarantees you "McDonald's coffee at a seniors price!" and should merit none of your considerations.

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: 4.2

DHS notes the commentor's concern that NBAF employment estimates in the EIS are overstated. The number of short-term and permanent jobs are discussed in Section 3.10 of the NBAF EIS. It is expected that approximately 2,700 direct temporary jobs (2,100 for the Plum Island Site) would result from construction of the NBAF, with many of the jobs being filled locally. Between 250-350 permanent jobs would result from operation of the NBAF, with much of the scientific work force relocating to the region.

Cooke, Richard

Page 2 of 2

MD0071

Finally, I must admit that all of us speak from a biased position. The question must be, "Is it a "self enggrandizing" bias, or not?" I understand the bias of the panel, that of the self seeking rewards people, and as well as that of prestige. My personal credentials are really unimportant, therefore will not be included in this communication. I have no personal vested interest in your locating the lab only two miles from my chosen Watkinsville retirement home. But, I do have these major concerns;

3| 21.0  
2 cont.| 4.2

Primarily - Because of the very possibility of human error. I am unwilling to support any such location since the magnitude of such would be debilitating, disabling or even deathly to individuals. Who, by the way were never even remotely included, or considered in any of your panels presentations. This should have been the over-riding consideration as stated in your "web site." Is it worth such impending possible consequences? What is the value of even one human life compared to a "herd of cattle?"

Secondarily - The fact remains that: poorly supported biased positions, usually supported by underlying selfish motivations, including "money", "prestige" and the like are always self enggrandizing and poor support for such a proposal. Greed only supports further greed, and ego centric presentations are presented only in the selfish hopes of uncaring peoples.

People, carefully consider your position on this matter, especially in light of the total outcomes for the families, the neighborhoods, and the individual. Each is vastly of more importance than a cow.

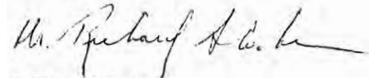
**WE DO NOT NEED THE LAB HERE.**

If you do decide to go ahead with this location, be assured, I, along with numerous other individuals will fight it with our last ounce of strength, including, if necessary that of civil disobedience.

This is a "battle field on which I would decide to die!"

With grateful thanks,

Sincerely,



Dr Richard A Cooke

Comment No: 3

Issue Code: 21.0

DHS notes the commentor's concern regarding the potential consequences from a NBAF accident or pathogen release as the result of human error. As described in 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. Training and inherent biocontainment safeguards reduce the likelihood of a release. 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 external events such as a terrorist attack. 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. The specific objective of the hazard identification, accident analysis, and risk assessment 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 risk of an accidental release of a pathogen is extremely low. As set out in 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 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 APHIS Animal Research Policy and Institutional Animal Care and Use Committee.

Cooley, Toni

Page 1 of 1

08/25/2008 16:08 FAX 601 407 2355

SYSTEMS ELECTRO COATING

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FD0078



253 Old Jackson Road  
Madison, Mississippi 39110-9485  
Telephone: (601) 407-2340  
Facsimile: (601) 407-2355

VIA FACSIMILE 1-866-508-6223

August 25, 2008

U.S. Department of Homeland Security  
Science and Technology Directorate  
245 Murray Lane, SW  
Building 410  
Washington, DC 20528

ATTN: James V. Johnson, Mail Stop #2100

Dear Mr. Johnson:

I wish to register my unequivocal support for DHS' for the National and Bio and Agro-Defense Facility to Flora, Mississippi.

I am a second-generation business owner with separate companies in Madison and Jackson, Mississippi. Specifically, one of our Mississippi-based organizations supplies Nissan as a Tier One supplier. That facility has been listed for the past three years as one of the nation's top 100 industrial sector African American owned businesses in terms of revenues. We have also won Nissan's zero quality defect award for the past three years. I add parenthetically, that six years ago we were novices to the automotive industry; none of us (fifty-odd Central Mississippians) who work in this plant had any automotive manufacturing experience. In 2003, our other organization, Systems Consultants was listed by INC Magazine as one of the top 100 fastest growing inner cities. I mention these merely to illustrate the capability and diversity of skill of our State's workforce and ability to quickly meet the demands/needs of an industry new to the State.

Finally, although I work in Madison and live in Jackson, the potential risk that this facility would create in no way concerns me, much like the risk of an accident at our nuclear facility does not worry me. Rather, I believe the benefit of having this facility in Mississippi greatly outweigh the potential risks involved. Naturally, the quality of life of people in the State would improve by the lab's mere presence. Similarly however, our workforce would positively impact the research the national facility does.

Given the foregoing, I urge you to choose Mississippi for the home of the nation's bio and agri defense facility.

Sincerely,

TONI D. COOLEY  
President

Comment No: 1

Issue Code: 24.5

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

1| 24.5

## Corcoran, James

## Page 1 of 1

WD0034

**From:** JC Corcoran [REDACTED]  
**Sent:** Wednesday, July 02, 2008 9:46 AM  
**To:** NBAFProgramManager  
**Subject:** Proposed UGA NABF site

Dear NBAF Program Manager,

1| 25.2 As a resident of [REDACTED] GA, I would like to register my OPPOSITION to the planned NBAF site at the  
 2| 21.2 University of Georgia. Clearly, the DEIS shows substantial risk to heavily populated areas. Athens, with  
 3| 19.2 100,000 residents and 33,000 students, makes this UGA site unacceptable.  
 4| 15.2

5| 12.2 Additionally, we are suffering from a drought here in GA. Climate change models demonstrate that this  
 trend could be common for the the SE US for the long haul. We haven't sufficient water now. There is  
 no way that we could handle a facility this large demanding 43 million gallons/year!

6| 24.1 It makes far more sense to go the preferred route and refurbish Plum Island in NY.

Please make my comments part of the official documents.

Thank you,

James Corcoran  
 [REDACTED]

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: 21.2

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: 3                      Issue Code: 19.2

See response to Comment No. 2.

Comment No: 4                      Issue Code: 15.2

DHS notes the commentor's statement.

Comment No: 5                      Issue Code: 12.2

DHS notes the commentor's drought concerns and acknowledges current regional drought conditions. As described in Section 3.7.3.3.1 of the NBAF EIS, the South Milledge Avenue Site Alternative would use approximately 118,000 gallons per day of potable water, an amount that is approximately 0.76% of Athens' current annual average of 15.5 million gallons per day usage. The NBAF annual potable water usage is expected to be approximately equivalent to the amount consumed by 228 residential homes.

Comment No: 6                      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 based on risks to residents. 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 in populated areas such as Athens.

Cottar, Daniel

Page 1 of 1

PD0018

July 17, 2008

Hello,

My name is Danny Cottar. My number is [REDACTED]

- 1| 25.2 | I am against having the bio terror lab in Athens, Georgia. Don't put it here. Take it  
somewhere else. Leave it on the island that it's on, over by New York. That's an  
2| 24.1 | island..it makes more sense.
- 1 cont.| 25.2 | None of us want it, and we'll do everything that's legal to make your lives miserable if  
you do bring it here. So, you'd be well advised to not bring the bio terror lab, NBAF, or  
whatever it is, to here.
- 1 cont.| 25.2 | We don't want any animal or any other kind of diseases being worked on in our city.  
Okay? There's probably enough of that already, all over the place.
- 1 cont.| 25.2 | Alright, this is no uncertain terms. Do not have it in Athens. Do not have the bio terror  
lab in Athens. Don't have it here. We don't want it. We don't like it, and we'll do  
everything...we meaning our community, we'll do everything legal to make your lives  
miserable so that you'll want to take it out of here, 'cause we don't want it.
- 1 cont.| 25.2 | Thank you very much. Don't have the bio terror lab in Athens, Georgia.

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: 24.1

DHS notes the commentor's support for the Plum Island Site Alternative.

Cottar, Daniel

Page 1 of 2

GAD007



## National Bio and Agro-Defense Facility Draft Environmental Impact Statement Comment Form

Personal information is optional as this document is part of the public record and may be reproduced in its entirety in the final National Bio and Agro-Defense Facility Environmental Impact Statement.

Name: Daniel Cottar

Title: Person Fulfilling My Civic Duty

Organization: U.S. Citizen

Address: [REDACTED]

City: [REDACTED] State: Ga Zip Code: [REDACTED]

Comments:

11 27.0 I speak on behalf of the Majority  
of Clarke County citizens.

21 25.2 We don't want NBAF or  
any other (bio - study) of weapons for  
disease etc, to be present, here in  
Clarke County, Athens, UGA, or  
Georgia.

31 5.2 Many other locales are  
dying (no pun intended) for you, to  
go here. It's already on an island,  
that, may be better, as far as I can  
see.

41 27.0 We will do all that is legal, for as long as it  
takes to keep your facility out of here.

(Continued on back for your convenience)

Comment No: 1 Issue Code: 27.0

DHS notes the commentor's statement.

Comment No: 2 Issue Code: 25.2

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

Comment No: 3 Issue Code: 5.2

DHS notes the commentor's opposition to the five mainland site alternatives.

Comment No: 4 Issue Code: 27.0

DHS notes the commentor's statement.

Cottar, Daniel

Page 2 of 2

GAD007

5| 15.2  
6| 27.0

I also find it laughable that you are trying to say that it will cause many jobs for the local community. I don't believe - Condi Rice about Uranium, George Bush about anything and you (NBAF) about the benefits of your presence.

Daniel Cottar

**THANK YOU FOR YOUR COMMENTS**

Please return this form to the comment table. It may also be mailed or faxed as follows:

**U.S. MAIL**

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

**TOLL-FREE FAX**

1-866-508-NBAF (6223)

Comment No: 5 Issue Code: 15.2

DHS notes the commentor's statement regarding employment. The economic effects of the NBAF at the South Milledge Avenue site are presented in Section 3.10.3 of the NBAF EIS.

Comment No: 6 Issue Code: 27.0

DHS notes the commentor's statement.

Couch, Carol

Page 1 of 2

08-20-08 11:44AM 1404-483-7688

**Georgia Department of Natural Resources**  
2 Martin Luther King Jr. Drive, S.E., Suite 1154, Atlanta, Georgia 30334  
Noel Holcomb, Commissioner  
Environmental Protection Division  
Carol A. Couch, Director  
404-656-2633

FD0025

# Fax

**To:** James V. Johnson  
U.S. Department of Homeland Security

**From:** Amy Potter  
Georgia Environmental Protection  
Division

---

**Fax:** 1-866-508-6223      **Pages:** 2 (Including Cover Sheet)

---

**Phone:**      **Date:** August 20, 2008

---

**Re:** Georgia EPD Review of NBAF DEIS: Construction  
and Operation of the National Bio and Agro-Defense  
Facility      **CC:**

---

**Comments:**

Empty box for comments or additional information.

Couch, Carol

Page 2 of 2

08/15/2008 11:44:40 AM 04044433-7588 # 2 1 1

**Georgia Department of Natural Resources**  
2 Martin Luther King, Jr. Drive S.E., Suite 1162 East, Atlanta, Georgia 30334  
Noel Holcomb, Commissioner  
Environmental Protection Division  
Carol A. Couch, PhD, Director  
(404) 656-2833

BY FACSIMILE FD0025  
August 15, 2008

U.S. Department of Homeland Security  
James V. Johnson  
Map Stop #2100  
245 Murray Lane, SW, Building 410  
Washington, DC 20528

Re: National Bio and Agro-Defense  
Facility Draft EIS

Dear Mr. Johnson:

1|3.0 The Georgia Environmental Protection Division appreciates the opportunity to review the June 2008 *National Bio and Agro-Defense Facility Draft Environmental Impact Statement* (NBAF DEIS). We have no comments on the NBAF DEIS with respect to locating the facility in Georgia at the South Milledge Avenue Site in Athens.

If you have any questions regarding our review, please contact Amy Potter at 404-657-8675.

Sincerely,  
  
Carol A. Couch  
Director

CAC:ap  
File: NEPA  
SYSTEM GENERATED FROM THE NEPA/EA/PEIS REVIEW AND COMMENT SYSTEM

Comment No: 1 Issue Code: 3.0  
DHS notes the commentor's statement.

## Coulson, Barbara and Thomas

Page 1 of 1

FROM : JTB/MC

PHONE NO. : 828 683 9354

SEP. 18 2008 08:44PM P.1

FD0021

August 19, 2008

1001 Reemes Cove Rd.  
Marshall, NC 28753

U. S. Department of Homeland Security

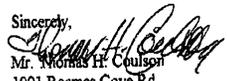
Science and Technology Directorate: James V. Johnson  
By Facsimile transmission  
1-866-508-NABF (6223)

Re: Proposed National Bio and Agro-Defense Facility

Dear Mr. Johnson:

1|25.3 | I wish to express my opposition to placement of the proposal of the above styled facility  
in Butner, NC2|5.0 | I find it impossible to believe that the existing site cannot be more economically  
upgraded than would be the construction of an entirely new facility. Furthermore the  
Geat Island is demonstrably safer than any of the inland sites proposed.

Sincerely,

  
Mr. Thomas H. Coulson  
1001 Reemes Cove Rd.  
Marshall, NC 28753Comment No: 1Issue Code: 25.3

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

Comment No: 2Issue Code: 5.0

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. DHS also notes the commentor's opposition to the five mainland site alternatives.

## Coulson, Barbara and Thomas

## Page 1 of 1

WD0288

From: [REDACTED]  
 Sent: Friday, August 15, 2008 2:14 PM  
 To: NBAFProgramManager  
 Subject: NBAF DEIS

Please consider my comments concerning the proposed National Bio- and agro defense facility near Butner, North Carolina.

- 1|1.0; I have a great many concerns about this facility as well as other sites for this project, the main one being  
 2|21.0 the safety of such facilities. It's my understanding that there were 103 accidents that were reported at  
 3|2.0 high-containment labs over the past four years, with 90% caused by human error. In addition, Homeland  
 Security's Federal Protective Service would be in charge of security, but a recent report that was  
 commissioned by Congress found that that organization is performing poorly. I know that there is a high  
 rate of staff turnover as well as the increasing use of private security guards, and this doesn't inspire  
 much confidence. Privatizing our security forces, when private companies focus on the bottom line, is to  
 my mind a dangerous practice. In addition to that, it's my understanding that the FOIA doesn't require  
 disclosure of information related to National Security. We have a hard time getting disclosure on power  
 plant emissions and water pollution discharges as it is; I can picture the secrecy that is so rampant in our  
 Government agencies becoming even more so.
- 4|18.3 Finally, there is the environmental impact of large animal waste being 'treated' and discharged into Falls  
 Lake, one of five reservoirs within a few miles of this facility.
- 2 cont. I also have concerns about the many people living near this proposed facility. It seems that the most  
 21.3 vulnerable people financially (who have no voice) are being invaded by anything that other locales don't  
 want (NIMBY) and can afford to fight.
- 5|12.3 I believe that this is an issue of justice, safety and environmental impact on a region that has been in a  
 major drought for the past few years. We may not have the water to spare when our wells are going dry  
 (as they are in my county of Madison in Western North Carolina) for a research lab that would use vast  
 quantities of it.
- 1 cont. I urge you to consider carefully and weigh all the pros and cons before being serious about such a  
 1.0 venture.

Thank you for allowing me to present my concerns.

(Mrs) Barbara Coulson

[REDACTED]  
 [REDACTED] North Carolina [REDACTED]

\*\*\*\*\*

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 ([http://autos.aol.com/cars-Volkswagen-Jetta-2009/expert-review?](http://autos.aol.com/cars-Volkswagen-Jetta-2009/expert-review?ncid=aolaut000300000000007)  
 ncid=aolaut000300000000007 )

Comment No: 1 Issue Code: 1.0

DHS notes the commentor's concerns about the need for NBAF. The purpose and need for the proposed action is discussed in Chapter 1 of the NBAF EIS.

Comment No: 2 Issue Code: 21.0

DHS notes the commentor's concern regarding the potential consequences from an NBAF accident or pathogen release to a populated area as the result of human error. As described in 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. Training and inherent biocontainment safeguards reduce the likelihood of a release. Appendix B of the NBAF EIS provides a comprehensive list of BSL-3 and BSL-4 laboratory accidents results, and consequences of the accidents 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 external events such as a terrorist attack. 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. The specific objective of the hazard identification, accident analysis, and risk assessment 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. As set out in 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 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 APHIS Animal Research Policy and Institutional Animal Care and Use Committee. 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 residing within the local area. 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: 3 Issue Code: 2.0

The decision to use government or private security forces to protect the NBAF has not been made. In all likelihood that decision will be made after the NBAF Record of Decision is issued. Should the ROD call for the design, construction, and operations of the NBAF then site specific decisions would include the determination to use government or private security forces to protect the NBAF.

Regardless of the decision, NBAF would have the levels of protection and control required by applicable DHS security directives. With regard to the commentor's concerns about secrecy and disclosure, DHS has made every effort to explain the operational aspects of NBAF and has conducted a thorough and open public outreach program in support of the NBAF EIS that exceeded minimum NEPA requirements. DHS will release emissions data as required by federal, state and local regulations.

Comment No: 4                      Issue Code: 18.3

As discussed in Section 3.13.2.2 of the NBAF EIS, one type of large animal waste, i.e., biological liquid waste from BSL-3 Ag areas, will enter a dedicated treatment system that involves thermal treatment followed by subsequent decontamination prior to discharge to a wastewater treatment system. A comparison of some of the onsite pretreatment technologies being considered for another type of animal waste, infected animal carcasses, is presented on Table 3.13.2.2-4 of the NBAF EIS. As shown on the table, all of these technologies result in non-infective residuals.

Comment No: 5                      Issue Code: 12.3

DHS notes the commentor's concerns and acknowledges the current regional drought conditions. 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, 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.

Coursey, Tim

Page 1 of 1

08/15/2008 14:38 6013596942 MCEDA PAGE 01/01



**MADISON COUNTY**  
ECONOMIC DEVELOPMENT AUTHORITY  
140 West Peace Street • P.O. Box 201  
Canton, Mississippi 39046  
Telephone (601) 859-1990 • FAX (601) 859-6942  
Web: www.madisoncountymceda.com

FD0016

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August 15, 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: NBAF Support

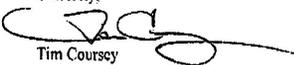
Dear Mr. Johnson:

Thank you for your decision to designate the Flora Industrial Park as one of the top five sites to be considered for the new National Bio and Agro-Defense Facility (NBAF). I represent the Madison County Economic Development Authority (MCEDA), which is the lead public economic development agency for Madison County and holds title to the Flora Industrial Park property.

As you know, our organization is part of the Gulf States Bio and Agro Defense Consortium that responded to the original RFP solicitation for the new the NBAF. When this competitive process first began, we believed, as we still do, that this project was critical to our future and that we were going to do everything in our power to attract the facility to Madison County. As such, we decided immediately to commit a large portion of our limited resources and devote them towards securing this project. Specifically, we have committed to contribute all of our land in our Industrial Park in Flora and have invested considerable capital toward securing our position as a site finalist and towards engineering and technical consulting needed to assist the EIS contractors. Furthermore, we also purchased two additional parcels of property that adjoin the subject site and now serve to enhance the security and development potential of the site. These are real actions and real purchases we have taken or made specifically for the NBAF project.

We hope this provides you with a better understanding of MCEDA's dedication and commitment to securing the NBAF project for Flora and the State of Mississippi. We want the NBAF in Madison County and believe strongly that we offer the best opportunity for your success.

Sincerely,



Tim Coursey  
Executive Director

Comment No: 1

Issue Code: 24.5

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

Cowan, Anne

Page 1 of 1

WD0168

**From:** ANNE G COWAN [REDACTED]  
**Sent:** Monday, August 04, 2008 10:14 AM  
**To:** NBAFProgramManager  
**Subject:** NBAF location

1| 19.4 I am very concerned about having the NBAF facility located in Manhattan, Kansas. There are risks  
 2| 13.4 involved here and I do not think the facility should be located so near a human population and a  
 3| 5.0 population of animals. This should be in an isolated place, like Plumb Island.  
 4| 24.1 I know you say it is too expensive to do that. Since when does our government deny the safety of the US  
 because of money. Spend the money and do it right.

5| 25.4 Please consider this a 'NO' vote for locating the facility in Manhattan, Kansas  
 Anne Cowan  
 [REDACTED] Kansas [REDACTED]

Comment No: 1      Issue Code: 19.4

DHS notes the commentor's concerns regarding the impact of an 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. 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. 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 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 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 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 APHIS Animal Research Policy and Institutional Animal Care and Use Committee. 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 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.

Comment No: 2      Issue Code: 13.4

DHS notes the commentors concern regarding animal populations in the vicinity of the Manhattan Campus Site. The potential impacts of an accidental release on wildlife are addressed in Section 3.8.9 of the NBAF EIS. Although the NBAF EIS acknowledges the potential for significant impacts on 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.

Comment No: 3                      Issue Code: 5.0

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: 4                      Issue Code: 24.1

DHS notes the commentor's opposition to the Manhattan Campus Site in favor of the Plum Island Site Alternative based on risks to residents. 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 in populated areas such as Athens. While the potential costs of proposed actions are not a factor in the environmental impact analysis presented in the NBAF EIS, cost information and the scope of the cost analysis performed is summarized in Section 2.5 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.

Comment No: 5                      Issue Code: 25.4

DHS notes the commentor's opposition to the Manhattan Campus Site Alternative.

Cowart, David

Page 1 of 2

WD0825

**From:** [REDACTED]  
**Sent:** Monday, August 25, 2008 6:17 PM  
**To:** NBAFProgramManager  
**Subject:** Comments re Athens, GA NBAF site

August 25, 2008

Dear NBAF Program Manager,

- 1| 25.2 | We, the undersigned, are strongly opposed to locating NBAF at the proposed South Milledge Avenue site in Athens, GA.
- 2| 19.2 | The DEIS clearly shows that the Athens, GA site is neither safe nor compatible from an environmental standpoint for the construction of NBAF.
- 3| 5.1 | For example, the DEIS shows that the Athens, GA site would not be as safe as the Plum Island, NY site. We believe that to build NBAF anywhere other than at the safest known site would be irresponsible and negligent.
- 2 cont|  
19.2 | The DEIS also discloses that any release of a pathogen, because of our warm, humid climate, could cause the disease to become permanently established in our community.
- 4| 19.0 | Additionally, the DEIS contains a number of inconsistencies, which we believe others have already pointed out to you. Perhaps more serious are that document's omissions, some of which are the following:
- 2 cont|  
19.2 | The DEIS discusses the nipah virus to some extent, but largely ignores the hendra virus. It mentions that three people have been infected with hendra, yet we do not see any mention that two of these people died. The DEIS's failure to explore the impact of a hendra virus release is especially critical in light of the fact that two more people have become infected with this virus since the DEIS was released, and one of them died just last week.
- The DEIS largely glosses over the impact of a pathogen release. While it mentions the 6.2-mile-radius "infected zone" and the larger "surveillance/movement-control zone," where are its detailed analyses of the impact of quarantine, isolation, movement control, and the possible "depopulation"/euthanasia of wildlife and even pets?
- 5| 13.2 | The DEIS also seems to gloss over the effect of NBAF on the environment of the State Botanical Garden and Important Bird Area in Athens, GA. We believe that visual/light-pollution issues alone should be sufficient reason to locate NBAF elsewhere.
- 6| 7.2 | For these and other reasons, we agree with Connecticut Attorney General Richard Blumenthal's recent statement that the DEIS is "profoundly deficient, and legally insufficient," failing to fully consider the overwhelming risks of this facility, in violation of the National Environmental Policy Act.
- 7| 4.2 | We believe that Blumenthal's recent statement about the Plum Island site applies equally, and probably more so, to the Athens site: "The environmental security risks are intolerable in an area so densely populated, heavily traveled
- 3 cont|  
5.2 |

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: 19.2

DHS notes the commentor's opposition to the South Milledge Avenue Site. Section 3.3.3 of the NBAF EIS includes an assessment of the current infrastructure, a discussion of the potential effects from construction and operation of the NBAF, and the identification of any infrastructure improvements necessary to meet design criteria and ensure safe operation. A discussion of existing road conditions and potential effects to traffic and transportation from the operation of the NBAF at the South Milledge Avenue Site, to include planned improvements to the primary corridors serving the NBAF, is provided in Section 3.11.3 of the NBAF EIS. Based on current information and planned improvements, no major infrastructure or transportation constraints have been identified for the South Milledge Avenue Site. Should a site be selected for NBAF, any needed infrastructure or transportation improvements to ensure service reliability would be identified in accordance with the final facility design. DHS would maintain the NBAF and ancillary facilities in compliance with applicable environmental, safety, and health requirements and provide for safe operation and maintenance. It has been shown that modern biosafety laboratories can be safely operated in populated areas and in areas with abundant wildlife. An example is the Centers for Disease Control and Prevention in downtown Atlanta 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 virus) becoming established in native mosquito populations, particularly in warm, humid climates, was evaluated in Sections 3.8.9, 3.10.9, and 3.14 of the NBAF EIS. 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.

Comment No: 3      Issue Code: 5.1

DHS notes the commentor's support for the Plum Island Site Alternative over the South Milledge Avenue Site Alternative. The conclusions expressed in Section 3.14 of the NBAF EIS show that even though Plum Island has a lower potential impact in case of a release, the probability of a release is low at all sites.

Comment No: 4      Issue Code: 19.0

DHS notes the commentor's concern regarding Hendra virus and the information provided regarding human fatalities. As noted in Section 3.14.1 and 3.14.2 of the NBAF EIS, Nipah virus was evaluated as part of a bounding case release and risk scenario in lieu of Hendra virus because Hendra virus presents no concerns that are not present for Nipah virus.

DHS also notes the commentor's concerns regarding release response measures. 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. Should the NBAF Record of Decision call for the design, construction, and operation of the NBAF then site-specific protocols and emergency response plans 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 area. DHS would have site-specific standard operating procedures and response plans in place prior to the initiation of research activities at the NBAF. Section 3.8.9 of the NBAF EIS addresses existing and potentially applicable response plans that provide insight into some of the livestock and wildlife protective and mitigating measures that could be employed in the event of a pathogen release from the NBAF.

Comment No: 5                      Issue Code: 13.2

DHS notes the commentor's concern and acknowledges the proximity of the South Milledge Avenue Site to the State Botanical Garden. As described in Section 3.8.3.1.1 of the NBAF EIS, 80% of the site consists of pasture, and the adjacent lands consist of forested lands and small, perennial headwater streams. Approximately 30 acres of open pasture, 0.2 acres of forested habitat, and less than 0.1 acres of wetlands would be affected by the NBAF. However, construction and normal operations of the NBAF would have no direct impact on the State Botanical Garden as indicated in Sections 3.8.3.2 and 3.8.3.3. Only minimal indirect effects would occur from operations due to increases in light and noise.

Comment No: 6                      Issue Code: 7.0

DHS notes the commentor's concern regarding the visual effects of the NBAF at the South Milledge Avenue Site, which are described in Section 3.2.3 of the NBAF EIS. DHS recognizes that the NBAF would be a distinctive visible feature including at night due to lighting and would alter the viewshed of the area.

Comment No: 7                      Issue Code: 4.2

DHS notes the commentor's statement. DHS prepared the NBAF EIS in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and CEQ's regulations for implementing NEPA (40 CFR 1500 et seq.).

**Cowart, David**

**Page 2 of 2**

WD0825

3 cont.  
5.2

and environmentally valued. The threat of accident or attack is hardly hypothetical or speculative, as recent experience has taught to our sorrow. These dangers are real and substantial, and have not been adequately considered [in the DEIS].

1 cont.  
25.2

Please do not act irresponsibly based on a flawed and incomplete study (the DEIS) and in the face of such overwhelming negative impact. NBAF should not be in Athens.

In closing, we are strongly opposed to locating NBAF in Athens and will continue to actively work, by all legal means, against any effort to bring NBAF to our community.

Sincerely,

David Cowart [REDACTED] (GA)  
Donna Maddock-Cowart [REDACTED] (GA)

Craig, Charles

Page 1 of 2

GAD022



August 14, 2008

The Honorable Michael Chertoff  
 Secretary  
 U.S. Department of Homeland Security  
 Washington, D.C. 20528

Dear Secretary Chertoff:

1| 24.2 On the behalf of Georgia Bio, I want to express my organization's strong support for locating the National Bio- and Agro-Defense Facility (NBAF) in Athens.

Georgia Bio is the private, non-profit association representing the life sciences industry in Georgia. Our members total more than 300 pharmaceutical, biotechnology and medical device companies, research institutions, government groups, and other business organizations across the state. These companies and organizations employ tens of thousands of life sciences professionals, and are international leaders in research, development and manufacturing of life sciences products.

Georgia's state government officials have identified life sciences as the top strategic industry for economic growth; and Georgia Bio works with the state to support existing industry growth and recruit new companies and organizations to Georgia, such as the National Bio- and Agro-Defense Facility.

2| 8.2 Georgia Bio's members are intensely interested in supporting life sciences industry growth. Creating a greater critical mass of life sciences companies, research institutes and related organizations, facilitates more collaborative research and development, strengthens the workforce, and fosters a strong and supportive professional community. Locating the National Bio- and Agro-Defense Facility in Athens will bring hundreds of jobs to the state and will spur even more growth as companies and organizations locate in Georgia to collaborate with the research center.

Athens is a prime location for the National Bio- and Agro-Defense Facility for many reasons. In addition to proximity with the University of Georgia and U.S. Department of Agriculture and Environmental Protection Agency research centers, the region between Athens and Atlanta is where 85 percent of Georgia's life sciences industry is located. In fact, this 13-county region is identified as Georgia's Innovation Crescent, a center of excellence for life sciences innovation.

cont.| 1| 24.2 The local governments, business organizations, state government, universities and life sciences industry are working together to promote life sciences growth in this region. The National Bio- and Agro-Defense Facility will be a welcome addition and enormous boost to this region and the state.

*continued*

Comment No: 1 Issue Code: 24.2

DHS notes the commentor's support for the South Milledge Avenue Site Alternative.

Comment No: 2 Issue Code: 8.2

DHS notes the information provided by the commentor.

Craig, Charles

Page 2 of 2

GAD022

The Honorable Michael Chertoff  
Secretary  
U.S. Department of Homeland Security

August 14, 2008

About 230 life sciences companies, the US Centers for Disease Control and Prevention, Yerkes National Primate Research Center, Emory University, Georgia Institute of Technology, Georgia State University, Morehouse School of Medicine, Morehouse College, Spelman College, and Clark Atlanta, are all within 70 miles or less of Athens; and all within the Innovation Crescent. The Medical College of Georgia, which is expanding to Athens, also is part of this region.

cont.] 2] 8.2 The companies and universities in this region employ the full range of life sciences workers, from management and administrative personnel to technicians and scientists. They represent a strong and robust life sciences workforce. This includes highly skilled workers that are trained for employment in several level 3 and 4 biosafety laboratories in Georgia. Where better to locate the National Bio- and Agro-Defense Facility than in a state that already has a long track record of safety with such laboratories and the workforce to help staff them and train others to work there.

cont.] 1] 24.2  
cont.] 2] 8.2 In addition, the life sciences industry has partnered with the Georgia Department of Education, Technical College System of Georgia and University System of Georgia to put in place a seamless life sciences career pathway from K-12 schools to technical colleges to universities to make sure there is always a talented workforce to support the fast-growing and evolving life sciences industry.

This career pathway will not only encourage and prepare students entering the workforce to choose life sciences careers, but also enable adults to retrain for these rewarding jobs. This is especially relevant to the Innovation Crescent region, in which four military bases are scheduled to close as of 2011.

cont.] 1] 24.2 Georgia Bio and its members urge the U.S. Department of Homeland Security to locate the National Bio- and Agro-Defense Facility in Athens. With the presence of a fast growing, internationally renowned bioscience community and a tradition of strong support for the country's national defense infrastructure, Georgia is an ideal choice for this facility.

Sincerely,



Charles Craig  
President  
Georgia Bio  
75 Fifth Street NW  
Suite 860  
Atlanta, GA 30308  
404-920-2043  
charles.craig@gabio.org  
www.gabio.org

**Cravens, Sandy**

**Page 1 of 1**

**PD0038**

August 3, 2008

Hi,

1| 25.4 I'm Sandy Craven, a farmer and rancher north of Manhattan, Kansas. I am very much  
2| 5.0 against bringing NBAF to Manhattan, Kansas or anywhere on the mainland. Human  
error is what, really, really, really worries me and scares me.

3| 24.1 So, put me down as please don't bring it to the mainland, and keep it on Plum Island.

Thank you so much.

Good bye.

Comment No: 1                      Issue Code: 25.4

DHS notes the commentor's opposition to the Manhattan Campus Site Alternative.

Comment No: 2                      Issue Code: 5.0

DHS notes the commentor's opposition to the five mainland site alternatives.

Comment No: 3                      Issue Code: 24.1

DHS notes the commentor's support for the Plum Island Site Alternative.

**Crawford, Jr., Jim**

**Page 1 of 1**

PD0185

August 22, 2008

1|24.3

This is State Representative Jim Crawford. I represent past District 32 which includes the Butner site and all of Granville County and southern Vance County. I would just like the committee to understand that there are 49,000 votes other than the ones that you have heard in the committees and would like you to take a look at the people that spoke at the last meeting in Butner and realize that the same people asked the questions and spoke both morning and afternoon. The general sentiment in our area is definitely in favor of locating the NBAF project in Butner. The people in the immediate Butner area have been stirred up considerably. I want you to understand that there are many other people in our area. And I have talked to County Commissioners and elected officials in the individual areas in Granville County and most of them personally are in favor of the NBAF. Political considerations seem to be holding a little more sway than they should at this point.

But we are excited that we are one of the chosen sites to be evaluated and wanted you to know that we are excited about being a part of the NBAF and what it could do for our area of the State and we feel like we have a great location with the University close by. And I think you'll find that this State will give you a great deal of support and the people in Granville County overall. Granted, we have some folks that have been fighting some environmental issues and they are very vocal and they've organized and pushed to fight against this project. But that is not the overwhelming sentiment in Granville County by any means.

Thank you so much for your consideration.

Comment No: 1

Issue Code: 24.3

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

Crnich, Chris

Page 1 of 1

WD0035

**From:** Chris Crnich [ccrnich@utah.gov]  
**Sent:** Wednesday, July 02, 2008 5:30 PM  
**To:** NBAFProgramManager  
**Subject:** Comments on Proposed National Bio-Ag Facilities

Sirs,

I read over the proposed environmental impact statements and site proposals. I had but a few comments concerning the activities in consideration of moving the current facility to the mainland, i.e. a populated area surrounded by land, people, and animals.

1) It was stated that financial losses to Suffolk County New York would be significant should Foot and Mouth Disease be released from the facility. I find this to be rather an interesting calculation since any release would have to get out of a very secure facility (as any of the proposed sites would be), cross a small island surrounded by water and prevailing winds out to sea, cross the same waters on a controlled access vehicle (ferry where personnel are inspected on both sides of the water), cross a long and relatively scarcely populated peninsula that has few if any animals and little or no truck traffic taking animals to other parts of the nation, and face weather or environmental conditions that disfavor viral survival, even if it reached the mainland. If a Foot and Mouth outbreak were ever to occur in the United States, it would not be a 'county' issue, it would be a United States issue and no matter where the disease were located we all would feel the impact. Suffolk County NY would be least affected because of the isolation of the facility. Any of the other sites, no matter how remote the possibility of a release, would cause extensive damage to the animal, wildlife, and human populations. Though the numbers quoted in the draft EIA seem a bit high for Suffolk County, they certainly do represent a significant issue we all must consider.

I must agree with much of the study and efforts that have gone on to date. Building a new and modern facility on the Plum Island site seems to be the best solution to keep all the agents and research in one spot. Bringing these agents on to the mainland seems a bit risky, even if the risk is 'low'. Consider the low risk to have FMD strike again in Britain after what they most recently experienced. Low risk, same issues when it was discovered leaking into the environment. Economic and public outcry. Let's not move the facility to the mainland.

Keep it off shore, miles from New York, and proven secure from the past decades of research and isolation. Dr. Crnich.

Chris S. Crnich, DVM  
 Director, Agriculture Homeland Security  
 Office: 801-538-7109  
 FAX: 801-538-7169  
 e-mail: [ccrnich@utah.gov](mailto:ccrnich@utah.gov)

Comment No: 1                      Issue Code: 21.0

DHS concurs. The evaluation of an accidental release of FMD virus in Section 3.10.9 and Appendix D of the NBAF EIS included national-scale economic consequences as well as local economic consequences.

Comment No: 2                      Issue Code: 24.1

DHS notes the commenter's support for the Plum Island Site Alternative.

Comment No: 3                      Issue Code: 5.0

DHS notes the commenter's opposition to the five mainland site alternatives. The conclusions expressed in Section 3.14 of the NBAF EIS show that even though Plum Island has a lower potential impact in case of a release, the probability of a release is low at all sites. The lower potential effect is due both to the water barrier around the island and the lack of livestock and susceptible wildlife species.

Cropper, DVM, MPVM, DACVPM, Thomas

Page 1 of 5

08/25/2008 10:31 210-492-3323 THE UPS STORE 4397 PAGE 01/05  
FD0062

**FAX Cover Sheet For Cropper Consulting; 25 Aug 2008**

Thomas Leo Cropper  
13507 Crescent Creek  
San Antonio, Tx. 78231  
Phone 210-493-9820/Cell 210-542-3428

TO: 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  
1-866-508-NBAF (6223)

Total pages: 5

Jamie,  
Have a great day!  
Leo

Cropper, DVM, MPVM, DACVPM, Thomas

Page 2 of 5

08/25/2008 10:31 216-492-3323 THE UPS STORE 4397 PAGE 02/05  
FD0062

Thank you for the opportunity to comment on the NBAF EIS. I enjoyed your open forum recently in San Antonio and after tracking this effort since the beginning wanted to share my insights and congratulate your team for doing such a great job.

1|1.0 The option to “take no action” would be equivalent to be negligent; for sure morally, perhaps even criminal if light of the aging infrastructure at Plum Island. Our nation needs new laboratory capabilities for animal diseases that could devastate out nations agricultural industry and our American way of life. I belong to the USDA NAHERC program and the USAHA and know first hand as a veterinarian with Board Certification in Veterinary Preventive Medicine for over 30 years how devastating animal epidemics can be.

**I want to highlight several facts to be included in the decision package.**

**1. Workforce quality of life is critical.** The success of federal labs is directly proportional to the quality and availability of highly educated workforce who want to live in the community near the facility. The quality of life for the spouses and children will dictate who DHS/USDA can recruit and retain. I was the Associate Director for the AFRL Human Effectiveness Directorate and site Commander for the Brooks team. One of the biggest challenges facing the Air Force Laboratory leadership was to recruit and retain a high quality workforce at our various geographic locations. Affordable housing and high quality of life for family members was one on the most important issue for the scientists needed. Affiliation with other multidisciplinary scientific organizations from Academia and private sector is crucial. Multidisciplinary biomedical engineering, information sciences to include information security, and broad medical sciences educational pools are necessary in the nearby community to gain the synergy needed for multidisciplinary innovation.

Comment No: 1 Issue Code: 1.0

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

Cropper, DVM, MPVM, DACVPM, Thomas

Page 3 of 5

08/25/2008 10:31 210-492-3323 THE UPS STORE 4397 PAGE 03/05  
FD0062

a. One disturbing quote in the lay media was if we build it they will come. That quote does not reflect the reality of recruiting and retaining leading scientists in our nation today. Even with a large company like Battelle who can send scientists temporarily from their other sites; their best scientists are not going to relocate to any community with minimal infrastructure for their children's educational needs and their spouse's lifestyle needs.

b. If the Mississippi site is selected, the science mission needed will suffer greatly and lag far behind compared to any of the other sites on your final list.

**2. Climatologically each site should be compared for the number of days where may impede movement of specimens from any point in the nation to the federal laboratory (an additional table in executive summary). Severe weather and natural phenomena like earthquakes, tornado's, snow storms, ice, severe fog & storms may impact both specimen transportation and lab personnel. 365 days a year, 24 hours a day our nation may be subject to a need to rapidly identify a particular pathogen from a US disease outbreak. Time of movement from impacted farm to the bench scientist in the laboratory is critical as every second counts as the disease back on the farm and in the surrounding areas is waiting for a lab confirmation (or not) of the suspected disease agent of concern to validate the clinical impression of the responding veterinarian. Most evidence I have seen would indicate the Southern US Border with Mexico is one of our nations highest risk areas for infectious animal disease problems to occur in. As such, the lab should be sited in proximity to where it is most likely needed.**

**3. The demographics of our nation is changing and DHS must understand how critical it is to have minority scientists and engineers invested in helping solve future scientific**

Comment No: 2 Issue Code: 15.0

DHS notes commentor's opinion. It is not possible to speculate on the proportion of scientists currently working at PIADC who would relocate to any particular candidate site nor on the quality of other scientists who would relocate to the selected site. It should be noted that all of the mainland candidate sites are within reasonable proximity of major research centers that employ scientists of comparable skill and education to the staff that would work at the proposed NBAF.

Comment No: 3 Issue Code: 25.5

DHS notes the commentor's opposition to the Flora Industrial Park Site Alternative.

Comment No: 4 Issue Code: 5.0

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

Comment No: 5 Issue Code: 15.6

DHS notes the commentor's opinion.

Cropper, DVM, MPVM, DACVPM, Thomas

Page 4 of 5

08/25/2009 10:31 210-492-3323 THE UPS STORE 4937 PAGE 04/05  
FD0062

6|24.6 | challenges to our nation. The San Antonio site is culturally rich and diverse. The University of Incarnate Word announced in Sunday's paper they are intending to start a veterinary school in San Antonio to support NBAF. With the many other Universities and colleges in the near by community, the unrelenting drive for the State and local community to support our nations needs is nothing short of amazing and should be a very strong factor in placement decisions.

7|27.0 | 4. The US Army Veterinary Corp is one on the National assets to meet Animal disaster events, both here and overseas where devastating animal epidemics occur routinely in 3<sup>rd</sup> world countries. The Army Veterinary Corp primary professional training location for Army officers and technicians is at Fort Sam Houston in San Antonio. Locating NBAF in San Antonio would greatly facilitate closer communication and improve working conditions with DoD compared to any other location. An added benefit, is many Army Veterinarians as graduates from all US Veterinary Schools separate or retire in the San Antonio community and many would be available & highly interested to work for USDA/DHS as research scientists. Most have active duty experiences dealing with epidemic disease agents from across the globe. I graduated from the Ohio State University and have my Masters In Veterinary Preventive Medicine from University of California at Davis and now live in San Antonio because of the military exposures to this great city. I know many former military officers and enlisted technicians who retire in San Antonio, and most are eager to continue to work to safeguard our nation even after leaving active duty. The ability to attract veterinarians with a solid track record of performance with security clearances cannot be matched in any other location.

Comment No: 6 Issue Code: 24.6

DHS notes the commentor's support for the Texas Research Park Site Alternative. The decision on whether or not the NBAF is built, and, if so, where 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.

Comment No: 7 Issue Code: 27.0

DHS notes the commentor's statement.

Cropper, DVM, MPVM, DACVPM, Thomas

Page 5 of 5

08/25/2003 10:31 210-492-3323 THE LPS STORE 4897 PAGE 05/05  
FD0062

5. All of the sites EIS evaluations are well done but the points above need to be further arrayed and accounted for in the final decision.

Thomas Leo Cropper, DVM, MPVM, DACVPM  
13507 Crescent Creek  
San Antonio, Texas 78231

**Cross, Mimms**

**Page 1 of 1**

WD0860

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**From:** Mimms Cross [REDACTED]  
**Sent:** Monday, August 25, 2008 9:44 PM  
**To:** nbafprogrammanager@dhs.gov  
**Subject:** No to NBAF in Athens

1| 25.2 | I adamantly say no to having the NBAF in Athens . It is an extremely dangerous risk to the surrounding communities and it's benefits do not outweigh it's risks. NO NBAF IN ATHENS.

Mimms Cross

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

Crowley, Thomas

Page 1 of 1

WD0139

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**From:** tom crowley [REDACTED]  
**Sent:** Friday, August 01, 2008 2:24 PM  
**To:** NBAFProgramManager  
**Subject:** new lab@ plum island

1|5.1 | I hope I followed the instructions correctly .I am 100% in favor of upgrading the lab at Plum Island and keeping the lab open .  
Thomas Crowley

Comment No: 1                      Issue Code: 5.1

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.

Culler, Esq., Jenny

Page 1 of 133

WD0753

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From: Jenny R. Culler [mailto:jculler@stack-envirolaw.com]  
Sent: Monday, August 25, 2008 8:35 PM  
To: NBAFProgramManager  
Subject: FAQ, et al. NBAF Comments, 1 of 12

Please see attached. Our comments are in 12 emails.  
This first email contains the written comments; the remainder of the emails will contain the attachments.

Hard copy to follow, via Federal Express.

Thank you for your consideration.

Jenny R. Culler, Esq.  
Stack & Associates, P.C.  
Suite 1200  
260 Peachtree Street, NW  
Atlanta, GA 30303  
(404) 525.9205 voice  
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Culler, Esq., Jenny

Page 2 of 133

**STACK & ASSOCIATES, P.C.** WD0753

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OF COUNSEL  
ROBERT B. JACKSON, IV

August 25, 2008

VIA FEDERAL EXPRESS AND EMAIL  
nbafprogrammanager@dhs.gov

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: *United States Department of Homeland Security National Bio- and Agro-Defense Facility Draft Environmental Impact Statement, June 2008.*

To Whom It May Concern:

The following comments to the U.S. Department of Homeland Security National Bio and Agro-Defense Facility Draft Environmental Impact Statement, published on June 25, 2008, are hereby submitted on behalf of Kathy Prescott, Grady Thrasher, and FAQ, Inc. Kathy Prescott and Grady Thrasher are citizens of the State of Georgia and residents of Athens-Clarke County. They also own property in Oconee County, Georgia. FAQ, Inc. is a nonprofit corporation organized under the laws of the State of Georgia, with more than 1,700 engaged participants who oppose the siting of the National Bio- and Agro-Defense Facility (NBAF) in Athens.

1|25.2

The two main contentions expressed in these comments are that the DEIS in and of itself is a fatally flawed document that fails to meet the requirements of the National Environmental Policy Act (NEPA), and that any decision to site the NBAF at the proposed South Milledge Avenue location in Athens, Georgia, would be unconscionable, irresponsible, arbitrary, capricious and evidence of a complete derogation of the Department of Homeland Security's duties to protect the American people.

2|5.2

As discussed at great length below, this DEIS is inadequate and misleads the public on many accounts. It contains contradictory "data" and "conclusions", and the

3|26.0

Comment No: 1 Issue Code: 25.2

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

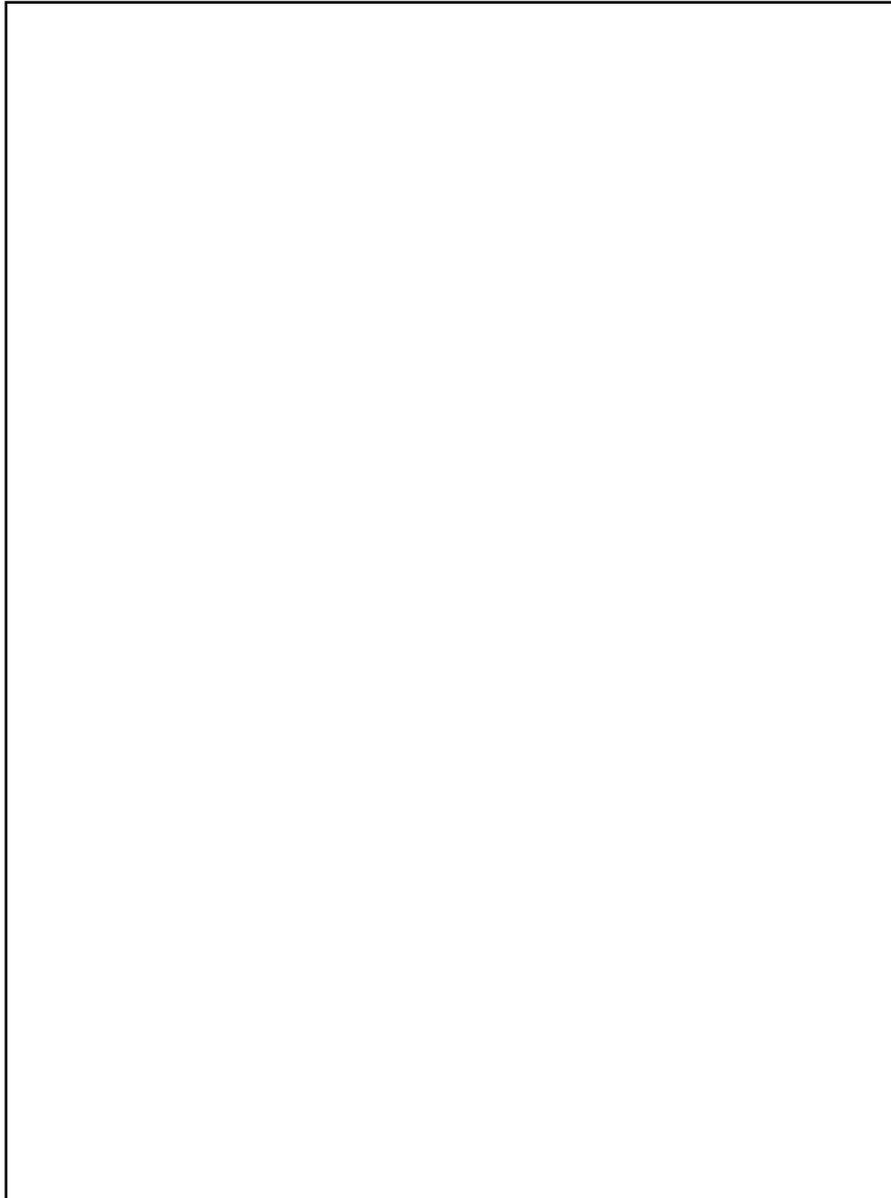
Comment No: 2 Issue Code: 5.2

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. DHS prepared the NBAF EIS in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and CEQ's regulations for implementing NEPA (40 CFR 1500 et seq.). The primary objective of the EIS is to evaluate the environmental impacts of the no action and site alternatives for locating, constructing and operating the NBAF. As summarized in 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 comparison among the alternatives. The decision on whether to build the NBAF will be made based on the following factors: 1) analyses from the EIS and support documents; 2) the four evaluation criteria discussed in Section 2.3.1 of the NBAF EIS; 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.

Comment No: 3 Issue Code: 26.0

DHS notes the commentor's concerns regarding the adequacy and complexity of the NBAF EIS and the presentation of analyses and conclusions therein. DHS disagrees with the commentor's characterization of the NBAF EIS in these areas. As noted in response to Comment No. 2, DHS analyzed each environmental resource area in a consistent manner across all the alternatives to allow for a fair comparison among the alternatives. DHS acknowledges that the NBAF EIS, by necessity, discusses complex issues and presents highly detailed information that may be difficult for some members of the public to understand. DHS has attempted to present the information in such a manner to allow the reader to clearly follow and evaluate the information. In doing so, DHS prepared a brief Executive Summary as contained in the NBAF Draft EIS that was intended to present relevant findings and conclusions from the impacts analyses performed in an a readily understandable format for use by the public at large. The Comparison of Environmental Effects summary table within the Executive Summary presents an adjectival assessment of the potential effects of the proposed NBAF on the environmental and human resources of each affected site alternative. Based on comments received on the NBAF Draft EIS, the table and the text in the NBAF EIS have been modified to rectify inconsistencies.

DHS also notes the commentor's concerns regarding the use and availability of reference documents cited in the NBAF EIS. DHS has endeavored to prepare the NBAF EIS utilizing reference sources that are reasonably available for inspection by the public as required by Council on Environmental Quality regulations (40 CFR 1502.21). Further, DHS has and will respond in a timely to Freedom of Information Act (FOIA) requests for copies of NBAF EIS references or other background documents,



which members of the public may have had difficulty locating in the public domain. As cited by the commentor, the Cost Analysis, Site Characterization Study, and the Plum Island Facility Closure and Transition Cost Study and other support documents were made available on DHS's NBAF Web page (<http://www.dhs.gov/nbaf>) in early August 2008 because these studies were commissioned by DHS and not otherwise publicly available. Nevertheless, information from these studies relevant to the NBAF EIS was included in the NBAF Draft EIS published in June 2008.

Culler, Esq., Jenny

Page 3 of 133

WD0753

3 cont. | 26.0 | technical issues are presented in an unnecessarily perplexing or confusing way, thus  
 4 | 4.0 | violating the basic requirement of any EIS that it be understandable to the average  
 5 | 2.0 | member of the public. The notice provided by the agency and the comment periods  
 6 | 5.0 | allowed were not legally sufficient. The entire NEPA process began without a good faith  
 7 | 6.0 | effort to inform and include the public and continued throughout to suffer from that same  
 8 | 7.0 | deficiency. It is clear that the Department of Homeland Security (DHS) has already  
 9 | 8.0 | decided to build the NBAF at some location, and is not seriously considering the no-  
 10 | 9.0 | action alternative as required by law. It is also clear that the Department of Homeland  
 11 | 10.0 | Security is going to great lengths to try to convince the public that an NBAF on the  
 12 | 11.0 | mainland would not unnecessarily endanger the health, safety, and economic stability of  
 13 | 12.0 | the nation. **But the truth remains: bringing deadly foreign diseases onto the  
 14 | 13.0 | mainland puts the entire nation at great risk, and is clearly not justified considering  
 15 | 14.0 | the safer location of Plum Island and Homeland Security's overarching mandate to  
 16 | 15.0 | protect the public.** A mainland NBAF would not protect the general public, the  
 17 | 16.0 | environment, the economy or the United States' security interests.

18 | 17.0 | An Athens, Georgia, NBAF is an especially outrageous option. Not only is the  
 19 | 18.0 | proposed site located on the Middle Oconee River, a major water supply source and  
 20 | 19.0 | recreational hotspot, but it is also located between two of the crown jewels of the Athens  
 21 | 20.0 | community: the State Botanical Gardens and the Whitehall Forest. This area brings  
 22 | 21.0 | visitors from around the world, and has been awarded the status of "Important Bird Area"  
 23 | 22.0 | by the Audubon Society. The rich biodiversity at this location currently means that  
 24 | 23.0 | visitors have a recreational retreat and Athens tourism dollars. This same attribute, if  
 25 | 24.0 | the NBAF is located in Athens, will mean that there is a high probability that a foreign  
 26 | 25.0 | animal disease that is released from the laboratory will become endemic to the area,  
 27 | 26.0 | sickening and killing animals and humans alike, and severely damaging the agricultural,  
 28 | 27.0 | hunting, and tourism sectors of the economy.

29 | 28.0 | The DEIS fails, in each and every topic it addresses, to properly research the  
 30 | 29.0 | readily available information about the sites proposed for the NBAF. Without an  
 31 | 30.0 | accurate picture of each site's resources and unique attributes, a decision maker will be at  
 32 | 31.0 | a loss to determine the nature and quality of any impacts that the NBAF would have on  
 33 | 32.0 | that area. For the Athens site, the DEIS fails to properly consider such important topics  
 34 | 33.0 | as air quality, water quality, infrastructure capabilities, prevalent wildlife, and the  
 35 | 34.0 | makeup of the landscape, to name a few.

36 | 35.0 | The DEIS also fails, in each and every topic addressed, to properly disclose  
 37 | 36.0 | important information to the public about the very real and very serious risks posed by  
 38 | 37.0 | the NBAF. Much of the information that would actually be helpful is either buried in  
 39 | 38.0 | obscure sections of the document, not included at all in the document, or unavailable to  
 40 | 39.0 | the public for review. Certain documents were published late in the comments period for  
 41 | 40.0 | the DEIS, but the public was not given more time to review them. The agency has not  
 42 | 41.0 | complied with federal laws requiring that this sort of information be made readily  
 43 | 42.0 | available for individuals with disabilities, and has not provided those individuals an  
 44 | 43.0 | extended period of time to comment.

2

Comment No: 4 Issue Code: 4.0

DHS notes the commentor's concern regarding the duration of the public comment period. DHS is committed to providing public access to pertinent information and has conducted a robust public participation program subsequent to the completion of the competitive site selection process, which is described in Section 2.3.1 of the NBAF EIS. To date, DHS has provided two opportunities for the public to provide comment and input to the environmental impact analyses presented in the NBAF EIS. An initial scoping comment period of 60 days followed the issuance of a Notice of Intent to prepare an EIS. Once a draft of the EIS was published, another notice was issued that provided 60 days for comment. The 60 day period for public review and comment on the NBAF Draft EIS, extended from June 27 through August 25, 2008, and exceeded minimum NEPA requirements. DHS accepted comments submitted by various means: mail, toll-free telephone and fax lines, NBAF Web page, and public meetings. DHS gave equal consideration to all comments, regardless of how or where they were received. All comments received during the public comment periods have been considered in this NBAF EIS.

Comment No: 5 Issue Code: 2.0

DHS notes the commentor's lack of confidence in the DHS. DHS has made every effort to explain the operational aspects of NBAF and has conducted a thorough and open public outreach program in support of the NBAF EIS that exceeded NEPA requirements. DHS prepared the NBAF EIS in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and CEQ's regulations for implementing NEPA (40 CFR 1500 et seq.). Since the inception of the NBAF project and beginning with the release of DHS's request for Expressions of Interest (EOI) on January 19, 2006, DHS has supported a vigorous public outreach program and has been as forthcoming as possible in disseminating information about NBAF as program planning has matured over time. No decision has been made about NBAF and the No Action Alternative remains a viable option. Nevertheless, DHS has been clear that the No Action Alternative would not satisfy DHS's purpose and need for action as detailed in Chapter 1 of the NBAF EIS. Other potential alternatives were considered but were determined not to be reasonable alternatives for evaluation in the NBAF EIS as discussed in Section 2.4 of the NBAF EIS.

Comment No: 6 Issue Code: 5.0

DHS notes the commentor's opposition to the five mainland site alternatives. 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.

Comment No: 7 Issue Code: 21.2

DHS notes the commentor'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. 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 of an accidental or deliberate pathogen release. 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 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 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 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 APHIS Animal Research Policy and Institutional Animal Care and Use Committee. 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 human, livestock, and wildlife populations residing within the local area. 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.

Culler, Esq., Jenny

Page 4 of 133

WD0753

3 cont. | 26.0 | The DEIS fails to present the information it does contain in any meaningful way. The public is left to guess at how the conclusions were reached, and how the document could possibly conclude that risks from the NBAF are not significant.

2 cont. | 5.2 | The comments that follow are not meant to be an exhaustive list of the problems and illegalities of the NBAF, nor could they be, given the number of analyses that should have been done, but were omitted from the DEIS, and given the DEIS' utter disregard of certain important concepts, such as the interconnectedness of groundwater, surface water, and stormwater. However, these comments will serve to show that **a decision maker, taking a discerning look at the DEIS, could not responsibly choose the South Milledge Avenue site in Athens, Georgia, for the NBAF.**

**I. ATHENS: A "CLASSIC CITY" DESERVING PROTECTION FROM NBAF.**

Incorporated in 1806, Athens was named after the classical center of culture in Greece. Home to the University of Georgia, Athens is known as the "Classic City" because of its devotion to the arts, music, education, historic preservation and cultural diversity. Preserving the unique quality of life Athens offers as a historically beautiful, liberal-leaning, progressive city is vitally important to most Athenians.

Athenians are devoted to human rights, music, artists of all varieties and outdoor recreation. Successful so far in combining the booming enthusiasm of Game Day, where 90,000+ raucous fans celebrate the Georgia Bulldogs, with the healing peace and serenity found every day at the State Botanical Garden on South Milledge Avenue or along the Greenways beside the Oconee River, our town of about 100,000 residents is struggling to maintain its distinctive sense of place in the face of rapid growth and development. Confined by the smallest county boundary in Georgia, the population density (851 persons per square mile as of the 2000 census) is increasing yearly, making open, green spaces for recreation and enjoyment vital to future planning.

1 cont. | 25.2 | The proposed site for NBAF on South Milledge is one of few premium, unique and distinctive, open, green spaces and vistas remaining in Athens-Clarke County (ACC). Its location, adjacent to the important recreational parkland of the State Botanical Garden, beside and behind the Equestrian Center, in the middle of the Audubon Society-designated Important Bird area that includes nearby Whitehall Forest, and being across the street from the intramural sports facilities currently under development by UGA makes the proposed NBAF site patently inappropriate for the imposition of such a huge environmentally degrading, ecologically destructive and potentially dangerous facility.

**II. DHS FAILED TO ADEQUATELY INVESTIGATE AND CONSIDER PUBLIC OPINION AND INFORMATION ABOUT NBAF.**

The purpose of the National Environmental Policy Act (NEPA) is set out clearly in the Regulations promulgated by the Council on Environmental Quality (CEQ) at 40 C.F.R. §1500, et seq. One of the basic tenets of the law is that "[f]ederal agencies shall to

Culler, Esq., Jenny

Page 5 of 133

WD0753

8|4.0 the fullest extent possible...encourage and facilitate public involvement in decisions which affect the quality of the human environment.” 40 C.F.R. §1500.2. Furthermore, “[t]he NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment.” *Id.* at §1500.1(c). It is an outright failure of the system set up under federal law if the agency does not properly evaluate and disclose to the public the impacts a proposed action will have on the environment. *Fund for Animals v. Norton*, 281 F. Supp. 2d 209, 226 (D.C. Dist. 2003). It is an outright failure if the agency does not listen to the public in order to gain more information that the agency must consider in the decision making process, and in order to gauge public sentiment about the proposed action. *Id.* Here, the Department of Homeland Security has failed on all accounts, rendering this DEIS fatally flawed from its inception.

**A. DHS HAS NOT CONSULTED WITH LOCAL ORGANIZATIONS.**

The Council on Environmental Quality’s NEPA taskforce recently submitted recommendations to modernize the NEPA process. The taskforce recognized that a fundamental principle for modernization is that each agency must “[o]perate openly and inclusively with all interested and affected parties to ensure that all perspectives are heard, shared, and considered.” James L. Connaughton, CEQ Memorandum to Heads of Federal Agencies, May 2, 2005. This memorandum is available online at [http://ceq.hss.doe.gov/ntf/CEQMemo\\_Implementing\\_Recommendations.pdf](http://ceq.hss.doe.gov/ntf/CEQMemo_Implementing_Recommendations.pdf).

9|4.2 DHS has indicated that public acceptance is one of its main criteria for the selection of the location for the NBAF. 71 Fed. Reg.12, 3107 – 3108 (Jan. 12, 2006). However, DHS has failed to take a hard look at the makeup of the Athens community, has improperly failed to acknowledge the public at large, and has equated the special interests of political, University, and industry support with community support. This could not be further from reality. Yet, DHS has cavalierly ignored public opposition to the siting of NBAF in Athens by arbitrarily limiting questions during public information sessions and refusing to include all of the public’s questions and comments on the record. DHS has touted the support from the Consortium that sought to bring the NBAF to Georgia. However, DHS has failed to note that at the time the Consortium filed its notice of intent, the public at large was still in the dark about the NBAF. A University of Georgia student stood up at the August 14, 2008, public meeting in Athens, Georgia, in fact, and indicated that almost the entire student body is still in the dark about the NBAF, because the only information they receive is the propaganda from the University in support of the facility that notably does not disclose the risks associated with the NBAF. It is also significant to acknowledge the public meeting on the DEIS took place during the summer, when the University of Georgia holds fewer classes and the overwhelming majority of the students who make Athens their home the rest of the year are visiting family, studying abroad, or pursuing internships and summer jobs elsewhere. Each and every public meeting held in the Athens area has actually been controlled to a great extent by the University of Georgia, because the meetings have been held at the Georgia Center for Continuing Education conference center, which is run by the University. The

4

Comment No: 8 Issue Code: 4.0

DHS notes the commentor’s viewpoint. DHS prepared the NBAF EIS in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and CEQ’s regulations for implementing NEPA (40 CFR 1500 et seq.). Environmental effects (i.e., effects in terms land use and visual resources; infrastructure; air quality; noise; geology and soils; water, biological and cultural resources; socioeconomics; traffic and transportation; existing waste contamination and waste management; and health and safety) of the proposed NBAF are discussed in Chapter 3 of the NBAF EIS.

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 (FMD)virus, Classical Swine Fever virus, Vesicular Stomatitis virus, Rift Valley Fever (RVF) virus, Nipah virus, Hendra virus, and African Swine Fever virus. Table 2.2.1-2 identifies the applicable characteristics of these pathogens and the biosafety levels at which they would be studied. 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.

The human health and safety and economic effects of an accidental release of FMD virus, RVF virus, and Nipah virus are presented in Chapter 3, Section 3.10 and Section 3.14 and in Appendix D and Appendix E 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 be released to the environment.

DHS has analyzed all comments received on the NBAF Draft EIS and, when appropriate, has made changes to the EIS in response to those comments. Public comments will be one of the elements considered in reaching a decision whether or not to build the NBAF and, if so, where.

Comment No: 9 Issue Code: 4.2

Since the inception of the NBAF project, DHS has supported a vigorous public outreach program. DHS has conducted more public meetings than the minimum required by NEPA regulations; to date, 24 public meetings have been held in the vicinity of NBAF site alternatives and in Washington D.C. to solicit public input on the EIS, allow the public to voice their concerns, and to get their questions answered. DHS has also provided fact sheets, reports, exhibits, and a Web page (<http://www.dhs.gov/nbaf>). Additionally, various means of communication (mail, toll-free telephone and fax lines, and NBAF Web site) have been provided to facilitate public comment. It is DHS policy to encourage public input on matters of national and international importance. See response to Comment No. 4 for more information.

DHS disagrees with the commentor's characterization of DHS's public meeting process. DHS has expended considerable effort to invite public participation in the preparation of the NBAF EIS in excess of that dictated by NEPA regulations and guidelines, including in the hosting and conduct of public meetings. As referenced by the commentor, three town hall-style meetings were held by DHS in February 2008 (i.e., in Creedmoor, North Carolina and Athens, Georgia) and in April 2008 (i.e., Southold, New York) which were scheduled at the request of members of the public and local elected officials. These meetings were intended to be and were advertised as informational meetings for the purposes of providing additional information about NBAF and to answer questions from members of the public. These town hall meetings were supplemental to the formal NEPA public participation process and, as such, these meetings were not transcribed for the public record. However, the 8 public scoping meetings and 13 public meetings on the NBAF Draft EIS were fully transcribed for the public record in accordance with NEPA requirements.

DHS also notes the listing provided of the 18 local organizations who may have an interest in the NBAF. The NBAF Draft EIS was distributed to all organizations who had requested it, in addition to making it available via DHS's web page ([www.dhs.gov/nbaf](http://www.dhs.gov/nbaf)). Additional copies were distributed upon request throughout the 60-day public comment period. All comments received were given equal consideration and have been responded to in the NBAF Final EIS.

Culler, Esq., Jenny

Page 6 of 133

WD0753

public meetings would more appropriately have been held at a non-affiliated school, church, or community center.

9 cont. | 4.2

“Growing Sustainably in Athens-Clarke County: Progress Report for 2007 and Recommendations for 2008” is a document published annually by representatives of 18 local environmentally concerned citizens’ organizations. This document, available online at [http://www.athensgrowgreen.com/information/pdf/growing\\_sustainably\\_v.pdf](http://www.athensgrowgreen.com/information/pdf/growing_sustainably_v.pdf), and attached hereto at Tab 1, is a valid barometer of the public’s concerns about the local environment. Not only did DHS fail to review this document to learn about critical environmental issues in the area and to gauge the local community’s interest level in the issues raised by the proposed location of the NBAF in Athens, but it also failed to contact the heads of these 18 groups in order to get their perspectives on the public acceptance or rejection of the concept of the NBAF. These 18 groups are: Athens Grow Green Coalition, Athens Land Trust, Athens-Clarke Community Tree Council, Athens-Clarke Heritage Foundation, Inc., BikeAthens/ Safe Routes Athens, Clean Air Athens, Emerging Green Builders (SEEDS), Georgia River Network, Joseph LeConte Group Sierra Club, Keep Athens-Clarke County Beautiful, Micah’s Mission, Northeast Georgia Children’s Environmental Health Coalition, Oconee River Land Trust, Oconee Rivers Audubon Society, Oconee Rivers Greenway Commission, Promoting Local Agriculture and Cultural Experience (PLACE), Sandy Creek Nature Center, Inc., and the Upper Oconee Watershed Network. The national headquarters of the Quality Deer Management Association is located in Bogart, Georgia, but DHS did not consult with this important organization, either. DHS should specifically consult with each of these entities.

**B. DHS ARBITRARILY AND CAPRICIOUSLY REFUSED TO INCLUDE PUBLIC COMMENT FROM A DHS-SPONSORED PUBLIC MEETING ON THE RECORD.**

4 cont. | 4.0

DHS set a 59-day public comment period for its scoping process for the NBAF. 72 Fed. Reg. 146, 41764 (July 31, 2007). Even though it became obvious that many interested members of the public only found out about the NBAF late in the scoping process, and even though DHS organized and attended extra public meetings in order to respond to the communities’ growing curiosity, confusion, and questioning, DHS refused to extend the period for public comment in the scoping process. Even in response to a letter formally requesting that this time be extended and that the public meeting that took place outside the stated comment period be put in the official record, DHS refused to do either. This letter is attached hereto at Tab 2.

9 cont. | 4.2

The Department should have extended the time for comments prior to the creation of the DEIS. DHS must have recognized that there was considerable public interest in learning more details about the proposed NBAF in Athens, Georgia, because it held a “Town Hall Meeting” on February 19<sup>th</sup>, 2008, ostensibly to address the questions and concerns of the citizens there. [http://www.dhs.gov/xres/labs/editorial\\_0803.shtm#3](http://www.dhs.gov/xres/labs/editorial_0803.shtm#3). However, DHS arbitrarily and capriciously refused to consider the comments and questions at this public meeting and to let them be a part of the official record. In fact, they do not even mention that the meeting occurred in the description of public

Culler, Esq., Jenny

Page 7 of 133

WD0753

9 cont. | 4.2

involvement in developing the scope of the EIS in the DEIS at 1-7. This sort of disregard for public information, input, and opinion is exactly what NEPA seeks to protect against, yet the agency attempted to skirt the processes by appearing to give the public additional consideration. In reality, it refused to “officially” consider anything that was said or discussed at that February meeting. Although the initial public comment period for the scoping process had expired at the time of this Town Hall Meeting, it was within the power of the DHS to re-open the record in order to take in all of this information, and it was an abuse of the process not to do so. 40 C.F.R. §1501.8.

**C. DHS FAILED TO ADEQUATELY PROVIDE THE PUBLIC WITH SUFFICIENT INFORMATION REGARDING THE PROPOSED NBAF AND ITS POTENTIAL IMPACTS.**

8 cont. | 4.0

It is axiomatic that “NEPA procedures must insure that the environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analyses, expert agency comments, and public scrutiny are essential to implementing NEPA.” 40 C.F.R. §1500.1(b). This DEIS, however, fails to provide a full list of diseases that may be studied at the NBAF; it fails to adequately disclose the human health effects of even just the diseases that will be initially studied at the NBAF; it makes bold conclusions without presenting the public with the underlying data they could check; it omits important discussions about real potential consequences from an outbreak; and it assumes throughout that operations will always be “normal” and mitigations will be applied and will be 100% effective. The document is more a public relations tome than a disinterested critique of the potential impacts of the NBAF, and as such, does not fulfill the disclosure requirements of NEPA.

5 cont. | 2.0

One of the reasons the public required and requested additional time to participate in the scoping period was because DHS had not been clear about the purpose of the NBAF and the risks associated with it. For example, DHS has been careful to tout the NBAF as a solution designed “to fill a critical gap in the nation’s agro and biodefense plan.” 71 Fed. Reg. 12, 3107 (Jan. 19, 2006). Yet nowhere in the Federal Register announcements of the proposed NBAF, on the DHS website, or in the DHS press releases is it disclosed that the risk of catastrophic impacts from the release of a pathogen to be studied at the NBAF is greatly increased by the mere presence of that pathogen on the mainland of the United States. Similarly, the DEIS also fails to acknowledge that incontrovertible fact.

DHS officials have indicated at public meetings that it is not a question of whether these pathogens will eventually come into the United States, but *when*, and that bio-terrorism is the very threat DHS is tasked to prevent; however, DHS dismisses any suggestions from the public that the NBAF could become a target for terrorism, even in the face of the recent discovery that Aafia Siddique was captured with a list of targets that included the Plum Island Animal Disease Center (PIADC) (see Richard Esposito and Brian Ross, *Alleged Mata Hari of Al Qaeda Could Provide ‘Treasure Trove’ of Intelligence: Aafia Siddique Had a List of Targets in New York & Chem-Bio Weapons*

Culler, Esq., Jenny

Page 8 of 133

WD0753

5 cont. | 2.0

*Information in her Possession*, August 12, 2008. Attached hereto at Tab 3). DHS dismisses the threats from intentional acts of sabotage or pathogen release, even in the face of the recent discoveries of scientific researcher Bruce Ivins' role in the 2001 anthrax attacks. (See Aaron David, Michael E. Ruane, and Nelson Hernandez, *Lab and Community Make for Uneasy Neighbors*, WashingtonPost.com, August 2, 2008; Eric Lipton and Scott Shane, *Anthrax Case Renews Questions on Bioterror*, nytimes.com, August 3, 2008; and Katherine Heerbrandt, *Opinion: The real enemy*, FrederickNewsPost.com, August 6, 2008; all attached hereto at Tab 4.) This sort of vacillation on the agency's part is evidence that it is not coming clean with the public. Instead, DHS is running a smooth public relations campaign designed to draw the public's attention away from the very real risks associated with the NBAF.

8 cont. | 4.0

Another glaring example of the DEIS' inadequate disclosure is the omission from the DEIS of any consideration of the "Crimson Sky" exercise. In 2002, government officials participated in a simulated exercise to study the impacts of a release of foot and mouth disease on the U.S. mainland. The end result was "fictional riots in the streets after the simulation's National Guardsmen were ordered to kill tens of millions of farm animals, so many that troops ran out of bullets. In the exercise, the government said it would have been forced to dig a ditch in Kansas 25 miles long to bury carcasses. In the simulation, protests broke out in some cities amid food shortages." Associated Press, *Dangerous Animal Virus on U.S. Mainland?*, FoxNews.com, April 11, 2008, attached hereto at Tab 5. The DEIS should disclose this full report, and should consider it in the risk analysis for the NBAF.

The entire DEIS is replete with conclusions with no support, figures calculated but none of the underlying data. Many of these deficiencies are noted throughout this comment, although there are certainly many more than the commenters had time to uncover and discuss.

4 cont. | 4.0

**D. THE 60 DAY TIME PERIOD FOR PUBLIC REVIEW AND COMMENT ON THE DEIS IS WOEFULLY INADEQUATE, IS ARBITRARY AND CAPRICIOUS, AND FAILS TO ALLOW THE PUBLIC ADEQUATE TIME TO PARTICIPATE MEANINGFULLY IN THE NEPA PROCESS.**

The Notice of Availability of the Draft Environmental Impact Statement for the National Bio and Agro-Defense Facility was published in the Federal Register on June 27, 2008. 73 Fed. Reg. 125, 36540 (June 27, 2008). This notice indicated that the public comment period for review and response to the DEIS was designated to be 60 days from that publication, or August 25, 2008. The regulations guiding the NEPA process state that "Federal agencies are encouraged to set time limits appropriate to individual action." 40 C.F.R. §1501.8. The decision to allow only 60 days for the public to review and comment on the DEIS was arbitrary and capricious, and indicates that the DHS is not taking seriously its obligation to review, consider, and respond to public comment. *The Commenters hereby formally again request that DHS extend the comment period to allow the public ample time to review and analyze the documents.*

Culler, Esq., Jenny

Page 9 of 133

WD0753

4 cont. | 4.0

3 cont. | 26.0

Simply considering the bulk of the DEIS itself and the number of underlying and incorporated studies, reports, and documents, it is bad faith for the agency to give the public only sixty days to read, digest, analyze, and prepare and submit comments on the DEIS. The DEIS is a document of approximately 1000 pages, with 481 listed reference documents that are incorporated into the DEIS. The incorporated documents must comprise many thousands more pages, with only five supporting documents posted to the DHS website very late in the comment period comprising another 277 pages, with footnotes throughout the Appendices, with an untold number of documents that were cited by abbreviation but did not have full citations included in the reference materials and are therefore not retrievable. There are an untold number of other unpublished and classified documents alluded to which are unavailable to the general public. Many of the documents that could be located are technical papers, and require expertise to analyze. The July 31, 2007, Federal Register notice of intent to prepare the EIS indicated that "at least 60 days" would be provided to the public for comment. 72 Fed. Reg. at 125, 41764. Apparently DHS did not think that any more time was prudent. However, the sixty days provided by the DHS for the public to review these documents and provide meaningful comments is unconscionably short considering the bulk of the materials, and the fact that the agency and its contractors had two-and-a-half years since its initial Notice of Request for Expression of Interest was published in the Federal Register to prepare the DEIS. 71 Fed. Reg. at 12, 3107. Also, considering the number of inconsistencies and highly relevant omissions discovered between the underlying documents and the DEIS text, *the public should be given ample opportunity to review all underlying, supporting, and otherwise referenced documents in order to determine in which ways the DEIS has overlooked, ignored, obfuscated, or misinterpreted the real data.*

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Further, DHS indicates on its website that Section 508 compliant versions of the support documents would be posted on or by August 25, 2008, the deadline for comments. The law requires that federal agencies provide reasonable accommodations for people with disabilities to enable them to access important documents such as the supporting documents listed on the DHS website. 29 U.S.C. §794(d). Although DHS provides a phone number for individuals to call in order to receive assistance accessing the documents prior to that date, this information was posted late in the comment period already. Therefore, individuals with disabilities were not afforded even the paltry sixty day period in which to analyze the documents and provide comments. The short time for review and comment is especially burdensome for individuals with disabilities, and DHS should extend this time frame to a more realistic time frame for review and comment.

11 | 4.0

**IV. DHS HAS FAILED TO COMPLETE CONSULTATION WITH FEDERAL AGENCIES AND TRIBES, AND HAS ARBITRARILY AND CAPRICIOUSLY FAILED TO SELECT COOPERATING AGENCIES TO ASSIST WITH THE NEPA PROCESS.**

NEPA requires that "[p]rior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact

Comment No: 10

Issue Code: 3.0

DHS notes the commentor's concerns regarding the posting of Rehabilitation Act Section 508 compliant versions of the NBAF Draft EIS on the DHS Web page. DHS regrets the difficulty in making available fully accessible versions of the portable document files of the NBAF Draft EIS. As observed by the commentor, DHS provided a toll-free phone number for persons with difficulties to use to request assistance in accessing electronic documents. No such telephone requests were received by DHS.

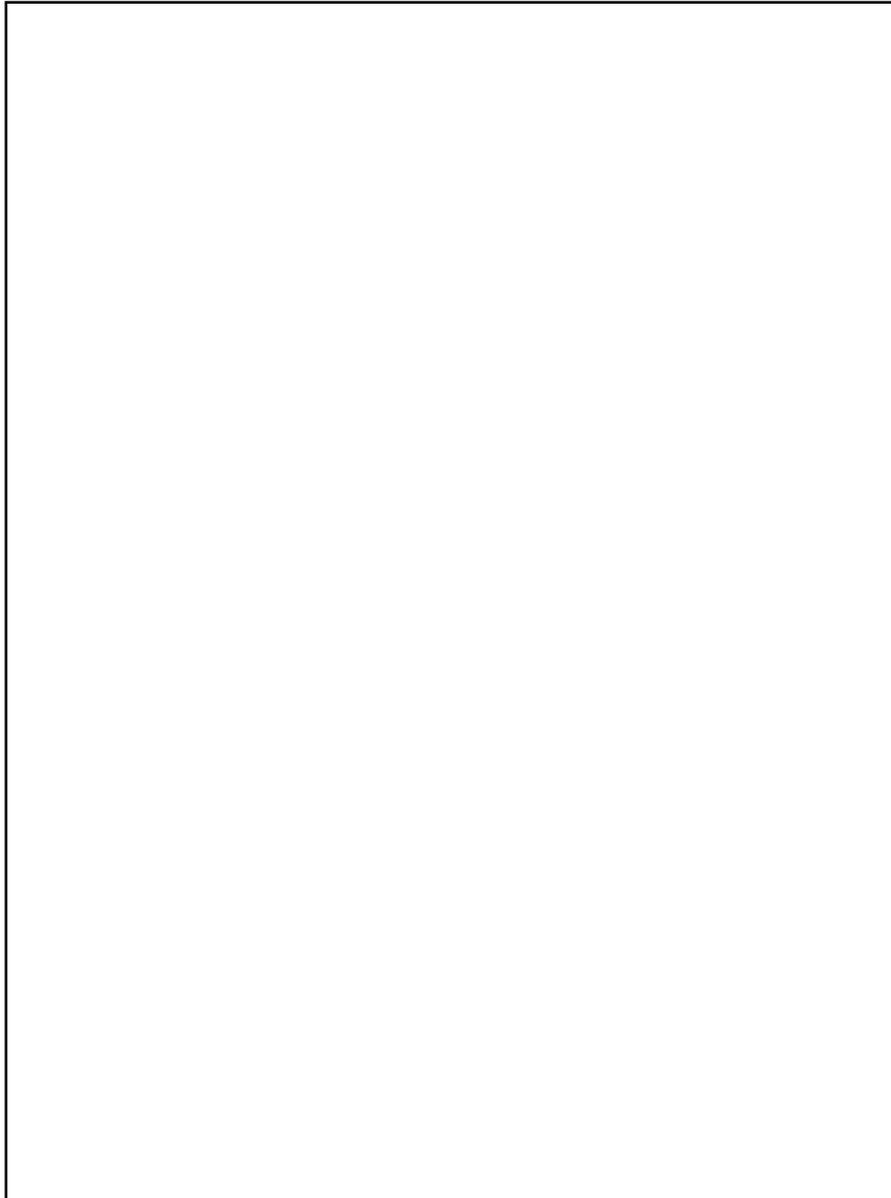
Comment No: 11

Issue Code: 4.0

DHS notes the commentor's concerns regarding the designation of a cooperating agency, distribution of the draft EIS to federal agencies, and completion of agency consultations. Council on Environmental Quality regulations (CEQ) for implementing NEPA specific to the designation of cooperating agencies (40 CFR 1502.6) do not require the lead agency responsible for preparation of an EIS to designate a cooperating agency. Nevertheless, the USDA, with specific support from the Animal and Plant Health Inspection Service-Veterinary Services (APHIS-VS) and Agricultural Research Service (ARS), has served as a consulting agency in the preparation of the NBAF EIS and has provided valuable and necessary technical expertise in developing the NBAF EIS and in supporting the public participation process. The Notice of Availability of the NBAF Draft EIS, which was published in the Federal Register on June 27, 2008, was issued jointly by the USDA Under Secretary for Marketing and Regulatory Programs and the DHS Under Secretary for Science & Technology.

DHS believes that its distribution of the NBAF EIS was comprehensive and that distribution was made to all Federal agencies with direct jurisdiction over the proposed activities associated with NBAF as stipulated by CEQ regulations (40 CFR 1502.19). In distributing the NBAF Draft EIS, deference was also given to agency-stipulated guidelines for the types of projects of interest to the agency. Nonetheless, all Federal agencies were informed of the availability of the NBAF Draft EIS via the publication of DHS's Notice of Availability in the Federal Register on Register on June 27, 2008. Further, in addition to Federal agencies, the NBAF Draft EIS was distributed to appropriate state and local agencies, to Native American Indian tribal governments, and to other entities and individuals who had specifically requested it in order to solicit comments on the NBAF Draft EIS as required by CEQ regulations (40 CFR 1503.1). In the case of potentially affected states, copies were distributed to individual state agencies and to each of the state clearinghouses and/or designated state NEPA contacts. The NBAF Draft EIS was also made available via DHS's Web page ([www.dhs.gov/nbaf](http://www.dhs.gov/nbaf)), and DHS also distributed additional hardcopies of the NBAF Draft EIS upon request from interested parties throughout the 60-day public comment period.

DHS endeavored to integrate environmental review and statutorily-mandated Federal consultation requirements concurrently with the preparation of the NBAF Draft EIS to the fullest extent possible, as prescribed by CEQ regulations (40 CFR 1502.25). As noted by the commentor, environmental



reviews and required consultations, including Native American Indian tribal governments, were initiated prior to the release of the NBAF Draft EIS. The results of these consultations are documented in Appendix G of the NBAF Final EIS.

Culler, Esq., Jenny

Page 10 of 133

WD0753

11 cont. | 4.0

involved.” 42 U.S.C.A. §4332(2)(C)(v). Furthermore, these comments received “shall accompany the proposal through the existing agency review processes.” *Id.* DHS has indicated that it has begun consultation with NRCS and tribes (DEIS, Executive Summary (ES)-8), and has mailed copies of the DEIS to ten federal agencies (DEIS, 7-2). However, there are no cooperating agencies chosen or listed by DHS. Additionally, to date there have been no comments, suggestions, recommendations, data submissions, or any other responses from any of these agencies. It is premature to present the DEIS for public review and comment without having already received the comments from the appropriate agencies.

Even more egregious than the failure to wait for relevant agency comments is that the DHS did not even solicit comments or send a copy of the DEIS to several agencies that have specific expertise that is squarely relevant to the environmental impacts being considered in the DEIS. The following agencies were not consulted: U.S. Department of Transportation, U.S. Department of Commerce, U.S. Department of Defense, the National Science Foundation, and U.S. Department of Labor (Occupational Safety and Health Administration).

12 | 1.0

**V. THE DEIS MISCONSTRUES THE PURPOSE AND NEED IN PROPOSING THE NBAF.**

In its discussion of the purpose and need for the NBAF, this DEIS clearly indicates the threat to the United States that has propelled it to propose the construction and operation of the NBAF is the fact that “[t]he global marketplace, increased imports of agricultural products, and growing numbers of international travelers to the United States have increased the number of pathways for the introduction of foreign and invasive agricultural pests and diseases.” DEIS, ES-1. The conclusion that we should intentionally bring these foreign and invasive pests and diseases into the country through yet another pathway for introduction (and a certain pathway for the presence of such diseases on our soils), precisely *because* we are threatened by the possibility that these diseases will make it onto U.S. soil, is absurd. From the very outset, this DEIS misconstrues both the purpose and the need for the project, and cannot even identify the uses of the NBAF with certainty. “DHS *anticipates* that the NBAF *initially* would focus on” various certain foreign animal diseases. DEIS, ES-2 (emphasis supplied). The use of “anticipates” and “initially” indicates DHS did not divulge everything to the public that it wishes to study at the NBAF, and calls into question whether the particular pathogens chosen for listing in the DEIS are actually the pathogens that will be studied at the facility. The true purpose of this facility appears to be intentionally hidden from public review.

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Further, the DEIS indicates that the Plum Island Animal Disease Center is “nearing the end of its lifecycle” (DEIS, ES-1 and 1-5), and implies that the need for the NBAF is created from the demise of the PIADC. However, PIADC may continue to operate as an animal research center, but even if it does not, the continuing functionality of the PIADC has nothing to do with whether an NBAF should or will be constructed. The DEIS indicates that the NBAF will create livestock research capabilities that do not

Comment No: 12

Issue Code: 1.0

DHS notes the commentor’s lack of trust in the federal government and its intentions for NBAF. The NBAF would assist in ensuring a safe, affordable food supply. The NBAF would allow a fully coordinated approach to research, diagnostics, vaccine and antiviral development, and responses to outbreaks in agricultural animals including cattle, swine, and sheep at a U.S. facility. The purpose and need for the proposed action is discussed in Chapter 1 of the NBAF EIS.

DHS further disagrees with the commentor’s implication that DHS has “created” the need for NBAF based on the current condition of PIADC. PIADC is an aging facility and DHS is currently investing over \$30 million in PIADC for long-term maintenance and improvements to keep the facility operational to perform its current mission requirements through the transition into the NBAF. By proposing to construct the NBAF, DHS is following policy direction established by the Congress and the President. Specifically, Homeland Security Presidential Directive (HSPD) 9 identified the need for “safe, secure, and state-of-the-art agriculture bio-containment laboratories that research and develop diagnostic capabilities for foreign animal and zoonotic diseases.

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.

Culler, Esq., Jenny

Page 11 of 133

WD0753

12 cont.|1.0

presently exist at the PIADC or anywhere else in the United States, and is initially being designed for the study of many pathogens that are not currently studied at the PIADC, therefore, it cannot be considered a replacement for PIADC in any way. Yet since the DEIS fails to discuss the nature and extent of the improvements that are planned and are underway at the PIADC, the public is unable to properly compare the capabilities of the facilities at all, and the agency is provided no information along these lines in the DEIS in order to properly complete its review.

The DEIS also provides the conclusion that “[t]he U.S. government has determined that to achieve our research and response requirements, we must ensure that this research can be performed in the U.S.”, without giving any citation or more specific information about who in the U.S. government came to such a conclusion, or why. DEIS, 1-5. This sort of nebulous information is inappropriately included in the DEIS without attribution or supporting data.

The DEIS must take another look at what the “needs” are for the United States in terms of prevention and control of foreign animal diseases.

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**VI. DHS LIKELY HAS ALREADY MADE DECISIONS PRIOR TO RECEIVING AND EVALUATING PUBLIC COMMENT, IN VIOLATION OF THE LAW.**

The National Environmental Policy Act requires that the agency complete the Draft Environmental Impact Statement and review, consider, and respond to public comment before it makes a final decision about the alternative it will choose. See 42 U.S.C.A. §4332(A) and (B); 40 C.F.R. §1500.1(b) (“...insure that environmental information is available to public officials and citizens *before* decisions are made...)(emphasis supplied); 40 C.F.R. §1503.4 (“An agency preparing a final environmental impact statement shall assess and consider comments both individually and collectively...”); 40 C.F.R. §1506.1(a)(“Until an agency issues a record of decision...no action concerning the proposal shall be taken which would...limit the choice of reasonable alternatives.”). Furthermore, the Regulations state that “[e]nvironmental impact statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made.” 40 C.F.R. §1502.2(g). However, it is abundantly clear from the agency’s publications, speeches, and actions, that it has already determined that the NBAF will be constructed in some location, and that public input and the no action alternative are not being seriously considered. In essence, the DEIS is merely a means for DHS to justify its decision, contrary to the very purpose of NEPA.

Notably, the Federal Register publication in which the DHS called for interested consortia to compete to host the NBAF clearly states that “*DHS intends to select a single site for the construction of the NBAF.*” 72 Fed. Reg. at 146, 41764 (emphasis supplied). This is repeated in the Federal Register Notice of Availability of the DEIS. 73 Fed. Reg. at 125, 36540. Additionally, an August 10, 2008, Associated Press article indicates that certain documents obtained from DHS show that government experts’ evaluations of the

Culler, Esq., Jenny

Page 12 of 133

WD0753

5 cont. | 2.0

suitability of the potential NBAF sites were “swept aside,” and that the Mississippi site is at the top of the Department’s list for hosting the NBAF. Larry Margasak, *NBAF Choices Suspect: Experts Ignored*, Associated Press, August 10, 2008. A USA Today story quoted Representative John Dingell of Michigan as saying that “[i]t appears that the Undersecretary responsible for this program may have corrupted the site selection process by putting his thumb on the scale in favor of a particular site and its contractor”, referring to DHS Undersecretary Jay Cohen’s apparent re-organizing of the rankings for the considered site to place the Mississippi site in at the top, despite what the agency’s reviewed panel recommended. Mimi Hall, *Tug of war over relocating lab: Five states grapple for financial and research boon, while residents rally against it*, USA Today, August 11, 2008.

Senator Hillary Clinton and Representative Tim Bishop have reported to newspapers that “they have been ‘repeatedly assured’ by U.S. Department of Homeland Security that Plum Island is not considered a ‘suitable location for a BSL-4 [Bio-Safety Level 4] research center.’” Tom Burke, *Will Plum Be Picked?*, Suffolk Times, July 31, 2008.

On August 14, 2008, Homeland Security spokesperson Amy Kudwa reportedly indicated that DHS “intend[s] to operate a single integrated facility.” Bill Bleyer, *Homeland Security might close Plum Island center*, Newsday.com, August 14, 2008, attached hereto at Tab 6. However, even in light of the ongoing \$60 million investment to upgrade the PIADC, and the apparent political support from Hillary Clinton and Representative Tim Bishop to keep the PIADC running as a BSL-3 laboratory, Kudwa’s statement that “[i]t does not make sense costwise or research collaboration-wise to have separate facilities” shows that the avenues of communication with DHS are effectively closed, and the agency has already made its decision to build the NBAF (and, incidentally, to close the PIADC despite the recent taxpayer infusion of \$60 million to upgrade the facility). *Id.*

Considering the information about DHS preferences and choices that has already been leaked to the public, and the amount of time and money that DHS has already spent to design the basic components of the NBAF and to visit each proposed site several times with agency cheerleaders in tow, it becomes apparent that ***the agency is conducting an improper post-hoc rationalization for building the NBAF through the DEIS.*** See *Metcalf v. Daley*, 214 F.3d 1135 (9<sup>th</sup> Cir. 2000); *Fund for Animals v. Norton*, 281 F. Supp.2d 209 (D.C. Dist. 2003).

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**VII. THE DEIS UTTERLY FAILS TO EFFECTIVELY COMMUNICATE WITH THE PUBLIC.**

This DEIS does not satisfy the primary purposes it is required to satisfy under NEPA; to wit, (1) providing decision makers with an environmental disclosure sufficiently detailed to aid in the substantive decision whether to proceed with the project in light of the environmental consequences, and (2) providing the public with information and an opportunity to participate in gathering information. *Friends of the Earth v. Hall*,

Culler, Esq., Jenny

Page 13 of 133

WD0753

693 F.Supp. 904, 922 (1988) (citing *Methrow Valley* 833 F.2d at 814). This DEIS is not a usable document, and it is impossible for the public to properly review and comment on it to the agency, which in turn renders it impossible for the agency to have the benefit of more meaningful public comment prior to making a decision.

**A. THE EXECUTIVE SUMMARY IS MISLEADING AND CONTRADICTS THE BODY OF THE DEIS.**

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In reviewing Environmental Impact Statements the courts require that "...first, the facts and conclusions therefrom must not be misleading, and, secondly, known facts must be disclosed and dealt with in an adequate manner." *Burkey v. Ellis*, 483 F.Supp. 897, 914 (D.C.Ala., 1979). The DEIS summary fails to meet these requirements, and is misleading on many accounts.

Probably the most glaring and insidious section of the Executive Summary is Table E-3 – Comparison of Environmental Effects. DEIS, ES-11. This chart purports to provide the public with a concise comparison of the site and the no-action alternatives in terms of their resource effects. However, the table fails to show the enormously important comparison of environmental effects at each site and in terms of each resource if the NBAF were *not* to operate "*normally*"; i.e., if there were to be an infected employee, an escaped mosquito, a facilities malfunction, or the like. The analysis of these potential impacts should be the heart and soul of this DEIS, but is not even summarized. The DEIS inappropriately separates out the release scenarios, and a member of the general public who has time only to review the Executive Summary will be wholly uninformed about the potentially devastating direct, indirect, and cumulative impacts from the NBAF.

Furthermore, the section on "Potential Beneficial Effects for Normal Operations" in Table E-3 is also intentionally misleading. The DEIS assumes that if the NBAF is built and operated, the scientists may find a cure or treatment for the foreign animal and other diseases they will study there. This is termed a "significant" potential benefit. However, in the same chart, the DEIS makes the outrageous assumption that if the NBAF is not built, there will be no beneficial outcomes – no scientist, apparently, will ever discover a treatment or cure for these diseases if the NBAF is not built.

The Executive Summary seeks to put up a smoke-screen as to the potential detrimental economic effects in the event of a pathogen release from the NBAF. For example, while the summary spells out the ranges of potential economic benefits (e.g. \$138.2 million to \$183.9 million in labor and income for the sites, (DEIS, ES-8), it simply indicates that "[t]he risk of an accidental release of a pathogen is extremely low, but the economic effect could be significant for all sites." DEIS, ES-9. The summary neglects to set out the estimated range of economic devastation from a release of FMD for the United States, which is between \$10 billion and \$30 billion. DEIS, D-7. Meanwhile, the newly hired head of the Plum Island Animal Disease Center, Dr. Elizabeth Lautner, has found the estimated impacts from a release of FMD to exceed even the numbers considered in the DEIS, to wit: \$33 billion. B. Lautner & S. Meyer,

Culler, Esq., Jenny

Page 14 of 133

WD0753

3 cont. | 26.0

*U.S. Agriculture in Context: Sector's Importance to the American Economy and its Role in Global Trade*, printed in T. Kelley, P. Chalk, J. Bonomo, B. Jackson, and G. Cecchine, eds., Conference Proceedings of the Office of Science and Technology Policy Blue Ribbon Panel on the Threat of Biological Terrorism Directed Against Livestock, (December 8-9, 2003). Additionally, the summary and charts do not mention the \$50 billion estimated detrimental economic impact from a Nipah Virus epidemic. D-13. It also fails to extrapolate economic impacts for *pandemics*, where a virus becomes endemic to the area and exacts economic, health, and environmental effects year after year.

Nevertheless, the DEIS denies that there will be significant adverse effects from the "normal operations" of the NBAF. DEIS, 2-48. However, if the agencies always assumed that there will be no significant impacts *if nothing goes wrong*, then there would never be an EIS indicating significant impacts. This view of the DEIS misses the point, and intentionally misleads the public into thinking that there is no real risk associated with the NBAF.

The DEIS suffers from other inconsistencies, such as where health and safety impacts are stated to be "negligible" at DEIS, 2-49, but at 2-46, the risk was determined to be "moderate", and the impacts from release "significant."

The description of the features and functions of the proposed NBAF in the Executive Summary is also intentionally misleading because it describes biocontainment features that only apply to the BSL-4 level. DEIS, ES-3. However, there are many dangerous pathogens that will be studied under less stringent controls, such as in the insectaries, which are slated to have only bio-safety level 3E or 3Ag protections. NBAF-1 at 4.3.2, Page 3. It is not altogether clear whether Foot and Mouth Disease, described as having "the capacity to wreak havoc on the livestock economy in countries where outbreaks have occurred," is going to be studied under BSL-3E conditions rather than the safer BSL-4 conditions. DEIS, at Appendix D, Page 2; NBAF-1, Sec. 4.3.2, page 7. The DEIS should clearly state which diseases will be studied under which levels of safety, and if any diseases will be studied at less than BSL-4, this should be explained and the risks disclosed and analyzed.

A consolidated account of many of the inconsistencies between the DEIS and the Executive Summary has been posted on the FAQ, Inc., website, and has been available to DHS for some time. This summary is by no means a complete listing of the inconsistencies, because they are legion. These identified inconsistencies, and all others, should be reviewed and remedied. A copy of the inconsistency charts is attached hereto at Tab 7. Further, a comment previously sent to DHS to point out inconsistencies is attached hereto at Tab 8. The criticisms of these inconsistencies are incorporated by reference herein.

Culler, Esq., Jenny

Page 15 of 133

WD0753

**B. THE DEIS FAILS TO ADEQUATELY DESCRIBE THE PROPOSED NBAF FACILITY, ITS MISSION, AND THE FULL RANGE OF PATHOGENS THAT MAY BE STUDIED.**

DHS has indicated that “[t]he proposed NBAF is envisioned to provide the nation with the first integrated agricultural, zoonotic disease, and public health research, development, testing, and evaluation facility with the capability to address threats from human pathogens, high consequence zoonotic disease agents, and foreign animal diseases,” and “the proposed NBAF is an integrated human, foreign animal, and zoonotic disease research, development, and testing facility that will support the complementary missions of the Department of Homeland Security (DHS), the Department of Human Health and Services (HHS), and the United States Department of Agriculture (USDA). 71 Fed. Reg. at 12, 3107. However, none of the analyses of potential impacts from the facility anticipates that public health research will be conducted or human pathogens will be studied at the NBAF. Additionally, by the time the Notice of Availability of this DEIS was published in the Federal Register, the mission to coordinate research with HHS had wholly disappeared, without explanation. 73 Fed. Reg. at 125, 36540. It is therefore unclear whether the NBAF will ever house poultry or study the avian flu (as the Feasibility Study appears to anticipate at NBAF-1, Section 4.1 – page 4), or whether any plant disease research will be conducted, in keeping with the mission of the Homeland Security Presidential Directive – 9, upon which the entire NBAF is supposedly predicated.

If one were to review the DEIS and its Appendices to attempt to determine whether the NBAF will study human or plant diseases based on whether the DEIS considered impacts and risks associated with those types of pathogens, then it would seem clear that there will be no human or plant pathogens studied at the NBAF. The focus of the DEIS on its face is squarely on zoonotic foreign animal diseases. However, there are clues throughout the underlying documents that while the DEIS lists an initial array of foreign animal diseases it intends to study at the NBAF, it remains to be seen what the full extent of the NBAF’s mission will be. It remains fundamentally unclear whether the intention to study the foreign animal diseases listed in the DEIS will be carried out, what the entire range of diseases are that may be eventually studied at the NBAF, and what public notice would be given, if any, in the event that the NBAF’s mission required that it study other diseases than the public is able to comment on and discuss through the NEPA process. If DHS were allowed to simply review only the first set of diseases it wanted to study at the NBAF in order to be considered to have completed a comprehensive review under NEPA, then the DHS could create a situation in which the first virus to be studied is as innocuous as the common cold, and the undisclosed second set virus is the avian flu.

*The public has a right to review a disclosure and analysis of the full range of potential effects of all the diseases that may be studied at the NBAF,* but has not been allowed to do so through a review of this DEIS. The DEIS should include analyses of the various representative types of agricultural and human diseases that may be studied at the NBAF in the future. The failure of the DEIS to acknowledge that the initial list of

Comment No: 13

Issue Code: 23.0

DHS notes the commenter’s concerns regarding the study of human and plant pathogens and the role of the U.S. Department of Health and Human Services (HHS). Between the issuance of DHS’s Request for Expressions of Interest to accommodate the construction of NBAF on January 19, 2006 and publication of the Notice of Intent to prepare an EIS on July 31, 2007, NBAF’s mission has been further refined and HHS no longer has a role in that mission. 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. Therefore, it is not foreseeable that future work would be conducted on strictly human pathogens. Further, it is not within NBAF’s mission to study plant pathogens. If this were to change and either of these types of diseases were proposed to be studied, a new risk assessment would be prepared and an evaluation of whether any new NEPA analyses would be required and, if so, such analyses would be undertaken.

DHS further notes the information cited by the commenter from the NBAF Conceptual Design and Feasibility Study. As noted in Section 2.2 of the NBAF EIS, the NBAF Conceptual Design and Feasibility Study 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. Like DHS’s mission which has been further refined, the design of NBAF continues to be refined as DHS works towards a final design, which will not be established until when, and if, a decision is made to build the NBAF and following site selection.

See the response to Comment No. 8 for further information on diseases which would be studied at NBAF.

Culler, Esq., Jenny

Page 16 of 133

WD0753

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8 cont.| 4.0

pathogens to be studied at the NBAF does not cover the whole array of pathogens that may be studied at the NBAF in the future yields an unrealistically narrow assessment of pathogen risks, which is discussed in greater detail in the comments related to Health and Human Safety, *infra*. This failure further denies the public meaningful participation through the NEPA process.

The DEIS also does not adequately disclose important information about the proposed NBAF facility itself. A review of the Feasibility Study for the NBAF (which, incidentally, was not provided to the public by DHS) reveals that the NBAF will house an insectary for the study of diseases in and transmission capabilities of mosquitoes, ticks, and other arthropods. Feasibility Study, §1.1, p.2 and §4.1, p. 4. However, the DEIS dances around the issue and fails to fully disclose the types and numbers of insects that will be studied at the NBAF. Further, there is no analysis of the potential impacts of and risks from toxic fumigations that the Feasibility Study indicates will necessarily occur inside the NBAF insectaries. *Id.* at §4.3, p. 16.

Additionally, the Feasibility Study indicates that avian viruses will be studied at the NBAF. *Id.* at § 4.1, p. 4. However, the DEIS does not consider the local populations of wild birds or the enormous poultry farming operations that occur, especially in Georgia, in its evaluation of economic risk from the NBAF. Therefore, it is unclear whether the study of avian viruses has been mixed from the NBAF mission, or whether it is another dormant mission that will be ignored in the NEPA process and sheltered from proper public and agency review by virtue of its omission in this DEIS.

3 cont.| 26.0

Furthermore, the DEIS is replete with terminology that is not defined or appropriately explained. One example of this is the discussion of the “bounding number” of animals that will be housed in the NBAF. The DEIS presents a table with a “bounding number of animals”, and cites to the Feasibility Study, but neither document clearly states how to calculate the maximum number of animals that could be housed in the NBAF at any given time. An emailed comment from Kathy Prescott of FAQ, Inc. addressing this issue in more detail is hereby incorporated herein, and is attached hereto at Tab 9.

**C. THE DEIS OMITTS CRITICAL INFORMATION OR BURIES IT IN SUPPORTING OR REFERENCE MATERIALS.**

3 cont.| 26.0

A NEPA document fails where the agency fails to “provide[] the public with insufficient information regarding the proposed action and its potential environmental impacts...” *Fund for Animals v. Norton*, 281 F. Supp. 2d 209, 226 (D.C. Dist. 2003). It is axiomatic that “NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made...” 40 C.F.R. §1500.1(b). It follows that the agency must not hide away such information in the footnotes and reference materials of its documents, but must provide the public with all relevant information up front and without media manipulations. It must give equal billing to the positive and negative environmental impacts that a proposed action may have.

Culler, Esq., Jenny

Page 17 of 133

WD0753

3 cont.|26.0

1. DHS Failed to Include Citations for Many of the Reports Discussed.

40 C.F.R. §1502.21 allows agencies to incorporate certain material by reference into the environmental impact statement, but “[t]he incorporated material shall be cited in the statement and its content briefly described,” and, “[n]o material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment.” DHS has violated this regulation because there are many citation abbreviations provided in the text not listed at all in the reference section (e.g. Kasari, et al., 2008, at 3-217; Britch, et al., 2007, at 3-218; Center for Food Security and Public Health 2005, at 3-220; USDA 2007, at 3-214; NPS 2001, at 3-214; USDA 2008, at 3-307, Audubon, 2008; Weakley et al., 2007; GNHP, 2008; etc.). Despite sending a Freedom of Information Act request to the Department of Homeland Security and a letter to Dial-Cordy and Tetra-Tech, the preparers of the DEIS, specifically requesting these citations and copies of these documents, the documents have not been made available to the public and have been omitted from public review. See Tab 10.

10 cont.| 3.0

Also, several “support documents” listed by DHS posted to its website for the first time on or around August 11, 2008. Meanwhile, DHS failed to send email or U.S. postal mail notifications to the interested parties who signed up on its mailing list that these new documents had been posted on the website. The website itself admits that “[t]he supporting documents for DEIS...are not fully accessible. The Section 508 compliant version of these documents will be posted on or by August 25, 2008.” [http://www.dhs.gov/xres/labs/gc\\_1187734676776.shtm](http://www.dhs.gov/xres/labs/gc_1187734676776.shtm). As Section 508 refers to the Rehabilitation Act of 1973, which requires that federal agencies make documents available to individuals with disabilities, it is apparent that many individuals will be without access to the supporting documents through the very last day of the comment period. 29 U.S.C. §794(d). However, this is by definition too late for the public to adequately review and comment on these support documents, and it renders the entire DEIS fatally flawed.

13 cont.| 23.0

2. Critical Information Buried in the Supporting Documents Is Not Disclosed in the Body of the DEIS.

a. *The DEIS ignores the wide array of potential pathogens that will be studied at the NBAF.*

In the Feasibility Study, the mission of the Foreign Animal Disease Diagnostic Laboratory is spelled out, in part, to be for the “[d]evelopment, improvement, and validation of diagnostic tests for major exotic livestock diseases, e.g. foot and mouth disease (FMD), classical swine fever (CSF), swine vesicular disease (SVD), malignant catarrhal fever (MCF), African swine fever (ASF), lumpy skin disease (LSD), rinderpest (RP), and contagious bovine pleuropneumonia (CBPP), and other foreign animal diseases of high importance as they are identified.” Feasibility Study, §3.1.2. However, at least four of these diseases were never mentioned in the DEIS as potential animal diseases to

Culler, Esq., Jenny

Page 18 of 133

WD0753

13 cont. | 23.0

be studied at the NBAF. It is not clear whether the diagnostic laboratory will be handling the actual pathogens or collaborating with the other researchers at the NBAF such that these other diseases will actually be present at the NBAF. On the other hand, the DEIS indicates that two other diseases, Rift Valley Fever Virus (RVFV) and Japanese encephalitis may be studied at the NBAF. The DEIS is required to come forward with information about which actual diseases will be studied, and to analyze the potential impacts of these diseases at each site. The disease fact sheets for each of these diseases is attached here at Tab 11. The DEIS must disclose whether each of the diseases listed in the Disease Factsheets catalogue provided as the first two pages of Tab 12 will be studied at the NBAF, and if so, fully analyze each disease and the potential consequences to each of the site alternatives. This has not been done.

14 | 19.0

- b. *The DEIS fails to adequately describe the human health impacts of any of the pathogens that will be or could be studied at the NBAF.*

3 cont. | 26.0

Although the DEIS states that many of the pathogens to be studied at the NBAF are “zoonotic”, meaning that they are transmittable from animals to humans, the DEIS fails to adequately disclose to the public the dangers to human health posed by these diseases. DEIS, 1-4. In the interest of good faith full disclosure, the DEIS should have included a section on human health risks, and should have described the symptoms a person would experience if they were to become infected with the diseases that will be studied at the NBAF. While the DEIS does include a basic description what occurs when humans become infected with the Nipah virus (“[p]ulmonary infection...followed by encephalitis and death in as little as 48 hours”), this description is buried in Appendix E, entitled “Accidents Methodology.” DEIS, E-17. The DEIS hides away further descriptive information, including human illness and mortality rates, in Appendix D, which is entitled “Potential Economic Consequences of Pathogen Releases from the Proposed NBAF.” This is an unlikely location for these descriptions, which the public would no doubt expect to find in the Health and Safety analysis, instead.

9 cont. | 4.2

The realities of the human health risks associated with an outbreak of this dangerous virus should be up front -- not hidden away where the majority of the public will not find it. Similarly, when asked at the Athens public meeting on August 14, 2008, to describe the human health effects of the diseases to be studied at the NBAF, the panel from DHS tried to avoid the question by pointing out that the diseases to be studied are animal diseases. The question was then put to a veterinarian, who was not identified on the record but was with DHS, who indicated only part of the picture -- that there are flu-like symptoms -- sometimes ocular effects -- and sometimes neurological effects. *It was abundantly clear that the panelists were trying to avoid disclosing to the public at that meeting the real dangers of the diseases and the realities of the risks involved from the NBAF.* These issues are discussed in greater detail elsewhere within these comments.

3. Public Review of the Action Is Impeded Because the DEIS Does Not Include Important, Hard-to-Find Documents in the DEIS Itself.

17

Comment No: 14

Issue Code: 19.0

DHS notes the commentor's concerns regarding the location in Appendix D of the NBAF EIS of potential human health consequences from the release of certain pathogens rather than in the Health and Safety section of Chapter 3. DHS contends that this organization of information is appropriate for several reasons and that it enhances the readability and comprehensiveness of the EIS. Section 3.14 and Appendix E of the NBAF EIS investigate the chances of a variety of accidents that could occur and consequences of those accidents in terms of acute exposure from a postulated pathogen release. While the analysis indicates that the risk of an accidental release of a pathogen is extremely low, Section 3.14 and Appendix E do not predict the outcome of such as exposure either in animals or humans. Whereas, the scope of Appendix D of the NBAF EIS is to provide readers with a summary of the range of possible outcomes of such a release based on studies, simulations and documented outbreaks in other countries.

As discussed in Section 3.14 and Appendix D of the NBAF EIS, a release of FMD virus would not be expected to have any affect on human populations as humans are not susceptible to the disease. However, if exposed, humans are potential vectors as FMD virus can persist in the human upper respiratory tract for up to 48 hours. For Rift Valley Fever (RVF) virus, which is an acute, mosquito-borne (vector-based) viral disease, exposed humans could develop severe influenza-like syndrome. As discussed in Appendix D.3, approximately 90% of humans infected with RVF virus show clinical signs of the disease, with an overall mortality rate of approximately 1%. For Nipah virus, exposure to humans can cause severe febrile encephalitis, fever, headache, dizziness, and vomiting with a high mortality rate. Although vectors associated with outbreaks of Nipah are not present in the United States, information from case studies indicate that once infected, mortality rates among humans have ranged from 38% to 75%, as noted in Appendix D.4. These outcomes are highly speculative and, again, are based on case studies, and not on risk assessment measures.

The mode of transmission of Nipah and Hendra is through direct contact with infected horses (Hendra) or swine (Nipah). There are no reports of “gastrointestinal” disease from either the Nipah or Hendra virus. There is absolutely no evidence that they are transmitted through water supplies. Inhalation of the virus from infected animal secretions or animal tissue can in rare cases result in an influenza-like disease in humans, although individuals have either no or mild symptoms. There is also no evidence of person-to-person transmission of Nipah or Hendra, according to the World Health Organization.

Culler, Esq., Jenny

Page 19 of 133

WD0753

3 cont. | 26.0

NEPA "requires an agency to do more than to scatter its evaluation of environmental damage among various public documents." *Natural Resources Defense Council, Inc. v. U.S. Nuclear Regulatory Commission*, 685 F.2d 459, 485 (D.C. Dist. 1982) (rev'd on other grounds by *Baltimore Gas and Electric Co. v. Natural Resources Defense Council, Inc.*, 462 U.S. 87, 103 S.Ct. 2246 (1983)). The failure to include important, hard-to-find documents in the DEIS results in a violation of the requirement that an agency must discuss environmental costs (including any uncertainties concerning such costs) in a manner that proves to the public that the agency has conducted a proper consideration of its action. *Compare Id.* For example, the DEIS only references the Phase I Environmental Site Assessment ("ESA") and the updated ESA for the property, which identified existing hazardous, toxic, and petroleum waste at the South Milledge Avenue Site. *See* DEIS, 3-330 – 332. These documents should have been included in the DEIS because the methodology used in the ESAs was not adequately explained in the DEIS and the basis for conclusions made in the DEIS was not apparent without referencing the ESAs themselves.

The failure to include the NBAF Feasibility Study as an attachment to the DEIS, or at least as a provided supplemental document, is a clear violation of the spirit of public disclosure championed by NEPA. This Study contains some of the key information that the public has been asking about since the very first scoping meetings related to the NBAF building itself.

The Appendices to the DEIS are themselves replete with footnotes, citing scientific papers and DHS documents that are not readily accessible for review. Further, the DEIS cites to unpublished information in the Waste Management discussion and elsewhere, but does not provide the unpublished documents as attachments, on the website, or as addenda at the public reading rooms. There is no indication of any way the public could locate or review such information. DEIS, 3-343. These are NEPA violations because contents of referenced documents must be adequately described to ensure that the EIS is understandable to a reader without undue cross-referencing. *See Natural Resources Defense Council v. Duvall*, 777 F.Supp. 1533, 1539 (E.D.Cal.1991).

**D. THE DEIS FAILS TO PRESENT THE TECHNICAL INFORMATION IN A READABLE AND UNDERSTANDABLE WAY.**

40 C.F.R. §1502.8 requires that "[e]nvironmental impact statement shall be written in plain language...so that decision makers and the public can readily understand them." However, the DEIS focuses to its detriment on the probability analysis, creates a numbers game that frustrates and numbs the reader and offers little to no actual explanation or communication of the risks involved. Simply stated, it lacks *plain language*. Tables and charts, which should serve to clarify and simplify complex data in fact are highly confusing. "In order to fulfill its role, the EIS must set forth sufficient information for the general public to make an informed evaluation and for the decisionmaker to 'consider fully the environmental factors involved and to make a

Culler, Esq., Jenny

Page 20 of 133

WD0753

reasoned decision after balancing the risks of harm to the environment against the benefits to be derived from the proposed action.' *County of Suffolk v. Secretary of Interior*, 562 F.2d 1368, 1375 (2d Cir. 1977), cert. denied, 434 U.S. 1064 (1978). In so doing, the EIS insures the integrity of the process of decision by giving assurance that stubborn problems or serious criticisms have not been 'Swept under the rug.' *Silva v. Lynn*, 482 F.2d 1282, 1285 (1<sup>st</sup> Cir. 1973).

8 cont. | 4.0

The DEIS needs to identify the scientific level of confidence in the data and methods of analysis and then distill and communicate that information to the public. The 'detailed statement' required by §102 (2)(C) of NEPA "is the outward sign that environmental values and consequences have been considered during the planning stage of agency actions." *Andrus v. Sierra Club*, 441 U.S. 347, 350 (1979). *Sierra Club v. United States Army Corps of Engineers* 701 F.2d 1011 (2d Cir. 1983). Failure to communicate in such a way as to be understandable to the public is a violation of CEQ requirements.

A glaring example of the failure of the DEIS to communicate the scientific information is contained in the site-specific consequences at DEIS, 3-435, et seq. These tables and maps are entirely unclear with regard to the actual distances from the NBAF of downwind exposures in the air and on the ground. It is of note that there is no mention or consideration in these charts of deposition of pathogens into the waterbodies at certain distances from the NBAF. Because many pathogens may be easily aerosolized, it is expected that they could fall out into water just as easily as into the air and onto the ground.

3 cont. | 26.0

15 | 21.2

For the Athens site analysis, the DEIS includes a figure that supposedly shows "Near Field Distribution of Viral Pathogens Based on Time-Integrated Atmospheric Transport." DEIS, 3-444. However, the map, its radii, and its legend all fail to show the measure of time employed to create the graphic. It is also untenable that atmospheric transport would really occur in a nice perfect circle around the NBAF; yet, the DEIS does not include or consider prevailing winds and historical air patterns in the Athens area in creating this graphic. Additionally, the distances are measured in kilometers, which is inconsistent with the other measurements of distances around the site in miles such as for the indication of the initial infection zone at 6.2 miles from the Athens site. Further, the concentrations are set out in scientific terminology that does not provide a lay reader with any idea of how meaningful the air and ground concentrations may be. These same criticisms may be employed with each of the figures in this section. In a table supposedly describing the "Unmitigated Accident Specific Air Concentration (virions/m<sup>3</sup>) Georgia Site", the reader learns that at 50 meters from the NBAF site the unmitigated source term for an air craft crash is 3.0E+08. DEIS, 3-446. This does not tell the reader anything about how many animals will be exposed to the pathogens from the NBAF, how likely it is that a human could become infected, how many animals will have to be slaughtered to be on the safe side that no pathogen infected the nearby herds, how many people would be expected to become ill or die. These are the categories of information that are useful to a lay reader, and not found together (and some not at all) anywhere in the DEIS.

Comment No: 15 Issue Code: 21.2

DHS recognizes the issues in conveying highly technical methodology and analytical results to persons not familiar with the risk assessment field. Information is contained within the body of the EIS that summarizes the risk assessment process so that the lay reader can obtain a general understanding of the comprehensive nature of the analysis. Results are summarized for each potential NBAF location in qualitative terms (e.g., low, moderate and high risk). The supporting information and data is provided so that the interested reader is able to understand how the quantitative approach is summarized qualitatively. Site specific meteorological data was obtained from the nearest measurement location in order to arrive at the near and far field concentrations. Appendix E of the NBAF EIS provides additional technical information so the reader with a comprehensive understanding or interest is provided with additional information to gain a through understanding of the methodology and results. An assessment of the potential effects to livestock and wildlife is provided in each site specific analysis in Section 3.14. The use of radial analysis is appropriate for analyzing the potential impacts by site since daily meteorological conditions cannot be predicted, but would be used in the event of an incident.

Culler, Esq., Jenny

Page 21 of 133

WD0753

**VIII. THE PRIMARY ALTERNATIVES ANALYSIS IS FATALY FLAWED.**

16| 26.0 Primary alternatives "are substitutes for proposed action that will achieve similar results." *Environmental Law* 3d. ed. (Perry). Secondary alternatives are "different ways the agency can go about its proposed action: changing the location...or the material". *Natural Res. Def. Council, Inc. v. Morton*, 458 F2d 827 (DC Cir. 1972)(alternatives considered do not just have to be those the agency is empowered to adopt). By definition, the exercise that the DEIS goes through in the evaluation of whether to build the NBAF at one of six sites, or not at all, is a secondary alternatives analysis. The DEIS's entire analysis of the NBAF is fatally flawed, because the primary alternatives analysis should have begun under the rigors of NEPA when the DHS was tasked with the complying with Homeland Security Presidential Directive 9 ("HSPD -9"). "The purpose of the Proposed Action – siting, construction, and operation of the National Bio and Agro-Defense Facility – is to comply with the Homeland Security Presidential Directive 9 by providing an enhanced domestic research capability on foreign animal diseases and zoonotic diseases (transmitted from animals to humans)." DEIS, 1-1. These directives did not require the DHS to build one enormous bio-lab facility in response, but instead, they acknowledge that the United States is in danger from terrorist attacks on our agriculture and food sources, and that our federal, state, and local agencies need to act to enhance our national security from these threats and to develop countermeasures so we can react to keep the dangerous pathogens from doing harm to our citizens, our natural resources and our economy. There are many ways to comply with this directive. A true primary alternatives analysis would include other ways to accomplish the goals of the Presidential Directives other than building one mammoth bio-defense facility which in of itself will then become a primary terrorist target.

17| 4.0  
12 cont| 1.0 However, the decision by DHS to build a single 500,000 - 520,000 square foot National Bio- and Agro-Defense Facility was made without the benefit of a NEPA analysis, and without regard to the overarching goals of the Presidential Directives it supposedly is designed to meet. From the outset of the entire process, DHS misconstrued the purpose and need identified by the Directives, and illegally charged ahead with a poorly considered plan to bring dangerous pathogens onto U.S. soils unnecessarily.

**A. DHS HAS PRESENTED NO ALTERNATIVE TO THE STATED "PROPOSED ACTION" ITSELF.**

The proposed action to be considered in the DEIS by DHS is stated concisely in the Introduction. "The U.S. Department of Homeland Security has proposed to augment the United States' existing research capabilities through construction and operation of the National Bio and Agro-Defense Facility at one of six alternative sites." DEIS, ES-1. If this is truly DHS's proposed action, then the National Environmental Policy Act requires that DHS consider alternatives to *that* action. A "detailed statement ...on alternatives to the proposed action" is required. 42 U.S.C.A. §4332(c)(3). In fact, the alternatives analysis of an environmental impact statement is described in the CEQ regulations as the "heart" of the EIS. 40 C.F.R. §1502.14. However, the stated "Proposed Action" was not simply one of the many alternatives considered. The construction and operation of one

Comment No: 16

Issue Code: 26.0

DHS notes the commentor's concern regarding the process used to identify and evaluate reasonable alternatives to meet Homeland Security Presidential Directive (HSPD) 9. HSPD 9 was signed on January 30, 2004 and directed that the USDA and DHS develop a plan to have safe, secure, and state-of-the-art agriculture biocontainment laboratories that can research and develop countermeasures for foreign animal and zoonotic diseases, as discussed in Section 1.1 of the NBAF EIS. As identified in Section 2.3, DHS investigated a number of options to meet the mission requirements of HSPD-9. In Fiscal Year 2006, Congress first appropriated money for site selection and other pre-construction activities for the NBAF. DHS developed a site selection process because Congress did not designate a specific site upon which to build and construct the NBAF. Section 2.3.1 describes DHS's site selection process. A team of federal employees representing multi-department component offices and multi-governmental agencies (i.e., DHS, U.S. Department of Agriculture, and Department of Health and Human Services) reviewed the submissions based primarily on proximity to research capabilities, proximity to workforce, acquisition/construction/ operations (including environmental suitability), 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.

Other potential alternatives that were considered for meeting DHS's purpose and need and other locations to construct the NBAF are described in Section 2.4. Nevertheless, by proposing to construct the NBAF, DHS is following policy direction established by the Congress and the President. DHS believes that the NBAF EIS is the appropriate NEPA analysis to undertake, rather than a Programmatic EIS.

Comment No: 17

Issue Code: 4.0

See response to Comment No. 16.

Culler, Esq., Jenny

Page 22 of 133

WD0753

16 cont.| 26.0  
17 cont.| 4.0

single facility of a predetermined size and functionality was the *only* option presented. The Proposed Action was considered to be the foregone conclusion, and the only alternatives analyzed are the choices between the six locations and “no action.” This is essentially an analysis of alternatives *within* the proposed action, rather than alternatives *to* the proposed action. Alternatively, this could be considered to be a two-pronged alternatives analysis: a choice between action and no action, only -- a classic Hobson’s choice, “... without an alternative; the thing offered or nothing.” See [www.dictionary.com](http://www.dictionary.com). This approach to the NEPA requirements has been found legally insufficient, and the DEIS here is fatally flawed because it actually only considers one action and one no action alternative. *National Resources Defense Council v. Evans*, 232 F. Supp. 2d 1003 (N.D. Cal. 2002). DHS should not intentionally propound a narrow project purpose in order to limit the alternatives it must take into account. See, e.g., *Davis v. Mineta*, 302 F.3d 1104, 1118–20 (10th Cir. 2002); *Simmons v. U.S. Army Corps of Eng’rs*, 120 F.3d 664, 666 (7th Cir. 1997) (“One obvious way for an agency to slip past the strictures of NEPA is to contrive a purpose so slender as to define competing ‘reasonable alternatives’ out of consideration (and even out of existence).”). The DEIS discussion of alternatives violates the “‘rule of reason’ which governs both ‘which alternatives the agency must discuss’ and ‘the extent to which it must discuss them.’” *Tongass Conservation Soc’y v. Cheney*, 924 F.2d 1137, 1140 (D.C. Cir. 1991) (quoting *Natural Res. Def. Council, Inc. v. Hodel*, 865 F.2d 228, 294 (D.C. Cir. 1988)).

**B. THE QUESTION OF HOW TO RESPOND TO HOMELAND SECURITY PRESIDENTIAL DIRECTIVE 9 WAS ITSELF REQUIRED TO UNDERGO THE NEPA ANALYSIS.**

1. The Decision About How to Spend Federal Dollars “To Protect the Agriculture and Food System from Terrorist Attacks” Constitutes a Major Federal Action Significantly Affecting the Quality of the Human Environment.

The requirement for an agency to conduct a NEPA analysis is based upon whether the proposed action constitutes a “major federal action significantly affecting the quality of the human environment.” National Environmental Policy Act, 42 U.S.C.A. § 4332 (c). In making the determination of whether an action is a “major federal action() requiring the preparation of environmental impact statements,” the Council on Environmental Quality created under NEPA at 42 U.S.C.A. §4344 published regulations. 40 C.F.R. §1502.4(b) specifically indicates that when agencies are creating new programs, they “shall prepare statements on broad actions so they are relevant to policy and are timed to coincide with meaningful points in agency planning and decision making.” 40 C.F.R. §1508.18(a) further confirms that “actions” for the purpose of NEPA analysis include “new or revised agency rules, regulations, plans, policies, or procedures”, and 40 C.F.R. §1500.1(b) states that the purpose of NEPA is to “insure that environmental information is available to public officials and citizens *before* decisions are made and *before* actions are taken” (emphasis supplied). However, there is no indication by DHS in any of its publications in the Federal Register or in the DEIS itself that DHS followed the NEPA

Culler, Esq., Jenny

Page 23 of 133

WD0753

process to determine what important, determinative, and far-reaching decisions DHS would make in order to comply with the Presidential Directive.

5 cont.|2.0

The decision by DHS to forego any other options and focus significant time, money, and efforts directly into planning for and proposing that one location be constructed and operated for the study of zoonotic foreign animal diseases and other diseases with some nexus to bio-defense is a decision that implies hundreds of underlying assumptions and decisions that have not been vetted by other federal agencies or the public as required by law.

Consequently, the DHS has made a series of secret, unsubstantiated decisions that have set in motion an entire chain of events, decisions, and expenditures that are major federal actions significantly affecting the quality of the human environment. DHS' initial decision has prejudiced the ultimate decision on the project (rendering it only a choice of *where* the facility will be located), was not provided to the public for comment, and has already limited the choices for achieving the best scenario to promote safety and security for our agriculture and food sources in the United States, all specifically contrary to 40 C.F.R. §1506.1.

2. The Question of How to Respond to HSPD-9 Should Have Been the Subject of a Programmatic Environmental Impact Statement.

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17 cont.| 4.0

12 cont.| 1.0

The DEIS indicates that “[t]he United States needs to update and expand its facilities to study the range of foreign animal diseases that are potential threats to U.S. Agriculture,” and cites to Homeland Security Presidential Directive -9. DEIS, ES-1. However, at the core of HSPD-9 is the idea that *all* of the relevant federal agencies will study, prioritize, and then act jointly to protect our food supplies from the threat of “terrorist attacks, major disasters, and other emergencies.” HSPD-9(1). Before DHS proposed that the solution for complying with this Directive is to build one large facility to study foreign animal diseases, it should have consulted with other federal agencies to determine all of the courses of action that they should take in response. A coordinated approach to protecting the food system of the United States will necessarily require the evaluation of current programs and the identification of several proposed solutions. Therefore, the multi-agency response to the HSPD-9 required a Programmatic Environmental Impact Statement in which the many possible agency responses were vetted.

The CEQ regulations make numerous positive references to the overarching policy theory behind Programmatic Environmental Impact Statements (PEISs): if disparate federal actions are sufficiently related, a broad PEIS should be conducted if it will serve to “avoid duplication and delay” in the long run. *See* 40 C.F.R. §§ 1502.4(d), 1508.25(a)(3); *see also id.* § 1502.4(a) (“Proposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.”). Echoing NEPA’s statutory language, the regulations list “systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive directive” as a recognized “Federal action[.]” *Id.* §

Culler, Esq., Jenny

Page 24 of 133

WD0753

16 cont. | 26.0  
17 cont. | 4.0  
12 cont. | 1.0

1508.18(b)(3) (interpreting 42 U.S.C. § 4332(2)(C)). Once this threshold has been met, the regulations further state that an EIS “may be prepared, and [is] sometimes required” for the project as a whole, in sum, a PEIS. *Id.* § 1502.4(b).

When preparing statements on expansive actions, agencies are encouraged to consider preparing a PEIS for proposals which have “common timing, impacts, alternatives, methods of implementation, media, or subject matter.” *See id.* § 1502.4(c)(2). Similarly, a PEIS on federal proposals that are at the same “stage of technological development including federal or federally assisted research . . . for new technologies” may be required “before the program has reached a stage of investment or commitment to implementation likely to determine subsequent development or restrict later alternatives.” *See id.* § 1502.4(c)(3).

It is unrealistic to think that the creation of the NBAF will respond to all of the concerns noted and mandates given in HSPD-9. It is obvious that there are other actions that other federal agencies, and probably even DHS, are taking in response. In order to adequately evaluate the likelihood of success of each of these courses of action, and to determine how they might work in concert or conflict with one another, DHS should have considered all these efforts together. Their environmental impacts should also have been considered together. It was a failure of DHS and other federal agencies that they did not prepare such a programmatic EIS.

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3. DHS Failed to Consider At All, Much Less Take a Hard Look At All Feasible and Prudent Alternatives for Compliance with the Presidential Directive.

If DHS's Proposed Action is as stated (to construct and operate an NBAF), then DHS was required to consider alternatives to constructing and operating the NBAF, including but not limited to this list of reasonably prudent alternatives:

- DHS should -- but did not -- consider providing federal funding for research on the desired foreign animal diseases at existing private or public research facilities.
- DHS should -- but did not -- consider constructing one facility off of the mainland for livestock and insect research on the desired foreign animal diseases, and other facilities strategically placed in close proximity to critical agricultural and food-supplying regions of the country for diagnostics, routine creation and stockpiling of any and all vaccines or other treatments developed, and vaccine production and distribution to ensure the quickest response to any regional outbreaks.
- DHS should -- but did not -- consider collaborating with scientists from the countries to which the foreign animal diseases of concern are endemic in order to benefit from the ongoing research there and the daily observations a scientist in the field can make related to diet, animal care, cultural activities, or other indicators of the means of transmission of the diseases, especially for the diseases

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Comment No: 18

Issue Code: 5.0

DHS notes the commentor's statement regarding DHS's selection of feasible alternatives to comply with Homeland Security Presidential Directive 9 (HSPD-9) and HSPD 10. DHS and USDA consulted and held preliminary discussions to identify mission requirements and facility needs to comply with HSPD-9. This resulted in the NBAF design as described in the NBAF Conceptual Design and Feasibility Study. DHS held a competitive process to select potential sites for the proposed NBAF as described in NBAF EIS Section 2.3.1. A multi-disciplinary team of engineers, scientists, lawyers, academics and communicators from the departments of Homeland Security, Agriculture, Health and Human Services, and Defense 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. Additional alternatives were considered but eliminated from further evaluation and are described in Section 2.4.

See response to Comment No. 16 for additional information.

DHS notes the commentor's opinions of other alternatives that might have been analyzed to meet the Homeland Security Presidential Directive 10 requirements. Section 2.14 describes some of the other alternatives that were considered but rejected for further analysis. DHS believes that it has analyzed an appropriate range of reasonable alternatives to meet the requirements of HSPD 10 and the procedural requirements of NEPA and its implementing regulations.

DHS further notes the commentor's concerns regarding the analysis of the No Action Alternative. DHS believes that its analysis of the No Action Alternative is proper under NEPA. Under the No Action Alternative, the NBAF would not be constructed. The work currently being conducted at PIADC, which performs much of the research on foreign animal and zoonotic diseases in the United States, would continue. So, analysis of the potential environmental impacts of continued operations under the prescribed conditions as identified in the NBAF EIS is appropriate.

Culler, Esq., Jenny

Page 25 of 133

WD0753

18 cont. | 5.0

for which there is little or no information in the literature about means of transmission.

- DHS should -- but did not -- consider creating a series of competitive programs with grant money awards for any advancements in the knowledge about the foreign animal diseases of concern, to encourage private and public research at existing BSL-4 laboratories in these areas.
- DHS should -- but did not -- consider utilizing a portion of the existing PIADC facilities for the desired BSL-2 or -3 laboratory space in order to consolidate research efforts and maximize economies.

“[T]he existence of reasonable but unexamined alternatives renders an EIS inadequate.” *Navajo Nation v. United States Forest Serv.*, 408 F.Supp. 2d 866 (D. Ariz. 2006), *rev'd in part and remanded on other grounds*, 479 F.3d 1024 (9<sup>th</sup> Cir. 2007). It is clear that this DEIS did not go very far at all in its consideration of reasonable alternatives, and is wholly inadequate under NEPA.

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4. By Failing to Conduct an Environmental Assessment and/or Environmental Impact Study on the Primary Alternatives, DHS Has Illegally and Irretrievably Committed Resources Already Devoted to the Concept of the NBAF.

Due to DHS' failure to comply with the NEPA requirements for its initial decision to build the NBAF somewhere, DHS has already committed an untold measure of resources to the development of plans to construct, operate, and justify this one facility. This illegally stacks the deck financially in favor of continuing along the path of constructing and operating one NBAF rather than considering all of the other feasible and prudent alternatives that should have been considered under the public microscope of NEPA process.

12 cont. | 1.0

**C. THE CONSTRUCTION AND OPERATION OF THE NBAF CONFLICTS WITH HOMELAND SECURITY PRESIDENTIAL DIRECTIVE 9.**

HSPD-9 requires that “in implementing this directive, federal departments and agencies will *ensure that homeland security programs do not diminish the overall economic security of the United States*” (emphasis supplied). However, the very nature of the decision that DHS has made to consider locating the NBAF on the mainland of the United States flies in the face of the superlative command of HSPD-9 that the overall economic security of our country is not diminished by any federal agency's actions intended to protect the U.S. from acts of terrorism. Furthermore, the DEIS does not even make an attempt to assess whether any of the proposed build alternatives or the no-action alternative will diminish the overall economic security of the United States.

Culler, Esq., Jenny

Page 26 of 133

WD0753

6 cont. | 5.0

It is indisputable that if the NBAF is located on the mainland, the probability that a pathogen being studied at the NBAF will be released into the environment is greater than the probability that a pathogen being studied elsewhere will be released into the environment. Yet this is never disclosed or discussed in the DEIS. It is further indisputable that in the event of such a release, the United States economy will suffer a significant blow, at least somewhat comparable to the cost to the UK from the 2001 Foot and Mouth Disease outbreak: somewhere in the \$10 billion to \$33 billion range. (See Lautner & Meyer, *U.S. Agriculture in Context: Sector's Importance to the American Economy and its Role in Global Trade* (2003). Yet somehow the DEIS focuses on estimates that losses due to an outbreak would only be between \$3 and \$4 billion. DEIS, 3-305 et seq. Of course, somehow these smaller numbers were the ones provided to the media. See Ted Bridis, *Study: Moving Virus Research Could Be Costly*, USA Today, June 20, 2008; John Milburn, *Biodefense lab worries residents: Disease fears counter idea of Kansas as site*, attached hereto at Tab 13.

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This is yet another example of how the DEIS misleads the public: the lower numbers are identified as those potential costs of an outbreak to each *county* where the NBAF is proposed to be located. DEIS, ES-12. But the counties vary drastically in size, and the decision to arbitrarily pick the county lines for cost risk analysis is irresponsible and appears to be intentionally misleading. [This atrocity is further discussed elsewhere herein.] The larger numbers nearing \$33 billion are the national costs – for a one-time outbreak that is stamped out in some undisclosed amount of time --but the DEIS fails to disclose that information, precluding analysis of the real risk of economic harm to the United States that is posed by the NBAF in conflict with HSPD-9.

6 cont. | 5.0

The DEIS fails to disclose and consider the relative risk probabilities because (1) it failed initially to conduct the proper primary alternatives analysis, and (2) its faulty secondary analysis in the DEIS considered only United States locations plus the no action alternative. Thus, from the outset when the determination was made by undisclosed persons or entities that the "evaluation criteria" for siting the NBAF would include a requirement that the NBAF be located in close proximity to existing research facilities (DEIS, ES-6), the DHS had already increased the likelihood of serious consequences from a pathogen release. DHS is ignoring its duty under HSPD-9 not to increase the risks of economic harm to the United States. Any decision ultimately made to place the NBAF at any proposed location other than Plum Island or another similarly isolated location is in sharp conflict with HSPD-9, arbitrary and capricious, and an abuse of discretion.

**D. THE CONSTRUCTION AND OPERATION OF THE NBAF CONFLICTS WITH HOMELAND SECURITY PRESIDENTIAL DIRECTIVE 10.**

18 cont. | 5.0

Homeland Security Presidential Directive 10 (HSPD-10) encourages the Federal agencies to "further strengthen the strong international dimension to our [biodefense] efforts", and underscores the importance of the Proliferation Security Initiative. The decision to locate the NBAF on United States soil goes against the HSPD-10 principles of working with foreign nations in order to foster cooperative relationships designed to keep

Culler, Esq., Jenny

Page 27 of 133

WD0753

18 cont. | 5.0

all friendly nations vigilant of the threats posed by agents of biological warfare. Where there are already laboratories in such friendly nations as Canada and Australia capable of housing the studies proposed by the DHS (DEIS, ES-1), it boggles the mind to think why the DHS would prefer instead to create a new facility in the U.S. to conduct these studies. Housing the research in the Australian laboratories, in fact, would meet every goal of the Presidential Directives (e.g. conducting the desired research, keeping the probabilities of accidental release and spreading of pathogens on U.S. soil to nil or very close to nil, complying with the Proliferation Security Initiative's goals of refraining from increasing transport pathways for dangerous agents that can be used as weapons of mass destruction, and strengthening international ties for the unified front against the spread of dangerous biological agents). DHS was required, but failed, to take a hard look at expanding research at the Australian laboratories rather than bringing an NBAF onto the mainland of the United States.

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**E. THE CONSTRUCTION AND OPERATION OF THE NBAF IS PREMATURE WHERE THERE IS NO EVIDENCE THAT DHS HAS COMPLIED WITH THE PLANNING AND ASSESSMENT REQUIREMENTS OF PRESIDENTIAL DIRECTIVES 9 OR 10.**

12 cont. | 1.0

1. DHS Has Failed to Properly Assess and Prioritize Previous and On-Going Investments in Biodefense-related Research.

HSPD-10 indicates that "the United States requires a continuous, formal process for conducting routine capabilities assessments to guide prioritization of our on-going investments in biodefense-related research, development, planning, and preparedness.... The Department of Homeland Security, in coordination with other appropriate Federal departments and agencies, will be responsible for conducting these assessments." However, there is no indication in the record that DHS has completed such a prioritization and has used that assessment in order to guide its decisions related to the NBAF. If there has been such a prioritization, it must be included in the DEIS for public review, and it should be front and center in the decision making process of the DHS.

However, it appears that not only is there no official guidance for identifying prioritizing biodefense-related research, but there is also not even an official list of the existing facilities. Incredibly, in written testimony before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representative, the Government Accountability Office indicated that "**no agency knows how many such labs there are in the United States or their location...[t]herefore, no agency is responsible for determining the aggregate risks associated with the expansion of these labs!**" GAO-08-108T, "High Containment Biosafety Laboratories: Preliminary Observations on the Oversight of the Proliferation of the BSL-3 and BSL-4 Laboratories in the United States"(emphasis supplied).

26

Comment No: 19

Issue Code: 2.0

DHS notes the commentor's statement regarding the policy, planning, and assessment requirements of Homeland Security Presidential Directives 9 and 10. Consideration of these aspects is not within the scope of the NBAF EIS, which presents the need for and evaluates the environmental impacts of the alternatives for constructing and operating the NBAF and those of the No Action Alternative.

Culler, Esq., Jenny

Page 28 of 133

WD0753

19 cont. | 2.0

2. DHS Has Failed to Define and Identify Vulnerable Critical Nodes of Production or Processing, and Has Failed to Make a Proper Analysis of Appropriate Mitigation Strategies.

HSPD-9 mandates that “agencies shall prioritize, develop, and implement, as appropriate, mitigation strategies to protect vulnerable critical nodes of production or processing from the introduction of diseases, pests, or poisonous agents.” HSPD-9 (12). However, nowhere in the DEIS are these “vulnerable critical nodes of production or processing” defined or identified. Defining and identifying these areas prior to determining where to locate the NBAF is a crucial step in the process that has been ignored by DHS.

Some of the chief policy components of HSPD-9 are:

- (a) identifying and prioritizing sector-critical infrastructure and key resources for establishing protection requirements;
- (b) developing awareness and early warning capabilities to recognize threats;
- (c) mitigating vulnerabilities at critical production and processing nodes;
- (d) enhancing screening procedures for domestic and imported products, and;
- (e) enhancing response and recovery procedures.

HSPD-9 (4). However, *there is no indication from DHS whether it has done any of these things*, which are all cautionary and preliminary activities the agency should complete before deciding whether it should locate a 500,00 – 520,000 square foot facility on the mainland that will contain the very pathogens it means to protect against. It appears that, instead, DHS is attempting to use the DEIS itself to initially identify what mitigation may turn out to be necessary. DEIS, 1-6. *This is certainly putting the cart before the horse and recklessly endangering the health, safety, and economic security of the United States*. If any mitigation analyses have actually been completed, DHS must provide a detailed assessment of the capabilities it has developed to protect the country from the spread of any released pathogens. If any of these analyses have not been done, DHS must refrain from making a determination about whether and where to create an NBAF, and must instead go back to the drawing board and consider all primary alternatives, including but not limited to those identified by these Commenters herein.

Culler, Esq., Jenny

Page 29 of 133

WD0753

**IX. THE EVALUATION OF THE “NO ACTION” ALTERNATIVE IS ILLEGAL.**

18 cont.| 5.0 DHS indicates that “[u]nder the No Action Alternative, DHS/ARS would be forced to rely upon non-U.S. BSL-4 facilities, as it does currently.” DEIS, 1-6. However, the analysis of the “no action” alternative does not include an investigation into the economic or environmental impacts of relying on the non-U.S. BSL-4 facilities. Instead, in each section in which the DHS evaluates the “no action” alternative, the discussion is in terms of the effects that will occur on Plum Island with the continuing use of the existing Plum Island Animal Disease Center (PIADC). DEIS, 3-6 through 3-8 (Land Use and Visual Resources); 3-30 through 3-32 (Infrastructure); 3-60 through 3-63 (Air Quality); 3-86 through 3-87 (Noise); 3-97 (Geology and Soils); 3-122 through 3-125 (Water Resources); 3-154 through 3-165 (Biological Resources); 3-221 through 3-222 (Cultural Resources); 3-228 through 3-237 (Socioeconomics); 3-310 through 3-312 (Traffic and Transportation); 3-329 (Existing Hazardous, Toxic, or Radiological Waste Contamination); and 3-353 (Waste Management). *This is a false comparison, and has nothing to do with the consequences of what DHS itself identified as the No Action Alternative.*

20| 5.1 In fact, DHS has indicated that regardless of where the NBAF will be located, the current PIADC may continue to function as a research facility. “The DHS spent approximately \$24 million in FY2007 and \$17 million more in FY2008 to upgrade the facilities at PIADC, and requested approximately \$17 million more for FY2008.” (CRS Report for Congress. 2007. The National Bio- and Agro-Defense Facility: Issues for Congress. Congressional Research Service. The Library of Congress. Order Code RL34160 (CRS 2007) at CRS-18.) On June 15, 2007, the contract was awarded to Veterans Engineering/NIKA Technologies for the programming and design of the improvements to the PIADC. See the Federal Business Opportunities website, at [https://www.fbo.gov/index?s=opportunity&mode=form&id=c7079de1134d47e1c7f708e3e35171bc&tab=core&\\_cview=1](https://www.fbo.gov/index?s=opportunity&mode=form&id=c7079de1134d47e1c7f708e3e35171bc&tab=core&_cview=1). However, DHS spokeswoman Amy Kudwa has recently indicated to the press that maintaining PIADC and constructing the NBAF would not be considered by the DHS. The DEIS, therefore, not only fails to disclose whether the continued operation of the PIADC will be affected by the decision making for the NBAF, but it also intentionally omits the cost of the PIADC improvements when it discusses the cost of maintaining the PIADC as the “no action” alternative. This is entirely inappropriate, because it unfairly skews the comparisons of the alternatives to make it appear that it will be more economically favorable to construct a new facility. Yet, the PIADC is currently operational, and may be here to stay as an important research facility regardless of the outcome of the NBAF. In fact, considering the amount of taxpayer dollars that have gone recently to upgrade and maintain the PIADC, it seems that the PIADC should be here to stay, at least as an auxiliary research, storage, and/or vaccine production space for a Plum Island NBAF. Either way, the choice to analyze the ongoing research at the PIADC as the “no action” alternative is disingenuous and/or illegal. If the PIADC data are considered in the analysis of “no action,” then such data should also be added to the analysis of the siting of the NBAF at each proposed location.

Comment No: 20

Issue Code: 5.1

DHS notes the commentor’s statement. Under the No Action Alternative, DHS would continue to operate PIADC with its limitations to conduct BSL-3Ag research on foreign animal diseases. The No Action Alternative reflects the decision not to build the NBAF. The proposed NBAF includes 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. Under the No Action Alternative, DHS and USDA would not be able to comply with the mission requirements of HSPD-9. See response to Comment No. 12 for additional information.

DHS notes the commentor’s concerns regarding whether the decision to construct NBAF will be affected by the continued operation of PIADC and observations regarding the costs of ongoing PIADC infrastructure improvements. No decisions have yet been made regarding the future operation of PIADC or whether to construct and operate NBAF. However, NBAF has been designed to replace the current facilities at PIADC, and DHS has been clear in its preference to close PIADC should a decision be made to construct and operate NBAF. While the potential costs of proposed actions are not a factor in the environmental impact analysis presented in the NBAF EIS, cost information and the scope of the cost analysis performed is summarized in Section 2.5 to provide pertinent information to the DHS Under Secretary for Science and Technology so that the Under Secretary may make a more informed decision with respect to the alternatives presented in the NBAF EIS. With regard to PIADC, it has been estimated that refurbishing the existing facilities and obsolete infrastructure to allow PIADC to meet the current mission of NBAF would be 42% more costly than building the NBAF on Plum Island. Table 2.5.1-1 in Section 2.5 summarizes the costs of constructing and operating NBAF at the six candidate sites. The fact remains that the Plum Island facility is limited by its more than 50-year-old infrastructure and by its size. The existing laboratory does not have the capacity to meet current or future research needs set out in Homeland Security Presidential Directive 10 requirements.

Culler, Esq., Jenny

Page 30 of 133

WD0753

20 cont. | 5.1

Furthermore, DHS's conclusion that "no action" in building an NBAF will necessitate the continuing research at non-U.S. facilities ignores DHS's own information that "[t]here are seven new federal facilities recently built, currently under construction, or planned, which have one or more BSL-4 laboratories. There are also BSL-4 laboratories at universities and in the private sector." DEIS, 1-3. While DHS goes on to indicate that none of these BSL-4 laboratories is currently a large animal or livestock facility, there is no further discussion of the potential for expanding these existing facilities to include such a laboratory, or to collaborate with these facilities on the desired research.

8 cont. | 4.0

42 U.S.C. §4332(2)(c) mandates that the agency create a "detailed statement" in order to analyze all of the alternatives available, and the regulations mandate that the agency "shall [r]igorously explore and objectively evaluate all reasonable alternatives..." 40 C.F.R. §1502.14(a). It is clear from the scant attention DHS has given to the "no action" alternative that DHS has illegally decided, prior to conducting the full NEPA analysis, that the NBAF will be constructed. If DHS were serious about considering a "no action" alternative, the study would have included the economic and environment impacts from continued and/or perhaps expanded reliance on the non-U.S. laboratories and the potential for collaborations with the new federal, university, and private BSL-4 laboratories, as well as other BSL-3 and BSL3Ag laboratories, the prevalence of which is not clear even to DHS. ("While the number of BSL facilities is difficult to quantify, many more BSL-3 laboratories exist compared with BSL-4 labs..." DEIS, 1-3.) There also should have been an analysis of what other actions DHS or other federal agencies might take in order to fulfill the purpose and need identified in the Directives other than continued use of non-U.S. BSL-4 facilities, since the choice of "no action" under this plan will not simply make the purpose and need (no matter how vaguely defined) disappear.

It is also appropriate to conduct an analysis of each proposed site and the resulting benefits or detriments to each location if the NBAF is not located there. For example, the no action alternative should have indicated that if the NBAF is not built on the Athens, Georgia site, then in Athens there will be no detrimental effects to land use, visual resources, air quality, water quality, and traffic, and there will be no need for increased capacity in the local wastewater treatment plan for dealing with the NBAF's waste. There should have been a comparison of the likelihood of a release of the foreign animal diseases in Athens from accidents, external or terrorist sources if there is no NBAF located there.

Significantly, in the agency's evaluation of the impacts of the NBAF on Health and Safety (DEIS §3.14), nowhere does the DHS even include the "no action" alternative in the discussion of or charts related to the site-specific risk ranks. See, e.g., DEIS §3.14, and Table 3.14.4-7. In the Executive Summary at ES-9, DHS indicates that "waste generation and management would be similar for all sites", ignoring the no action alternative. DEIS, ES-9. According to CEQ Regulations, the agency "should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options..." 40

Culler, Esq., Jenny

Page 31 of 133

WD0753

3 cont. | 26.0 C.F.R. §1502.14. The “no action” alternative has not been included in the Health and Safety section, leading to the conclusion that Health and Safety will not be affected if the NBAF is not built. This, of course, calls into question the whole reasoning behind DHS’ desire to construct and operate the NBAF.

21 | 26.0 **X. THE DEIS FAILS TO TAKE A HARD LOOK AT THE CUMULATIVE IMPACTS OF THE NBAF’S CONSTRUCTION AND OPERATION.**

Cumulative impacts of a project that must be reviewed in an EIS include those impacts on the environment “which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency...or person undertakes such other actions.” 40 C.F.R. §1508.7. The DEIS entirely fails to adequately consider the cumulative impacts of the project as a whole.

22 | 2.0 **A. THE DEIS FAILS TO ADEQUATELY CONSIDER THE CUMULATIVE IMPACTS ON NATIONAL SECURITY.**

The proliferation of BSL-3 and BSL-4 labs, along with the creation of one large, concentrated location for pathogens that could be used as biological weapons increases the risks to national security from the construction and operation of the NBAF. There is evidence in the record that DHS does not have adequate information on the number or capabilities of the currently operational BSL-3 and BSL-4 laboratories in the United States (DEIS at 1-3). The primary mission of the DHS is to “(a) prevent terrorist attacks within the United States,” and “(b) reduce the vulnerability of the United States to terrorism.” 6 U.S.C.A. §111(b)(1). Therefore, in evaluating any action that it may take, the DHS must first make a determination of its impacts to national security. Would the construction of the NBAF meet the needs of bio-defense research and lead to the closure of other laboratories? Would the creation of the NBAF create a more competitive rather than a more cooperative bio-defense research environment? Rep. Bart Stupak, Chairman of the Oversight & Investigations Subcommittee of the United States House of Representatives gave an opening statement during the first of several hearings related to the problem of the proliferation of biolabs. The DEIS should answer each question set out in Mr. Stupak’s address, to wit:

Has NIH carefully assessed the need for these labs before writing checks to build them? Would we be better off expanding existing facilities rather than building dozens of new ones? When it comes to BSL-4 facilities – which are those labs that deal with the most serious diseases for which there is no cure – should we significantly limit the number of labs so there are fewer chances for an accidental or intentional release of these most dangerous substances? Has the proliferation of these labs reached the point at which there are so many labs doing this research that you actually increase the chances of a catastrophic release of a deadly disease?

Bart Stupak, *Opening Statement of Chairman Bart Stupak, Oversight & Investigations Subcommittee, Germs, Viruses and Secrets: The Silent Proliferation of Bio-Laboratories*

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Comment No: 21 Issue Code: 26.0

DHS notes the commentor’s concerns regarding the analysis of cumulative impacts. As summarized in Section 3.1 of the NBAF EIS, the environmental impacts analysis performed included potential impacts resulting from other separate activities that would not be related to the NBAF that, in combination with potential impacts from the Proposed Action, may cumulatively impact areas of concern. Cumulative impacts are impacts in the environment that result from the incremental impact of the proposed project when added to other past, present, and reasonably foreseeable future actions regardless of the agency (federal or non-federal) or person that undertakes such other actions (40 CFR 1508.7). DHS believes that it has adequately considered and analyzed potential cumulative impacts, along with the direct impacts of construction and operations, in a consistent manner across all the alternatives to allow for a fair comparison among the alternatives.

Comment No: 22 Issue Code: 2.0

DHS notes the commentor’s concerns regarding the analysis of the cumulative impacts of the proposed action on national security. Programmatic national security considerations and the construction of other biosafety laboratories by other agencies at other locations and with differing mission drivers are not within the scope of the NBAF EIS, which presents the need for and evaluates the environmental impacts of the alternatives for constructing and operating the NBAF.

Culler, Esq., Jenny

Page 32 of 133

WD0753

21 cont. | 26.0

in the United States”, October 4, 2007, attached hereto at Tab 14. Further, the DEIS should address Mr. Stupak’s observation that “[h]ere in the U.S., over the past four years the CDC has received more than 100 incident reports from labs handling select agents. However, there are indications that the actual number of incidents may be much higher. It is also alarming to note that more than a third of the incident reports are from 2007, which begs the question of why there has been such a steep increase in BSL incidents?” *Id.*

22 cont. | 2.0

The DEIS should review and consider recent media related to the proliferation of laboratories, and provide the public with an analysis of the potential impacts of the proliferation. (See Jocelyn Kaiser, *Proliferation of Biosafety Labs Poses Its Own Risks, Congress Told*, ScienceNOW Daily News, October 4, 2007, attached hereto at Tab 15; Pandora’s *Pandemic Box*, butnerblotspot, August 16, 2008, available at <http://butnerblogspot.wordpress.com/2008/08/16/pandoras-pandemic-box/>, and attached hereto at Tab 16; Larry Margasak and David Dishneau, *Is Another Bruce Ivins lurking in a biolab?*, Associated Press, attached hereto at Tab 17; Wendy Orent, *Our own worst enemy: The U.S. bioweapons program has grown so large that it has become a threat to Americans*, Los Angeles Times, August 13, 2008, available at <http://www.latimes.com/news/opinion/la-oe-orent113-2008aug13.0,1045104.story>, and attached hereto at Tab 18; and Watchdog director calls to cancel NBAF lab project: Head of Texas group speaks to hundreds about biodefense facility, Athens Banner Herald, January 23, 2008, attached hereto at Tab 19.

18 cont. | 5.0

In the context of this DEIS, DHS is required to determine from a national security standpoint what bio-terror agents could currently be produced or released from the existing laboratories in the United States, and whether the addition of an enormous facility housing foreign animal diseases will be an attractive target for terrorists by virtue of its location on U.S. soil. The cumulative effects of having yet another laboratory of this sort (in conjunction with the considerations of having the laboratory at each proposed location specifically) must be considered, evaluated, and discussed in any legally sufficient EIS.

23 | 8.2

**B. THE DEIS FAILS TO ADEQUATELY CONSIDER THE CUMULATIVE IMPACTS OF THE FACILITY ON THE CHARACTER OF THE NBAF’S SITE.**

When infrastructure is expanded to serve one large facility, it is then also available for use by new construction at a discounted cost; therefore, it is likely for development and sprawl to result from the installation of additional infrastructure in a community that was traditionally rural in nature, as is the proposed Athens NBAF site. “Investments in infrastructure such as roads, sewers, and water supplies can be one of the most important drivers of urbanization, since infrastructure provides the essential framework for development.” Ralph E. Heimlich & William D. Anderson, *Development of the Urban Fringe and Beyond: Impacts on Agriculture and Rural Land*, U.S. Department of Agriculture, at 21, available online at <http://www.ers.usda.gov/publications/aer803/aer803.pdf>. In *TOMAC v. Norton*, 240

Comment No: 23

Issue Code: 8.2

DHS notes the commentor’s concern that future urban sprawl is not included in the cumulative impacts discussion relative to infrastructure improvements at the South Milledge Avenue site. Section 3.16 (Unavoidable Adverse Impacts), Section 3.17 (Relationship Between Short-Term Uses of the Environment and Long-Term Productivity), and Section 3.18 (Summary of Significant Effects), which provide information on the short and long term cumulative impacts associated with the NBAF construction and operation, were prepared in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and CEQ’s regulations for implementing NEPA (40 CFR 1500 et seq.). A summary of the environmental impacts and costs specific to each site alternative is provided in Section 2.5 of the NBAF EIS.

Culler, Esq., Jenny

Page 33 of 133

WD0753

F.Supp.2d 45 (D.C. Dist. 2003), the court found that it was a failure of the EIS not to analyze growth patterns and impacts on the community resulting from the construction of a casino. The same concerns are applicable with the construction of the NBAF, and in fact, are far and away the main reason that the proponents of the lab want the NBAF in their communities: to spur economic growth and to lure more bio tech industry to the region. Yet, the DEIS leaves it to the local universities to be the cheerleaders for industry, while it omits the issue altogether, conveniently neglecting to give adequate consideration to what growth actually could occur, and how that growth would *adversely* impact the area. These concerns as applicable to the Athens and Oconee areas are discussed in further detail in the Infrastructure comments within.

23 cont. | 8.2

**C. THE DEIS FAILS TO ADEQUATELY CONSIDER THE CUMULATIVE IMPACTS OF THE FACILITY ON THE LOCAL ECONOMY.**

24 | 15.2

The cumulative effects of the changes in land use in Athens-Clarke County (ACC) resulting from the NBAF were not considered in the DEIS. The NBAF will likely decrease tourism revenue in ACC because less tourism related industries and attractions will choose to be near the NBAF and its potential contamination and disease outbreaks. The recreational facilities currently near the South Milledge Avenue site, which include the Botanical Gardens, a golf course, and a zoo, may attract fewer tourists and their tourism dollars to the area due to the risks associated with NBAF. The property around the NBAF may no longer be suitable for residential purposes. The surrounding property values and resulting property taxes will decrease. The potential tax base from industries dependent on a minimally contaminated or low risk natural environment, such as agriculture, will also likely be adversely affected as those businesses choose to do business far from NBAF.

The DEIS does not assess any of the cumulative economic effects that will result from the infrastructure upgrades attendant to the NBAF. The infrastructure additions will require unspecified contributions from ACC, which will be detrimental to the County's budget and other competing budgetary demands, including education. For example, the host consortium may be required to provide a portion of the Central Utility Plant ("CUP") that is necessary for the NBAF to be feasible. Feasibility Study, §5.2.7, p. 1. The DEIS does not even discuss the CUP in the infrastructure section applicable to the South Milledge Avenue site, much less discuss the economic impacts of contributing an unspecified portion of the utility during construction and/or operations. The actual or approximate costs to ACC of installing, operating, and maintaining additional infrastructure such as water and sewer lines are not discussed in the DEIS. In addition, County liability for the infrastructure upgrades and uses of the infrastructure by NBAF are not considered. For example, if NBAF emits wastewater that is discharged into the Middle Oconee River in violation of ACC's wastewater discharge permit, the County could be liable for fines and even expose itself to liability for personal or property injuries sustained as a result of the discharges.

32

Comment No: 24

Issue Code: 15.2

DHS notes the commentor's statement. The economic effects of the NBAF at the South Milledge Avenue Site are included in Section 3.10.3. Labor income during construction is projected at approximately \$150 million while operation of the NBAF would generate approximately \$28 million in wages annually. This section addresses indirect and cumulative impacts by assessing the spending by the NBAF (indirect) and the spending of employees (induced). However, the study did not quantify the potential economic growth due to new businesses locating in the region because of the presence of the facility. In addition, Section 3.10.3 of the NBAF EIS includes an assessment of the impact on community services due to the population increase associated with NBAF. The additional population increase associated with the NBAF (671), relative to the estimated growth of the existing population in the study area between 2007 and 2012 (13,663), would result in negligible increase in the demand on the existing community facilities and services. DHS is not aware of any historical evidence that a biological research facility adversely affects the local economy. On the contrary, operations and maintenance of the facility and household spending by its employees generates a positive economic impact. In addition, research facilities typically stimulate the formation of other high tech establishments in the surrounding region and can serve as engines of economic growth.

Culler, Esq., Jenny

Page 34 of 133

WD0753

XI. **THE DEIS DOES NOT TAKE A HARD LOOK AT THE IMPACTS OF THE NBAF'S CONSTRUCTION AND OPERATION AT THE SOUTH MILLEDGE AVENUE, ATHENS, GEORGIA, SITE.**

25|26.0

26|21.0

In general, the DEIS only reviewed the consequences on humans and the environment in terms of "normal operation" of the facility. DHS intentionally and erroneously chose to break apart the consideration of the risks and dangers of the facility in the event of an accident or attack from the considerations of risk if no accidents or attacks occur. The resulting analysis from the agency boils down to "there are no risks if there are no problems." Yet, this is always true. This approach does not give the agency or the public the benefit of really looking at the potential effects on each attribute of the environment from the facility when it functions properly versus when it does not function properly, in a comparative format, as is required by the CEQ regulations. 40 C.F.R. §1502.14. The risks from release of the pathogens should be incorporated into each issue area analysis so the reader can readily see the potential damages to air quality, challenges for waste management, impacts to local and regional livestock, wild animals, and domesticated pets in terms of suffering and economic loss in the event of an outbreak, and other similar concerns as he or she is learning about the current and potential future conditions at each location.

5 cont. | 2.0

In no case did the DEIS consider and evaluate the likelihood of future expansion of the NBAF at the sites. The direct, indirect, and cumulative impacts of such a possibility must be considered and evaluated in the DEIS, especially since DHS is already contemplating such a possibility. The Feasibility Study generally evaluates "[p]rovision for future additions." Feasibility Study, §3.1.2, p.1. Future expansion is also designated in the site plan drawings at Appendix E, Page 34. However, future growth of the facility is not disclosed or evaluated in any of the Affected Environment sections. If future expansion is planned for the NBAF, this sort of evaluation is critical for a proper and complete cumulative impacts analysis and should have been addressed in the DEIS. For example, in the event that the NBAF is located in Athens, Georgia, and is expanded, the analyses below assume, *inter alia*, that the facility will impact a specified number of linear feet of streams, will not be located in the floodplain, will destroy grasslands and not a substantial swath of hardwood forest, and the like. However, those would be flawed assumptions given that the facility will expand to some extent in the future. If there is to be future expansion, the disclosures and considerations in this DEIS are in need of a complete overhaul.

The "Log of Amendments to the NBAF Feasibility Study dated August 24, 2007", attached as a stand-alone document at the end of the Feasibility Study, indicates that DHS did initially have the architects and civil engineers review materials related to the future expansion of the NBAF. However, the amendments read "[f]uture expansion of the NBAF program has been eliminated as one of the criteria for evaluating each of the short listed sites therefore has been deleted from the current site diagrams." This means that the site diagrams used to have more information for the public review, but DHS has taken that out of the picture. This raises a number of questions about the real transparency of the DEIS and the willingness of the DHS to truly consider all of the relevant impacts of

33

Comment No: 25

Issue Code: 26.0

DHS notes the commentor's views and disagrees and believes that it did take a hard look at the potential impacts on human health and the environment from construction, normal operations and from potential accidents, as presented in Section 3.14 and Appendix E of the NBAF EIS, which considers potential exposure pathways; potential impacts on livestock, wildlife, humans, and socioeconomics; and which is otherwise appropriate for each resource area analyzed. More specifically, Section 3.14 and Appendix E investigate the chances of a variety of accidents that could occur with the proposed NBAF and consequences of potential accidents. The risk of an accidental release of a pathogen from the NBAF is extremely low. The potential impacts of an accidental release on wildlife are addressed in Section 3.8.9. 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.

Comment No: 26

Issue Code: 21.0

DHS disagrees with the commentor's assertion and notes that the NBAF EIS considers impacts on human health and the environment for construction, operation and potential accidents from NBAF. See, also, the response to Comment No. 25.

Culler, Esq., Jenny

Page 35 of 133

WD0753

5 cont. | 2.0

the facility. *Because the expansion of the NBAF is a reasonably foreseeable event, the DEIS is remiss in failing to evaluate and consider it*, and has violated the public trust by initially evaluating the expansion and then removing those considerations from the DEIS. The DEIS is consequently insufficient under the law.

#### A. LAND USE AND VISUAL RESOURCES

##### 1. The DEIS Inadequately Describes the Affected Environment.

9 cont. | 4.2

While the description of the affected environment should be concise, it must "succinctly describe the environment of the areas(s) to be affected." 40 C.F.R. § 1502.15. 40 C.F.R. § 1502.15 directs agencies to concentrate effort and attention on important issues, but the description included in the DEIS of the proposed South Milledge Avenue site is overly narrow and omits information that should be central to the consideration of alternatives. The unique and beloved quality of the land proposed for the NBAF is discussed in an emailed comment to DHS from Kathy Prescott of FAQ, Inc., which is incorporated by reference herein and is attached hereto at Tab 20. This comment discusses, among other things, the "unique beauty" of the site, and the inspiration it has provided for local artists. The DEIS, however, ignores how this site is a special place for the Athens community, and disregards the importance of the site as a landmark and historic vista for residents and visitors alike.

27 | 7.2

The DEIS purportedly included consultation of sources such as the National Land Cover Database, local land use maps, technical reports, aerial photography, local zoning ordinances and regulations; site visitation; identification of potential changes in land; determinations of compatibility among land uses reasonably anticipated to occur as a result of the proposed action and adjacent land uses; and, discussion of compatibility with management plans, policies and practices. However, in reality, the DEIS gave the discussions of land use especially short shrift. Thus, there is little evidence to support the contention that such sources were in fact consulted.

28 | 6.2

With regard to land use, the DEIS description of the affected environment focuses solely on the 67 acre of the proposed site itself. The only reference to the site surroundings is the statement that "there are no adjacent neighborhoods," which is dangerously misleading. There are residences along a private drive that adjoin the subject property to the north. Geo-Hydro Engineers, Inc. *Report of Phase I Environmental Site Assessment South Milledge Avenue and East Whitehall Road Site, Athens-Clarke County, Georgia*. Prepared for the University of Georgia (January 31, 2007) ("Geo-Hydro Engineers 2007" or "Phase I ESA"). Also, there are many, many other neighborhoods, apartment and condominium complexes, UGA family housing, schools, houses of worship, and other population centers within the 6.2 mile radius identified in the DEIS as the "initial infection zone". The University golf course is within 1.5 miles of the site. UGA softball and soccer fields are very close to the facility. Bear Hollow Wildlife Trail and Zoo, Memorial Park and Nature Trail are within 2 miles of the site. The State Botanical Gardens are adjacent to the site. See Map of Initial Infection Zone, at Tab 21. The DEIS also fails to mention that the property currently serves as a

34

Comment No: 27

Issue Code: 7.2

DHS notes the commentor's concern regarding the visual effects of the NBAF at the South Milledge Avenue Site, which are described in Section 3.2.3 of the NBAF EIS. DHS recognizes that the NBAF would be a distinctive visible feature and would alter the viewshed of the area.

Comment No: 28

Issue Code: 6.2

DHS notes the commentor's statements regarding the land use analysis for the South Milledge Avenue Site, the references consulted, and conclusions drawn from the impacts analysis performed. DHS also notes the commentor's observations relative to other existing and new land uses in proximity to the site and other community assets in the area. In particular, DHS acknowledges the proximity of the South Milledge Avenue Site to the State Botanical Garden. DHS contends that it appropriately confines its analysis of direct construction effects to the 67-acre site. As described in Section 3.8.3.1.1 of the NBAF EIS, 80% of the site consists of pasture, and the adjacent lands consist of forested lands and small, perennial headwater streams. Approximately 30 acres of open pasture, 0.2 acres of forested habitat, and less than 0.1 acres of wetlands would be affected by the NBAF. However, construction and normal operations of the NBAF would have no direct impact on the State Botanical Garden as indicated in Sections 3.8.3.2 and 3.8.3.3. Only minimal indirect effects would occur from operations due to increases in light and noise.

The South Milledge Avenue Site is currently zoned as "Governmental", and construction and operation of the NBAF is consistent with this designation. However, the Clarke County Comprehensive Plan designates the South Milledge Avenue Site as "rural", so an amendment to the comprehensive plan may be required. This information has been added to the NBAF EIS in Chapter 3, Section 3.2.3. DHS and USDA would ensure that the NBAF operation at the South Milledge Avenue Site will comply with all applicable local, state, and Federal regulations and policies.

Culler, Esq., Jenny

Page 36 of 133

WD0753

28 cont. | 6.2

river buffer, important for keeping sediment, pesticides, fertilizers and other pollutants out of the Middle Oconee River. The DEIS discussion of the affected environment lists the land cover types of the site, the site's zoning specification, and current ownership of the site but does not include descriptions of the surrounding land uses.

The DEIS fails to describe not only what the surrounding land uses may be, but how the introduction of the proposed NBAF would or would not be compatible with those the existing land uses. Although both the methodology described and the description of the affected environment superficially reference the Athens-Clarke County Comprehensive Plan and local land use maps, the DEIS does not incorporate the contents of these resources in any meaningful way.

The DEIS notes that the site is zoned for "government use." Athens Clarke County Comprehensive Plan Future Development Map and the Official Future Land Use Map of Athens Clarke County ("Comprehensive Plan"). See Tab 22. However, the Government use zone is broadly defined to include areas "in use or proposed for use by federal, state or local government agencies, including the University of Georgia and Athens Clarke County Board of Education." *Id.* This designation incorporates a large variety of uses that may or may not even be compatible with each other, and the definition of government use is not useful for an analysis in terms of consistent aesthetics, density, or even expected activities. ***The DEIS fails to mention the Athens Clarke County Comprehensive Land Use Plan also designates the site as rural and expects for it to remain rural in the future.*** Athens Clarke County Community Agenda at 26.

The Comprehensive Land Use Plan's Growth Concept/ Character Areas Map also includes the site in the rural designation. Comprehensive Plan, Growth Concept/Character Areas Map. See Tab 23. The guiding principle for land use decision making in ACC is "[t]o enact land use policies that avoid urban sprawl." Athens-Clarke County Community Agenda ("Community Agenda"), p.13. One of the guiding objectives is to "...preserve the rural character and the opportunity for agricultural and forestry activities to remain a vital part of our community." *Id.*

The Rural Areas of Clarke County extend along the county boundaries. This is an area of largely low intensity, sparsely developed agricultural land and open areas. This land is not needed for the level of growth expected to occur by the year 2020. The Rural Area is appropriate for low density rural housing and agriculture.

This is the green buffer that surrounds the current and future urban areas of Greater Athens and the surrounding areas. It offers a relief from a continuous urban landscape and should be protected through air, ground, and water quality standards.

Culler, Esq., Jenny

Page 37 of 133

WD0753

The corridors that traverse the Rural Areas are an exception to the relatively low intensity development and agricultural development that characterizes them. These corridors must be monitored to ensure that the rural nature is maintained.

Community Agenda, p. 27.

28 cont. | 6.2

The DEIS references the Comprehensive Plan, but only to say that “the main objective for developed areas is to focus on the stabilization and revitalization of residential commercial and industrial areas. Additional objectives of the plan include development of the under-utilized West End in a responsible manner within city, state, and federal guidelines.” DEIS 3-8. Not only is this in general a gross misrepresentation of the philosophy and goals evident in the comprehensive plan, but it is also specifically misleading, because it pulls out discussion of the West End and its development as if the West End, a neighborhood located in downtown Athens, was in any way pertinent to the development of the area in question.

Additionally, although the site is less than half a mile from the Oconee County border, the DEIS fails to disclose or consider land use plans and other corresponding sources for this neighboring county. Land along the Oconee/Athens Clarke County border is currently rural and agricultural land slated for continuing rural residential use, and the proposed NBAF is inconsistent with this plan. See Oconee County Generalized Existing Land Use 2007 Map & Oconee County Future Development Map 2030. See Tab 24. The metropolitan Atlanta area is also only about 50 miles from the proposed Athens NBAF site, as well. Due to the rapid growth of Atlanta, Athens is essentially becoming a bedroom community for Atlanta. With the planned light rail from Athens to Atlanta, this effect will only intensify in years to come. The DEIS fails to consider land use plans for the entire region to determine whether the proposed site may be one of the only areas not slated for rapid growth and development. A review of the prevalence or dearth of other areas similar in character to the Botanical Gardens/Whitehall Forest South Milledge Avenue corridor was not completed, so there is no way to tell how few of these areas exist, and how many are threatened with development.

2. The DEIS Is Inconsistent in its Characterization of Visual Impacts, and Fails to Properly Consider the Receptors of Visual Impacts.

29 | 7.2

At DEIS 3-8, DHS describes the South Milledge Avenue Site as having “low visual sensitivity” because it is in a rural area. However, this is inconsistent with the earlier acknowledgment that the facility would be “a noticeable landscape feature, particularly to visitors and staff at the nearby botanical garden” (DEIS, 2-29), and that South Milledge Avenue, from which the site would be visible “already experiences impaired traffic flow” (DEIS, 2-43). It also states that “there are no sensitive residential receptors near the proposed site.” It ignores the existence of the adjacent residences to the north, nearby neighborhood, apartments and condominiums, and UGA family housing residents, as well as those who use the soccer fields, golf course, hiking trails, houses of worship and those commuting from Watkinsville to UGA on a daily basis. It ignores the

Comment No: 29

Issue Code: 7.2

DHS notes the commentor’s concern regarding the visual effects of the NBAF at the South Milledge Avenue Site, which are described in Section 3.2.3 of the NBAF EIS. DHS recognizes that the NBAF would be a distinctive visible feature and would alter the viewshed of the area. The evaluation conducted in the NBAF EIS addressed the cumulative effects of reasonably foreseen future actions on all resource categories including visual resources. The visual receptors identified in Section 3.2.3 included those that were existing at the time of the analysis or were identified with future foreseeable actions. DHS notes the commentor’s comparisons to other visually prominent facilities.

Culler, Esq., Jenny

Page 38 of 133

WD0753

new UGA intramural fields that are currently being constructed across the street and less than 200 yards away from the proposed NBAF's South Milledge Avenue entrance road.

28 cont.| 6.2 The DEIS apparently did not review or consider the 2006 Athens-Clarke County and The City of Winterville Community Assessment, available online at [http://www.acplanning.com/comp\\_plan.php](http://www.acplanning.com/comp_plan.php). Even just a quick glance at Maps B.1.1 through B.3 reveals that Athens-Clarke County has precious few natural areas for leisure and wildlife, and the location of NBAF at the South Milledge Avenue site would be in direct conflict with the current and planned uses of the largest natural area in the County.

29 cont.| 7.2 The facility would also stick out in the landscape like a sore thumb, and considering that there will be fences, guards, and incineration stacks, the comparison of the visual effect to that of a hospital or school is grossly misconstrued. The more apt comparisons would be to a prison, a slaughterhouse, a power plant, or a paper mill.

3. The DEIS Fails to Consider Whether an Athens NBAF Would Conflict with the Farmland Protection Policy Act.

30|3.0 The DEIS refers to the Farmland Protection Policy Act ("FPPA") in its discussion of Geology and Soils at 3-102, but fails to address it in reference to land use. "Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a Federal agency or with assistance from a Federal agency." Farmland Protection Policy Act, US Department of Agriculture Natural Resources Conservation Service, available at <http://www.nrcs.usda.gov/programs/fppa/> ("FPPA"); see also 7 USC 4201(c). The US Department of Agriculture Natural Resources Conservation Service explains the background and purpose of FPPA:

Background

The National Agricultural Land Study of 1980-81 found that millions of acres of farmland were being converted in the United States each year. The 1981 Congressional report, Compact Cities: Energy-Saving Strategies for the Eighties, identified the need for Congress to implement programs and policies to protect farmland and combat urban sprawl and the waste of energy and resources that accompanies sprawling development. The Compact Cities report indicated that much of the sprawl was the result of programs funded by the Federal Government. With this in mind, Congress passed the Agriculture and Food Act of 1981 (Public Law 97-98) containing the Farmland Protection Policy Act (FPPA)—Subtitle I of Title XV, Section 1539-1549. The final rules and regulations were published in the Federal Register on June 17, 1994.

Purpose

The FPPA is intended to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that—to the extent possible—Federal programs are administered to be compatible with state, local units of government, and

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Comment No: 30

Issue Code: 3.0

DHS notes the commentor's concern regarding compliance with the Farmland Protection Policy Act (FPPA). As discussed in Section 3.6.3.1 of the NBAF EIS, DHS has considered whether construction and operation of the NBAF would conflict with the FPPA and has initiated consultation with the USDA Natural Resources Conservation Service. The results of this consultation are documented in Appendix G of the NBAF Final EIS.

Culler, Esq., Jenny

Page 39 of 133

WD0753

private programs and policies to protect farmland. Federal agencies are required to develop and review their policies and procedures to implement the FPPA every two years.

30 cont.|3.0 FPPA; *see also* 7 U.S.C. §4201. Farmland subject to the FPPA includes prime farmland, unique farmland and land of statewide or local importance, however, it does not have to be currently used as cropland, it can also be forested, pasture or other undeveloped land. *Id.* The DEIS fails to address whether there are legal roadblocks set up by the FPPA that would prohibit an Athens NBAF site, or whether compliance with the FPPA would increase costs associated with development of or mitigations for the site.

4. The DEIS Fails to Properly Identify and Consider Indirect and Cumulative Impacts of the NBAF on Land Use and Visual Resources.

31|6.2 There is no analysis in the record of the likelihood that the location of the NBAF on South Milledge Avenue will spur other bio-research development in the corridor. Although this contention was a big selling point for the University of Georgia, it is largely ignored in the DEIS. The DEIS should include a review of the literature to determine the likely development scenarios in the area to predict the indirect effects on land use, impervious surface, traffic, and other factors. Further, with a changed visual landscape adjacent to the Botanical Gardens that may spur increased development and density of structures along the South Milledge Avenue corridor, the environmental tourism to the Botanical Gardens will likely be impacted. Currently, the South Milledge Avenue corridor is a popular pathway for cyclists and runners, as well. This can be expected to change with the installation of the NBAF, but this was not disclosed or considered in the DEIS.

29 cont.| 7.2 In addition, the increases in visual sensitivity over time were not discussed, but should have been, considering the information supplied on the expected population growth in the Athens and Oconee County areas (DEIS, 3-241) and the real traffic data that was not supplied for travel on South Milledge Avenue, especially on football game days when the population of Athens doubles from approximately 100,000 to 200,000 people. In failing to account for impacts resulting from population growth, the DEIS provides only a snapshot of the impacts to the South Milledge Avenue site, and does not go far enough to evaluate the changing and inevitable conditions.

While DHS reviewed the Athens-Clarke County land use controls and zoning ordinances, it did not review the same information for Oconee County, which is just across the river from the proposed site location. Oconee County residents will obviously also be affected by the visual effects of the facility, and will be impacted by the change of the character of the land. See Discussion above.

Comment No: 31 Issue Code: 6.2

DHS notes the commentor's concern regarding secondary bio-research development and potential impacts on tourism. The potential effects of the population growth associated with the NBAF on the existing recreational facilities was assessed in Section 3.10.3 of the NBAF EIS. The recreational resources within the South Milledge Avenue Study Area would not experience a significant increase in utilization rates as a result of the population increase associated with the NBAF. DHS is not aware of any studies that attribute the siting of a comparable new bioresearch in a community to any decline in tourism or utilization of recreational areas. However, the analysis of such unforeseeable secondary impacts is not within the scope of the NBAF EIS. Also, see response to Comment No. 24.

Culler, Esq., Jenny

Page 40 of 133

WD0753

**B. INFRASTRUCTURE**1. The DEIS Inadequately Describes the Affected Environment.

32| 8.2 The DEIS does not adequately describe the severity of the drought that is currently affecting Athens-Clarke County. The DEIS only mentions the drought in relation to the responsive outdoor water use bans that Athens-Clarke County has implemented. DEIS, 3-33. The DEIS fails to discuss the impacts that the drought can have on infrastructure, most notably the ability of the infrastructure to satisfy NBAF's needs if the drought continues or worsens. For example, as a result of the drought, the County may not be able to meet NBAF's potable water needs as easily as the DEIS contemplates. The DEIS states that raw water comes from three sources, Bear Creek Reservoir, the North Oconee River, and the Middle Oconee River, *id.*, but does not address raw water sources in the event of a drought, or the local, state, or federal limits on drawdowns and what impacts an interrupted water source could have on the safety of NBAF operations.

The DEIS also fails to adequately discuss the current state of the sanitary sewer system. DEIS, 3-34. Most notably, Athens-Clark County plans to sell waste sludge that would be produced at the Middle Oconee Wastewater Treatment Facility to be used as fertilizer for land that produces food for humans and animals. However, it is not clear whether municipal sewer sludge – even without the addition of unknowns from an NBAF – is safe to use on fields. Greg Bluestein, *Georgia: Scientist Fights EPA Over Sludge, Struggle to Show Dangers Lasts More than a Decade*, Sunday, August 10, 2008, attached hereto at Tab 25. Because the NBAF would discharge to the Middle Oconee WWTP, all of this information is necessary to fully and accurately assess the potential ramifications of discharge of pollutants or disease carrying agents into the wastewater stream. Also, the DEIS fails to mention that the Middle Oconee WWTP discharges treated liquid wastewater into the Middle Oconee River, which is an impacted waterway on 303(d) list. See Pertinent Portions of Georgia's 2008 Integrated 305(b)/303(d) Report (also referred to as Water Quality in Georgia 2006-2007), attached hereto at Tab 26 and available online at [http://www.gaepd.org/Files\\_PDF/305b/Y2008\\_303d/Y2008\\_Rivers\\_Streams.pdf](http://www.gaepd.org/Files_PDF/305b/Y2008_303d/Y2008_Rivers_Streams.pdf). The failure of the DEIS to disclose and adequately evaluate the reasonably foreseeable impacts of additional wastewater loads into the Middle Oconee River sets up another barrier against a true and comprehensive understanding of the NBAF's potential impacts.

33| 8.2 2. The DEIS Fails to Adequately Consider Whether Current and Planned Local Infrastructure Can Meet NBAF's Needs.

The prescribed methodology for assessing infrastructure impacts requires that adequate information be provided regarding the infrastructure currently supporting the South Milledge Avenue Site and any proposed infrastructure improvements in order to compare those capabilities to NBAF's infrastructure needs. (DEIS, 3-30). However, DEIS fails to provide data necessary for such assessment in numerous instances.

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Comment No: 32 Issue Code: 8.2

DHS notes the commentor's opinion that baseline infrastructure conditions were not adequately described in the NBAF EIS for the South Milledge Avenue Site. Section 3.3.3.1 (Affected Environment), which provides a baseline description of each utility resource category including potable water, electricity, natural gas, sanitary sewage and steam and chilled water, was prepared in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and CEQ's regulations for implementing NEPA (40 CFR 1500 et seq.). The description of baseline conditions relative to each utility resource category is based on information and data provided by the utility provider as referenced within the NBAF EIS.

Comment No: 33 Issue Code: 8.2

DHS notes the commentor's concern regarding the adequacy of the utility infrastructure to support the NBAF operation at the South Milledge Avenue Site Alternative. Section 3.3.3 of the NBAF EIS includes an assessment of the current infrastructure, a discussion of the potential effects from construction and operation of the NBAF, and the identification of any infrastructure improvements necessary to meet design criteria and ensure safe operation. Should a site be selected for NBAF, any needed infrastructure improvements to ensure service reliability would be identified in accordance with the final facility design.

DHS notes the commentor's concern that quantitative characterization data on the wastewater to be generated at the NBAF was not provided in the NBAF EIS. Section 3.13 of the NBAF EIS describes the processes that would be used to control and dispose of liquid and solid waste from the NBAF, with Sections 3.3 and 3.7 of the NBAF EIS describing the standard methods used to prevent and mitigate potential effects of spills and runoff. Since the method of carcass disposal at NBAF has not yet been determined, the effects of alkaline hydrolysis, incineration, and rendering were included in the analysis presented in Section 3.13 (Waste Management) of the NBAF EIS. Incineration has the potential to affect air quality, so the evaluation in Section 3.4 (Air Quality) of the NBAF EIS assumed only incineration would be used to assess the greatest adverse effect. Alkaline hydrolysis and rendering would have the greatest effect on sanitary sewage capacity, Section 3.3, so the qualitative sanitary sewage effects were determined using the alkaline hydrolysis method.

DSH notes the commentor's concern regarding the low-pressure distribution of natural gas to the NBAF operation at the South Milledge Avenue site from the proposed high-pressure natural gas supply pipeline proposed for construction. Natural gas from high-pressure supply lines is distributed to end users through utility-provided, pressure reducing stations to meet federal, state and local codes. Section 3.3.3 of the NBAF EIS includes an assessment of the current utility infrastructure at the South Milledge Avenue Site, the potential impact and effects from construction and operation of the NBAF, and the planned utility 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,

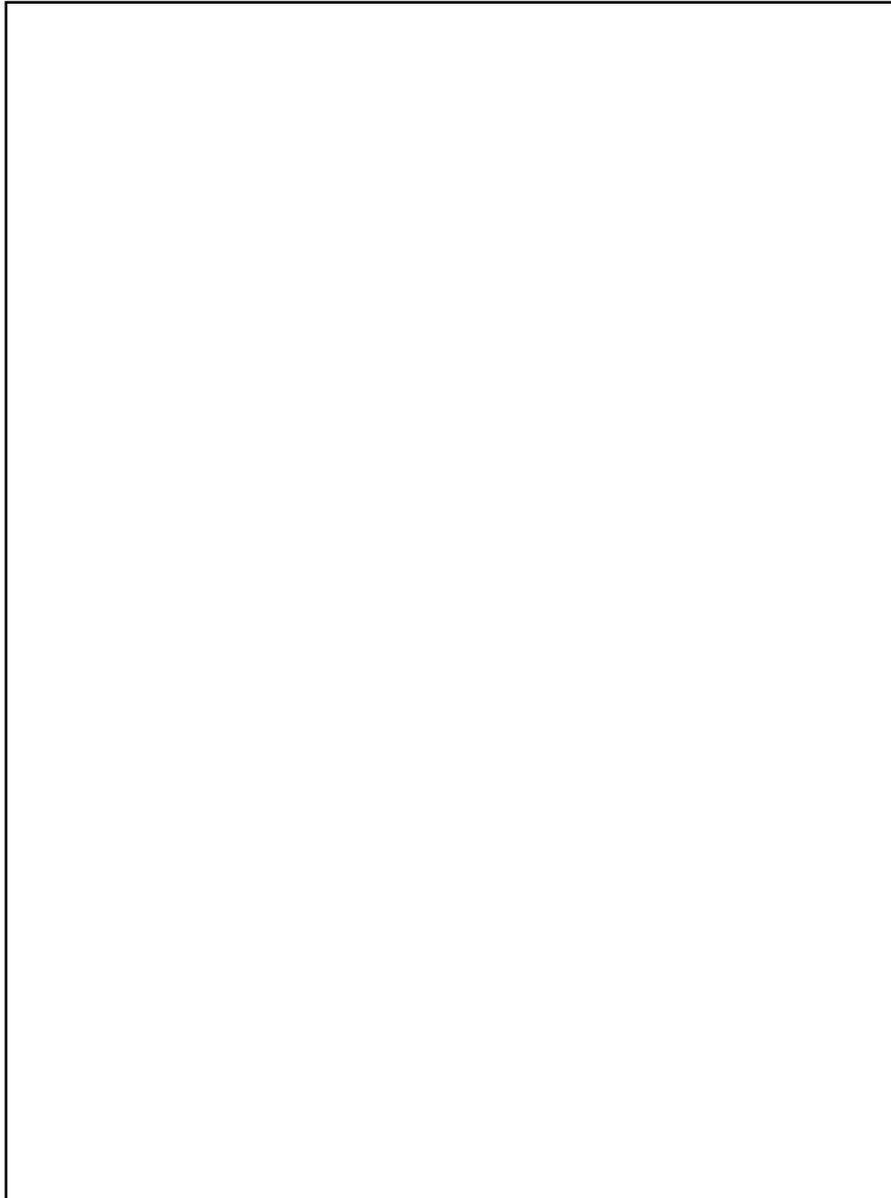


Table 2.5.1-1 of the NBAF EIS to provide pertinent information to the DHS Under Secretary for Science and Technology so that he may make a more informed decision with respect to the alternatives presented in the NBAF EIS. Infrastructure costs were analyzed and included in the final costs provided in 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 preparing the Record of Decision.

DHS notes the commenter's concern regarding the potable water infrastructure improvements to meet NBAF design criteria being authored but not recommended by the local governing authority. Should the alternate potable water infrastructure improvement plan be implemented by Athens-Clarke County as discussed in Section 3.3.3.3.1 of the NBAF EIS, the alternate improvements would comply with the design criteria for NBAF operations.

Culler, Esq., Jenny

Page 41 of 133

WD0753

33 cont. | 8.2

Although infrastructure capabilities and needs should be a relatively easily quantifiable comparison, the DEIS repeatedly uses general terms to describe need and assure that infrastructure will be improved accordingly. For example, instead of providing a numbers to numbers comparison of the current versus the expected effluent discharges of wastewater and their relationship to specific pretreatment standards for receipt of those discharges by the local wastewater treatment plant, the DEIS merely states that NBAF would be designed and operated *as necessary* to prevent negative impact to the Middle Oconee Waste Water Treatment Plant, DEIS, 3-36. This conclusion that there will be no negative impacts is also limited to the impacts of potentially harmful wastewater constituents; however, the potentially harmful constituents are not identified. In the context of impacts from gas lines, the DEIS almost offhandedly states that a pressure-reducing station for low-pressure gas distribution to the facility will be required when the existing inadequate gas-line is upgraded. DEIS, 3-35. However, the location, the cost, the impacts or even the need for this station are not discussed in any form or fashion.

In addition, the DEIS acknowledges that neither the current nor the proposed infrastructure would satisfy the potable water feed redundancy specifications or the consumption/peak flow requirements for the proposed NBAF. DEIS, 3-35. Although an alternative infrastructure plan authored by Athens-Clarke County would comply with those requirements, ACC does not recommend it. DEIS, 3-35. The DEIS fails to provide specifics regarding why ACC disapproves of the only proposed plan that would meet the NBAF potable water needs, which course of action will actually be implemented for the NBAF, what DHS will be required to do to comply with any applicable ACC mandates in this regard, and whether the resulting water needs of the NBAF could even be met. Without knowing these facts, valid investigation into the feasibility of an Athens NBAF is completely hampered.

3. The DEIS Fails to Properly Identify and Consider the NBAF's Impacts on Local Infrastructure and Resources.

The DEIS Fails to properly identify and evaluate site-specific impacts resulting from construction, installation, and operations of the facility.

a. *Potable Water Supply*

34 | 8.2

The construction of the NBAF will have direct impacts on the potable water supply infrastructure that were not adequately considered in the DEIS or not properly quantified. Although DHS asserts that demand on water supply during the construction of the NBAF would be negligible, it does not provide actual data. (DEIS 3-33). The specified needs for a potable water supply during construction are for dust suppression and wash down of equipment. However, the number of acres of dust to be suppressed, or the amount of equipment, is not specified. This amount of water could be significantly more than negligible if enough of the 67 acre site needs dust suppression. Without more specific estimates of the amount of water required during construction, assessment of indirect and cumulative impacts is made even more difficult. This failure to supply

Comment No: 34 Issue Code: 8.2

DHS notes the commentor's concern that the construction and operating consequences associated with potable water usage by the NBAF operation at the South Milledge Avenue Site, are not inclusive of all possible impacts. DHS also notes the commentor's drought concerns and acknowledges regional drought conditions. Section 3.3.3 of the NBAF EIS includes an assessment of the current potable water infrastructure, a discussion of the potential effects on the potable water resource from the construction and operation of the NBAF, and the identification of any potable water resource infrastructure improvements necessary to meet design criteria and insure safe operation. Should a site be selected for NBAF, any needed potable water resource infrastructure improvements to ensure service reliability would be identified in accordance with the final facility design.

DHS notes the commentor's concerns regarding soil erosion and sedimentation within the watershed and impacts on any receiving waters. A description of the potential effects to water resources is included in Section 3.7.3. The NBAF will be constructed and operated in accordance with the applicable protocols and regulations pertaining to stormwater management, erosion control, spill prevention, and waste management. Grassy swales, retention ponds, and pervious pavement are examples of available stormwater management options. No direct effects would occur, and erosion control and stormwater control measures would reduce the potential for indirect impacts to occur.

Culler, Esq., Jenny

Page 42 of 133

WD0753

34 cont. | 8.2

information relevant to foreseeable adverse impacts violates the law. 40 C.F.R. §1502.22. The DEIS should have specified the relevance of the incomplete information to evaluation of reasonably foreseeable significant adverse impacts on the human environment, and should have provided a summary of existing credible scientific evidence relevant to evaluating the impacts based on theoretical approaches or generally accepted research methods. *Id.* Obviously, the DEIS label of “negligible” to describe unknown construction impacts to water resources does not meet these standards. Contrary to the assertion in the DEIS, no additional draw on the water supply could be deemed “negligible” if proper consideration is given to the ongoing drought.

Increased erosion and sedimentation into waterbodies that serve as potable water supply sources increases the local water plant’s costs associated with cleaning the water to make it drinkable. Therefore, the lack of information in the DEIS relative to the erosion and sedimentation risks from the actual land disturbance required to construct water supply lines and other infrastructure for the NBAF is yet another deficiency of the DEIS. This failure to supply information relevant to foreseeable adverse impacts to ACC and the water users downstream on the Middle Oconee River violates requirements found in 40 C.F.R. § 1502.22. The DEIS should have specified the relevance of the incomplete information to evaluating reasonably foreseeable significant adverse impacts on the human environment, a summary of existing credible scientific evidence that is relevant to evaluating the impacts, and evaluation of the impacts based on theoretical approaches or generally accepted research methods. *Id.* Obviously, a complete failure to mention these erosion and sedimentation issues does not meet these standards. It is clear that the potential effects of erosion and sedimentation into the Middle Oconee or other streams were not considered in terms of community cost to be able to drink the water, whether that cost is borne by Athens-Clarke County or its downstream water users.

The operation of the NBAF will create a strain on the potable water infrastructure of the local environment and community. With ACC under drought conditions, its use of water will tax the water supply from the North and Middle Oconee Rivers. This can affect the water supply in Bear Creek Reservoir, which DHS fails to address. The ACC Drought Management Plan was drafted in 2000 and updated in 2004 without planning for NBAF’s huge draw on water. That Plan was drafted based on community water supply needs and historical rainfall data. The DHS does not discuss how that Plan will need to be modified to reflect NBAF’s reliance on the potable water supply. ACC Manager Alan Reddish, Local Government Meeting Drought’s Challenges, October 17, 2007, available online at <http://www.athensclarkecounty.com/publicutilities/planning.htm>, and attached hereto at Tab 27. When discussing the difficult decisions necessary to protect county in case of drought conditions, Manager Reddish states that the Mayor and Commission “may be called upon to make even more difficult decisions if the drought continues.” It seems contrary to common sense to then invite NBAF to share a dwindling water supply. *See Id.*

In addition, the water needs of the NBAF cannot be met by the current or proposed infrastructure. (DEIS, 3-35). Although an alternative plan can meet the redundancy specifications and peak flow requirements, ACC does not support that plan.

Culler, Esq., Jenny

Page 43 of 133

WD0753

34 cont. | 8.2

This plan seems to involve placing new water lines as opposed to maintaining the existing water lines. Because the County does not approve this plan, the alternative must have adverse consequences. Because of the lack of information regarding which, if any, proposed plan will be implemented, its effects on the infrastructure, and the County's assessment, the public is unable to adequately comment on what those impacts might be.

b. *Electricity*

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In order to route the electricity from the two pre-existing substations in the area to the South Milledge Avenue Site, two new aboveground or underground lines will be required. (DEIS, 3-35) These lines will converge at a third electrical substation located on or adjacent to the NBAF site. The effects of these new lines and new substation on the health and property values of affected property owners are not discussed.

The DHS does not identify emergency electrical supply at the proposed NBAF site. It does not identify protocol for Georgia Power to restore power in the case of an outage despite the danger attendant to such loss of power.

The DEIS also fails to address the significant water usage that is part and parcel of electricity production, and improperly separates this out of the discussion of the impacts of the NBAF on water resources. Although the water necessary to produce the electricity for the NBAF will not be used *at* the NBAF, that water use will impact the local community and the local and regional water supplies. Especially considering the level of drought that the Athens community has been suffering, the failure of the DEIS to disclose and consider these impacts is a significant one. For example, 0.49 gallons of water are required to produce 1 kilowatt hour of electricity from a coal-fired power plant. 0.62 gallons of water are required to produce 1 kilowatt hour of electricity from a nuclear power plant. 0.43 gallons of water are required to produce 1 kilowatt hour of electricity from an oil-based power plant. See <http://www.cleanenergy.org/pdf/GAwaterreport.pdf>, attached hereto at Tab28. However, these effects were ignored in the DEIS, and the real water costs of electricity at the NBAF were improperly externalized.

Similar concerns arise from a review of the regional "Water Wars" between Georgia, Alabama, and Florida. The U.S. Army Corps of Engineers (Corps) constructed Buford Dam and created Lake Lanier in Georgia over sixty years ago. The Corps, which operates the dam, manages the flow of water through the structure to generate electricity and to accommodate downstream users, mainly utilities, industrial plants and the fisheries of the Apalachicola River and Bay. Water supply for municipal and industrial uses, hydropower, wildlife, recreation, irrigation, flood control and navigation all compete for the finite water in the Lake. See Alabama Rivers Alliance website, [www.alabamarivers.org/current\\_work/water\\_wars](http://www.alabamarivers.org/current_work/water_wars). Over time, the booming population of metro Atlanta began to rely on Lake Lanier primarily for its water supply and the Corps began issuing interim contracts to municipal water supply providers. Those contracts started an 18-year war over the right to the water in Lake Lanier.

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Comment No: 35

Issue Code: 8.2

DHS notes the commentor's concern that the construction and operating consequences associated with electrical power usage by the NBAF operation at the South Milledge Avenue site, are not inclusive of all possible impacts. Section 3.3.3 of the NBAF EIS includes an assessment of the current electrical power infrastructure, a discussion of the potential effects on the electrical power resource from the construction and operation of the NBAF, and the identification of any electrical power resource infrastructure improvements necessary to meet design criteria and ensure safe operation. Should a site be selected for NBAF, any needed electrical power resource infrastructure improvements to ensure service reliability would be identified in accordance with the final facility design.

Culler, Esq., Jenny

Page 44 of 133

WD0753

In 1990, the State of Alabama filed the first of numerous federal lawsuits to stop the Corps from giving metro Atlanta more water from Lanier. Georgia and Florida intervened and subsequently filed their own lawsuits. Alabama and Florida say Congress established only three purposes for the federal reservoir: to control floods, float barges downstream and generate power. Stacy Shelton, *Question of Right to Water Central in Lanier Case*, Atlanta Journal-Constitution, August 12, 2008. Georgia strongly disagrees and has promised to prove to the Court that Congress intended drinking water supply to be a main function of the lake. *Id.*

Florida and Alabama accuse Georgia of withholding too much water from Lake Lanier, parching the Apalachicola-Chattahoochee-Flint river basin, which runs through Lanier and along the Georgia-Alabama border before spilling into Florida's Apalachicola Bay. The two states say Georgia reduces flows into their states that support power plants, commercial fisheries, endangered species and industrial users like paper mills. Amid the drought, the Corps has released more water from Lake Lanier than has flowed in, bringing water levels down significantly and dropping the reserve level well below the 280 days' worth minimum. Peter Whoriskey, *3 States Compete for Water from Shrinking Lake Lanier*, Washington Post, October 27, 2007. Georgia argues it is not getting enough water from the reservoir to support its commercial and municipal users.

At one point, at least eight lawsuits were pending in three different states. Associated Press, *Tri-State Water War to Heat Up with Federal Intervention*, Atlanta Journal-Constitution, March 9, 2008. In 2003, Georgia and the Corps agreed to allow the state's withdrawals to jump from about 13 percent of the Lake's capacity to about 22 percent. Bob Evans, *Georgia Plea for Water goes to Supreme Court*, Atlanta Journal-Constitution, August, 14, 2008. In February 2008, the U.S. Court of Appeals in Washington, DC held that the agreement between Georgia and the Corps amounted to a major operational change at the reservoir that required congressional approval. *Id.* The Corps, in response, has begun writing a new short-term plan to govern river operations. Associated Press, *Tri-State Water War to Heat Up with Federal Intervention*, Atlanta Journal-Constitution, March 9, 2008. Consequently, until this is decided, the water upon which Georgia relies has an uncertain future amid an ever-worsening drought.

c. *Fuels and Natural Gas*

36| 8.2 The direct impacts of the construction of the facility on fuels and natural gas are not discussed in the DEIS. In fact, the actual amount of fuel estimated to be consumed is not included. The DEIS admits that the volume and consumption projects of diesel and gasoline usage during construction activities are not available at this time. (DEIS 3-34) The lack of explanation for this omission is in and of itself a NEPA violation. This failure to supply information relevant to foreseeable adverse impacts violates requirements found in 40 C.F.R. § 1502.22. The DEIS should have specified the relevance of the incomplete information to evaluating reasonably foreseeable significant adverse impacts on the human environment, a summary of existing credible scientific evidence that is relevant to evaluating the impacts, and evaluation of the impacts based on theoretical approaches or generally accepted research methods. *Id.* Obviously,

43

Comment No: 36

Issue Code: 8.2

DHS notes the commentor's concern that the construction and operating consequences associated with natural gas and fuel oil usage by the NBAF operation at the South Milledge Avenue Site, are not inclusive of all possible impacts. Section 3.3.3 of the NBAF EIS includes an assessment of the current natural gas infrastructure, a discussion of the potential effects on the natural gas resource from the construction and operation of the NBAF, and the identification of any natural gas resource infrastructure improvements necessary to meet design criteria and ensure safe operation. Should a site be selected for NBAF, any needed natural gas resource infrastructure improvements to ensure service reliability would be identified in accordance with the final facility design.

DHS notes the commentor's concern regarding the cost of infrastructure improvements. 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 preparing the Record of Decision.

DHS notes commentor's concern regarding the use of aboveground storage tanks for the storage of 500,000 gallons of fuel oil for purposes of emergency use at the NBAF South Milledge Avenue Site. Section 2.2.2.5 of the NBAF EIS identifies the control and countermeasure requirements and plans required for the operation of fuel oil storage tanks at the South Milledge Avenue Site and include preparation of a Pollution Prevention Plan, a Spill Prevention Control and Countermeasures Plan and a Storm Water Pollution Prevention Plan. Implementation of all plans will prevent impact to surface water and groundwater resources.

Culler, Esq., Jenny

Page 45 of 133

WD0753

36 cont. 8.2

merely stating that the information is “not available at this time” does not meet these standards. In addition, the public is unable to assess all impacts of federal action and effectively comment. Further, if the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining are not exorbitant, info should be included. 40 CFR § 1502.22(a).

The impacts resulting from fuel and gas requirements to operate NBAF were also not adequately assessed. Multiple fuel oil tanks serving the boilers and generators with a total capacity of 550,000 gallons are required to provide stand-by operation of the facility for thirty days. National Bio- and Agro-Defense Facility (NBAF) Site Characterization Study, Department of Homeland Security, DHS Project No. LGL07L00004, §2A.4, p. 2 (July 25, 2008)(“Site Characterization Study”). The storage of this fuel is not addressed in the DEIS. This omission is particularly glaring as the potential impacts from having this much contained fuel on site, from spills to possible sabotage, are numerous. In addition, the local utility company is responsible for upgrading the natural gas and fuel supply lines to support NBAF. The payor for this upgrade is not specified, although such improvements are often made by the company, with the costs passed on to all utility consumers, resulting in increased utility bills. With natural gas bills forecast to be prohibitively costly for lower income customers, the result of any rate hike to outfit NBAF will disproportionately impact lower income consumers. These consumer and environmental justice concerns must be disclosed and addressed in the DEIS.

d. *Sanitary Sewage*

37| 8.2

NBAF’s sanitary sewage needs will have impacts on the local environment that were not discussed. During construction, DHS specifies that wastewater will only be produced from portable toilets on site, which will only result in a minor increase in discharge to the local sewer system during the construction phase. DEIS, 3-34. The method by which this waste will be discharged to the sewer system and its effects on the receiving facility are not specified. As noted above, this failure to supply information relevant to foreseeable adverse impacts violates requirements found in 40 C.F.R. § 1502.22.

The DEIS fails to adequately assess the sanitary sewage needs during operation or the possible impacts thereof. The DEIS only very generally estimates that NBAF’s wastewater discharge will be between 50,000 gallons per day and 150,000 gallons per day. DEIS 3-36. The percent that NBAF’s discharges will increase the total discharges processed at the Middle Oconee WWTP per day is not discussed; the DEIS also does not discuss the ability of the Middle Oconee WWTP to handle this increase. If the Middle Oconee WWTP is not able to accommodate the NBAF’s wastewater, which is likely because the Middle Oconee is an impaired water, the river will become even more impacted. Potentially, the addition of wastewater into the Middle Oconee River could be catastrophic to aquatic wildlife therein due to the nature of the discharges. Potential failure of the sanitary system, or pass through of constituents from NBAF, is not discussed. Sanitary sewer overflows (SSOs) occur in almost every sewer system.

44

Comment No: 37

Issue Code: 8.2

DHS notes the commentor’s concern that the construction and operating consequences associated with the handling and treatment of sanitary sewage generated by the NBAF operation at the South Milledge Avenue Site, are not inclusive of all possible impacts. Section 3.3.3 of the NBAF EIS includes an assessment of the current sanitary sewage infrastructure, a discussion of the potential effects on the sanitary sewage transport and treatment infrastructure from the construction and operation of the NBAF, and the identification of any sanitary sewage transport and treatment infrastructure improvements necessary to meet design criteria and insure safe operation. Should a site be selected for NBAF, any needed sanitary sewage transport and treatment infrastructure improvements to ensure service reliability would be identified in accordance with the final facility design.

Culler, Esq., Jenny

Page 46 of 133

WD0753

37 cont. | 8.2

Deteriorating systems, or systems that are undersized due to recent development, can cause chronic SSOs. U.S. EPA website, Sanitary Sewer Overflows Frequently Asked Questions, which is attached hereto at Tab 29, available at [http://cfpub.epa.gov/npdes/faqs.cfm?program\\_id=4](http://cfpub.epa.gov/npdes/faqs.cfm?program_id=4). However, the DEIS does not disclose and consider the fact that the Middle Oconee River is already an impacted waterway on the 303(d) list. Nor does it disclose that additional discharges to the river will likely cause additional impairment. If there are Total Maximum Daily Loads associated with the Middle Oconee River, then the introduction of the volumes of wastewater that the NBAF will produce may conflict with federal and state law, and may result in fines or other legal penalties for the Athens WWTP, since wastewater will pass through the Middle Oconee WWTP first, before it is discharged into the River. See [http://www.gaepd.org/Files\\_PDF/305b/Y2008\\_303d/Y2008\\_Rivers\\_Streams.pdf](http://www.gaepd.org/Files_PDF/305b/Y2008_303d/Y2008_Rivers_Streams.pdf), attached hereto at Tab 30.

Also, ACC's plans to sell municipal sewerage waste sludge, and the possible ramifications thereof are not mentioned in the infrastructure assessment of the DEIS. See Bluestein, *supra.*, and attached hereto at Tab 25. Not enough information is known about the effects of sludge application on animal health, human health, or detriment to the environment. *Id.* A recent lawsuit involved untreated sludge applied to grazing fields laden with pollutants such as arsenic that killed hundreds of dairy cows. *Id.* While the Clean Water Act currently mandates that the EPA establish numeric limits for certain pollutants in sludge, there are no regulations in place even to test for the presence in sludge of the pathogens that will be studied at the NBAF. 33 U.S.C. §1345(d)(2)(A)(i). In fact, the science is not even available that can guarantee that these pathogens are really eradicated after tissue digestion or incineration. Therefore, any impacts from the land application of municipal sewerage sludge that contains NBAF waste are completely unknowable, and the DEIS should disclose and discuss that.

Although waste at the PIADC is currently divided into Research and Non-Research waste, it does not appear from the DEIS that any sort of distinction will be made if the NBAF is constructed at the South Milledge Avenue Site. DEIS, 3-31. Waste from the tissue digester will be commingled for discharge with the remainder of the wastewater. DEIS, 3-36. The DEIS does not disclose how this will be accomplished, and possible impacts of this discharge are not assessed. Again, the DEIS states that DHS will design and operate the NBAF to prevent impacts to Middle Oconee from potentially harmful wastewater constituents, but potentially harmful constituents or possible effects on the function of the plant are not identified. DEIS, 3-36. The Site Characterization Study recognizes that a dedicated solid waste treatment system is necessary for the BSL-3 and BSL-4 areas. See §3, p.1. The need for separate solid waste treatment systems, much less the possible impacts from combining the two, are not addressed in the DEIS in regard to the South Milledge Avenue Site.

The majority of the pretreatment standards applicable to the Middle Oconee WWTP are likely to become less stringent before the NBAF would be operational at the South Milledge Avenue Site. See Executive Summary of the Local Limits Evaluation Technical Report, Prepared for the ACC Public Works Dept. (June, 2007). See Tab 31.

Culler, Esq., Jenny

Page 47 of 133

WD0753

37 cont. | 8.2

Relaxed pretreatment standards could attract more emitters to the area served by the Middle Oconee WPCP, resulting in even more waste to be processed and possible failures and discharges to Middle Oconee River, which could result in further impairment to the River. DHS only discusses standards that are becoming more stringent, such as biological oxygen demand (BOD) and total suspended solids (TSS). The fact that the standards for numerous POCs for Middle Oconee WPCP will likely be relaxed in time for the NBAF to begin emitting is not discussed.

e. *Steamed and Chilled Water*

38 | 8.2

The Feasibility Study was developed based on the assumption that a Central Utility Plant (CUP) will be constructed as part of the NBAF to provide steam and chilled water services with all the required equipment and system redundancies. Feasibility Study, § 5.2.7, p. 1. The CUP is an integral part of the feasibility of the NBAF. *Id.* No such capabilities exist at the site at this time. (DEIS, 3-34). Based on the site selected, a portion of this utility may be provided by the host consortium. Feasibility Study, §5.2.7, p. 1. Although it is apparently a lynchpin of the NBAF, the infrastructure section of DEIS does not address the environmental or economic costs and effects of constructing the CUP on ACC's infrastructure. Nor does it discuss the current or planned County infrastructure which will feed the CUP, or who will be responsible for its design and construction in ACC.

The absence of steam and chilled water capabilities at the site are noted, and requirements for steam and chilled water at NBAF are specified, but there is no discussion of any impacts of this addition on the existing infrastructure or the local environment. DEIS, 3-37.

f. *Other Considerations*

39 | 8.2

The DEIS fails to consider possible mitigation of impacts from placement of infrastructure on-site by measures such as conservation and water reclamation. In addition, neither the maintenance nor the upgrade of the infrastructure throughout the expected 50-year lifespan of the NBAF, nor the potential dismantling of the infrastructure after 50 years is discussed. The United States Government Accountability Office has reported that "a contributing factor [in the Pirbright FMD release and outbreak] might have been a difference of opinion over the responsibilities for maintenance of a key pipe within the drainage system." GAO-08-108T, *High Containment Biosafety Laboratories: Preliminary Observations on the Oversight of the Proliferation of the BSL-3 and BSL-4 Laboratories in the United States*. The DEIS should have discussed and disclosed the entities responsible for facilities maintenance. Not only would such a disclosure ensure that an oversight like that at Pirbright might not happen again, but it would also inform the public about which entities will have to investigate hazard insurance. If the County is responsible for maintenance of the sanitary sewer lines from the NBAF, for example, then serious liabilities may attach to the local government in the event that the County's failure to properly maintain the line leads to an outbreak. The liability insurance costs

Comment No: 38

Issue Code: 8.2

DHS notes the commenter's concern that the construction and operating consequences associated with steam and chilled water usage by the NBAF operation at the South Milledge Avenue site, are not inclusive of all possible impacts. Section 3.3.3 of the NBAF EIS includes an assessment of the current steam and chilled water infrastructure, a discussion of the potential effects on the steam and chilled water resource from the construction and operation of the NBAF, and the identification of any steam and chilled water resource infrastructure improvements necessary to meet design criteria and insure safe operation. Should a site be selected for NBAF, any needed steam and chilled water resource infrastructure improvements to ensure service reliability would be identified in accordance with the final facility design.

DHS notes the commenter's concern that environmental and economic impacts relative to the construction and operation of the Central Utility Plant (CUP) are not included in the cumulative impacts discussions for the South Milledge Avenue Site. Section 3.16 (Unavoidable Adverse Impacts), Section 3.17 (Relationship Between Short-Term Uses of the Environment and Long-Term Productivity), and Section 3.18 (Summary of Significant Effects), which provide information on the short and long term cumulative impacts associated with the NBAF construction and operation, were prepared in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and CEQ's regulations for implementing NEPA (40 CFR 1500 et seq.). A summary of the environmental impacts and costs specific to each site alternative is provided in Section 2.5 of the NBAF EIS.

Comment No: 39

Issue Code: 8.2

DHS notes the commenter's concerns about long-term operation and maintenance of infrastructure improvements to the proposed NBAF site. DHS would maintain the NBAF and ancillary facilities in compliance with applicable environmental, safety, and health requirements and provide for safe operation and maintenance. The Federal government would be responsible for costs associated with the maintenance of NBAF facilities and improvements on the NBAF site. It is anticipated that the maintenance of infrastructure improvements outside the perimeter of the NBAF site would be the responsibility of the utility purveyor. Also, see responses to Comment Nos. 34 and 38.

DHS notes and shares the commenter's concerns for sustainable facility design. The NBAF would be designed and constructed to emphasize state-of-the-art strategies for sustainable site development, water savings, energy efficiency, material selection, and indoor environmental quality. In addition, Section 3.15 of the NBAF EIS discusses proposed mitigation measures for the design, construction, and operation of the NBAF including measures consistent with the low-impact design (LID) approach.

Culler, Esq., Jenny

Page 48 of 133

WD0753

would then be borne by the public. Such costs are certainly a consideration of significant importance, and a disclosure that should be comprehensively discussed in the DEIS.

39 cont.| 8.2

Furthermore, possible increased stormwater run-off and containment from increased infrastructure is not considered in the DEIS. It is briefly considered in the Site Characterization Study at 2A.3.2, although how it will be contained is not even discussed there, much less addressed in the DEIS. The detrimental impacts from run-off to surrounding properties is not considered, despite the potential for hazardous run-off, as it is not known what may be carried in the stormwater from the NBAF. [The deficiency of information necessary for a proper assessment of stormwater impacts and mitigation measures is discussed more fully elsewhere in these comments.] In addition, the implementation and effects of sustainable design is not addressed in the infrastructure section. The Feasibility Study, Section 6, suggests that products and materials to comply with executive order "Greening in the Government" will be assessed and addressed in the design of the final facility. These items include HVAC delivery methods and building orientation. However, because the materials and building design of the NBAF are not known at the time of issuance of this DEIS, the potential impacts of various alternatives are not adequately addressed.

4. The DEIS Ignores the Fact that Available Infrastructure Drives Development and Sprawl.

23 cont.| 8.2

The DEIS fails to consider that the installation of several miles of new water, electric, and gas lines in the Athens area will be a natural driver of increased development around the NBAF site. ("Investments in infrastructure such as roads, sewers, and water supplies can be one of the most important drivers of urbanization, since infrastructure provides the essential framework for development." Ralph E. Heimlich & William D. Anderson, *U.S. Department of Agriculture, Development of the Urban Fringe and Beyond: Impacts on Agriculture and Rural Land*, p. 21, available online at <http://www.ers.usda.gov/publications/aer803/aer803.pdf>.) See Tab 32. This not only leads to increased impervious surfaces, increased stormwater flows, increased traffic, and the like, but it also leads to more people spending more time in close proximity to the pathogens. The DEIS does not discuss the ability of the new electrical service or sewer service to the South Milledge Avenue site to accommodate increased development in the area that will accompany the NBAF.

Sprawl is a major consideration for Athenians, as evidenced in the recommendation that the government "[r]eview infrastructure plans and ensure that the location of new infrastructure does not exacerbate sprawl and its attendant greenhouse gas emissions...." *Growing Sustainably in Athens-Clarke County V: Progress Report for 2007, Recommendations for 2008*, which is attached hereto at Tab 33, and may be found online at [http://www.athensgrowgreen.com/information/pdf/growing\\_sustainably\\_v.pdf](http://www.athensgrowgreen.com/information/pdf/growing_sustainably_v.pdf).

Culler, Esq., Jenny

Page 49 of 133

WD0753

5. The DEIS Fails to Consider Indirect or Cumulative Impacts from the Installation of the NBAF's Infrastructure.

130| 27.0 The DEIS did not consider that the construction of additional electric lines in the right-of-way will make that right-of-way unavailable for road widening or for the installation of alternative energy infrastructure, such as solar panels or wind power turbines. The regulations instruct that the agency "shall to the fullest extent possible...(f) Use all practicable means ... to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment." 40 C.F.R. §1500.2. However, it is clear that the DEIS did not consider alternative sources of power for the NBAF in order to avoid using traditional measures of gas and coal, nuclear, or oil-based power, each of which has adverse impacts on the environment.

40| 8.2 The Barrow, Oconee, and Jackson Counties all draw water from the Bear Creek Reservoir, which also supplies water in cases of extreme drought. ACC Manager Alan Reddish, Local Government Meeting Drought's Challenges, October 17, 2007, available online at <http://www.athensclarkecounty.com/publicutilities/planning.htm>. See Tab 27. Water needs of the NBAF will further tax the Reservoir, jeopardizing the water supply for adjacent counties in the current extreme drought conditions, and during future droughts. Further, the DEIS does not consider the NBAF's effect on the stream feeding the reservoir.

The DEIS asserts that Georgia Power has the ability to supply the electricity required to NBAF through two independent electrical substations. (DEIS 3-35) It does not, however, assess the draw on other natural resources to produce this extra electricity, or discuss how the addition of substations and power lines will increase the electricity consumed, in turn increasing air pollution. The DEIS did not consider the atmospheric or other environmental effects from increased consumption of electricity.

### C. AIR QUALITY

41| 9.0 *The air quality analysis set forth in the DEIS is woefully inadequate and fatally flawed.* Contrary to the purpose and mandate of NEPA, the DEIS fails to conduct a meaningful analysis of air quality and air quality impacts associated with the proposed action – to site, construct and operate a NBAF. Rather, it has merely provided wholly unsupported broad-based assertions regarding current air quality conditions and the potential impacts to air quality associated with the siting, construction and operation of a NBAF. For example, the DEIS provides that "[a]ir quality effects would occur with the construction and operation of the NBAF for all sites," but fails to provide a meaningful assessment of the nature and extent of any such air quality effects at any of the proposed sites or under a no action alternative. See DEIS, ES – 7. Likewise, the DEIS provides that "[p]reliminary assessments indicate that the operation of the NBAF would not likely affect regional air quality," yet the DEIS is devoid of any real data or analysis supporting such a contention. See DEIS, ES – 7. Such conclusory statements without supporting data are precisely the type of assessment NEPA is designed to protect against.

Comment No: 1 Issue Code: 27.0

DHS notes the commentor's concerns regarding the analysis of cumulative impacts. As summarized in Section 3.1 of the NBAF EIS, the environmental impacts analysis performed included potential impacts resulting from other separate activities that would not be related to the NBAF that, in combination with potential impacts from the Proposed Action, may cumulatively impact areas of concern. Cumulative impacts are impacts in the environment that result from the incremental impact of the proposed project when added to other past, present, and reasonably foreseeable future actions regardless of the agency (federal or non-federal) or person that undertakes such other actions (40 CFR 1508.7). DHS believes that it has adequately considered and analyzed potential cumulative impacts, along with the direct impacts of construction and operations, in a consistent manner across all the alternatives to allow for a fair comparison among the alternatives.

Comment No: 40 Issue Code: 8.2

DHS notes the commentor's concern that future indirect impacts on water supply and electric power supply are not included in the cumulative impacts discussion relative to installation of infrastructure improvements at the South Milledge Avenue Site. Section 3.15 (Mitigation), Section 3.16 (Unavoidable Adverse Impacts), Section 3.17 (Relationship Between Short-Term Uses of the Environment and Long-Term Productivity), and Section 3.18 (Summary of Significant Effects), which provides impact mitigation plans and information on the short and long term cumulative impacts associated with the NBAF construction and operation, were prepared in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and CEQ's regulations for implementing NEPA (40 CFR 1500 et seq.). Also, see response to Comment No. 21.

Comment No: 41 Issue Code: 9.0

DHS notes the commentor air quality concerns. The potential effects of NBAF operations on air quality are discussed in Section 3.4 of the NBAF EIS. Section 3.4.1 describes the methodology used in assessing potential air quality consequences at each site. Conservative assumptions were used to ensure the probable maximum effects were evaluated.

Sitespecific effects at the South Milledge Avenue Site are discussed in Section 3.4.3. Section 3.4.3.1.2 summarizes the 2006 Ambient Air Surveillance Report produced by the Ambient Monitoring Program of Georgia's Department of Natural Resources, Environmental Protection Division. Air emissions were estimated using SCREEN3, a U.S. Environmental Protection Agency dispersion modeling program. Should a decision be made to build the NBAF and following site selection and final design, a more refined air emissions model would be used during the permitting process. The final design would ensure that the NBAF does not affect the region's ability to meet air quality standards.

Culler, Esq., Jenny

Page 50 of 133

WD0753

41 cont. | 9.0

Notably, the DEIS specifically acknowledges that it has failed to conduct the requisite inquiry with regard to air quality. It admits that in order to accurately assess air quality and impacts to air quality from the construction and operation of a NBAF it must take into account the design and location of any proposed NBAF. The DEIS further admits that the design and location of the facility have not yet been determined, and thus it did not consider the location or design in its air quality analysis, two components that are integral to any meaningful assessment of the proposed NBAF on air quality. In that regard, the DEIS acknowledges that additional modeling is required to determine the true impact of any proposed NBAF on air quality. However, the DHS was required to conduct this modeling prior to site and design selection in order to adequately assess the environmental impacts of the proposed action. In addition, this information was required to be presented in the DEIS.

8 cont. | 4.0

Instead, as admitted, the DEIS contains nothing more than a cursory review of air quality that is highly speculative and fails to meet the requirements of NEPA. Accordingly, the public will at no time have an opportunity to review the environmental impacts on air quality of the actual methodologies chosen, since DHS is going to wait until the site is selected before it designs the facility. However, this attempt to defer any critique of the incineration process and/or the air quality impacts from the NBAF is not in keeping with the legal requirement that the agency consider all important components together in the EIS. "NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 C.F.R. §1500.1(b). "Federal agencies shall to the fullest extent possible...implement procedures to make the NEPA process more useful to decision makers and the public...Environmental Impact Statements...shall be supported by evidence that agencies have made the necessary environmental analyses." 40 C.F.R. §1500.2(b).

To the extent that the DHS selects a location for the NBAF prior to making a determination about the expected emissions and resulting air quality impacts to the proposed sites without then compiling and circulating a Supplemental Environmental Impact Statement ("SEIS"), DHS will be committing a legal error. Any information the DHS gathers relative to air quality impacts from the NBAF will be "significant new...information relevant to environmental concerns and bearing on the proposed action or its impacts", and mandates the preparation of an SEIS. See 40 C.F.R. §1502.9(c)(1)(ii). As it stands, *the DEIS fails to adequately address and assess impacts to air quality associated with the siting, construction and operation of any proposed NBAF.*

42 | 9.0

1. The Methodology Employed by DHS to Assess Air Quality and Air Quality Impacts in the DEIS is Fatally Flawed.

The meteorological data assembled for review and consideration in the DEIS is inadequate to assess air quality and air quality impacts. The DEIS did not employ adequate meteorological data (particularly hourly direct measurements of atmosphere

Comment No: 42

Issue Code: 9.0

See response to Comment No. 41.

Culler, Esq., Jenny

Page 51 of 133

WD0753

42 cont.] 9.0

stability of the surface air (0 – 1000 m. altitude) in order to make meaningful calculations of hourly dispersion estimates, both for emissions under normal operations and for emissions under accident conditions. Pursuant to the DEIS DHS assembled meteorological data from the National Climatic Data Center (NCDC), the Southeast Regional Climate Center (SERCC), and the High Plains Regional Climate Center (HPRCC). DEIS at 3-57. Notably, these data centers terminated compiling and storing direct measurement of surface air data from which one could determine ground level (0 – 1000m) atmosphere stability in the mid 1980's, [i.e. hourly atmosphere stability, vertical temperature profiles, short-term measurements of the variances of cross-wind directions, etc.] These data are more than twenty years old. The DHS should have acquired more current and meaningful data for its analysis of meteorological conditions, especially in light of the recent and alarming climate changes. NEPA and attendant case law requires the utilization of best available science; clearly data two decades old does not meet this requirement.

Furthermore, it appears that "Stability Classes as Function of Wind speed, Insolation and Cloud Cover" was apparently used to estimate atmospheric stability for each of the 8760 hourly measurements in a given year for the surface air wind stations. See DEIS, E – 76, Table 3.4.4.1. This qualitative procedure is sometimes used to estimate atmospheric stability, particularly when long-term averages are of interest in cases where there is lack of on-site measurements. However, this non-quantitative method cannot substitute for direct measurements (especially where short-term accident doses are of concern). There are no known quantitative studies that show the limits of accuracy of such a qualitative method, or whether such a procedure offers any degree of conservatism (as one would expect in a "scoping" or "screening" analysis). Local meteorological stations should have been set up at each of the proposed sites to collect representative samples of hourly stability data. This sort of evaluation is conducted on a regular basis by significant industry, such as nuclear power plants, and is a necessary exercise for a facility that poses risks as significant as those posed by the NBAF. These meteorological data would inform proper dispersion calculations, and should have been collected and analyzed prior to, and incorporated within, the DEIS.

2. The DEIS Fails to Properly Consider and Evaluate Likely Pollutants that Will Be Emitted from the NBAF.

43] 9.0

a. The DEIS Lacks Necessary Information about the NBAF's Pathological Waste Disposal Method.

The DEIS fails to include a meaningful assessment of the types and quantities of emissions from any proposed NBAF as well as the potential impacts to air quality associated with the siting, construction and operation of NBAF. In fact, the DEIS acknowledges that DHS has not determined the "proposed pathological waste disposal method" for the NBAF. As such, the DEIS is at an utter loss to describe the expected air quality impacts in terms of emissions from the NBAF. DEIS, 3-57. Significantly, without specifying the particular treatment technology/pathological waste disposal method, the atmospheric release rate cannot be estimated.

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Comment No: 43

Issue Code: 9.0

DHS notes the commentor's concerns regarding air pollutant emissions. See response to Comment No. 41. In addition, the potential effects of NBAF operations on air quality are discussed in Section 3.4 of the NBAF EIS. Section 3.4.1 describes the methodology used in assessing potential air quality consequences at each site. Carcass/pathological waste disposal, including incineration, is discussed in Section 3.13, and Section 3.14 of the NBAF EIS describes the hazard and accident analysis including site specific consequences. Conservative assumptions were used to ensure the probable maximum effects were evaluated. Should a decision be made to build NBAF and following site selection and final design, a complete emission inventory would be developed and refined modeling performed as necessary in accordance with state-specific air quality permitting requirements.

Culler, Esq., Jenny

Page 52 of 133

WD0753

43 cont. | 9.0

Notably, while the DEIS acknowledges that three disposal methods are being considered, it fails to evaluate emissions associated with any of the three proposed disposal methods as contemplated and required by NEPA. Instead, the DEIS seeks to justify its failure to conduct any meaningful analysis of air quality, by simply stating that it has not yet determined the "proposed pathological waste disposal method" and that once determined DHS will be able to assess the emissions and potential impacts of the selected alternative. Again, this flies in the face of the requirements of NEPA. DHS was required to conduct this assessment and present the results in the DEIS for public review and comment.

- b. *The DEIS Fails to Properly Evaluate the Pollutants that Would be Emitted From an Incinerator, and Has Failed to Disclose the Scientific Uncertainties to the Public.*

Despite its unsupported declaration that the NBAF facility "would be in compliance with all operational scenarios" (DEIS, 3-66), the DHS does not know what sorts of pollutants will be emitted from the incinerator stacks at the NBAF. The DEIS does not consider those mystery pollutants.

Importantly, the DEIS glosses over and fails to properly consider the fact that *there are significant gaps in the scientific knowledge about the "[d]isease agent fate and transport in composting, rendering, open pit burial, landfill burial, and incineration..."* *Protecting Against High Consequence Animal Diseases: Research & Development Plan for 2008 – 2012*. Subcommittee on Foreign Animal Disease Threats, Committee on Homeland and National Security, National Science and Technology Council, p. 14 (Jan. 22, 2007)("FADT 2007")(emphasis supplied). This means that there could be disease agent transport in the emissions from the NBAF facility, but this is not disclosed in the body of the DEIS. The DEIS also fails to consider the potential mitigation or emergency response actions that will become necessary in the event the NBAF uses incineration, but then later discovers that the emissions *do* carry disease agents. This is a glaring and dangerous omission from the DEIS. DHS is certainly required to consider the possibility of disease agent transport from NBAF emissions.

3. The DEIS Fails to Properly Consider and Evaluate Current Air Quality Conditions at the South Milledge Avenue Site.

44 | 9.2

The DEIS summary of the air quality conditions in the Athens area does not paint the full picture. First, *the DEIS admits that the air model used for the evaluation is a "cursory model."* DEIS, 3-58. This certainly does not provide the level of investigation required for the agency to take a hard look at the relevant data. Second, there is only a very basic assessment of the current air quality conditions in the Athens area, no mention of the number of non-attainment days in the Athens area for any given pollutant, and no correlation between the pollutants considered in the National Ambient Air Quality Standards table (DEIS, Table 3.4.1-2) and the Operational Emissions Estimates tables for the Athens site (DEIS, Tables 3.4.3.3.2-2, -3, and -4).

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Comment No: 44

Issue Code: 9.2

DHS notes the commentor's concern regarding the assessment of current air quality conditions. Ambient air quality conditions of the South Milledge Avenue Site are discussed in Section 3.4.3 of the NBAF EIS. Section 3.4.3.1.2 summarizes the 2006 Ambient Air Surveillance Report produced by the Ambient Monitoring Program (AMP) of Georgia's Department of Natural Resources (GDNR), Environmental Protection Division. Based on GDNR's AMP 2006 Ambient Air Surveillance Report, Clarke County was in attainment, and as of September 2, 2008, the U.S. Environmental Protection Agency (EPA) has Clarke County as in attainment for ozone. Also, see response to Comment No. 41.

Culler, Esq., Jenny

Page 53 of 133

WD0753

44 cont. 9.2

Although the DEIS acknowledges that compliance with the O<sub>3</sub> and PM<sub>2.5</sub> standards continues to be a challenge, it fails to properly characterize and portray the air quality for the Athens area and the state, as well as the impacts the operation of NBAF will have on air quality in Athens, the state and the region. Notably, the DEIS is devoid of any Ambient Air Quality data for the Athens area and surrounding areas, even though these data are readily available. Data from the Athens Monitoring Site for January 2008-August 23, 2008, are attached hereto at Tab 34. Additional Ambient Air Quality data for the Athens Monitoring Site can be found at <http://www.air.dnr.state.ga.us/amp/>. In order to accurately assess air quality and impacts to air quality, this information must be considered. In addition to Athens area data, the DEIS is also required to assess and evaluate the air quality and air quality impacts of and to surrounding counties. Notably, Athens is located approximately 73 miles from Atlanta and is directly adjacent to several other counties that fail to meet NAAQS.

Likewise, the DEIS fails to acknowledge that that Athens-Clarke County was once considered a nonattainment area and is projected to be added, along with several other Georgia counties, back to the current list of twenty (20) counties considered as nonattainment areas. See Blake Aued, *Smog rules stiffen; will locals act? A-C weigh steps to clean up air*, Athens Banner-Herald, April 29, 2008, attached hereto at Tab 35. See also Nonattainment Areas webpage, available online at <http://www.georgiaair.org/airpermit/naa.htm>, and attached hereto at Tab 36 (detailing the Georgia NAAQS NonAttainment Areas); United States Environmental Protection Agency chart, "Nonattainment Status for Each County by Year", available online at <http://www.epa.gov/oar/oaqps/greenbk/anay.html>, and attached hereto at Tab 37 (setting forth additional information regarding nonattainment status for Georgia counties). The DEIS is required to consider and evaluate the proposed nonattainment status of Athens-Clarke County as well as surrounding counties, but fails to do so.

45| 9.2

4. The DEIS Fails to Properly Evaluate the Air Quality Impacts Associated with Operation of a NBAF at the South Milledge Avenue Site.

As previously set forth, DHS has not yet determined the pathological disposal method for NBAF and thus is unable to determine the emissions associated with the operation of any proposed NBAF. Significantly, despite this admittedly missing integral component needed to make any assessment of air quality impacts associated the operation of NBAF in Athens, the DEIS concludes that the "operation of the NBAF will not likely affect regional air quality." DEIS, 2-32 (emphasis supplied). There is absolutely no data or analysis presented in the DEIS to support this position. The DEIS is required to put forth affirmative data to support its contentions. The purpose of NEPA is to require the agency to take a hard look at the environmental impacts of its proposed action -- not to make wholly unsupported assertions that its proposed action will not result in any environmental impact as has been done in this DEIS with regard to air quality impacts.

Comment No: 45

Issue Code: 9.2

See response to Comment No. 41.

Culler, Esq., Jenny

Page 54 of 133

WD0753

45 cont. | 9.2

Rather, as is apparent from the analysis presented on air quality, the DEIS did not conduct the requisite analysis of the impacts on air quality associated with any proposed NBAF, but simply presented wholly unsupported assertions that there will be no impact. The DEIS fails to consider and conduct the required evaluation of the following in assessing any impacts to air quality associated with the construction and operation of NBAF at the South Milledge Avenue Site:

- Impacts to local air quality as well as regional air quality
- Whether the construction and/or operation of NBAF will cause and/or contribute to violations of NAAQS
- Whether the construction and/or operation of NBAF will cause and/or contribute to nonattainment of NAAQS
- Type and quantity of emissions from a NBAF
- Impacts on air-quality related illnesses

Admittedly, much of this has not even been determined yet alone evaluated at this stage. In addition, the evaluation of air quality presented in the DEIS is woefully inadequate.

***Furthermore, the DEIS assessment of PM<sub>2.5</sub> at the proposed Athens, Georgia, site is flawed and fails to accurately assess the impacts that operation of the NBAF will have on PM<sub>2.5</sub> in Athens.*** While the DEIS acknowledges that NAAQS for PM<sub>2.5</sub> is presently exceeded at the Athens, Georgia site, the methods recommended in the DEIS to demonstrate compliance are not satisfying. Specifically, the recommended steps presented in four "bullets", on DEIS, 3-67 and in the top paragraph of DEIS, 3 - 68 essentially amount to saying, "if you are out of PM<sub>2.5</sub> compliance on screening analysis, then do this:

- 1) Discuss with the state as to whether they might adjust downward their PM<sub>2.5</sub> estimate, or
- 2) Adjust your model (stack diameter assumption, stack temperature, stack height) to model a higher degree of dispersion, or
- 3) Change your assumed particle size distribution (to larger particles) to get smaller PM<sub>2.5</sub> concentrations, or
- 4) Refine description of control technologies to model a lower emission rate."

"Then, if all this fails, use a more detailed modeling procedure."

In contrast, the DEIS does not consider its obligation to modify the operation of the NBAF to *in fact* reduce PM<sub>2.5</sub> releases, as it must. Operation of the NBAF at the Athens site will result in additional exceedences of PM<sub>2.5</sub>. Accordingly, the DEIS was required to disclose this information, and to demonstrate compliance with PM<sub>2.5</sub> standard. While the DEIS states that further evaluation is required to demonstrate compliance with the PM<sub>2.5</sub> standard, that evaluation should have already been conducted, and should have been set forth in the DEIS.

Culler, Esq., Jenny

Page 55 of 133

WD0753

5. DHS Failed to Properly Research and Consider the Cumulative Impacts of the NBAF on Local and Regional Air Quality.

46| 9.2 In assessing the possible cumulative impacts of the facility on air quality, the DEIS looked only at the projected University of Georgia facilities to try to determine if there were other major polluters coming online in the near future. DEIS, 3-68. However, the DEIS fails to consider other existing and proposed major emitters in the Athens as well as the surrounding area in its cumulative impacts analysis. The DEIS is required to consider all major polluters, both existing and proposed, in Clarke County (not just University of Georgia facilities) as well as those in adjacent counties, such as Oconee County, Jackson County, Oglethorpe County. There are currently six permitted Title V facilities in the Athens area alone, yet the DEIS only references the University of Georgia as a Title V permitted facility. See Tab 38 which contains a complete listing of Title V facilities in Georgia.

In addition, the DEIS fails to consider air quality impacts from the NBAF in conjunction with population growth effects on the local and regional air quality. Notably, much of the air pollution in Athens drifts in from the metro Atlanta traffic, yet there is no analysis as to the projected growth in the Athens area and metro Atlanta area and its impact on air quality.

There is also no information related to the remaining "capacity", if any, of the air column to withstand the types of pollutants that will likely come from the NBAF, and what the presence of the NBAF would mean for whether other facilities could obtain permitting after the NBAF potentially fills the field. If the presence of the NBAF makes the permitting process extremely rigorous for other industry, it is less likely that other industry will choose to locate in the Athens area, and these impacts are not addressed.

6. The DEIS Fails to Consider Any Data Related to the Prevalence of Air Quality-Related Illnesses Near the Proposed NBAF.

47| 9.2 Although localized air pollution can have acute and chronic effects on human health, the DEIS does not consider or evaluate the prevalence of asthma or other air quality-related illnesses in the Athens area, and the potential for the operation of the NBAF to contribute to such illnesses. See Tab 39, discussing the health effects of air pollution, and the prevalence of air-quality related illnesses in Georgia.

7. The DEIS Fails to Properly Consider Air Quality Impacts from Construction of the NBAF.

48| 9.2 The DEIS omits consideration of dust from construction and diesel pollution from heavy equipment used in construction in its analysis of air quality impacts. It further fails to consider conservation options, which is information that must be considered in order to comply with the purpose of NEPA. Certain mitigations, such as a "no-idle" rule for heavy machinery and trucks on the NBAF site during construction, could serve to limit

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Comment No: 46 Issue Code: 9.2

DHS notes the commentor's concern regarding the analysis of cumulative impacts on air quality. The potential effects of NBAF construction and operation on air quality are discussed in Section 3.4 of the NBAF EIS and includes the potential effects from fugitive dust and heavy equipment emissions during construction and operational incineration emissions as well as cumulative effects. Site-specific effects at the South Milledge Avenue Site are discussed in Section 3.4.3. Carcass/pathological waste disposal, including incineration, is discussed in Section 3.13. 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 contaminant model that includes all area Title V sources as background contributors will be developed and 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: 47 Issue Code: 9.2

DHS notes the commentor's concerns related to existing health conditions related to air quality. The potential effects of NBAF operations on air quality are discussed in Section 3.4 of the NBAF EIS. Section 3.4.1 describes the methodology used in assessing potential air quality consequences at each site. Section 3.14 describes the hazard and accident analysis including site specific consequences. Conservative assumptions were used to ensure the probable maximum effects were evaluated. The final design will ensure that the NBAF does not significantly affect the region's ability to meet air quality standards.

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, including for air quality. However, an analysis of existing health conditions in the Athens, Georgia area is not within the scope of the NBAF EIS, which presents the need for and evaluates the environmental impacts of the alternatives for constructing and operating the NBAF.

Comment No: 48 Issue Code: 9.2

DHS notes the commentor air quality concerns. The potential effects of NBAF operations on air quality are discussed in Section 3.4 of the NBAF EIS. Section 3.4.1 describes the methodology used in assessing potential air quality consequences at each site. Section 3.4.3.2.2 describes the potential construction consequences including fugitive dust and heavy equipment hydrocarbon emissions. Conservative assumptions were used to ensure the probable maximum effects were evaluated. Mitigation measures to reduce the potential for construction-related impacts on air quality are discussed in Section 3.15 of the NBAF EIS.

Culler, Esq., Jenny

Page 56 of 133

WD0753

the impacts to air quality from the construction phase of the NBAF, but were not even considered. The DEIS should re-evaluate these possibilities.

8. The DEIS Fails to Properly Evaluate Compliance with the State Implementation Plan.

49|9.0

The DEIS provides insufficient information to assure that the routine operation of the NBAF would not adversely affect the State Implementation Plan (SIP). Although the DEIS specifically acknowledges and admits that it has not yet evaluated, let alone even determined certain emissions associated with the operation of NBAF, it claims that “[e]missions from the proposed NBAF would not be anticipated to impede a state’s plan for restoring an area’s pollutant(s) specific National Ambient Air Quality Standards (NAAQS) compliance.” DEIS, 3-57. However, DHS has no way of knowing whether emissions from the proposed NBAF would actually comply with NAAQS since it has not even determined what the emissions will be from NBAF. In addition, the DEIS offers no means of assurance that the state in which the NBAF would be located would authorize approval of this now-unknown release rate. It is likely that the site selected will be in non-compliance for NAAQS for one or more pollutants.

**D. NOISE**

1. The DEIS Fails to Properly Disclose and Evaluate the Affected Environment and the Potential Impacts of the Proposed NBAF.

50|10.0

The described methodology for assessing impacts from noise is obviously inadequate. The DEIS merely relies on noise studies, records and information that were not specific to the site or the proposed facility. Baseline noise levels for the various sites, with the exception of Plum Island, were not and have not been documented. The DEIS fails to include a description of the yearly day-night average sound levels, either outdoors or indoors. In addition to the lacking baseline noise levels, the projected noise levels are likewise without foundation or support. The projected noise levels for the NBAF were based on current levels of the existing PIADC, despite the fact that the NBAF will be a larger facility and a baseline noise level survey for the PIADC also has not been conducted.

The DEIS evaluation of Noise should be primarily concerned with the documentation and assessment of the changes in the noise situation/environment with regard to each potential site as a result of the proposed NBAF construction and operations. S.P. Singal, *Noise Pollution and Control Strategy*, Alpha Science Int'l Ltd., 2005 at 210. An analysis of the noise environment would begin by asking the following questions:

- Does the noise environment change?
- Does the exposed population change?
- Are changes significant enough for detailed documentation?

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Comment No: 49

Issue Code: 9.0

DHS notes the commentor’s concern for compliance with the State Implementation Plan (SIP).

Section 3.4.3 of the NBAF EIS discusses the ambient air quality of the Athens-Clarke County region and the potential air quality impacts from constructing and operating the NBAF at the South Milledge Avenue Site. Should a decision be made to build NBAF and following site selection and final design, a complete emission inventory would be developed and refined modeling performed as necessary in accordance with state-specific air quality permitting requirements. DHS would be required to comply with permit-established requirements.

Comment No: 50

Issue Code: 10.0

DHS notes the commentor’s noise concerns. Section 3.5.3 of the NBAF EIS describes the potential construction and operational consequences from noise affects at the South Milledge Avenue Site alternative. As summarized in Section 3.5.1, the evaluation of potential impacts on the acoustic environment considered the impact of noise-generating equipment and activities associated with NBAF in order to assess the potential for and to estimate the potential magnitude of the change, if any, in each site’s ambient acoustic environment considering the existing land use formed the affected environmental baseline. This analysis specifically considered sensitive receptors unique to each site. In the case of the South Milledge Avenue Site, this includes adjacent University of Georgia facilities and nearby resource protection and recreation areas such as the State Botanical Gardens. As noted in Section 3.5.3, noise effects were discussed both for nearby human populations and for wildlife. Once a site is selected and design finalized, a detailed geotechnical report will be prepared and results included in construction technique development. If blasting is required, efforts will be taken to minimize the blast number(s), intensity, and duration. A blasting plan would be developed implementing construction measures such as minimizing explosive weights, stemming depths and material, and delay configurations all to mitigate potential noise levels.

Culler, Esq., Jenny

Page 57 of 133

WD0753

*Id.* These questions, specifically tailored to the considerations at the Athens site include:

51| 10.2

- Will visitors to the Botanical Gardens constantly hear the NBAF facility instead when they are outdoors?
- Will the homeowners on the Middle Oconee River be able to hear the sound of running water from the river, or will the NBAF drown that out with its air compressor and other noises?
- Will birders who travel from all locations to the Audubon Important Bird Area in Athens still be able to hear the distinct species' calls, or will the noise from the NBAF interfere?
- If any of the answers to these questions indicate there will be noise impacts, then to what degree, and how often will they occur?

The DEIS should measure and document the noise levels and the exposed population, including, but not limited to, the existing noise level and exposed population, projections of future noise levels and exposed populations and the change in noise level/impact of the project. *See id.* The assessment of the impact should include health and welfare effects; potential loss of hearing; and environmental degradation. *See id.* The DEIS does not adequately identify the receptors in the area. Different types of noises should be included in the evaluation. The types of noise and vibration environments to be considered should be:

- General audible noise;
- Special types of noise such as infrasound, ultrasound, impulsive sounds such as blasts, and sounds from random noise sources such as voices, and warning signals (since these noises cannot be adequately evaluated by average sound levels); and
- Vibration, because of the close relationship of noise to structural vibration.

Singal at 210.

Another analysis defines the noise environment is the affected population by the new noise sources above a specified YLDN, the base yearly day-night noise level, which is typically 55 dB, consistent with the lower threshold for health and welfare effects prescribed by EPA in 1973 and 1974 for the most sensitive receptors of the population—residences with a margin for interference with everyday activities such as conversation, telephone use, radio listening, etc. Singal at 211-212.

Evaluations of noise changes lasting longer than 6 months should include a projection of population and land uses affected by the noise over a period of 20 years or the length of the project, which is ostensibly 50 years or the NBAF. Singal at 211. For non-continuous sounds there should be a measure of the average (equivalent) continuous A-weighted sound level over the specified period of time that includes a nighttime weighting, and the day-night average sound level. *Id.*

Even where no one currently lives, a small increase in noise over existing conditions will also constitute noise impact degrading the environment whether it affects wildlife or because it destroys the tranquility of a wilderness area that draws urbanites as

56

Comment No: 51

Issue Code: 10.2

DHS notes the commentor's noise concerns. The NBAF EIS Section 3.5.3 describes the potential construction and operational consequences from noise affects at the South Milledge Avenue Site alternative. Section 3.5.5.3 addresses operational noise impacts associated with the proposed NBAF. Minor noise impacts would result from an increase in traffic and operation of the facility's filtration, heating, and cooling systems. Section 3.5.5.3 describes noise-attenuating design features that would minimize noise emissions. In the event of a power outage, operation of back-up generators could have a short-term impact on wildlife by discouraging utilization of immediately adjacent habitats. Routine operations at the NBAF would not likely have significant noise impacts on wildlife or wildlife-dependent activities on adjacent properties.

Culler, Esq., Jenny

Page 58 of 133

WD0753

an escape from the city or makes the area unsuitable for future residential or other noise sensitive development. Singal at 214. The DEIS also makes no mention of what natural noises the NBAF may drown out. A more detailed description of potential and expected adverse effects on wildlife is included elsewhere in these comments.

2. The DEIS Fails to Properly Disclose and Evaluate the Range of Effects for Noise Impacts During Construction and Operation of the NBAF.

52| 10.2

If the DEIS considered actual measurements of the distances the expected NBAF noise may travel, it fails to disclose them. The DEIS also fails to define the area within which noise receptors were considered. It provides a table listing decibel levels of common sounds, but does not provide decibel levels for construction or operation of the NBAF, leaving the reader to guess at where those activities would rank on that list. It omits the fact that building construction and earthworks equipment produce considerable noise emission levels, on the order of 100dBa at 15meters, and if the equipment is poorly maintained, up to 130dBa. Singal at 40. That puts the construction phase at least tied for third place of the loudest examples on the list (on platform by passing subway train, 100 dBa) and in the running for first (the highest listed is air raid siren at 50ft, 120 dBa). DEIS, 3-87. This estimation of construction noise does not even include the potential blasting that the DEIS anticipated and as is discussed below.

The DEIS does not at any point indicate how far from the site they expect construction or operational noise to travel, and therefore what residents, businesses, schools, churches, etc. should be considered as noise receptors. The noise receptor map, Figure 3.5.3.1-1, is misleading and omits residences that are literally just outside the pictured area. DEIS, 3-89, compare Figure 3.2.1.2-1 at 3-11. If so, then extrapolating from that point, there are residents, schools, business and churches that should also have been considered.

Several more deficiencies could be named. The DEIS fails to clearly state the timeframe for the expected phases of construction and construction noise emissions. The DEIS does not state what sources of noise are inherent in the design of the NBAF and whose noise levels could have been ascertained. No mention is made of how loud the chillers will be, for example. The DEIS fails to state whether valuable ambient noise such as the river or birds will be drowned out by the constructions and operations noise. In sum, no meaningful general or site specific analysis was performed.

3. The DEIS Fails to Include an Analysis of Noise Levels and Impacts from Blasting and Compaction.

In the event the NBAF is located on the Athens site, the construction of the facility on the bedrock present there will require blasting and compaction with heavy machinery. Site Characterization Study § 2A.1, p. 1. However, the DEIS failed to even mention the fact that blasting or compaction will occur at the Athens site in the discussion of noise. The data are readily available to conduct proper analyses of noise

57

Comment No: 52

Issue Code: 10.2

DHS notes the commentor's noise concerns related to construction blasting. Section 3.5.3 of the NBAF EIS describes the potential construction and operational consequences from noise affects at the South Milledge Avenue Site. Once a site is selected and design finalized, a detailed geotechnical report will be prepared and results included in construction technique development. If blasting is required, efforts will be taken to minimize the number, intensity and duration. Also, see response to Comment No. 50.

Culler, Esq., Jenny

Page 59 of 133

WD0753

52 cont. | 10.2

impacts from blasting, and the DEIS must include a thorough review of these impacts. In addition, vibration and shock from blasting must be evaluated for potential adverse impacts on buildings and structures surrounding the site. Singal at 224.

4. The DEIS Fails to Properly Analyze Impacts on Wildlife from Noise of Construction and Operation of the NBAF.

53 | 10.2

The DEIS indicates in a conclusory fashion that noise from construction will “temporarily disperse wildlife from adjacent undeveloped areas.” DEIS, 3-88. However, this statement does not include an analysis of the effects of such a dispersal if it occurs during mating season or during the months when the wildlife are tending to their young, when species are the most sensitive to disruption. The documents also ignores the question of where the dispersed animals would go during this time. Will there be more deer/auto accidents due to the dispersal? Will the disruptions cause certain migratory birds to nest in less suitable areas, decreasing their chances for the survival of their broods? Federal agencies are required to investigate the effects of their activities on migratory birds, and to enter into a Memorandum of Understanding with the Fish and Wildlife Service “that shall promote the conservation of migratory bird populations.” Executive Order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*. Yet, there is no mention in the DEIS of compliance or planned compliance with this Executive Order, especially as it relates to the impacts of noise on migratory birds.

The continued operation of the NBAF will certainly generate noise on a regular basis that may be disruptive to the local wildlife. The DEIS indicates that “operational noises from the NBAF would likely discourage the on-site fauna rehabilitation.” DEIS, 3-88. These operational noises will include the air compressor, noises from the water chilling plant, automobiles traveling to and from the facility, voices, and the like. However, there is not an elaboration on which fauna are less likely to rehabilitate the area, or what the definition of “on-site” is for the purposes of determining the impacts of operational noise on wildlife. Obviously, “on-site” must include an area of otherwise habitable forest, grassland, or other environment, but this is not explored in the DEIS. Therefore, it is impossible for the reader of the document to anticipate what area will be effectively depopulated of its native wildlife.

Consequences from the selective depopulation of these areas are also not considered in the DEIS. For example, if the natural deer population normally keeps the invasive kudzu plant at bay, then the evacuation of the deer in the several miles surrounding the NBAF site could lead to massive, unchecked growth of that non-native species, thereby destroying other important native plants and habitats. For example, Swainson’s warbler, a species of concern in Georgia, nests in native canebreaks, and they are known to breed and nest in the Botanical Gardens immediately next door to the proposed NBAF site in Athens. See Dean F. Stauffer, *Comments Related to the DEIS on the Proposed U.S. Department of Homeland Security National Bio and Agro-Defense Facility*, prepared for these comments (August, 2008) (“Stauffer Report”) at Tab 40. If the invasive, non-native privet were to take over more habitat normally suitable to the cane because the privet is not being eaten by the local deer population, then less cane

58

Comment No: 53

Issue Code: 10.2

See response to Comment No. 50.

Culler, Esq., Jenny

Page 60 of 133

WD0753

means less suitable habitat for the Swainson's warbler to nest. The DEIS fails to explore these possibilities, ignoring the overall connectedness of each NBAF impact.

#### E. GEOLOGY & SOILS

##### 1. The DEIS Fails to Explain the Inconsistencies Related to Geology and Soils at the Proposed NBAF Site.

54| 11.2

The DEIS needs to explain the conflict between its assessment of important soils and the county assessment of important soils, which identifies portions of the site and areas adjacent to the site as a source of valuable agricultural soils. See Athens-Clarke County Comprehensive Plan Map of Prime Agricultural Soils, attached hereto at Tab 41. The DEIS must not make assumptions regarding the soil quality and value of the land, especially when it has not yet received the full Natural Resource Conservation Service Farmland Protection Policy Act report.

Furthermore, it has been noted in the media that blue granite bedrock is prevalent in Georgia. The composition of this bedrock creates difficulties for builders in the area, and generally means that a construction site will have to be revised during the process of construction depending upon how much of this type of bedrock ends up being present. An emailed comment from Kathy Prescott, incorporated herein and attached hereto at Tab 42, includes the media on this subject and some comments. It is not clear whether the DEIS considered the probable increased construction costs for building on this sort of bedrock at the South Milledge Avenue site. See Comments of Dr. David Wenner, attached hereto at Tab 40. Additionally, the DEIS did not properly disclose any information about whether this bedrock can be conserved or salvaged from the construction site and utilized for some other beneficial purpose, or whether its removal from a location may impact the ability of the location to withstand seismic activity.

##### 2. The DEIS Fails to Disclose and Consider the Impacts from Vulnerabilities of Bedrock.

The Site Characterization Study indicates that blasting will need to occur at the proposed Athens NBAF site if the NBAF is constructed there. Site Characterization Study at 2A.1, Page 2. However, the study goes on to report that "[t]he report does not address deep foundations", which begs the question of whether a deep foundation will be required for the NBAF at the Athens location, and to what extent that deep foundation will require additional blasting and excavation. The analysis of the site characteristics stops short of providing a complete picture of what to expect at the Athens site. There is no way for the DHS or the public to accurately assess bedrock impacts and vulnerabilities from the information that was provided in the DEIS.

Furthermore, blasting in bedrock can create fractures, enhancing the potential for spills of pollutants or hazardous wastes to filter through the bedrock, beyond easy cleanup, and into the nearby river. For a detailed analysis of these issues and an example of what the DEIS should have addressed, but did not, please see the Blasting Impact

59

Comment No: 54

Issue Code: 11.2

DHS notes the commenter's concerns regarding impacts on site soils and bedrock. Section 3.6.3 of the NBAF EIS describes the South Milledge Avenue Site's soil and geological conditions and Section 3.6.3.2 describes potential construction consequences. A detailed geotechnical report will be prepared for the selected site and will be used in the NBAF's final design specifications including subsurface rock strata and potential construction blasting implications including any possible groundwater flow alterations. Section 3.6.3.2 describes initial coordination with the local USDA field office and the potential impact on the Congaree soils which constitute 3% of the site and are considered as farmland of statewide importance. The results of consultation with the Natural Resources Conservation Service (NRCS) are documented in Appendix G of the NBAF EIS.

Culler, Esq., Jenny

Page 61 of 133

WD0753

Assessment, Proposed Nelson Aggregate Nelson Quarry Extension, attached hereto at Tab 43.

#### F. WATER RESOURCES

3 cont. | 26.0 [H]uman actions jeopardize the biological integrity of water resources by altering one or more of five principal factors – physical habitat, seasonal flow of water, the food base of the system, interactions within the stream biota, and chemical quality of the water....” Courtemanch, D.L. 1995. *Merging the science of biological monitoring with water resource management policy: Criteria development*. Pages 315-325 in W.S. Davis and T.P. Simon (editors). *Biological assessment and criteria: Tools for water resource planning and decision making*. Lewis Publishers, Boca Raton, Florida, citing Karr, J.R. 1998. *Rivers as sentinels: Using the biology of rivers to guide landscape management*. Pages 502-528 in R. J. Naiman and R.E. Bilby, editors. *River Ecology and Management: Lessons from the Pacific Coastal Ecosystem*. Springer, N.Y. The DEIS fails to adequately describe and track each of these principal factors, and to disclose the likely and reasonably foreseeable impacts of the NBAF on the entire ecosystem, flowing from the impacts on the biological integrity of water resources. The DEIS’s decision to consider surface water, stormwater, and groundwater independently and to ignore the natural connectedness of these water systems is also arbitrary and capricious, and yields an inadequate review of impacts to water resources from the NBAF.

A consideration of the above factors that respects the natural connectedness of water systems should be available for public review, and should also be a critical component of the agency’s review before it makes a decision about where or whether to construct the NBAF. These principal factors are reviewed in this section on Water Resources, but are also critical to consider in the sections on Aquatic Resources and Terrestrial Wildlife that the DEIS inexplicably separated out as if they could be independently studied.

1. The DEIS Fails to Properly Evaluate and Consider the Affected Environment.
  - a. *The DEIS Fails to Adequately Evaluate Current and Historic Conditions.*

55 | 12.2 The DEIS indicates that “[b]ased on a conceptual site drawing, the proposed facility would directly affect on-site surface water features.” DEIS 3-129. However, the DEIS does not direct the reader to this site drawing, nor does it explain within the surface waters section how these direct effects will occur. Streams that should be protected on the Athens site are not discussed in Chapter 2: Description of the Proposed Action and Action Alternatives, at DEIS 2-12, nor are they shown on the figures at 2-14 and 2-15. What is apparent on the figures at 2-14 and 2-15 is a pond just adjacent to the proposed NBAF site, which is not mentioned at all in the DEIS.

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Comment No: 55

Issue Code: 12.2

DHS notes the commentor’s concerns regarding the assessment of water resources and potential impacts. The water resources of the South Milledge Avenue Site are described in Section 3.7.3 of the NBAF EIS. The NBAF will be operated in accordance with the applicable protocols and regulations pertaining to stormwater management, erosion control, spill prevention, and waste management. Section 3.13.4 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 3.3.3 and 3.7.3 describe standard methods used to prevent and mitigate potential spills and runoff affects. With respect to the rate of water use at the NBAF, it is noted that the anticipated rate of 118,000 gallons per day is approximately 0.76% of Athens’ annual average of 15.5 million gallons per day. As designed, there are no underground fuel storage tanks proposed and facility infrastructure located in a basement area would not impact groundwater quality, although alternate groundwater flow patterns may develop. Once a site is selected and design finalized, a detailed geotechnical report will be prepared and subsurface strata and groundwater elevations will be considered during construction. DHS notes the commentor’s 100 vs 500-year floodplain opinion.

Culler, Esq., Jenny

Page 62 of 133

WD0753

55 cont. | 12.2

The DEIS does not explore where exactly these streams run, whether they are listed on the state 303(d) list for impaired waters, or whether the pollutants that are reasonably expected to enter and impact those waters are pollutants of concern in the area, either for those headwater streams themselves, or for the waterbodies they feed. For example, the Middle Oconee River feeds the Altamaha River, and the Altamaha is the seventh most endangered river in the United States due to the loss of water flow stemming from power plants and reservoirs. [www.garivers.org](http://www.garivers.org). Several endangered species are known in this watershed area, among them the Altamaha Shiner and Robust Redhorse 2006: <http://georgiawildlife.dnr.state.ga.us>. See "Report of Dr. Sally Walker," attached hereto at Tab 44.

The only discussion of the 303(d) list is in the context of the Middle Oconee River itself, but it is apparent that the DEIS does not consider the current condition of the streams on the site to determine if they are impaired or are impacted enough by any pollutant such that they have reached the total maximum daily load (TMDL) of such pollutants, which should be investigated regardless of whether the streams have been assigned TMDLs or not. 33 U.S.C.A. §1313(d).

EPD has identified the Middle Oconee River as an impaired water with a 'not supporting' designation. A water body is placed on the 'not supporting' list if 1) chemical data indicated a water quality standard was not met in greater than 25% of the samples collected for a given location, 2) if a fish consumption ban was in place or 3) if tests indicated toxicity at low flow in a municipal or industrial discharge. See, [http://www.caes.uga.edu/publications/subject\\_list.html#Water](http://www.caes.uga.edu/publications/subject_list.html#Water); <http://pubs.caes.uga.edu/caespubs/pubs/PDF/B1242-2.pdf>, "Total Maximum Daily Loads in Georgia", attached hereto at Tab 45. The Middle Oconee River is classified as a 'fishing' river, thus its 'not supporting' designation signifies that the Middle Oconee does not support its primary dedicated use due to various pollutants. See, generally EPD's 2008 Integrated 305(b)/303(d) List, available online at [www.gaepd.org/Files\\_PDF/305b/Y2008\\_303d/Y2008\\_Rivers\\_Streams.pdf](http://www.gaepd.org/Files_PDF/305b/Y2008_303d/Y2008_Rivers_Streams.pdf), attached hereto at Tab 46.

For the purposes of the TMDL Implementation Plan for the Oconee River Basin, EPD identifies the Middle Oconee River as the segments between McNutt Creek to the Oconee River, Mulberry River to Big Bear Creek and Big Bear Creek to McNutt Creek. TMDL Implementation Plan for the Oconee River Basin, available online at [www.gaepd.org/Files\\_PDF/techguide/wpb/TMDL/TMDL\\_Implementation\\_Plans/Oconee/Oconee\\_ProgramPlans/TMDLIP\\_Oconee\\_ZeroPercent\\_BioSed\\_Y2003.pdf](http://www.gaepd.org/Files_PDF/techguide/wpb/TMDL/TMDL_Implementation_Plans/Oconee/Oconee_ProgramPlans/TMDLIP_Oconee_ZeroPercent_BioSed_Y2003.pdf), and attached hereto at Tab 47. The McNutt Creek segment stretches for four miles. For those four miles, the Middle Oconee is impaired for fecal coliform from urban runoff and/or urban effects. [www.gaepd.org/Files\\_PDF/305b/Y2008\\_303d/Y2008\\_Rivers\\_Streams.pdf](http://www.gaepd.org/Files_PDF/305b/Y2008_303d/Y2008_Rivers_Streams.pdf). The Mulberry River segments runs for 11 miles. For those 11 miles, the River is impaired for fecal coliform with significant impacts to the fish community. The pollution in the Mulberry to Big Bear section results from nonpoint sources. *Id.* The Big Bear Creek to

Culler, Esq., Jenny

Page 63 of 133

WD0753

McNutt Creek segment runs for 12 miles. For those 12 miles the River is impaired for fecal coliform from nonpoint sources. *Id.*

55 cont. | 12.2

Significant tributaries to the Middle Oconee are also impaired, according to EPD's 2008 Integrated 305(b)/303(d) list. Mulberry River (18 miles) is impaired for fecal coliform from nonpoint sources with significant impacts on the fish community. McNutt Creek (12 miles) is impaired for fecal coliform from nonpoint and urban runoff sources. North Bypass Branch, West Fork Trail Creek, Brooklyn Creek, Cloverhurst Branch, and Hunnicutt Creek are all impaired for fecal coliform from urban runoff and/or urban effects. *See*, EPD's 2008 Integrated 305(b)/303(d) List.

Clearly, the burden on the Middle Oconee River must not be increased by additional pollution, especially any waste stream that contains fecal coliform. Despite the fact that this information is clear and easily obtained information from EPD, the DEIS discounts its impact on the Middle Oconee River by failing to adequately address it. The NBAF will study and house numerous animals, and there are indications that some of these animals will be kept penned outside the facility. The proposed Athens NBAF would sit alongside of the Middle Oconee River. Runoff and wastewater from the facility are likely to be directed into the River. Yet, the DEIS never addresses how the NBAF will prevent or mitigate further pollution of the Middle Oconee River from nonpoint and urban runoff sources from the facility.

The DEIS fails to disclose and consider current and historic impacts on the waterbodies at the proposed Athens NBAF site. For example, high levels of nitrates have been discovered and documented in the Orange Trail Creek at the State Botanical Gardens, and the lagoons from the University of Georgia Swine Farm have been implicated as the major cause of significant pollution to the area waterbodies. *See* David Radcliffe and Karin Lichtenstein, *Investigation into Sources of High Nitrate Concentrations in Orange Trail Creek State Botanical Garden of Georgia*, attached hereto at Tab 48. The DEIS should have reviewed the readily available data from the Upper Oconee Watershed Network, and should have analyzed and considered these data and this report for purposes of properly identifying the existing conditions at the proposed Athens NBAF site, and also for purposes of properly examining the cumulative impacts that the pollutants produced at the NBAF and disposed of in the local waterbodies will have on the local water resources.

- b. *The DEIS Fails to Acquire and Consider Reliable Information About Groundwater Levels or Fluctuations.*

The Site Characterization Study provided in mid-August by DHS indicates that the borings to determine groundwater fluctuations at the Athens, Georgia, site were conducted in "extreme draught [sic] conditions late 2007. Further consideration of groundwater fluctuations is warranted." Site Characterization Study § 2A.1, p. 1. The potential for groundwater fluctuations may affect the construction of the NBAF, but was not considered with any specificity at all. It appears that DHS has not conducted any

Culler, Esq., Jenny

Page 64 of 133

WD0753

further studies and has not further considered the possibility of groundwater fluctuations as recommended by their experts.

c. *The DEIS Fails to Adequately Identify Floodplains.*

DHS made the determination that it would use the FEMA 100-year storm floodplain map. However, it is undeniable that it is more protective to use the 500-year storm floodplain map. The DEIS does not address how the decision was made to use a less protective standard for identifying whether the proposed NBAF sites were in the floodplains. If the NBAF will actually be located in a 500-year floodplain, local, state, and federal laws applicable to construction within the floodplain may apply.

2. The DEIS Fails to Adequately Describe Sources and Types of Pollutants from the NBAF and the Methods by Which Such Pollutants May Affect Connected Water Resources.

The DEIS does not adequately address the potential impacts on water resources from the various on-site pollutants that will be produced or kept at the NBAF, nor did it adequately address whether there will be hazardous wastes on-site and what the likelihoods are that these hazardous wastes could escape into the environment. The DEIS fails to indicate the level of risk from NBAF's pollutants to the NBAF site itself, to the river, to the local community, and to downstream communities. It fails to discuss the pollution connected with maintenance of the NBAF facility, including not only the fuels storage tanks (which may be underground and susceptible to leaking), but also the landscape maintenance outside of the facility (which may involve the application of fertilizers and herbicides). The DEIS must quantify the risk and potential environmental of the fuel storage tanks, landscape maintenance and other pollutants produced by site operations. See comments from the Upper Oconee Watershed Network attached at Tab 40.

a. *Fuel Storage Tanks.*

Leaking underground storage tanks can pollute groundwater, and without an accurate picture of where the groundwater is located at the Athens site, there is no way to tell what other underground water recharge areas, natural springs, or other connected surface waters may be affected by a fuel leak, or by absorption. According to the Site Characterization Report, about 550,000 gallons of fuel will be stored on site. Site Characterization Study, §2A.4, p.2. Assuming these fuel storage tanks are located underground, they will have to be built in bedrock. Borehole data referenced by the Site Characterization Report establish the existence of shallow groundwater levels in some areas. *Id.* at §2A.1, p. 1. The risk for groundwater contamination, and the further spread of that contamination to the river via bedrock fractures, is real and would be extremely difficult, if not impossible to remediate.

63

Comment No: 56

Issue Code: 12.2

DHS notes the commentor's concerns. Following final design, process specific pollutants and potential transfer media will be considered in developing detailed maintenance and operational guidelines and responses. Section 3.13.2 of the NBAF EIS describes potential waste management impacts common to all sites and Section 3.14.3 describes hazard identification, accident analysis, and risk assessment pertaining to different operational scenarios. Section 2.2 of the NBAF EIS describes construction and operational requirements and Section 3.3.3 describes site specific infrastructure and potential construction and operational consequences.

Also, see the response to Comment No. 5.

Culler, Esq., Jenny

Page 65 of 133

WD0753

b. *Transportation-Related Waste.*

56 cont. | 12.2

The DEIS fails to discuss pollutants such as oil, tire rubber, and coolant that end up on the pavement of parking lots and are transported into surface waters by stormwater runoff. The fact is that the streams will be impacted, that stormwater run off from parking lots and roof tops will collect automobile- and industry-related pollutants, and that those pollutants will then be introduced into the headwaters of these streams and into the Middle Oconee River.

c. *Biological Waste.*

The DEIS further fails to disclose that the NBAF will keep paddocks of pre-testing subject animals penned outside the NBAF and onsite, and fails to consider the impacts on nearby waterbodies from the polluted runoff from animal waste on these fields. See Feasibility Study, §1.2, p.2, and further discussion *infra*.

The risks from waste water from the NBAF that is commingled with municipal waste, treated, and discharged into the Middle Oconee River must be analyzed in the DEIS to ensure that water quality standards and criteria are not exceeded by the operations of the proposed NBAF. Even treated wastes can reduce the oxygen in the stream to such an extent that fish kills occur—as occurred twice last year in Athens below the wastewater treatment plant. The DEIS must address the potential lack of water for waste dilution by providing quantitative/numerical estimates with uncertainty bounds on the timing and amount of waste loads and estimated river flow and then comparing these estimates to state standards and criteria to demonstrate compliance. See comments from the Upper Oconee Watershed Network attached at Tab 40.

d. *Landscape Maintenance.*

The DEIS must also address the disposal of other wastes, especially hazardous wastes, on site and the potential for contamination of surrounding areas, communities, the river, and downstream communities. The DEIS fails to discuss the maintenance of the NBAF facility and the landscape maintenance outside of the facility which may involve the application of fertilizers and herbicides.

e. *Air-borne Particulate Matter.*

By separating out the air quality and water quality considerations, the DEIS failed to consider that air quality can impact water quality. An important issue to consider is whether the operation of the incinerator stacks or other facility processes will affect local air quality, and whether the particulate matter is considered likely to fall out into and impact the water column, especially considering the proximity of the Middle Oconee River to the proposed NBAF location. However, the DEIS fails to disclose or consider this type of data, and the public is left without the ability to analyze or comment on air-borne particulate matter impacts.

Culler, Esq., Jenny

Page 66 of 133

WD0753

57| 12.2

3. The DEIS Fails to Adequately Evaluate the Impacts to Fish, Macroinvertebrates, and Other Species.

a. *The DEIS Fails to Adequately Assess How Stream Destruction and Segmentation Affect Aquatic Species.*

The DEIS fails to properly evaluate stream destruction and segmentation, buffer destruction, erosion and sedimentation issues, pesticide impacts, and other impacts that the NBAF will have on the proposed Athens site. All of these impacts adversely affect water quality and the entire ecosystem of the water resources, from the algae to the macroinvertebrates, to the fish.

The DEIS concludes that there are headwater streams located on the property proposed for the Athens NBAF, and that at least some of those streams will be impacted by the construction and operation of the NBAF. Specifically, it states that road and fence construction would affect approximately 50 linear feet of stream, as well as the buffer zone on either side of the stream and would require a Section 404 permit from the United States Army Corps of Engineers (ACE), a Section 401 certification from the Georgia Environmental Protection Division, and a buffer variance from Athens-Clarke County. The DEIS should also reflect that a buffer variance will also have to be obtained from the state for the 25 foot buffer. The obvious stream destruction and interruption the DHS would have to get permits for in order to complete is clearly a "direct impact" and the DEIS is in error to conclude that operations at the proposed NBAF would have "no direct impact" on wetlands or aquatic communities. The permanent disruption of the streams that currently exist on the Athens, Georgia, site is not considered in the scheme of the region's impacts on its surface waters due to the proliferation of stream crossings and the disappearance in the region of unadulterated, pristine head-waters streams. Yet, research done at the University of Georgia demonstrates the value of headwater streams and the need for them to be protected to avoid further losses, and the DEIS should address the importance of the biological processes that occur only in headwaters streams that affect the overall ecosystem health. M.A. Churchel and Darold P. Batzer, *Recovery of Aquatic Macroinvertebrate Communities from Drought in Georgia Piedmont Headwater Streams*, Am. Midl. Nat. 156: 259-272, attached hereto as Tab 50.

b. *The DEIS Fails to Adequately Address How Erosion and Sedimentation Affect Aquatic Species.*

The discussion of the impacts of construction of the NBAF on surface waters focuses solely DHS' assurance that state required erosion controls will be utilized. DEIS, 3-129. However, the DEIS ignores the impacts to fish, macroinvertebrates, and other species that depend upon the uninterrupted flows of the streams at the Athens site. Stormwater and erosion and sedimentation are also stressors to the state listed Threatened Altamaha Shiner, which is found in the Middle Oconee River. The DEIS cannot conclude that there will be "no direct impact" on federal or state listed species. Due to the probability of increased erosion and sedimentation during construction, and increased stormwater flows once construction is completed, it is likely that there will be a direct

65

Comment No: 57

Issue Code: 12.2

DHS notes the commentor's concerns regarding possible impact to the area's water resources and aquatic communities. The NBAF will be operated in accordance with the applicable protocols and regulations pertaining to stormwater management, erosion control, spill prevention, and waste management. Section 3.7.3 of the NBAF EIS describes the potential water resources consequences from NBAF's construction and operation. Sections 3.8.3.1.3, 3.8.3.2.3, and 3.8.3.3.3 describe site specific aquatic resources. Sections 3.3.3 and 3.7.3 describe standard methods used to prevent and mitigate potential spills and runoff effects. Also, see response to Comment No. 34.

Culler, Esq., Jenny

Page 67 of 133

WD0753

57 cont. | 12.2

adverse impact. One of the most significant contaminants of the waters in Georgia is sediment. The DEIS assumes that during construction there will not be any soil that leaves the site improperly and impacts the Middle Oconee River or other downstream waterbodies. The cursory review that the DEIS gives to this topic is inadequate to disclose the dangers and the potentials impacts that could occur to the local water resources in the event that the erosion and sedimentation control features fail and sediment escapes from the site. During construction of the facility there is great potential for erosion and sedimentation of the river, impacting habitat and downstream communities. Construction will result in substantial land disturbance during construction and the DEIS needs to quantify these effects through a more rigorous analysis such as environmental simulation modeling. At this time there are no specific guarantees that erosion and sediment impacts will be mitigated or prevented. The DEIS cannot conclude that there will be "no direct impact" without these assurances. Stream restoration should be required to maintain Oconee River quality at its current level or better during and after construction. The DEIS must describe such measures and their cost should be included in the cost-benefit analysis of the site. Additionally, the DEIS must address the cumulative impacts of sedimentation in the area.

There are no fewer than 90 species of macroinvertebrates in the Middle Oconee River, which indicate "a relatively healthy ecosystem, recovering from pesticide and siltation-producing land-use practices stemming from the 1950's that greatly affected the Middle Oconee River. Silt is one of the worst pollutants detrimentally affecting macroinvertebrate diversity and biomass in this region. Silt reduces light penetration in streams and thereby stunts algal growth. Pesticides, too, traveled to the Middle Oconee via suspended sediments running off the land and through leaching during the 1950's." See Report of Dr. Sally Walker, (*citations omitted*), attached hereto at Tab 40. The construction of the NBAF could have extremely detrimental impacts to macroinvertebrates from erosion into the river, and both vector control and landscaping activities from the operation of the NBAF could have extremely detrimental impacts to macroinvertebrates due to pesticides. However, this was not properly explored, disclosed, or considered in the DEIS. The importance of macroinvertebrates and the potential adverse impacts on macroinvertebrates, fish, and other species up the food chain are considered further elsewhere within these comments.

58 | 12.2

c. *The DEIS Fails to Adequately Address Impacts to and from Stormwater.*

Due to the size of the facility it is likely that it will result in a large amount of impervious area and therefore a large amount of stormwater. The increased stormwater flows due to increased impervious surface areas on the NBAF site are also not considered in the DEIS. While the document indicates that "[d]esign measures could include pervious pavement...", it is not clear whether those design measure will be implemented, or what the consequences and costs would be in terms of increased sheet flow of water across the site, and in terms of damage to the site and receiving waterbodies if the pervious surface designs are not implemented. DEIS, 3-129. The DEIS did not consider the preexisting stormwater flows on the site and the potential impacts from certain

Comment No: 58

Issue Code: 12.2

DHS notes the commentor's concerns regarding possible impact to the area's water resources from stormwater runoff. Sections 3.3.3 and 3.7.3 of the NBAF EIS describe standard methods used to prevent and mitigate potential spills and runoff affects. Stormwater abatement options available for implementation include, but are not limited to, grassy swales, retention ponds, pervious pavement, and facility grounds' reuse. In addition, Section 3.15 discusses proposed mitigation measures for the design, construction, and operation of the NBAF including measures consistent with DHS's proposed low-impact design (LID) approach. Any other required mitigation measures, monitoring or other conditions adopted as part of DHS's decision will be summarized in the Record of Decision.

Culler, Esq., Jenny

Page 68 of 133

WD0753

58 cont. | 12.2

percentages of increased impervious surfaces. At this time, there are no specific plans that guarantee that stormwater impacts will be mitigated or prevented with installation and maintenance stormwater control practices, with the DEIS stating only that they *would be considered* or *could* be used but not *shall be used*. The DEIS cannot conclude that there will be "no direct impact" without these assurances.

3 cont. | 26.0

The local government in Athens-Clarke County has taken a special interest in providing the public with information about how stormwater may become polluted and the impacts it may have on water quality. The DEIS failed to consider the information readily available from the county at [www.acstormwater.com](http://www.acstormwater.com), which not only provides information about the connectedness of stormwater and surface waters, but also provides suggestions for mitigation measures that facilities can implement in order to minimize impacts from polluted stormwater. The DEIS should, but did not consider these methods to reduce stormwater pollution from the NBAF facility into local waters.

The DEIS failed to discuss and consider where the stormwater retention that may occur on the site would discharge. Although the DEIS indicates that the Middle Oconee River will be the recipient of surface water drainage from the NBAF (DEIS, 3-131), there is no way to know the outfall location and any concerns that may arise from that choice. For example, if the outfall is a pipe that discharges directly into the Middle Oconee River, then is this point source discharge subject to Clarke County's Municipal Separate Storm Sewer System permit requirements?

Because the County has committed to providing certain infrastructure improvements for the NBAF, will the County remain responsible for the maintenance and upkeep of that infrastructure, notably the stormwater pipes or channels? If that is the case, then the DEIS should include an analysis of the cost to the County for such maintenance and upkeep. If the stormwater is discharged directly into the impaired Middle Oconee, then the DEIS should consider what end-of-pipe water quality treatments would be necessary and prudent to avoid adding any fecal coliform or other pollutants into the river, since the Middle Oconee is on the state's 303(d) list for fecal coliform.

The DEIS mentions at 3-172 that the soil erosion and sedimentation potentials will be minimized through the use of "erosion and sedimentation control measures" during the construction phase of the NBAF. However, the mitigations chapter does not specify what particular control measures DHS intends to use, whether there are data to demonstrate the relative efficacy and/or confidence in the measures that DHS intends to use to control stormwater from the NBAF site, or whether DHS will go above and beyond any state or locally imposed best management practices in order to avoid adverse impacts "to the fullest extent possible," as required by the regulations. 40 C.F.R. §1500.2. Even in the underlying Feasibility Study, there are no site-specific determinations of whether and where stormwater detention ponds or other facilities would be built, how much stormwater they would be required to hold, how much the topography of the site may have to be changed in order to safely direct flows of stormwater into the detention facilities, etc. Feasibility Study, §5.2.1.

Culler, Esq., Jenny

Page 69 of 133

WD0753

58 cont. | 12.2

Even after the site is constructed and stabilized, it is foreseeable that a stormwater retention pond or other structure would continue to be utilized to capture stormwater and release it at the same rate that the stormwater flowed across the site pre-construction. However, there appear to have been no hydrological study to determine those volumes and rates, nor has there been any study or indication of where the stormwater retention facility would discharge the water. The stormwater discharge itself may create erosion and sedimentation effects, and this has not been adequately analyzed or considered for mitigation.

Although Low Impact Development (LID) is mentioned in the mitigations section as a tool to mitigate stormwater impacts (DEIS 3-505), there is no elaboration or analysis in the DEIS regarding which concepts of LID the DHS would be putting into practice on the Athens proposed NBAF site. The DHS should consider the EPA's literature review regarding LID strategies in order to ensure that it has properly reviewed the practicable and available mitigation techniques for stormwater. <http://www.epa.gov/owow/nps/lid/lid.pdf>. The DEIS instead lists out the exact number of square feet of impervious surface the NBAF will create (as if this is a given, although DHS insists that the final design of the NBAF is not completed and will be designed to site-specific parameters when the time comes and it is unclear whether the LID mitigations are already factored into this mysterious number), and concludes that 22,500 cubic feet of runoff will be produced from the NBAF site in a 1-inch rainfall event. DEIS, 3-174. Is this 1-inch rainfall event then used throughout the analysis of impacts of the NBAF on water resources? The more appropriate analysis would include calculations of stormwater runoff during a 25-year rain event, a 50-year rain event, a 100-year rain event, and a 500-year rain event, in order for all the important information to be disclosed and considered. A 1-inch rainfall event is a laughable standard for the DEIS to utilize in making any determinations relative to the impacts of stormwater on any biological resources.

4. The DEIS Fails to Consider the Likelihood of Fissures in the Substrate from Blasting at the Proposed Athens NBAF Site, and the Impacts of those Fissures on Groundwater.

59 | 12.2

There was no discussion of the impacts from the construction of the NBAF on groundwater. However, the DEIS should have investigated whether there are any groundwater recharge areas, aquifers or other significant pools of groundwater beneath the proposed NBAF site in Athens, and determined whether the blasting required to build the NBAF on the site would create fissures in the bedrock, diverting or destroying the current recharge areas, pools or flows of groundwater, and enhancing leaching capabilities. See Report of Dr. Sally Walker, attached hereto at Tab 40. Such changes in the groundwater circuit could affect nearby streams, lakes, or other structures by forcing water to the surface in areas that were historically dry, or drying up areas that were historically spring fed. In fact, since there are on-site first-order headwaters streams on site (DEIS, 3-125), it is foreseeable that these streams could be affected by the blasting and disturbance of groundwater pathways.

68

Comment No: 59

Issue Code: 12.2

DHS notes the commentor's concerns regarding the effects of construction on bedrock in the area. Section 3.6.3 of the NBAF EIS describes the South Milledge Avenue Site's soil and geological conditions and Section 3.6.3.2 describes potential construction consequences. A detailed geotechnical report will be prepared for the selected site and will be used in the NBAF's final design specifications including subsurface rock strata and construction implications. The proposed NBAF developed footprint will reduce the allowable area for groundwater recharge; however, preliminary design parameters such as pervious pavement and stormwater reuse will minimize the effect. Also, see response to Comment No. 54.

Culler, Esq., Jenny

Page 70 of 133

WD0753

**G. BIOLOGICAL RESOURCES**

3 cont. | 26.0 The DEIS inexplicably attempts to explore potential adverse effects to biological resources as if each type of animal could be separated out of its habitat and the interactive nature of its ecosystem and analyzed independently in a vacuum. However, the scientific data show that sediment impacts water quality; water quality impacts macroinvertebrates; macroinvertebrates impact fish; fish impact birds; birds impact recreation, and on and on. The very format of the DEIS, therefore, subjugates the proper and adequate consideration of commingled and cumulative effects of the NBAF on species and the ecosystem, rendering the analysis of direct, indirect, and cumulative impacts in the DEIS wholly inadequate.

60 | 23.0 Furthermore, the only consideration of the potential impacts of the NBAF on biological resources in the event of an outbreak that is set out in this section of the DEIS provides only a cursory discussion of "Potential Operational Consequences for Wildlife," and presumes that site-specific "Standard Operating Procedures" (SOPs) identifying the appropriate response in the event of an outbreak for the facility will be publicly accepted and properly executed. DEIS, 3-213-214. This is a premature and probably unrealistic set of assumptions. At the very least, DHS should have proposed the SOPs for the NBAF to give the public a better idea of the expected quarantine zones, initial infection zones, control zones, outer surveillance zones, and the like. The DEIS should have provided data related to the successes and failures of SOP execution in other similar laboratory scenarios, to give the public an idea of the chances for successful control of an outbreak from the NBAF. The inclusion of the DEIS' brief analysis of these very serious and significant factors in the biological resources section is baffling, and does not serve to inform the public or elicit meaningful comments for review and consideration by the agency. It is left to the imagination whether the SOPs that would be developed at some point in the future would be manageable by the Athens area police, fire fighters, and other first responders. It is entirely uncertain whether the community would be able to --- or willing to --- respond in accordance with the SOPs, because they do not yet exist. Not only is this an inappropriate discussion to contain only in the biological resources section, the fact that the agency will develop such important protocols outside of the NEPA process is inappropriate and renders the DEIS inadequate.

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- 61 | 13.2 1. The DEIS Fails to Adequately Consider the Increased Potentials for the Spread of Disease Due to the Numerosity and Diversity of Species at the Proposed NBAF Site in Athens.

Georgia is the home to over 50 (fifty) species of mosquitoes. Robert N. Brewer, *Controlling mosquitoes in your home and on your premises*, Union Sentinel, July 12, 2007. This article is available online at <http://www.unionsentinel.com/news/2007/0712/home/057.html>, and is attached hereto at Tab 49. Considering the ability of many of the diseases to be studied at the NBAF to be transmitted via mosquito, the superficial treatment of the Athens mosquito problem in the DEIS is of great concern. The DEIS indicates that the climate and proximity to water at the proposed Athens NBAF site "would increase the likelihood that the RVF would

69

Comment No: 60

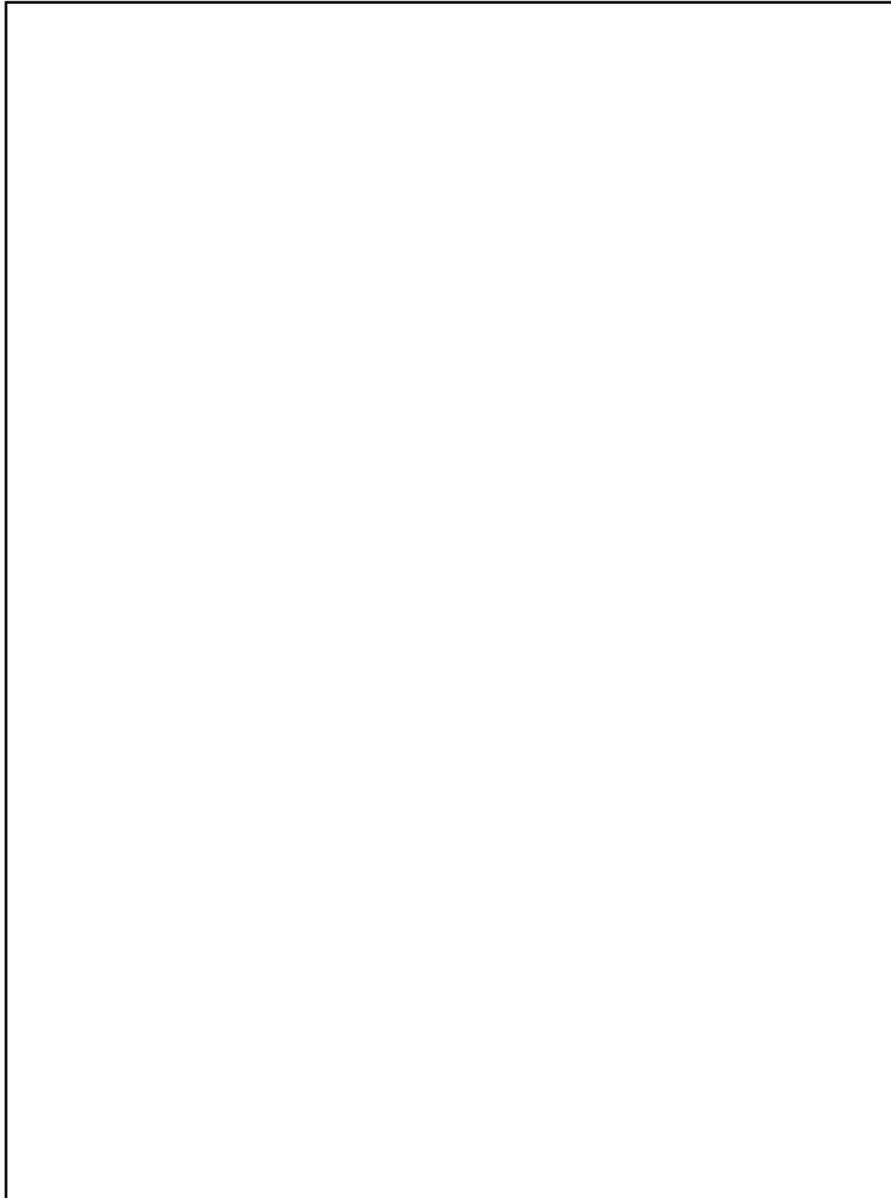
Issue Code: 23.0

DHS notes the commentor's concerns regarding specific measures as part of NBAF standard operation procedures and response plans. It is not possible to speculate on the nature and extent of quarantine zones, initial infection zones, control zones, and outer surveillance zones as referenced by the commentor for an accident event resulting in a release of a pathogen, which has a low probability of occurring. State-of-the-art engineering controls and biosafety and emergency response protocols are designed to contain any threat on site. Nevertheless, a site-specific emergency response plan would be developed and coordinated with the local emergency management plan and local emergency response agencies for all potential emergency events including accidents at the NBAF. The type of, duration, and geographical extent of any quarantine would be determined by the appropriate authorities depending on the pathogen released and contamination level.

Comment No: 61

Issue Code: 13.2

DHS notes the commentor's concern regarding the potential effects of an accidental release on wildlife at the South Milledge Avenue Site. 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 Kansas (Section 3.8.4.1.4 of the NBAF EIS), New York (Section 3.8.6.1.4), and North Carolina (Section 3.8.7.1.4) sites; and is only slightly higher than the diversity of species at the Mississippi site (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 Kansas (Section 3.8.4.1.4) and Texas (Section 3.8.8.1.4). Georgia has low diversity of ungulate wildlife. 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 response measures that could be employed in the event of an accidental release are described in Section 3.8.9. Table 3.8.9-1 describes the potential response strategies 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 depopulating wildlife (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. In the event that depopulation or population reduction was determined to be the most appropriate course of action, hunting with firearms would be the likely method for implementing this strategy. The response to an accidental release of a mosquito-borne pathogen such as Rift Valley fever could include the aerial application of insecticides. The use of insecticides could lead to direct adverse impacts on insect fauna, as well as indirect impacts on other wildlife species through disruption of the food chain. Although the NBAF EIS acknowledges the potential for significant impacts on white-tailed deer 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 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 of a pathogen.

Culler, Esq., Jenny

Page 71 of 133

WD0753

61 cont. 13.2

establish a sustainable reservoir.” DEIS at 2-38. It goes on to admit that “[s]hould a release of certain vector-borne pathogens occur, impacts such as aerial spraying of insecticide(s) could directly affect minority and low-income communities and other populations immediately adjacent to the site.” *Id.* However, the DEIS never elaborates on what insecticides would be utilized, what the reasonably foreseeable impacts to the human, animal, and insect communities near the NBAF would actually be, and what it would mean for the region if RVF or another pathogen were to “establish a sustainable reservoir.” What would the emergency response be if that were to occur? Would all biota in a radius around the facility be quarantined or eradicated? Does one bite from a mosquito carrying RVF infect a human?

Georgia is also the home to at least sixteen species of bat. See Cavender report at Tab 40. The Nipah virus has been found to be transmittable by a certain species of bat, and it is undetermined whether all of the Georgia bats may be able to transmit the disease. One strange outcome of an eradication of bats in the area in the event of a suspected or actual release of the Nipah virus would be the increased prevalence of mosquitoes in the area.

2. The DEIS Fails to Adequately Consider Impacts to Vegetation.

62| 13.2

a. *The DEIS Fails to Consider the Importance of Grasslands to Native and Migratory Wildlife.*

The needs of species such as the Eastern Meadowlark that are generalist species and tend to use pasture lands such as the area that will be destroyed to locate the NBAF on the South Milledge Avenue site, should be carefully considered as well, but were not discussed or considered at all in the DEIS.

b. *The DEIS Fails to Consider the Impacts of Landscaping Maintenance at the NBAF on other Vegetative Species.*

There is no indication of the landscaping that will be installed outside the NBAF. This would of course be different if cattle or other pre-test subject animals are kept outside of the NBAF, or if general institutional landscaping is installed, like turf grass. In either event, it is not clear whether native species would be planted, whether maintenance of the landscaping would include herbicide applications, fertilizing, or the like. If so, these chemical and nutrient applications could negatively impact not only the growth of native species that might otherwise have become rooted on site, but also the health of the animals and waterbodies nearby.

3. The DEIS Fails to Adequately Consider Impacts to Aquatic Resources.

63| 13.2

A portion of the discussion of the impacts to aquatic resources is contained in the comments on biological resources. However, it bears further noting that macroinvertebrate communities are important indicators of water quality in streams and

70

Comment No: 62

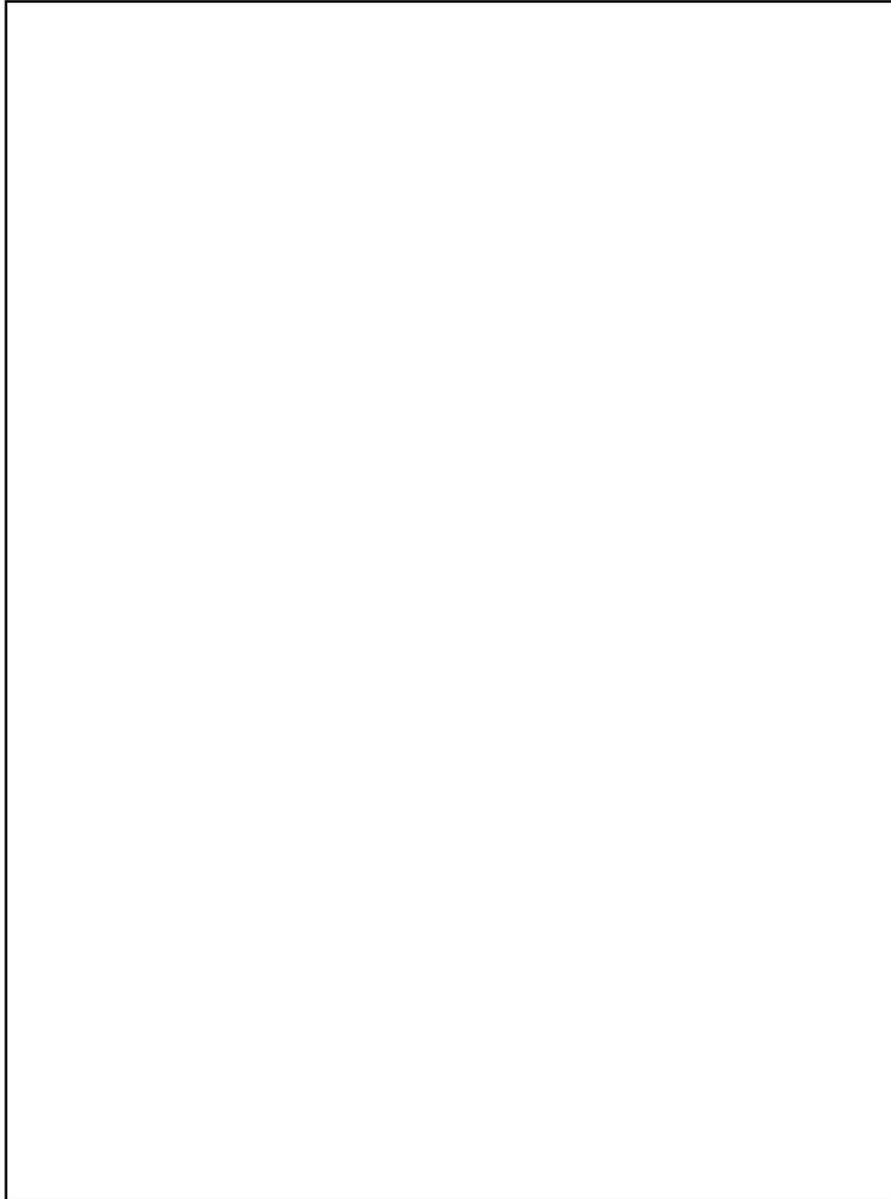
Issue Code: 13.2

DHS notes the commentor’s concern regarding potential effects on wildlife habitat at the South Milledge Avenue Site. DHS acknowledges the importance of native grasslands and early successional habitats to wildlife. However, as indicated in Section 3.8.3.2.5 of the NBAF EIS, the NBAF would affect primarily pasture areas that consist of grazed, cultivated forage grasses. The pasture areas do not represent native grasslands or early successional habitats; and therefore, have low wildlife habitat value due to their disturbed condition, lack of native vegetation, and lack of wildlife food and cover. The forested portion of the South Milledge Avenue Site along the Oconee River is a high value riparian wildlife corridor that connects the State Botanical Garden with the Whitehall Forest Important Bird Area (IBA). However, impacts to the forested riparian area would be minor (0.2 acres), and these impacts would occur within the existing pasture fence-line in areas that have been disturbed by grazing. The high value forested riparian corridor would be preserved. Low-impact design (LID) measures would include the use of native plants for landscaping (Section 3.15 of the NBAF EIS). The use of native plants would minimize the need for watering and chemical fertilization.

Comment No: 63

Issue Code: 13.2

DHS notes the commentor’s concern regarding potential effects on aquatic species and water quality at the South Milledge Avenue Site. Table 3.8.3.1.3-1 in the NBAF EIS provides a list of fish species that have been collected from the Middle Oconee River. As described in Section 3.8.3.2.2, impacts to a headwater stream would impact aquatic resources within a 50-foot reach. However, a properly designed road crossing would have little or no adverse effect on downstream aquatic resources. The impacted stream, which extends into the fenced pasture, has been severely impacted by loss of buffering vegetation and erosion and sedimentation. If the final design plan does not avoid stream impacts, DHS would consider restoration of the unaffected stream segments as mitigation for the impacts. As described in Section 3.8.3.2.3, best management practices and requirements for a stormwater pollution prevention plan would mitigate potential erosion and sedimentation impacts during the construction process. The NBAF EIS acknowledges the potential for minor adverse impacts on aquatic communities due to direct stream impacts, stormwater runoff, pollutant transport, and erosion and sedimentation. However, as described in Section 3.8.3.3.1, best management practices and low impact design (LID) features would be used to minimize the potential for such impacts. Preliminary LID measures that are being considered include pervious pavement in both parking lots and pedestrian walkways, capturing and using roof runoff for landscape watering, and grading parking lots to filter storm water through landscaped areas. As described in Section 3.3.3.1.4, sewage acceptance criteria and pretreatment requirements would apply to the wastewater discharged from the proposed NBAF. The Athens-Clarke County Sewer Use Ordinance of 2007 provides limits on specific pollutant discharges to the Middle Oconee Wastewater Treatment Facility. The NBAF would be designed and operated as necessary to comply with Athens-Clarke County Middle Oconee Wastewater Treatment Facility criteria and avoid the discharge of potentially harmful wastewater constituents. Implementation of approved erosion control measures, utilization of LID storm water pollution prevention measures, and compliance with wastewater treatment standards



would prevent significant impacts on downstream aquatic communities; including macroinvertebrates, amphibians and fish.

Culler, Esq., Jenny

Page 72 of 133

WD0753

63 cont.] 13.2

63 cont.] 13.2 rivers, and are the foundation of a healthy aquatic ecosystem, providing breakdown and digestion of biological material like leaf litter, and serve as a basic food source for fish, crayfish, amphibians, reptiles, mammals, and birds. See M.T. Barbour, J. Gerritsen, B.D. Snyder, and J.B. Stribling, *Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates and Fish, Second Edition*. EPQ 841-B-99-002, U.S. Environmental Protection Agency, Office of Water, Washington, D.C. (1999). See also K.W. Cummins and M.J. Klug, *Feeding ecology of stream invertebrates*, printed in *Annual Review of Ecology and Systematics* 10:147-72 (1979); and J.H. Thorp and A.P. Covich, *Ecology and Classification of North American Freshwater Invertebrates*, Academic Press (2001). However, the DEIS fails completely to identify the relative abundance or scarcity of these important species in the waterbodies near the proposed Athens NBAF site, and fails to consider the impacts from the NBAF on these communities. Macroinvertebrates in Georgia have been hard hit by the recent droughts, and any increased water consumption from the NBAF that may amplify the drought will also amplify the detrimental effects on macroinvertebrates, and in turn, the health of the entire aquatic ecosystem. The DEIS should have considered an important study conducted by entomologists from the University of Georgia that sheds light on these considerations. See Churchel and Batzer at Tab 50.

Furthermore, the DEIS does not even include a listing of fish species found in the Middle Oconee River, much less an adequate evaluation of the potential impacts on the local fish from erosion and sedimentation directly, from a scarcity of macroinvertebrates as food, dangers from the possibility of an infrastructure malfunction leaking sewage, fuels, or laboratory waste into the waters, or an outbreak via water-borne virus release. The potentially devastating effect of pesticides on fish are also not discussed, and should be considering the high likelihood that the NBAF or the local government will find it fitting to provide "vector control" to reduce the number of mosquitoes and biting flies and ticks around the NBAF in order to mitigate against a release of a deadly pathogen. All in all, the treatment of aquatic resources is paltry and renders the DEIS wholly inadequate.

4. The DEIS Fails to Adequately Consider Impacts on Terrestrial Wildlife.

64|13.2

64|13.2 The DEIS does not adequately consider the effects of light pollution on wildlife species, and especially on bats and migratory birds. The DEIS indicates at 3-12 that "visual impacts would occur from lighting during the nighttime. The main facility, all support buildings, and the parking lot would be well-lit. Lighting is also proposed at regular intervals along the security fence." Although the effects of this lighting are cursorily considered for the human receptors, ***the effects of the night lighting on wildlife and especially on migratory birds, is not considered at all in the visual impacts or in the terrestrial wildlife sections. This is a major oversight.*** Executive Order 13186 requires that federal agencies "support the conservation intent of the migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources...[and] prevent or abate the pollution or detrimental alteration of the

71

Comment No: 64

Issue Code: 13.2

DHS notes the commentor's concern regarding the potential effects of noise and light on terrestrial wildlife in the vicinity of the South Milledge Avenue Site. Section 3.5.5.3 of the NBAF EIS addresses operational noise impacts associated with the proposed NBAF. Minor noise impacts would result from an increase in traffic and operation of the facility's filtration, heating, and cooling systems. Section 3.5.5.3 describes noise-attenuating design features that would minimize noise emissions. In the event of a power outage, operation of back-up generators could have a short-term impact on wildlife by discouraging utilization of immediately adjacent habitats. Routine operations at the NBAF would not be likely to have significant noise impacts on wildlife. 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 has the potential for adverse impacts (i.e., repulsion and interference with foraging behavior) on resident wildlife immediately adjacent to the NBAF. The NBAF would employ the minimum intensity of lighting that is necessary to provide adequate security. Mitigation measures, such as the use of 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 telecommunication 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 mitigation measures, significant lighting impacts on migratory birds would not be likely to occur. The potential effects of NBAF construction and operations on air quality are discussed in Section 3.4. Section 3.4.1 describes the methodology used in assessing potential air quality consequences at each site. The U.S. Environmental Protection Agency dispersion modeling program, SCREEN3, was used to predict potential bounding case emissions at the South Milledge Avenue Site based on the current state of facility design. Should a decision be made to build the NBAF the final design process would include a complete emissions inventory and refined modeling as necessary to comply with EPA and state-specific air quality permitting requirements. Compliance with these regulations and permit requirements would minimize the potential for adverse effects on wildlife.

Culler, Esq., Jenny

Page 73 of 133

WD0753

64 cont. | 13.2

environment for the benefit of migratory birds, as practicable....” Exec. Order 13186, Sec.3(e)(1) and (3). Further, this Order anticipates that a federal agency that will take actions that may affect migratory birds will enter into a Memorandum of Understanding with the Fish and Wildlife Service prior to conducting public participation and the NEPA process. See Exec. Order 13186, Sec.3(c). Since “[l]ighted buildings and towers can have a substantial effect on birds at night, especially those that are migrating” (Stauffer Report at Tab 40) and especially since the proposed Athens NBAF site is in an otherwise unpopulated and therefore un-lit area, DHS is required to consider and abate the impacts of the bright lights in the middle of the Audubon-designated Important Bird Area that could be devastating to migratory birds.

These investigations into the effects of night lighting should be conducted for the federally listed endangered gray bat and the migratory birds that do or could utilize the proposed NBAF site and the Important Bird Area surrounding it. The effects of night lighting should be investigated specifically as it relates to all of the species detected at the Botanical Gardens, and especially those identified to have declining populations as determined from the data collected by the U.S. Fish and Wildlife Service Breeding Bird Survey (BBS). These species include but may not be limited to: Yellow-billed Cuckoo, Eastern Wood-Pewee, Carolina Chickadee, Wood Thrush, Gray Catbird, Northern Mockingbird, Prairie Warbler, Eastern Towhee, Field Sparrow, Rose-breasted Grosbeak, Eastern Meadowlark, and the Common Grackle. See Stauffer Report attached hereto at Tab 40.

Songbirds migrate primarily at night. Stauffer, Tab 40. Since there are many species of birds suffering downward population trends in the area, the impacts of the lighting could negatively impact their chances of survival.

Further, two species of concern listed in the Georgia Heritage Program were overlooked completely in the DEIS; to wit, Swainson’s Warbler and the Winter Wren. <http://www.georgiawildlife.com/content/specialconcernanimals.asp>.

The impacts to terrestrial wildlife from the construction and operation of a facility using noisy cooling towers, having cars and people come and go, spewing various airborne pollutants from its incinerators, and emanating lighting day and night echo far from just the boundaries of the facility itself. However, the DEIS concludes that construction would not directly affect terrestrial wildlife simply because “[t]he forested riparian corridor that connects Whitehall Forest with the State Botanical Garden would be preserved.” DEIS, 3-173. This faulty conclusion ignores the fact that many terrestrial wildlife utilize pasture lands and edge habitat for foraging. The functionality of the edge habitat, even if it still physically exists, is obliterated for many species by the noise, light, odors, and activity at the NBAF. The disruption of those habitats is not even discussed or analyzed, but may be important in the continued viability of many species in the area.

Furthermore, the DEIS fails to consider that only the unaffected core of the remaining forested areas will be suitable habitat. It ignores the fact that indirect effects of construction tend to extend into the untouched forested areas around the construction.

Culler, Esq., Jenny

Page 74 of 133

WD0753

The extent to which the noise and light from the NBAF will penetrate the surrounding natural areas must be considered in the DEIS. See T.A. Kerpez, *Effects of group selection and clearcut openings in Appalachian hardwood forests*, Ph.D. Dissertation, Virginia Tech (1994).

5. The DEIS Fails to Adequately Consider the Impacts of the NBAF to Threatened and Endangered Species.

- a. *The DEIS Describes an Inadequate and cursory Review of the Potential Impacts of the Construction and Operation of the NBAF to the Federally Listed Endangered Gray Bat and Its Habitat.*

65| 13.2

The DEIS concludes, without support, that there are no suitable roosting sites for the gray bat at the South Milledge Avenue site. DEIS, 3-171. However, it admits that the gray bat could forage over the Middle Oconee. DEIS, 3-172. The Endangered Species Act ("ESA"), was enacted in part in order to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved..." 16 U.S.C.A. §1531(b). Therefore, it is imperative that DHS take a hard look at whether the NBAF will impact the habitat where the gray bats do forage or where they may forage. DHS is required to determine whether the foraging area over the Middle Oconee River is critical habitat for the gray bat, and whether the NBAF will unlawfully adversely impact the usefulness of that habitat for the gray bat. Not only has the DEIS omitted any review of critical habitat, but it has also omitted any review of the impacts that night lighting of the NBAF would have on gray bats in the area. There are no data related to how far the light is expected to disperse from the facility, or the effects of such night lighting on the gray bat, other bats, or birds.

These types of data are available and should have been reviewed in the DEIS. By way of example only, the DEIS should have included a consideration of J. Jones and C.M. Francis, *The effects of light characteristics on avian mortality at lighthouses*, *Journal of Avian Biology* 34:328-333 (2008); L.J. Evans Ogden, *Collision Course: the hazards of lighted structures and windows to migrating birds*, Report to World Wildlife Fund Canada and The Fatal Light Awareness Program; and C. Rich and T. Longcore, eds., *Ecological consequences of artificial night lighting*, Island Press. 458 pp. (2006).

The DEIS discloses that the Hendra and Nipah viruses may infect and/or be transported by bats. The DEIS does not consider the greater potential for the Endangered Gray Bat to become infected with one of these pathogens, considering the prevalence of other species of bats in Georgia.

73

Comment No: 65

Issue Code: 13.2

DHS notes the commentor's concern regarding rare, threatened and endangered species in the vicinity of the South Milledge Avenue Site. As indicated in Section 3.8.3.1.5 of the NBAF EIS, gray bats are highly cave dependent and use caves or cave-like structures for roosting. No such habitat occurs at the South Milledge Avenue Site. The U.S. Fish and Wildlife Service (USFWS) Athens Field Office has reviewed the proposed NBAF project and has determined that no habitat or critical habitat for federally listed species occurs at the South Milledge Avenue Site. A copy of the USFWS assessment has been included in this NBAF Final EIS. The forested buffer between the site and the Middle Oconee River would be retained; and therefore, the NBAF is not likely to affect any potential foraging habitat over the Middle Oconee River. The USFWS advocates the use of shielded lighting to minimize adverse impacts on wildlife. Shielded fixtures direct light downwards and can be used to keep light within the boundaries of the site. The NBAF would employ the minimum intensity of lighting that is necessary to provide adequate security. The use of shielded lighting will be considered in the final design of the NBAF. It is expected that the forested buffer and the use of shielded lighting would prevent light pollution from reaching the Middle Oconee River. As described in Section 3.8.9, fruit bats of the genus *Pteropus* are known to be carriers of the Nipah virus, although the bats themselves are not affected. As described in Section 3.8.9, no fruit bats occur in North America.

The Georgia Natural Heritage Program list of rare, threatened, and endangered species for Clarke County is provided in Table 3.8.3.1.5-1 of the NBAF EIS. The robust redbreast is not known to occur in Clarke County; and therefore, was not included in the NBAF EIS. As indicated in Section 3.8.3.1.5, the Heritage Program has no records of rare, threatened, and endangered species within a one-mile radius of the South Milledge Avenue Site. The NBAF EIS acknowledges the potential for minor adverse impacts on aquatic communities due to direct stream impacts, stormwater runoff, pollutant transport, and erosion and sedimentation. However, as described in Section 3.8.3.3.1, best management practices and low impact design (LID) features would be used to minimize the potential for such impacts and their affect on aquatic species such as the Altamaha shiner.

Culler, Esq., Jenny

Page 75 of 133

WD0753

65 cont. | 13.2

- b. *The DEIS Describes an Inadequate and cursory Review of the Potential Impacts of the Construction and Operation of the NBAF to the State Listed Threatened Altamaha Shiner and Its Habitat, and Fails even to Mention the Endangered Robust Redhorse.*

The Middle Oconee River, including the section which flows through Athens in the Altamaha River watershed, is home to a species of protected fish, the Altamaha Shiner (*Cyprinella xanura*). See Ga. Rules and Reg. §391-4-10-.09, *Protected Species of Plants and Animals*; [www.georgiawildlife.org/content/specieslocationbycounty.asp?1stCounty=Clarke](http://www.georgiawildlife.org/content/specieslocationbycounty.asp?1stCounty=Clarke). This small fish holds a state status of "threatened," which indicates "a species which is likely to become an endangered species in the foreseeable future throughout all or parts of its range." See <http://www.georgiawildlife.org/content/specialconcernanimals.asp>, Georgia Department of Natural Resources Wildlife Resources Division. Alarmingly, the State Rank of the Altamaha Shiner (S2S3) signifies that it is also considered a rare species, with only 21 to 100 known occurrences, and becoming imperiled (6 to 20 occurrences). *Id.* This rare and vulnerable fish is known to inhabit the Middle Oconee River and its medium-sized tributaries in small runs and pools over sand and gravel substrate.

The future of the Altamaha Shiner is precarious. At most, it has been spotted on a mere one hundred occasions. Any change to its habitat, however small or seemingly insignificant, could render the species extinct. Yet, the DEIS utterly fails to address its inevitable effect on the nearby Oconee River from storm water runoff and sedimentation and erosion issues during construction and operation to fecal coliform and dissolved oxygen from its livestock subjects. A proper and effective evaluation of the impact of the NBAF on the environment must include analysis on the affects on protected and rare species in the Altamaha River watershed.

Additionally, there are no indications whether the DEIS took a hard look at the Georgia list of endangered, threatened, rare or unusual species, at Ga. Rules & Reg. §391-4-10-.09, attached hereto at Tab 51, and whether any of these species are found in or around the proposed NBAF site, or utilize habitat that is present at the proposed NBAF site.

6. The DEIS Fails to Consider the Impacts of the NBAF on "Species of Concern."

The DEIS failed to gather and consider the readily available data from the Audubon Society website, which is an especially glaring error considering the fact that the proposed NBAF site would bisect a designated Important Bird Area. The Audubon site provides information about "species of concern", and provides a more accurate picture of local bird populations and their successes or declines. See, <http://web1.audubon.org/science/species/watchlist/browseWatchlist.php#cuckoo>. The birds of concern listed on this site that the DEIS failed to identify and specifically consider include the Yellow-billed Cuckoo, the Brown-headed Nuthatch, the Wood

Culler, Esq., Jenny

Page 76 of 133

WD0753

Thrush, the Prairie Warbler, the Prothonotary Warbler, the Swainson's Warbler, the Louisiana Waterthrush, and the Kentucky Warbler.

Another valuable set of data are readily available through the United States Fish and Wildlife Service Breeding Bird Study ("BBS"), at <http://222.pwrc.usgs.gov/bbs>. This site provides long-term data on breeding birds in North America, and has a site specifically dedicated to surveys in the Botanical Gardens in Athens, Georgia. The DEIS failed to review or consider these data, that indicate statistically significant declines of populations of certain species. The impacts on these species that are already declining should be considered and disclosed in the DEIS. The birds with declining populations include the Yellow-billed Cuckoo, the Wood Thrush, the Prairie Warbler, the Eastern Wood-Pewee, the Carolina Chickadee, the Gray Catbird, the Northern Mockingbird, the Eastern Towhee, the Field Sparrow, the Eastern Meadowlark, and the Common Grackle. See also Stauffer Report, at Tab 40.

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7. The DEIS Fails to Consider Cumulative Impacts on Wildlife Populations from the NBAF.

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The DEIS concludes, without support, that the area surrounding the proposed Athens NBAF site has "limited wildlife habitat value." DEIS, 3-172. However, the DEIS fails to conduct a regional review of habitat abundance or scarcity, and does not consider whether the pasture it proposes to destroy in order to build the NBAF is actually rare in the area. If this is the case, the value of that pasture land increases dramatically for species like the Eastern Meadowlark that require pasture for species success.

The DEIS reviewed the Gap Analysis Program ("GAP"), which provides a very broad view of the status of species and communities on state lands. However, GAP is not site-specific, and cannot provide an accurate analysis of the species present, or those that are surprisingly absent. If the DEIS had adequately reviewed the available information about declining bird species, as noted above, then it could have conducted a proper review of whether the construction and operation of the NBAF at the proposed Athens site would threaten to have any cumulative impacts on the species of concern and their important habitat.

67 | 13.2

8. The DEIS Fails to Consider Impacts on All Biota from Insecticides Sprayed Around the NBAF for Vector Control or in the Event of a Suspected Pathogen Release.

Although there is no mention in the DEIS of sustained area mosquito control, it is known that communities surrounding the Plum Island Animal Disease Center are regularly sprayed with insecticides called Scourge and Anvil. <http://www.suffolkcountyny.gov/Home/departments/healthservices/publichealth/preventive/Vector%20Control/Vector%20Control.aspx>. Such "vector control" programs would likely be instituted around the NBAF either by the NBAF itself or by the local

75

Comment No: 66

Issue Code: 13.2

DHS notes the commentor's concern regarding cumulative effects on wildlife. A cumulative impact assessment was conducted as described in Section 3.1 of the NBAF EIS. In accordance with Council on Environmental Quality regulations, a sliding scale approach was used. The cumulative impact analysis determined that significant cumulative impacts on wildlife were not likely to occur. Therefore, specific sections on cumulative wildlife impacts were not included in the NBAF EIS.

Comment No: 67

Issue Code: 13.2

DHS notes the commentor's concern regarding the potential effects of insecticides on biota in the vicinity of the South Milledge Avenue Site. The response to an accidental release of a mosquito-borne pathogen such as Rift Valley fever could include the aerial application of insecticides as discussed in Section 3.8.9.2 of the NBAF EIS. The use of insecticides could lead to direct short-term adverse impacts on insect fauna, as well as indirect impacts on other wildlife species through disruption of the food chain. The loss of insect pollinators could also have a short-term adverse effect on sexual reproduction of insect-pollinated flowering plants. 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).

Culler, Esq., Jenny

Page 77 of 133

WD0753

government in order to minimize the likelihood that an escaped insect could establish itself in the ecology or infect nearby animals and people with the disease it carries.

However, there are many concerns about using such insecticides that are particular to the Athens proposed NBAF site. For example, Scourge is the drug called Resmethrin, which is "classified by EPA as having Class III toxicity, being slightly toxic to humans.... Resmethrin is extremely toxic to aquatic organisms....also extremely toxic to bees." See Stauffer Report, attached hereto at Tab 40. The other insecticide used at the PIADC is Anvil, also known as Sumithrin, and while Sumithrin is a less toxic option for humans, it is still extremely toxic to bees and aquatic organisms. *Id.* The spraying of either of these substances at the Athens site is reasonably foreseeable, and would certainly adversely affect the fish and macroinvertebrates in the streams on the proposed site area, as well as in the Middle Oconee River. In light of the recent concerns expressed by the scientific community about the world-wide decline of honeybees, also, the use of Resmethrin in the agricultural landscape of the South Milledge Avenue site is folly. DHS should, but did not consider the Congressional Research Service Report to Congress on the decline of honey bees and the concerns (including but not limited to loss of agricultural dollars), and the possible action items discussed therein. CRS Report for Congress: Recent Honey Bee Colony Declines, Updated August 14, 2007, Renee Johnson, Analyst in Agricultural Economics – Resources, Science and Industry Division, attached hereto at Tab 52.

9. The DEIS Omits Consideration of Impacts to Domesticated Pets.

The DEIS admits that dogs, cats, and other domesticated pets are susceptible to Rift Valley Fever Virus and indicates that it is "critical" that RVFV not be released. DEIS, 3-384-385. However, these statements are not made elsewhere in the document, and the fact that the family pet could contract RVFV has not made it into the media. While the economic impacts of the slaughter of family pets inside an initial infection zone may pale in comparison to the economic impacts of the slaughter of beef cattle, poultry, and other food animals in the same zone, the psychic effects and emotional trauma of such an outcome would be devastating to many families and individuals. The DEIS fails to disclose or consider whether family pets would be immediately confiscated and slaughtered in the event of a potential or actual release of RVFV or other pathogens from the NBAF, or whether they would be quarantined and observed instead. If the animals would be quarantined and observed, then the DEIS should consider where they would be kept, the cost of keeping the animals, who would bear this cost, and any other reasonably foreseeable direct, indirect, and cumulative effects of these actions.

Comment No: 68

Issue Code: 23.0

DHS notes the commentor's concerns regarding the effects of a postulated Rift Valley fever virus (RVF) release on domestic pets. An analysis of potential consequences of RVF becoming established in native mosquito populations was evaluated in Sections 3.8.9, 3.10.9, and 3.14 of the NBAF EIS. 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. As specifically stated in Section D.1, the assessment included in Appendix D was limited to a case study and literature review as the basis for assessing the potential economic damage to the U.S. economy if one of the pathogens proposed for study at the NBAF were to be released into the surrounding environment. For RVF, for example, the focus of the literature review was placed on effects to livestock and humans infected through exposure to mosquito vectors such as that outlined in the scenario from the Rift Valley Fever Working Group described in Appendix D.3. Case study data suggest that moderate disease upon infection can occur in adult cats, dogs, horses, and some monkeys. Severe disease can occur in newborn puppies and kittens.

DHS would have site-specific standard operating procedures (SOPs) and response plans in place prior to the initiation of research activities at the NBAF, including for RVF. SOPs and response plans for RVF would likely include strategies similar to those for foot and mouth disease as discussed in Section 3.8.9.1. These could include, as appropriate, the establishment of an infected zone, a buffer surveillance zone around the infected zone, a control zone, and an outer surveillance zone; imposition of movement restrictions; and placement of controls on and/or depopulation of infected wildlife or other species in either the infected zone or the surveillance/movement control zone as a last resort. First and foremost, the RVF response plan would hinge on a mosquito control action plan as RVF is transmitted primarily by mosquitoes but also by other biting arthropods as discussed in Section 3.8.9.2. The potential consequences of pesticide use would be evaluated during the preparation of a site-specific response plan. It must be noted that the probability of a release from the NBAF and its ensuing establishment in the environment would be very low. As such, the threat to and outcomes of infection on domestic pets and associated response plans are highly speculative and, again, are based on case studies, and not on risk assessment measures.

DHS notes the commentor's concerns regarding quarantine of domestic pets and associated costs. Although also highly speculative for the reasons described above, quarantine is highly unlikely. Should there ever be an event that threatens the local community; the Federal government would be responsible for any necessary corrective action.

Culler, Esq., Jenny

Page 78 of 133

WD0753

#### H. CULTURAL RESOURCES

1. The DEIS Fails to Adequately Investigate or Disclose Information Relative to the Potentially Valuable Cultural Site at the Proposed Athens NBAF Site.

69| 14.2

The DEIS indicates that there were eleven archaeological sites discovered at the proposed Athens NBAF site, and that one of those eleven had been submitted to the Historic Preservation Division of the Georgia Department of Natural Resources for a “formal Section 106 review of the site”. (DEIS at 3-222.) However, the DEIS does not disclose to the public what a formal Section 106 review is. Further, the DEIS prematurely and erroneously concludes that of the eleven sites, “[n]one are listed or would be considered eligible for listing in the NRHP [National Register of Historic Places] or HPD [Historic Preservation Division].” *Id.* The first problem with this statement is that sites aren’t listed in the HPD; they are submitted for listing by the HPD. The other significant problem with this statement is that later on the same page, the DEIS indicates that the one site that has been submitted to Section 106 review “would be eligible for listing.” *Id.* (emphasis supplied).

The Federal regulations governing historic preservation, which include the recordation of archaeological sites, are under the authority of 16 U.S.C. § 470, the “National Historic Preservation Act.” (NHPA) passed by Congress in 1966. The pertinent parts of the NHPA establish that the Secretary of the Interior is responsible for maintaining the NRHP and that he or she will put regulations in place to guide States in the establishment of State historic preservation agencies. 16 U.S.C. § 470(1)(a)-(b)(3) (2007). The NHPA also establishes an independent Advisory Council on Historic Preservation (Council) charged with advising the President, Congress, and State and Local Authorities on legislation and guidelines for the preservation of historic sites. 16 U.S.C. § 470(j) (2007). The Council may also be invited to participate in the process of determining whether development may have an adverse affect on a particular site. 36 C.F.R. § 800.6(a)(1) (2004).

Federal regulations set forth the guidelines for the establishment of a State Historic Preservation Program, the HPD in Georgia, a State Historic Preservation Officer, Mr. Noel A. Holcomb in Georgia, and a State Review Board. 36 C.F.R. § 60.3(m)-(o) (2007). Each evaluates potentially eligible sites and makes a determination as to whether the sites should be submitted for inclusion in the NHRP. The criteria used in making this determination are also spelled out in the Federal regulations and include: whether the sites are associated with significant events, whether they are sufficiently distinct, and whether they are likely to yield important information about history or prehistory. 36 C.F.R. § 60.4(a),(c) and (d) (2007). Once the State Historic Preservation Officer (SHPO) nominates a site as eligible for the NRHP, the nomination will be kept on file during the comment period prior to the Review Board’s meeting to determine the eligibility of the site, to allow any affected property owners an opportunity to comment. 36 C.F.R. § 60.6(a) and (c) (2007). Once the Review Board has made a determination it then makes a

77

Comment No: 69

Issue Code: 14.2

DHS notes the commentor’s statement. The Georgia Department of Natural Resources, Historic Preservation Division has determined that no historic or cultural resources would be affected by the NBAF at the South Milledge Avenue Site and consultation requirements under the provisions of Section 106 of the National Historic Preservation Act have been demonstrated. The results of consultations with the State Historic Preservation Officers under Section 106 are documented in Appendix G of the NBAF EIS.

Culler, Esq., Jenny

Page 79 of 133

WD0753

recommendation to the SHPO on the status of the site, the SHPO then makes the final determination as to whether the site should be submitted. 36 C.F.R. § 60.6(j) (2007).

69 cont|

14.2 The one archaeological site wholly discounted in the DEIS was actually submitted in April, 2008, by the SHPO to determine whether it will be eligible for inclusion on the list. The HPD is still in the process of responding, but a look at the files has revealed that the site may be potentially eligible and that further testing is needed to make a final determination.

70|

- 14.2 2. The DEIS Fails to Adequately Consider Whether Construction of the NBAF Will Threaten the Potentially Valuable Cultural Site at the Proposed Athens NBAF Site.

In the event of development at an archaeological site, a determination must be made as whether the site will be affected and whether there is the potential for adverse effects to the site due to development. 36 C.F.R. §§ 800.4(d) and 800.5(a)(1) (2004). If it is determined that no historic property will be adversely affected then documentation describing the undertaking, describing the steps taken to identify historic properties, and the “basis for determining that no historic properties are present or affected” must be submitted to the Council or the SHPO. 36 C.F.R. § 800.11(a) and (d) (2004). The DEIS fails to consider or investigate whether construction of the NBAF at the Athens site would potentially damage the site of interest. It will be important to establish whether the affected area includes staging for construction or only the post-construction footprint; in many cases the fragile nature of a site may be disturbed by the general use of an area for construction preparation, even if that area is ultimately not developed. The DEIS should, but does not address these issues.

3. The DEIS Fails to Consider Proper Mitigations to Protect and Preserve the Potentially Valuable Cultural Site at the Proposed Athens NBAF Site.

The DEIS states that its mitigation efforts would include the “use of BMPs during construction [and] adherence to any SHPO requirement.” DEIS, 3-506. This statement is fairly vague and does not provide any assurances, especially considering the fact that the potentially valuable site has not even been deemed eligible or ineligible for listing, and the DEIS does not guarantee that it would await a decision or the application of any SHPO requirements before it began NBAF construction.

The DEIS also does not go into any detail about possible methods of mitigation, primarily because of the early, unsupported conclusion that no sites will be impacted. Mitigation of harm to historic sites typically follows one of two paths; the site is either fenced off and left as green space, or it is excavated. In either event the cost of the development will increase, either through the necessity of redrafting development plans or having to hire archaeologist to excavate the site. Since the HPD has agreed with Mr. Braley’s finding that the site is potentially eligible, then furthering testing will be

78

Comment No: 70

Issue Code: 14.2

See response to Comment No. 69.

Culler, Esq., Jenny

Page 80 of 133

WD0753

70 cont. | 14.2

required if it is determined that the area will be impacted by development; for example if the plans were to change to include the site or if staging were to take place on the site.

A certain level of speculation is needed in determining what may be irretrievably lost if the site is destroyed without proper excavation. It is very difficult to predict the research value of a site prior to excavation. On initial survey some sites appear to be unimportant and upon excavation it becomes apparent that they are very significant sites; the opposite may also be true. Mr. Braley states that the "fire-cracked rock suggests a hearth or other features might be present, and the site seems to be well preserved." Braley, 27 (2008). The depth of the soil supports this conclusion and suggests that the site may be of research value. The DEIS should but did not consider how a determination that the site is a valuable historic site would impact the cost, timelines, and feasibility of building the NBAF on the proposed Athens site.

#### I. SOCIOECONOMICS

71 | 15.0

##### 1. NBAF Accident Scenarios Fail to Include an Adequate Analysis and Disclosure of Impacts from a Release from the NBAF on Interstate and International Trade.

It has been reported that Foot and Mouth Disease could spread to 25 states in as little as 4 days. DEIS, 1-4. In an Appendix, the DEIS acknowledges that:

The potential for economic losses under a worst case scenario is non-trivial. An outbreak of foot and mouth disease (FMD) in Britain during 2001, for example, resulted in GDP losses of approximately £2.5 billion (\$5 billion)<sup>2</sup>. Economic losses extended well beyond the livestock sector; the tourist sector was particularly adversely affected because large swaths of the rural country side, where tourist frequent, were quarantined. In the U.S., secondary industries such as transportation would be adversely impacted. The U.S. could experience even larger losses if an FMD outbreak were to occur here. The U.S. is a larger country with an integrated and mobile livestock industry. A recent study by researchers at Kansas State University, for example, estimated an outbreak of FMD could cost the State of Kansas alone nearly a billion dollars<sup>3</sup>. A multi-state outbreak would obviously increase the magnitude of economic losses beyond this estimate.

DEIS, D-1. It also includes the statement that "the estimated range of economic devastation from a release of FMD for the United States, which is between \$10 billion and \$30 billion." DEIS, D-7. While the body of the DEIS acknowledges some potential economic impacts, it does little to educate the reader to the broad reach that such impacts would have, attributing most of the losses to the agricultural sectors:

79

Comment No: 71

Issue Code: 15.0

The objective of Appendix D is to provide the reader with a range of potential economic outcomes based on studies, simulations, and documented outbreaks of the relevant pathogens in other countries. Several of the studies cited and discussed in the Appendix directly address the issue of foreign trade, particularly the ban on U.S. livestock products. Tourism was not considered and would not be expected to be significantly adversely impacted as was the case in England in 2001. For further detail on the studies referenced in the Appendix, DHS refers the commentor to the bibliography.

Culler, Esq., Jenny

Page 81 of 133

WD0753

The losses resulting from local industry disruptions tend to account for most of the differences in the total economic costs (industry disruption costs plus trade ban costs) associated with each candidate site. Because the industry disruption costs are generally related to the size of livestock operations, the size of the local livestock industry serves as the leading discriminator among the candidate sites. More information on some the details of this analysis are provided in Appendix D.

71 cont. | 15.0 DEIS, 3-306. However, even in the appendix, the DEIS does not include adequate consideration of the extent and breadth of the potential impacts. For example, it does not elaborate on the damage that would occur in the tourism industry, despite documentation that the outbreaks in the United Kingdom severely impacted their tourism industry. DEIS, D-1. Furthermore, the DEIS evaluation of socio-economic impacts is not based on any economic modeling. *Id.*

3 cont. | 26.0 2. The Conclusion that the Athens Site Will Experience Significant Socioeconomic Benefits from the NBAF Is Misleading and Is Not Supported in the DEIS.

72 | 15.2 DHS indicates that the economic benefits from the NBAF will be “significant” to the surrounding communities. (DEIS, ES-9 and DEIS, ES-11). This subjective conclusion appears to be based on the purportedly beneficial impacts from the jobs created in the area for the construction and operation of the facility. However, in the body of the analysis of employment and income, the DEIS clearly states that “[t]he proposed facility would have a *small incremental benefit on the local economy* during the 4-yr construction phase” (DEIS, 3-246); and, “[t]he proposed facility will have a *small incremental benefit on the local economy* during the operations and maintenance phase, which would commence in the year 2014” (DEIS, 3-248)(emphasis supplied). Further, every single subsection of the socioeconomics analysis concludes that the socioeconomic impacts are either “negligible” (operation impacts on population and housing, quality of life, law enforcement, fire protection, and medical facilities), “small incremental” (construction impacts on employment and income, operation impacts on employment and income), or labeled as either “no effects” or a variation on the language indicating that there will be no impacts (construction impacts on population and housing and quality of life; operation impacts on recreation and health and safety).

Meanwhile, many of the subsections of the socioeconomics “affected environment” description are not included in the impacts section, and are only studied in the context of the section on Health and Safety in 3.14. See the following Table:

Comment No: 72

Issue Code: 15.2

DHS notes the commentor’s statement. The reference to a “potential significant benefit” in Section 2.5 of the NBAF EIS is referring to the potential economic benefit through prevention and minimization of the effects of a foreign animal disease (FAD) outbreak experienced nation-wide. The socioeconomic effects from normal operations are listed as minor. As discussed in Section 3.10.3, the NBAF will create a small incremental benefit on the local economy during the construction phase and operations and maintenance phase. The economic effects would result from regional purchases generating local sales, payroll expenditures for labor onsite and offsite, and related spending by supplying firms and laborers to satisfy the initial demand created by the project investment and operations of the facility. The number of short-term and permanent jobs are discussed in Section 3.10.3. It is expected that approximately 2,700 direct temporary jobs would result from construction of the NBAF, with many of the jobs being filled locally. Approximately 483 permanent jobs, including the initial 326 direct jobs, would result from operation of the NBAF. Permanent employees will include scientific and support staff as well as operations, maintenance and security staff. A portion of the permanent jobs at the NBAF will be filled locally and the household spending by new residents and the operations of the NBAF are expected to indirectly support additional jobs that will be filled by the local labor force.

Culler, Esq., Jenny

Page 82 of 133

WD0753

| Categories of Affected Environment   | Was this Category Analyzed in the Construction Impacts Section? | Was this Category Analyzed in the Operational Impacts Section? |
|--------------------------------------|---|--|
| Employment                           | Yes   | Yes  |
| Agricultural Industry                | No  | No   |
| Hunting                              | No  | No   |
| Income and Poverty                   | No  | No   |
| Population                           | Yes   | Yes  |
| Ethnicity and Race                   | No  | No   |
| Age                                  | No  | No   |
| Educational Attainment               | No  | No   |
| Housing                              | Yes   | Yes  |
| Quality of Life (Community Services) | Yes   | Yes  |
| Public Schools                       | No  | Yes  |
| Law Enforcement                      | No  | Yes  |
| Fire Protection                      | No  | Yes  |
| Medical Facilities                   | No  | Yes  |
| Recreation                           | No  | Yes  |

3 cont.|26.0

The failure to analyze the impacts to certain categories of the affected environment and the division of the analysis of the health and safety impacts on other categories of the affected environment renders the analysis and conclusions in the socioeconomic section meaningless. The socioeconomic section of the DEIS only analyzes the impacts during “normal operations,” and inserts the conclusions from this partial analysis into the executive summary as if a complete analysis yielded the conclusions that the economic benefits are always significant and the economic burdens imposed by the facility are necessarily negligible.

72 cont.|15.2

The DHS acknowledges that accidents will happen in the NBAF (Public Meeting, Athens, Georgia, August 14, 2008)(categories of frequent laboratory accidents reviewed at DEIS 3-377, et seq.), but ignores that these accidents could possible lead to a release of pathogen in its presentation of the possible socioeconomic impacts to the public, and concludes “significant” benefits where no section under the socioeconomic analysis calls an effect “significant.” There cannot be some other factors included in the final executive summary conclusions that there will be significant benefits to the community from the location of NBAF, because all of the analyses in the socioeconomic section are purportedly done through the IMPLAN model, which “estimates the total economic effects arising from a Proposed Action by accounting for direct, indirect, and induced effects of the projected investment.” DEIS at 3-227.

Culler, Esq., Jenny

Page 83 of 133

WD0753

73| 15.0

4. The DEIS Fails to Consider the Cost of Healthcare in the Event of Human Infections from the Incurable Diseases to Be Studied at the NBAF.

The DEIS fails to review and consider whether Medicaid, Medicare, and private insurance companies will pay for care or treatment of an incurable disease. The DEIS does disclose in Appendix D that "on average treatment costs for mild cases [of West Nile Virus] were approximately \$200 (in 2003 dollars); treatment for neurological-invasive cases, \$38,417; and cases requiring institutional care, \$138,078." D-12. This is provided to apparently give a low figure to consider in terms of the medical care costs associated with the Rift Valley Fever Virus. However, these estimates, even the low ones, are apparently not worked into an overall estimate of cost. Rather, they appear to be externalized to the individuals who become ill. The potential costs to the communities surrounding the NBAF should include a review of the health care costs that people will be directly responsible to pay without the assistance of any health care insurance or government-issued plans in the event of an outbreak that affects the human population.

5. The DEIS Fails to Consider the Delays in Detection of Human Infectious Outbreaks Where the NBAF Is Proposed in Low-Income Areas Where Residents Are Statistically Less Likely to Have Healthcare Insurance or to Seek Treatment.

The DEIS mentions in its summary that each of the proposed NBAF locations is surrounded by a disproportionately high minority and low-income population. However, the DHS did not consider statistics related to the likelihood that individuals in these populations have healthcare insurance, whether these individuals regularly visit their physicians, or whether the flu-like symptoms that typify the first signs of infection from many of the NBAF pathogens will go undetected for a longer period of time in a high minority and low-income population.

74|15.2

6. The DEIS Fails to Accurately and Adequately Disclose Whether the NBAF Will Create Jobs Suitable for the Unskilled Local Labor Force.

Although the Georgia Consortium has identified the NBAF as a project that will bring jobs to Athens and reduce the poverty there, the DEIS does not address whether any of the jobs at the NBAF will be suitable for the unskilled labor force. Additionally, there is no information in the DEIS about the training and background checks that any local applicants would have to undergo to work at the NBAF, rendering it impossible to analyze the true potential for employment of the local impoverished.

82

Comment No: 73

Issue Code: 15.0

The scope of Appendix D of the NBAF EIS was not to perform a comprehensive impacts assessment of a pathogen release but rather to provide readers with a summary of the range of possible outcomes of such a release based on studies, simulations and documented outbreaks in other countries. How individuals would have to bear the cost of health care in the unlikely event of a pathogen release is not within the scope of the EIS. The Appendix does summarize health costs incurred for historical outbreaks of West Nile Virus as an indicator of potential costs for Rift Valley Fever. The epidemiology of any future outbreak of a disease affecting humans is highly speculative and not predictable, but low income and minority populations would not be at higher risk for infection than other populations and therefore would not incur disproportionate high and adverse impacts. 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 all of the alternative sites except for the Texas Research Park Site, no disproportionately high and adverse effects to environmental or human resources are evident with any of the alternatives.

Comment No: 74

Issue Code: 15.2

DHS notes the commenter's statement regarding employment. The number of short-term and permanent jobs are discussed in Section 3.10.3 of the NBAF EIS. It is expected that approximately 2,700 direct temporary jobs would result from construction of the NBAF, with many of the jobs being filled locally. Approximately 483 permanent jobs, including the initial 326 direct jobs, would result from operation of the NBAF. Permanent employees will include scientific and support staff as well as operations, maintenance and security staff. A portion of the permanent jobs at the NBAF will be filled locally such as the operations, maintenance and security staff positions. Some of these positions may not require extensive specialized training and could be suitable, with some training, for the unskilled labor force. In addition, the household spending by new residents and the operations of the NBAF are expected to indirectly support additional jobs that will be filled by the local labor force, with some job positions offering opportunities for unskilled workers to enter the labor force.

Culler, Esq., Jenny

Page 84 of 133

WD0753

75|15.0

7. The DEIS Fails to Consider Whether the NBAF Will Study Pathogens that Affect the Agricultural Industry in the Future, Thereby Failing Completely to Analyze and Consider the Impacts that the NBAF May Have on the Local and National Agricultural Industry.

The involvement of DSH, USDA, and APHIS in NBAF proposal, along with the goals stated in HSPD-9 and the DHS Federal Register notices related to the NBAF, evidence a clear intention by the government to one day study plant diseases at the NBAF in addition to the foreign animal diseases discussed in the DEIS. However, there is very little mention of this possibility in the DEIS, and its omission precludes public involvement in the future if the mission of the NBAF does change to the study of plant pathogens. The DEIS does not take a hard look at the proposed site locations with this reasonably foreseeable eventuality in mind, and misses a mountain of data related to the site conditions and the risks posed by studying pathogens that attack crops at the proposed sites. This is a major oversight, misleads the public, and should be the subject of an extensive Supplemental Environmental Impact Statement on the direct, indirect, and cumulative impacts that may occur at each proposed site in the event the NBAF studies plant pathogens.

76| 15.2

8. The DEIS Fails to Adequately Investigate the Prevalence and Types of Hunting that Occur in Georgia, and Omits Information and Discussion of the Potential Impacts on Fishing in Georgia from the NBAF.

The DEIS completely lacks any current or in depth evaluation of the potential impacts of the NBAF on the major economic force that is Georgia's sportsmen's economy. Sportsmen support as many jobs in Georgia as two of its largest employers, Delta Airlines and Hewlett Packard, *put together*. *Hunting and Fishing: Bright Stars of the American Economy ~ A Force as Big as All Outdoors*, Georgia Fact Sheet, U.S. Fish & Wildlife Service and the Congressional Sportsmen's Foundation available at <http://www.nssf.org/07report/factsheets/Georgia.pdf?CFID=1624634&CFTOKEN=36ae b5f61d458f89-E5C59283-B62E-0C15-F50847EC76996B75&jsessionid=f0303d93e225d1502a2c3f6e7b19744c2333>, attached hereto at Tab 53. In Georgia, sportsmen support 31,000 jobs, \$909 million in salaries and wages, \$214 million on federal taxes, \$198 million in state and local taxes. *Id.* The broader ripple effect for this economic sector on the rest of the Georgia economy is \$3 billion. *Id.* Annual spending by Georgia's sportsmen is more than the cash receipts for the state's top agricultural commodities (cotton, greenhouse/nursery, eggs and cattle) combined, and significantly more than the estimates given for the economic impacts expected to flow from the NBAF.

Anglers in Georgia spend \$1.13 billion and create 16,500 jobs. *Id.* The Oconee River is a major fishing destination, both upstream and downstream of the potential site. The DEIS fails to adequately investigate the potential affects that the NBAF might have on

83

Comment No: 75 Issue Code: 15.0

None of the pathogens currently proposed for study at the NBAF are plant pathogens and, therefore, potential impacts to those subsectors of the local and national agricultural industry were not considered.

Comment No: 76 Issue Code: 15.2

DHS notes the commentor's concern. More recent data from the U.S. Fish and Wildlife Service on the economic value of the hunting industry within each state has been used to appropriately update the affected environment description and impacts section for each proposed site alternative in Section 3.10 of the NBAF Final EIS.

Culler, Esq., Jenny

Page 85 of 133

WD0753

this industry in Clarke and Oconee Counties and the state as a whole. See more detailed discussions of possible impacts elsewhere herein.

76 cont. | 15.2

Hunting is also a major factor in the Georgia economy, creating 14,700 jobs and \$680 million in spending. Deer hunting, specifically, is a major segment of Georgia's economy. **Georgia is the number one deer hunting destination in the country.** See Tab 53. The DEIS, however, also neglects to investigate how many of the surrounding farms derive income from deer hunting leases. Last year 11,100 acres were leased in Clarke and Oconee counties for hunting. 2007 Georgia Farm Gate Value Report, Center for Agribusiness and Economic Development, College of Agricultural and Environmental Sciences, The University of Georgia. Yet, these impacts to this industry appear to have been left out of the equation in the DEIS.

The South Milledge Avenue site adjoins hardwood forests along the Middle Oconee River, which provide both habitat for deer and other wildlife, as well as excellent avenues for pathogen dispersal should a loss of containment occur at the NBAF. The DEIS fails to include and evaluate any data concerning the population and travel characteristics of deer surrounding the site. This is irresponsible given that deer are vulnerable to Foot and Mouth Disease ("FMD") and Rift Valley Fever Virus ("RVFV" or "RVFV"), two of the pathogens that were reviewed for the DEIS, not to mention the many others that may or may not be studied at the NBAF.

In the event of an FMD outbreak, wildlife, including deer and birds, would be included in the necessary slaughter to prevent the spread of the disease. Plum Island is currently devoid of any surrounding wildlife. The controls used on Plum Island to eliminate the deer population, killing every deer that makes it to the island, will not be possible or desirable on any of the mainland sites. See Ianthe Jeanne Dugan, *Bioterrorism Fears Revive Waning Interest In Agricultural Disease Lab on Plum Island*, Wall Street Journal, January 8, 2002. This is especially true of the Georgia site, surrounded by woods, farmland and a thriving and essential hunting industry. And yet, the Plum Island policy of deer eradication on the island speaks volumes about how seriously DHS takes the threat from an outbreak, even on an island in the ocean. An outbreak would not only impact and likely devastate Georgia's agricultural industry, but Georgia's much larger and pervasive hunting, fishing and sporting industries as well. Indeed, if a national crisis were to ensue, a \$76 billion industry would be at stake. Hunting and Fishing: Bright Stars of the American Economy ~ A Force as Big as All Outdoors, Complete Report, U.S. Fish & Wildlife Service and the Congressional Sportsmen's Foundation available at [http://www.sportsmenslink.org/reports\\_and\\_data/Sportsmens-Economic-Impact.html](http://www.sportsmenslink.org/reports_and_data/Sportsmens-Economic-Impact.html) and attached hereto at Tab 54. (The sportsmen's \$76 billion industry is bigger than Costco, Target or AT&T and creates a ripple effect of \$192 billion). The DEIS must consider the potential economic impacts to both Georgia and the nation as a result of the NBAF. Such an evaluation should consider not only the potential impacts based on a possible release, but the potential detrimental impacts to the Georgia industry based on avoidance and fear as a result of the siting of the NBAF proximate to wildlife habitat.

Culler, Esq., Jenny

Page 86 of 133

WD0753

77| 15.2

9. The DEIS Fails to Consider the Impacts of Noise, Night Lighting, and Fear of a Pathogen Release from the NBAF on Local Real Estate Values.

There is no mention or consideration of the potential real estate value impacts the NBAF will have near the proposed sites. Many of the NBAF's attributes, such as noise, night lighting, and risk of disease release, can reasonably be expected to impact the value of a home or property situated near the NBAF, and particularly those situated immediately across the river or just down the street, those condominiums advertising and expecting to capitalize on the fact that you can hear the Middle Oconee River from your balcony, and the organic farmer who might not receive certification because the NBAF's incinerator emissions land on her farm. The DEIS should gather data from other areas where there have been dangerous laboratories, livestock yards, and cremation facilities constructed next door to residences and farms to get an idea of the decreases the neighbors of the NBAF could expect. The failure of the DEIS to include this information is insulting to the nearby landowners, and completely disregards the concerns of the citizens whose livelihoods might be adversely impacted by the NBAF.

78| 15.2

10. The DEIS Fails to Consider the Temporal and Financial Burdens the NBAF Will Place on Community Service Providers.

- a. *The DEIS Fails to Adequately Identify First Responders in the Proposed NBAF Area.*

The DEIS reviewed the number of firefighters in Athens-Clarke County based on 2006 data. Surely it would be simple enough to obtain the current numbers of firefighters in 2008 in order to analyze the most current data. A comprehensive review of the direct impacts would necessarily not only include an analysis of the most current data regarding available firefighters in order to determine how the increased population from the siting of the NBAF would affect the number of firefighters necessary for the region for continuing operations at the current level of service. No mention of national guard, EMTs, etc.

- b. *The DEIS Fails to Consider that First Responders Near the NBAF Will Require Special Training and Equipment.*

The DEIS should also include an analysis of what equipment is already owned by the local fire stations and what equipment that should be purchased or upgraded in order for the local firefighters to have the best available technology for response to an incident at the NBAF. It would include an analysis of the time and money necessary for advanced training for emergency preparedness related specifically to NBAF. It would include an analysis of the support services and personnel necessary, including but not limited to the firefighters, local police, National Guard, and other first responders, in the event an area had to be quarantined or otherwise restricted. It would include an analysis of the local budgetary restrictions to determine whether there is available funding to supplement the

85

Comment No: 77

Issue Code: 15.2

DHS notes the commentor's concern. Potential visual impacts from locating NBAF at the South Milledge Avenue Site, including nighttime lighting, are discussed in Section 3.2.3 of the NBAF EIS, and the potential for noise generating activities to affect properties and persons adjacent to the South Milledge Avenue Site is discussed in Section 3.5.3. Visual effects from exterior lighting, including lighting of the NBAF perimeter fence, would be a sustained effect as noted in Section 3.16. However, a specific evaluation of the degree to which these particular factors would or would not affect property values would be highly speculative and is not within the scope of the NBAF EIS. However, a discussion of the effects of the NBAF on property values was included in Section 3.10, which concluded that no empirical evidence was identified demonstrating that a facility such as the NBAF would reduce overall property values in the study area. 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.

Comment No: 78

Issue Code: 15.2

DHS notes the commentor's concern. A site-specific emergency response plan will be developed and coordinated with the local Emergency Management Plan regarding evacuations and other emergency response measures for all potential emergency events including accidents at the NBAF. The risks and associated potential effects to human health and safety are evaluated in Section 3.14 of the NBAF EIS. The risks were determined to be low for all site alternatives, and the probability of a release requiring a quarantine or evacuation is very low. DHS would offer coordination and training to local medical personnel regarding the effects of pathogens to be studied at the NBAF. Emergency management plans will also include training for local law enforcement, health care, and fire and rescue personnel.

Culler, Esq., Jenny

Page 87 of 133

WD0753

78 cont. | 15.2

local first responders, or whether the local government will have to seek to raise taxes or find other alternative sources of income.

However, the DEIS did not consider any of these areas. Specifically, the DEIS did not, but should, consider whether the fire departments and other first responders would need to acquire special equipment or personal protective suits in order to safely combat a fire or other emergency incident at the NBAF. DHS did not, but should, review what the cost would be to the fire stations and the communities to obtain these suits or other equipment, and how this cost would factor into the economic analysis of the impacts from the facility.

Additionally, the DEIS did not consider the impacts on the firefighters in terms of the number of hours they would need to train for recognizing and handling any foreign animal disease outbreaks. It is likely that the local governments would need to find money to compensate the firefighters for their new training hours, to provide bonuses or increased salaries for those firefighters who are trained specially to respond to incidents involving the NBAF, and to provide public outreach through the fire departments to the citizens about how to respond to the NBAF. DHS did not consider the impacts of the actual dollar cost or the cost in time for these activities.

11. The DEIS Fails to Adequately Consider the Impacts of the NBAF on Medical Facilities.

Just as with the firefighters, any and all medical personnel at local medical facilities should be trained in recognizing and responding to outbreak scenarios. The DEIS failed to consider the impacts on the medical personnel and their employers in terms of hours away from work for training, the cost of training, the increases in salaries or the bonuses that would be provided to medical personnel who complete the training programs, and what entities will be responsible for these costs. While the majority of these costs will be borne by private or nonprofit medical facilities and will not come from citizen taxpayers, the DEIS should still have considered what other services those medical facilities currently provide that may be cut in order to find the funding for the medical training to be prepared to handle an outbreak of any of the foreign animal diseases to be studied at the NBAF. Furthermore, since it is clear that the particular pathogens that may be studied at the NBAF are subject to change, this analysis should not be considered to be a one-time cost for training, but should be considered as an on-going expense for the life of the facility.

12. The DEIS Fails to Adequately Consider the Impacts of the NBAF on Recreation.

79 | 16.2

The DEIS fails to discuss the use of the South Milledge Avenue corridor for bicycling and the use of the Botanical Gardens and surrounding areas as walking paths and locally significant visitor's areas, and the impacts the NBAF would have on these resources. See, e.g., <http://www.libs.uga.edu/athens/gardens.html>. Considering the expected increases in traffic, the expected air pollution, and the expected decline in

Comment No: 79

Issue Code: 16.2

DHS notes the commentor's concern. The potential effects of the population growth associated with the NBAF on the existing recreational facilities was assessed in Section 3.10.3. The recreational resources within the South Milledge Avenue Study Area would not experience a significant increase in utilization rates as a result of the population increase associated with the NBAF. The study area has abundant recreational resources available. The commentor's statement regarding local health impacts from the decline in tourism and exercise is not within the scope of the NBAF EIS.

Culler, Esq., Jenny

Page 88 of 133

WD0753

79 cont. | 16.2 | species, including migratory birds, the DEIS should certainly address socioeconomic and local health impacts from the NBAF related to the decline in tourism and exercise.

13. The Decision to Include the Accidental Release Scenario in the Socioeconomics Section Is Misleading.

3 cont. | 26.0 |  
80 | 15.0 | As a preliminary matter, the DEIS is not clear about how the accidental release scenario is a different consideration than health and safety, and why this is inserted into the chapter on Socioeconomics only. Appendix E purportedly addresses accidents methodology, Appendix B purportedly addresses likelihoods of accident scenarios, and Appendix D purportedly addresses the economic consequences of pathogen releases. All of these topics should have been considered together in the DEIS, and the analysis of release scenarios would have been a reasonable place to have done this. However, the decision to separate them out without then analyzing all of the data together is arbitrary and capricious, and renders a complete understanding of the risks and the potential consequences from those risks impossible. Furthermore, if accidental risks are considered in order to simulate the generally random emanation of disease from the site of release, then intentional risks should also be considered in more detail in order to fully disclose the relative likelihoods of an evildoer smuggling in a pathogen for release onto the mainland versus obtaining a pathogen by theft or sabotage of the NBAF.

14. The DEIS Fails to Provide the Public with a Way to Accurately Compare the Potential Economic Impacts at Each Proposed Site.

81 | 15.0 | The DEIS flip flops between land area and political subdivisions in its analysis of the potential costs of an outbreak from the NBAF facility. For example, on one page the DEIS lists the \$10-\$30+ billion potential national impact from a release of FMD, and indicates that an outbreak in Kansas, considered over a 14-county area could cost around \$1 billion in 2005 dollars (and does not convert this to present-day dollars). DEIS, 3-306. However, in the site-specific analyses, the DEIS inexplicably uses county lines for as far as it goes to predict the local impacts. Because viruses and other pathogens do not respect political boundaries, this analysis is fatally flawed.

Additionally, the Executive Summary indicates that the \$3-\$4 billion estimates for economic losses due to an outbreak of FMD are on a county-by-county basis. DEIS, ES-10. However, the counties are nowhere near in size to one another, and DEIS apparently fails to normalize the data to account for the widely different county sizes. Riley County, Kansas, is 622 sq. mi., and Clarke County, Georgia, is 125 sq. mi. See [http://en.wikipedia.org/wiki/Riley\\_County,\\_Kansas](http://en.wikipedia.org/wiki/Riley_County,_Kansas), and <http://clarkecounty.georgia.gov/03/home/0,2230,8896524,00.html;jsessionid=D984B19F6C20F7A492CBC1D8385E949B>. This disparity is enormous, and renders the data provided useless.

Furthermore, although the Executive Summary indicates that these figures representing economic loss only for each county in which each proposed NBAF would be located, the slightly more detailed description of the cost analysis in the Accidental

87

Comment No: 80

Issue Code: 15.0

The scope of Appendix D of the NBAF EIS is to summarize the range of possible outcomes of a pathogen release based on previous research studies, simulations and documented outbreaks in other countries. These studies and simulations were conducted independently of the EIS effort and serve to provide the reader with supplemental information on the potential for economic harm if a pathogen were to enter the surrounding environment. The appendix does not address or evaluate the risk of accidental releases. This issue is evaluated in the risk assessment presented in Section 3.14 of the NBAF EIS which provides a comprehensive and detailed analysis of the potential for accidental pathogen releases from the proposed NBAF.

Comment No: 81

Issue Code: 15.0

The objective of Appendix D is to provide the reader with a range of potential economic outcomes based on studies, simulations, and documented outbreaks of the relevant pathogens in other countries. One of the studies cited and discussed in the Appendix explicitly addresses and compares the potential economic outcomes from an outbreak of foot and mouth disease (FMD) at each of the candidate sites. The appendix also provides information on environmental factors that might increase or reduce the risk of economic losses from a release of Rift Valley Fever (RVF). For further detail on the studies referenced in the Appendix, DHS refers the commentator to the bibliography.

Culler, Esq., Jenny

Page 89 of 133

WD0753

81 cont. | 15.0  
3 cont. | 26.0

Release Scenario subsection of the Socioeconomic discussion seems to indicate that the study areas for the economic impact may have been larger. The DEIS states that the economic loss figures were created by the Lawrence Livermore National Laboratory study, but never provides a citation to the description of its methodologies or input data. DEIS, 3-306. Therefore, when the description of the economic loss to the proposed Athens "site" is discussed with a preliminary description of "animal production activity in the six-county region", it is not clear whether the "site" is still just Clarke County, or whether the \$3.35 billion estimated impact will be to the entire undefined six-county region. DEIS, 3-307. The same criticisms apply for the analyses of the other sites, where the numbers for the Manhattan site may relate to Riley County or a "seven-county study area" (DEIS, 3-307); for the Flora site where the numbers may relate to an "eight-county region" (DEIS, 3-308); for the Plum Island site where the numbers appear to have been applied to "three counties" (DEIS, 3-308); for the Umstead, North Carolina site where the numbers may be for an "eight county region" (DEIS, 3-309); and for the Texas site, where the numbers may also be for an "eight county region" (DEIS, 3-309).

15. The DEIS Fails to Properly Include, Analyze, and Consider Costs from Human Illness and Mortality.

82 | 15.0

The DEIS fails to include any of the information contained in Appendix D in its Accidental Release Scenario cost conclusions that are set out in the body of the document. This improperly leads the reader to think that the \$3-\$4 billion site costs are the worst-case scenario costs, and already factor in economic impacts from human illness and mortality rates. This is a significantly misleading omission. Only in Appendix D is there an indication that *the release of RVFV would sicken 90% of those humans exposed, kill 1% of those humans exposed to the disease, and cost upwards of \$50 billion, considering livestock, public health, trade, and tourism sectors.* DEIS, D-13. An outbreak of the Nipah Virus, "characterized by severe febrile encephalitis, fever, headache, dizziness, and vomiting with a high mortality rate" (DEIS, 3-449), and *could kill between 38% and 75% of those people exposed.* DEIS, D-18. There is no mention of the potential cost of this sort of morbidity, nor is there an attempt to extrapolate an estimated cost of human mortality from comparison data from other countries where outbreaks of Nipah Virus have occurred, such as Malaysia or Singapore, even though the DEIS did use comparison data from those countries to estimate pig farming losses in the United States. DEIS, D-20-21.

16. The DEIS Fails to Properly Include, Analyze, and Consider Costs Attributable to Declines in Consumer Confidence.

83 | 15.0

In the event of an outbreak in the United States, the DEIS indicates that FMD could spread to as many as 25 states in 4 days (DEIS, 1-4), that it could presently take up to 27 days to even recognize an outbreak of Rift Valley Fever Virus (DEIS, D-13), and that many of the pathogens to be studied at the NBAF are transmittable by skin, clothing, nares, and hair (DEIS, 3-385). This, coupled with the fact that we know very little about disease transmission susceptibilities in North American species to many of these foreign animal disease, could very well lead to an all-out ban on the import of American products

Comment No: 82

Issue Code: 15.0

DHS notes the commentor's statement regarding human illness and mortality rates. The risks and associated potential effects to human health and safety are evaluated in Section 3.14 and Appendix E of the NBAF EIS. The risks were determined to be low for all site alternatives. Appendix D references a study performed by the Rift Valley Working Group that estimated that the economic cost of a terrorist act involving the purposeful infection of livestock with the Rift Valley Fever (RVF) virus could ultimately reach \$50 billion, as cited in Section 3.10.9. The scope of potential economic losses predicted for an RVF outbreak encompasses both human health impacts and livestock industry impacts. It should be emphasized that the study used a worst-case scenario to arrive at its estimate of economic losses to the U.S. economy. However, Appendix D also notes that if RVF were to establish itself in a broad area of the United States and become endemic, the cost to the U.S. economy could reach a level cited by the Rift Valley Fever Working Group. Finally, the probability of a release of RVF virus from the NBAF and its ensuing establishment in the environment would be very low.

Comment No: 83

Issue Code: 15.0

The objective of Appendix D is to provide the reader with a range of potential economic outcomes based on studies, simulations, and documented outbreaks of the relevant pathogens in other countries. The studies cited and discussed in the Appendix explicitly address a broad range of potential impacts including the ban of meat exports, destruction of domestic livestock populations, as well as potential public health impacts from Rift Valley Fever and Nipah virus. The level of detail and additional analysis requested by the commentor is not within the scope of the NBAF EIS. For further detail on the studies referenced in the Appendix, DHS refers the commentor to the bibliography.

Culler, Esq., Jenny

Page 90 of 133

WD0753

by consumers abroad. However, the DEIS worst-case scenario fails to consider such an eventuality.

83 cont. | 15.0 A proper analysis of the rates at which the diseases could spread is difficult to perform, because very little is known about the susceptibility of North American wildlife to RFVF. DEIS, 3-217. For the Nipah virus, the data are at least clear that fruit bats can be reservoirs for the disease (DEIS, 3-220), so the fact that there are at least 16 species of bats in Georgia makes it likely that the risks from the release of Nipah are severe, and potentially more readily transmittable than the RFVF. See Cavender report at Tab 40. 25 cont. | 26.0 The very fact that there is not adequate information available to know which species on the mainland of the United States are susceptible to many of these diseases means that an economic or socioeconomic analysis of impacts from accidental (or intentional) release would necessarily have to include a discussion of the drastic reduction in consumer confidence across the board, and not just for cattle, swine, and the other animals known to become infected with and/or serve as reservoirs for disease.

The DEIS considers direct, air-borne, water-borne, and vector-borne transmission in the discussion of transport, transmission and exposure estimates in the Health and Safety section (DEIS §3.14), but fails to indicate in the Socioeconomics section that *it is reasonably foreseeable that in the event of a release of a pathogen from the NBAF no products from the area would be accepted into the consumer marketplace.*

Furthermore, all of these data are buried in the Appendices, and never brought out in the Executive Summary or in any obvious section of the study, in an extreme violation of the public trust and the NEPA process.

#### J. TRAFFIC AND TRANSPORTATION

84 | 17.2 The DEIS is inconsistent in its analysis of the transportation needs for the Athens site. The DEIS acknowledges that the Georgia Department of Transportation recommends the construction of a dedicated turn lane and certain intersection changes for the NBAF if it is located on South Milledge Avenue. DEIS 2-43. However, in another location the DEIS concludes that there are no changes needed to the roadways at the Athens site. DEIS, 3-4. Nowhere does the DEIS explain this conclusion in light of the DOT recommendations. 3 cont. | 26.0

The lack of information, the potential for misstatement, and the failure to analyze critical and reasonably available data in the Traffic and Transportation analysis of the South Milledge Avenue site produces an ineffective, infeasible, and arbitrary and capricious assessment of impacts on and resulting from the NBAF.

89

Comment No: 84

Issue Code: 17.2

DHS notes the commentor's concern that all major highways and roads in the Athens, Georgia, area were not evaluated in the NBAF EIS for traffic conditions and cumulative impacts resulting from NBAF operation at the South Milledge Avenue Site. An evaluation of the existing road conditions and potential effects to traffic and transportation from the primary transportation corridors in the area of the site is provided in Section 3.11.3 of the NBAF EIS. A discussion of the planned improvements to the area's primary transportation corridors of South Milledge Avenue and Whitehall Road to alleviate current and future traffic congestion resulting from the NBAF operation is located in Section 3.11.3.3.1. All planned improvements are per the 2007 recommendations of the Department of Transportation and Public Works. An evaluation of cumulative impacts for traffic in the area of the South Milledge Avenue Site is also located in Section 3.11.3.3.1 of the NBAF EIS.

Culler, Esq., Jenny

Page 91 of 133

WD0753

84 cont. | 17.2

1. The DEIS Fails to Adequately Investigate and Consider the Available Data Related to Current Traffic Conditions.

The Methodology Section (DEIS, 3-310) for Traffic and Transportation indicates that the analysis of issues involving traffic and transportation consisted of 1) collection and verification of traffic and transportation data for the proposed site and regional area; 2) identification of NBAF-design based traffic and transportation conditions and 3) identification and evaluation of site-specific and/or regional impacts resulting from construction and facility operation. In actuality, little to no information was analyzed for highway and road traffic volumes and conditions or NBAF-design based traffic and transportation conditions for the immediate vicinity of South Milledge Avenue or the Athens regional area. The use of such a limited set of data calls into question the validity of the conclusions drawn in the DEIS.

The DEIS provides a list of several highways and roads in area (Georgia 10 Loop, U.S. 29, U.S. 441, U.S. 429, State Highway 319 and Interstates 85 and 20), thereby demonstrating only that the proposed South Milledge Avenue site is accessible by roadway. DEIS, 3-312. The analysis ends there. Despite the stated methodology, the DEIS failed to address current or projected conditions on these highways and roads. It does not identify or analyze current road conditions on these roadways. It does not mention traffic patterns or volumes on these roadways. See <http://www.dot.state.ga.us/statistics/TrafficData/Documents/cov2007.xls>, attached hereto at Tab 55. It does not address impacts to these roadways during construction or operation of the NBAF. It does not consider how traffic patterns, volumes or road conditions may affect the provision of emergency services or the delivery of goods and materials to the proposed site on South Milledge Avenue during congested construction and operation conditions.

It is arbitrary and capricious to discuss the existence of roadways while completely ignoring other critical traffic and transportation factors. An evaluation of the site most properly includes an understanding of traffic patterns and volumes and road conditions – both current and projected. The simple mention that roads exist in the area, thus, fails the minimum standard needed to effectively evaluate the South Milledge Avenue area as a proposed NBAF site.

85 | 17.2

2. The DEIS Makes Contradictory Conclusions, Fails to Cite to Supportive Data, Does Not Consider Alternate Solutions, Disregards the County's Transportation Goals and Fails to Analyze Impacts on Traffic and Transportation.

Traffic flow in the two 'critical' traffic areas for the South Milledge Avenue site – Whitehall Road and South Milledge Avenue and South Milledge Avenue at the entrance to the NBAF – are projected to worsen upon operation of the NBAF. The DEIS acknowledges "the additional vehicles from approximately 350 new employees," but concludes that traffic on South Milledge Avenue would only consequentially increase by 9%. (DEIS, 3-315). Yet, the Levels of Service (LOS) for the critical traffic area are

90

Comment No: 85

Issue Code: 17.2

DHS notes the commentor's concern about the traffic congestion in the area of the South Milledge Avenue Site and the future impact of the NBAF operation on the area's transportation infrastructure. A discussion of the planned improvements to the area's primary transportation corridors of South Milledge Avenue and Whitehall Road to alleviate current and future traffic congestion resulting from the NBAF operation at the South Milledge Avenue site is located in Section 3.11.3.3.1 of the NBAF EIS. All planned improvements are per the recommendations of the Athens-Clarke County Department of Transportation and Public Works Department as of 2007.

Culler, Esq., Jenny

Page 92 of 133

WD0753

85 cont. | 17.2

projected to drop to 'F' and, on occasion, 'E.' (DEIS, 3-313). The dismissal of the increased number of cars does not explain the decrease in the LOS. The DEIS also fails to cite to the data analyzed to determine the anticipated LOS for the critical areas. Thus, it is impossible to verify how or why the critical areas are impacted and whether the LOS evaluations are correctly stated.

The Department of Transportation and Public Works recommends redesigning the Whitehall Road and South Milledge Avenue intersection and providing two points of access to the NBAF within 300 feet of each other. (DEIS, 3-313). The record, however, does not address whether other alternate solutions were considered or clarify why these recommendations are preferred. It does not analyze how the recommendations, if implemented, will affect the critical areas or whether these recommendations will, in fact, be implemented. In fact, the DEIS does not even state whether the LOS evaluations take these recommendations into account when predicting delays in the critical areas. Additionally, these solutions are directly contrary to the Athens-Clarke County Community Assessment which calls for fewer curb cuts. Transportation Subcommittee Vision, Issues and Opportunities Plan, 2006 Athens-Clarke County and The City of Winterville Community Assessment, available online at [http://www.acplanning.com/user\\_files/IssuesandOpportunitiestransportation.pdf](http://www.acplanning.com/user_files/IssuesandOpportunitiestransportation.pdf).

Additionally, the DEIS does not consider how or whether the increase in traffic congestion around the South Milledge Avenue site during construction and operation will affect other areas of the city of Athens or Athens-Clarke County. How the change in traffic patterns resulting from rerouted traffic and alternate routes taken by drivers will affect congestion in other areas remains unknown and unstudied.

3. The DEIS Fails to Adequately Investigate and Consider the Future Impacts on Traffic from Expected Population Growth.

86 | 17.2

Although the DEIS acknowledged that rapid population growth is anticipated and will certainly increase traffic (DEIS, 3-315), *at no point* did the DEIS drafters collect or analyze projected growth and associated traffic data to understand how the changes in traffic volume and patterns may affect the South Milledge Avenue site. This information is readily available, including from the University of Georgia. See <http://www.georgiastats.uga.edu/counties/059.pdf>, attached hereto at Tab 56. This oversight alone skews the analysis and likely resulted in misleading, and even ineffective, conclusions.

Consequently, any conclusions drawn were derived in a vacuum with no attachment or relevance to the certain future increase in vehicles on the highways and roads of Athens-Clarke County. The evaluation within the DEIS of site-specific transportation and traffic conditions resulting from construction and facility operation are, simply put, inapplicable for any time other than the immediate present.

91

Comment No: 86

Issue Code: 17.2

DHS notes the commentor's concern that future population growth is not included in the cumulative impacts discussion relative to traffic and transportation in the South Milledge Avenue Site area. An evaluation of the existing road conditions and potential effects to traffic and transportation on the primary transportation corridors from the NBAF construction and operation at the South Milledge Avenue Site is provided in Section 3.11.3 of the NBAF EIS. Specifically, an evaluation of current and future cumulative impacts to traffic from population growth and regional development projects in the area of the South Milledge Avenue Site is provided in Section 3.11.3.3.1 of the NBAF EIS. All planned improvements are per the recommendations of the Athens-Clarke County Department of Transportation and the Public Works Department as of 2007.

Culler, Esq., Jenny

Page 93 of 133

WD0753

87| 17.2

4. The DEIS Fails to Consider Impacts to the Emergency Response Times and Transportation Needs for Evacuation of the NBAF Facility and Surrounding Areas.

The DEIS identifies the "current response time" for Athens-Clarke Fire and Emergency Services to be "slightly more than five minutes." DEIS, 3-315. The record does not address whether this response time applies to the area once the NBAF is operational. If not, the stated response time is grossly misstated as increased congestion and longer delays at the critical areas were not considered.

Accidents are possible, even at the most secure facilities. Thus, it is illogical to identify the potential impacts from daily traffic without considering impacts during critical times, such as an accident or epidemic. The DEIS does identify or even mention a traffic plan for quick and efficient evacuation of the NBAF or the surrounding area. It does not consider how or how long it would take to affect such a plan, thereby creating a better understanding of a potential exposure time and the number of people exposed for that duration.

88| 17.2

5. The DEIS Fails to Consider Mitigation of Traffic Impacts Through Public Transit Options.

The DEIS wholly fails to address construction and operation impacts on the County's goals to promote calming traffic options and increase availability of and connectivity between bike, pedestrian and vehicular routes. Transportation Subcommittee Vision, Issues and Opportunities Plan, 2006 Athens-Clarke County and The City of Winterville Community Assessment, available online at [http://www.acplanning.com/user\\_files/IssuesandOpportunitiestransportation.pdf](http://www.acplanning.com/user_files/IssuesandOpportunitiestransportation.pdf).

89| 17.2

6. The DEIS Fails to Consider Cumulative Impacts from Construction Traffic and Increased Operational Traffic from the NBAF.

The DEIS cites to statements made by an individual at the University of Georgia Office of the University Architects for Facilities Planning and the Athens-Clarke County Planning Director as proof there are no proposed development projects for the South Milledge Avenue site, and, therefore, no substantial cumulative impacts. It must be noted that the lack of current plans does not forego the possibility or need for future development projects, especially given the anticipated rapid population growth in Athens-Clarke County and the associated increase of traffic on highways and roadways.

Moreover, the information relied upon in reaching the 'no cumulative impacts' conclusion is incorrect. Had DHS consulted the Athens-Clarke County Comprehensive Plan, it would have noticed that a new road and an intersection realignment are proposed for the immediate area around the South Milledge Avenue site. See Athens-Clarke County Community Agenda, Future Development Map (April 9, 2008). By themselves, such projects will certainly result in increased congestion and traffic delays. An effective

92

Comment No: 87

Issue Code: 17.2

DHS notes the commentor's concerns regarding the impacts to traffic from an emergency event or pathogen release. A discussion of the low risk associated with the shipment of infectious materials to and from the NBAF operation at the South Milledge Avenue Site is provided in Section 3.11.3 of the NBAF EIS, in conjunction with an analysis of accidental releases during transportation as provided in Section 3.14 and Appendix E. An evaluation of the existing road conditions and potential effects to traffic and transportation from the South Milledge Avenue site is provided in Section 3.11.3. An emergency response plan that would include area evacuation plans would be developed if one of the action alternatives is selected and prior to commencement of NBAF operations. It should be noted that the need for an evacuation under accident conditions is considered to be a very low probability event. 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.

Comment No: 88

Issue Code: 17.2

DHS notes the commentor's concerns regarding the impact of NBAF construction and operation on the availability of public transit options such as bike and pedestrian routes. It is the intention of DHS to work with Athens Clarke County in all transportation considerations.

Comment No: 89

Issue Code: 17.2

DHS notes the commentor's concern that construction and operation of the NBAF are not included in the cumulative impacts discussion relative to traffic and transportation in the South Milledge Avenue Site area. An evaluation of the existing road conditions and potential effects to traffic and transportation on the primary transportation corridors from the NBAF construction and operation at the South Milledge Avenue site is provided in Section 3.11.3 of the NBAF EIS. An evaluation of current and future cumulative impacts to traffic from the operation of the NBAF at the South Milledge Avenue Site is provided in Section 3.11.3.3.1.

DHS has reviewed the Athens-Clarke County Comprehensive Plan and found that this document does not provide anything new regarding transportation other than the identification of South Milledge Avenue and Whitehall Road as being subject to road widening based on a dotted line and the key identifying the dotted line as "Proposed Road Widening". However, no definitive timeframe has been identified for these projects.

Culler, Esq., Jenny

Page 94 of 133

WD0753

89 cont. | 17.2

analysis of the impacts surrounding the NBAF must evaluate the cumulative impacts of such projects.

Despite the title "Construction Consequences," the DEIS does not evaluate the site-specific and/or regional consequences resulting from construction, as promised by the stated Methodology for this section. Rather, the reader is only informed of such obvious conditions as the use of trucks and machinery during daylight hours, the steady delivery of soil and building materials, the use of adjacent land for worker parking and the possibility of rerouted vehicular and pedestrian traffic. The section fails to offer any conclusions as to the consequences of the aforementioned activities on the South Milledge area. It also fails to explain the need to reroute vehicles and pedestrians, identify alternative routes or describe the impact of those reroutings on traffic conditions. These shortcomings produce an ineffective and unfeasible assessment of construction impacts on the South Milledge site, which falls, again, well below the minimum standard necessary for a valuable evaluation of the area as a proposed NBAF site.

Although the contemplated Athens NBAF site is located very near the border of Athens-Clarke and Oconee Counties, the DEIS does not consider cumulative traffic effects outside of Athens-Clarke, and it is not clear whether the DHS even reviewed transportation or other land use plans for Oconee and other surrounding counties other than just Athens-Clarke.

7. The DEIS Fails to Consider Impacts to Air Travel Necessary for Security around the NBAF.

90 | 19.2

The South Milledge Avenue site would impact air traffic from Hartsfield-Jackson Atlanta International Airport and will certainly affect traffic control at the local airport, Athens Ben Epps. As previously mentioned, Hartsfield-Jackson hosts 994,346 takeoffs and landings a year; Ben Epps hosted 53,357 takeoffs and landings in 2007.

Just as boats and airplanes are not allowed to approach the Plum Island facility for security reasons, nor will air traffic be allowed to approach the NBAF. Despite this obvious security consideration, the DEIS absolutely fails to consider the impact of the NBAF on air traffic over Athens-Clarke County.

8. The DEIS Fails to Adequately Consider Risks from the Transportation of Shipments of Infectious Materials.

91 | 21.2

Shipments of infectious materials must, at some point, traverse the roads of Athens-Clarke County and the airspace above it. Yet, the DEIS fails to adequately consider the risks of a potential traffic accident involving such materials. While the DEIS discloses that there were 546 hazardous materials incidents in Georgia in 2007, the focus then turns to probabilities of accidents across all vehicles regardless of the load. DEIS, 3-327-328. The DEIS fails here to compare apples to apples, and attempts to sweep that shocking number of 546 hazardous materials accidents under the rug. There is additionally no consideration of the frequency of traffic or airspace accidents as

Comment No: 90

Issue Code: 19.2

DHS notes the commentor's concerns regarding consideration of effects to air travel from siting of NBAF. No-fly zones will be considered along with other security measures for the proposed NBAF. A separate Threat and Risk Assessment (TRA) (designated as For Official Use Only) 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. While a no-fly zone is not currently anticipated, and is therefore speculative, it would remain an option based on security conditions.

Comment No: 91

Issue Code: 21.2

See response to Comment No. 87.

Culler, Esq., Jenny

Page 95 of 133

WD0753

91 cont. | 21.2

impacted by population growth and increased numbers of trips along the South Milledge Avenue corridor. There is no consideration of the increased frequency of automobile accidents in Athens when the county's population doubles for University of Georgia football games. There is no analysis of the amount of traffic South Milledge Avenue gets on game days, during the move-in day for students each year, or during graduation, which are all, incidentally, also days when the local air pollution peaks to nonattainment from the automobile exhaust and fumes.

Along with these omissions, the DEIS also avoids discussion of the means by which such an accident would be contained, the response methodologies from the NBAF and the short and long-term effects on both traffic patterns and congestion remain unidentified and unanalyzed. The EIS must include the expected amounts of biological agents which will be transported to and from the NBAF facility, and disclose and consider the potential impacts from a release of that amount of pathogen. Further, the DEIS should but did not consider mitigating the potential for accidents by restricting traffic around the NBAF or providing a police officer or other official to direct traffic on high-travel days, or constructing speed bumps or other devices in South Milledge Avenue in order to calm the traffic in the area. As such, the review of the traffic and transportation issues in the DEIS is far from thorough, and fails to provide disclosure or analysis of all reasonably foreseeable direct, indirect or cumulative impacts from and to traffic and transportation.

#### K. EXISTING HAZARDOUS, TOXIC, OR RADIOLOGICAL WASTE CONTAMINATION

92 | 18.2

1. The DEIS Fails to Properly Identify and Describe Existing Hazardous, Toxic, or Radiological Waste Contamination.
  - a. *Standards and Reports Detailing the Specific Methodology Employed to Determine the Presence of Existing Hazardous, Toxic, or Radiological Waste Contamination Were Not Easily Accessible By the Public.*

Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. 40 C.F.R. § 1502.24. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. *Id.*

Most of the information presented on each proposed location derives from the Phase I Environmental Site Assessments ("ESA") performed in accordance with the requirements of American Society for Testing and Materials (ASTM). However, the ASTM materials were not provided with the DEIS and were not available on the internet without a download fee. In fact, the ASTM standards were never fully explained in or attached to the original ESA, which was prepared by Geo-Hydro Engineers in January 2007. As such, adherence to the methodology had to be assessed by finding the regulations on which the ASTM standards were based, 40 C.F.R. 312.1 *et seq.*

94

Comment No: 92

Issue Code: 18.2

As discussed in Section 3.12.1 of the NBAF EIS, Phase I Environmental Site Assessments (ESAs) were performed at all of the candidate sites to determine if recognized environmental conditions (RECs) indicated the need for further studies to characterize and manage risks to the NBAF project posed by baseline environmental conditions. Environmental sampling is not required as part of Phase I ESAs because these studies are designed to reduce, but not eliminate uncertainties related to existing contamination. The ESAs performed for the South Milledge Avenue Site are described in Section 3.12.3. As discussed in this section, one ESA found a low potential for contamination, and another found no RECs associated with the site. From this information, DHS concluded that "no construction or operational impacts are anticipated due to existing hazardous, toxic, or radiological waste contamination."

While EPA has acknowledged that meeting ASTM Standard E-1527-05 satisfies the "All Appropriate Inquiries" standard under CERCLA, it does not follow that ESAs performed for a different reason (i.e., to evaluate baseline conditions at proposed NBAF locations and assess potential liabilities associated with former activities at the proposed locations and neighboring locations) are required to meet the requirements of CERCLA regulations under 40 CFR Section 312 *et seq.*

As noted by the commentator, Phase I ESA's are valid for 180 days and more than 180 days have passed since the Phase I ESA's for the NBAF proposed locations were performed. This may limit DHS's ability to hold ESA preparers liable for omissions and errors. In addition, DHS recognizes that recent changes may have occurred at the candidate locations and additional environmental inquiries may be appropriate once an NBAF location is chosen to verify that new environmental concerns have not surfaced. However, the fact that more than 180 have passed since the ESA's were completed does not nullify the historical information presented in these ESAs. Also, DHS's primary purpose in performing these ESAs, to determine if existing contamination was sufficient to rule out any candidate sites from consideration, was fulfilled.

Culler, Esq., Jenny

Page 96 of 133

WD0753

92 cont. | 18.2

3 cont. | 26.0

Although an updated ESA was prepared by Terracon Consultants in the fall of 2007, neither ESA was readily available to the public for review for the entire comment period. Neither ESA was attached to the DEIS or made available on the DHS website. The original ESA was provided on the Georgia Consortium's website for a time, but was taken down before the comment period expired. This is evidenced by the two attached print-outs of the index of the Georgia Consortium's webpage, the more recent of which does not include a link to previous environmental studies, attached to these comments. See UGA/NBAF webpages, most recent version available online at <http://www.uga.edu/nba/faq.html>. See Tab 57. The updated ESA has never been accessible to the preparers of these comments, and therefore is believed to never have been available to the public.

The shortcomings of the DEIS regarding methodology requirements, the tests and inquiries conducted by the ESA preparers, and information regarding the preparers themselves render the evaluation of existing hazardous, toxic, and radiological waste inadequate to provide public notice and opportunity for comment. Further, this lax review begs the question of whether the agency has followed through with its obligations under the law to independently evaluate any information submitted by the applicant (such as the Georgia Consortium) and to be responsible for its accuracy. See 40 C.F.R. §1506.5(a). Although a copy of the Geo-Hydro ESA was obtained by the preparers of these comments through a combination of diligent effort to collect documents not provided with the DEIS and luck, the brief appearance of that document on another entity's website cannot substitute for the public notice absent from the DEIS. See Geo-Hydro Engineers 2007. Tab 58. *NEPA "requires an agency to do more than to scatter its evaluation of environmental damage among various public documents,"* 685 F.2d, at 484. Contents of referenced documents must be adequately described to ensure that the EIS is understandable to a reader without undue cross-referencing. See *Natural Resources Defense Council v. Duvall*, 777 F.Supp. 1533, 1539 (E.D.Cal.1991).

- b. *The DEIS Does Not Make All Appropriate Inquiries Necessary to Make A Reliable Determination Regarding the Presence of Recognized Environmental Conditions.*

92 cont. | 18.2

The DEIS failed to follow all required steps and to provide all information specified in the methodology. The ASTM has published standard E 1527-05, the 2005 revision to E 1527- 00 (2005 ASTM). Wendy L. Wilkie, *Purchasing Contaminated Property – Without the Liability, the EPA's New Standard for a Phase I Environmental Site Assessment*, South Carolina Lawyer 19 (Jan. 2007). The EPA has acknowledged that the 2005 ASTM satisfies the All Appropriate Inquiries ("AAI") standard required by the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") regulations, which are codified at 40 C.F.R. 312.1 *et seq.* *Id.* (citing 70 Fed. Reg. 66070, 66108). Thus, a prospective purchaser can comply with the AAI Rule by obtaining a Phase I that meets the 2005 ASTM standard. *Id.* The prospective purchaser should review the Phase I in comparison to the 2005 ASTM to ensure compliance with the

Culler, Esq., Jenny

Page 97 of 133

WD0753

ASTM and should specifically ensure that the Phase I report meets the requirements of the AAI Rule. *Id.*

92 cont. | 18.2

Therefore, to meet the ASTM standards, the ESA should meet requirements of CERCLA regulations 40 C.F.R. §312.1 *et seq.* Olivia Marr & Richard Montevideo, *Are You Making "All Appropriate Inquiries?" – New U.S. EPA Final Rule Strengthens Environmental Due Diligence Standards*, Orange County Lawyer 34 (Sept. 2006). After November 1, 2006, prospective purchasers must show compliance with either the new rule or the 2005 ASTM standards. *Id.*

According to the new rule, the reliability of a Phase I Assessment has a limited life span. To be reliable, the appropriate inquiry must occur within one year of purchasing the property. 40 C.F.R. § 312.20(a). Also, any interviews, visual inspections, or review of cleanup liens and government records conducted within more than 180 days of purchase must be updated prior to closing on property. 40 C.F.R. § 312.20(b). The DEIS's reliance on an ESA prepared in January 2007 over a year and a half later is a glaring violation of the prescribed methodology for all appropriate inquiries. In addition, the updates to the ESA conducted by Terracon Consultants were added in Fall 2007, significantly more than 180 days before the DEIS, much less any potential transfer of the South Milledge Avenue site and beginning of land disturbance. For the ESA to be properly relied upon, the ESA should be updated again and made available for additional public comments.

- c. *Further Testing for Existing Hazardous, Toxic, or Radiological Waste Contamination Should Be Conducted.*

An environmental professional must review government records for a proposed site and adjoining sites under the new all appropriate inquiries standard and the corresponding ASTM standards. *See* 40 C.F.R. 312.26. The ESA was purportedly an effort to identify recognized environmental conditions ("RECs") with respect to the South Milledge Avenue Site and its surroundings. Geo-Hydro Engineers, 2007, p. 4. An REC indicates the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. *Id.* The Geo-Hydro Engineers seem to have identified RECs, or at least environmental conditions that warranted further testing before a land disturbing project the magnitude of NBAF could be undertaken, but then dismissed them without the necessary information to do so. For instance, Geo-Hydro identified a former yarn mill on adjoining property and acknowledged that historical industrial operations are RECs due to the possible handling, storage, and potential release of hazardous or petroleum substances. *Id.* However, Geo-Hydro Engineers determined that Whitehall Mills was not an REC in the ESA because of a lack of regulatory records and the amount of time that had elapsed since operations, despite the fact that the lack of regulatory records resulted from the length of time since operations- before records were likely kept.

Culler, Esq., Jenny

Page 98 of 133

WD0753

92 cont.118.2

Other potential RECs were dismissed due to their presumed presence in different drainage basins or location not upgradient from the South Milledge Avenue site. However, the Geo-Hydro ESA admits that the engineers *assumed* that the groundwater table and associated hydraulic gradient is parallel with ground surface, i.e. no drainage basin or groundwater flow studies were conducted. For example, a underground storage tank known to have leaked and located within ASTM minimum search distances was discounted as an REC based in part on its hydrogeology from the subject property, which was merely discerned from site topography. Geo-Hydro Engineers, 2007, p. 9. Similarly, a nearby Hazardous Materials Treatment Facility with numerous RCRA violations was also found not to be an REC because it did not *appear* to be upgradient from the South Milledge Avenue Site, again an assessment based upon site topography. The Site Characterization Study acknowledges that drought conditions warrant further considerations of groundwater fluctuations around the South Milledge Avenue. Site Characterization Study §2A.1 p. 1. Obviously, a visual topography would not satisfy the Site Characterization call for considerations of groundwater fluctuations, and therefore it is not a proper basis for determining that an otherwise potential environmental condition is not an REC.

The updated ESA conducted by Terracon Consultants was not able to be obtained or reviewed. According to the DEIS, Terracon conducted a regulatory record review that revealed the same sites of interest. Terracon also dismissed those sites as RECs based on their distance more than 3,000 ft from the South Milledge Avenue Site; Whitehall Mills was determined to not be an REC because it was 2500 feet and cross-gradient. Just from the scant information revealed in the DEIS and without the benefit of reviewing the ASTM regulations or the updated ESA, it does not seem that Terracon had sufficient information to determine that the sites of interest were not RECs.

Because the DEIS and ESA indicate past contamination at and around the South Milledge Avenue Site, more extensive testing for existing hazardous, toxic, or radiological waste, such as soil sampling, should be conducted. Evaluation of existing hazardous waste with respect to proposed sites for new agency facility must be reasonably thorough enough to satisfy a "hard look" requirement. *Young v. General Services Administration*, 99 F.Supp.2d 59, hn.14 (Dist. D.C. 2000). ***Where the record points to inconsistent information regarding the existence of hazardous materials at a proposed site, remediation measures should be proposed to satisfy responsibilities under NEPA.*** *Id.* at 80. If property exhibits soil contamination and the presence of hazardous materials to the extent that it is likely that further sampling will be needed both before and during any construction activities, an EIS was adequate where acknowledges that construction project could be planned to ensure the proper identification, treatment and/or removal of any such materials in accordance with all applicable local, state, and federal regulations. *Id.* In *Young*, extensive testing of site in the past gave developers an idea of where contaminants may be located without further delineation and characterization. *Id.* at 80-81. The DEIS presents conflicting information regarding hazardous waste at the South Milledge Avenue Site due to the operation of Whitehall factory at the site, the listing of the landfill on the site on the Hazardous Waste Sites List, and the inability to account for groundwater flow and drainage basin boundaries.

Culler, Esq., Jenny

Page 99 of 133

WD0753

Therefore, more thorough testing or at least remediation plan is necessary for DEIS to satisfy NEPA. A Phase II Assessment involves intrusive sampling of soil and/or groundwater in an attempt to resolve RECs identified in a Phase I Assessment. *Master Lock Co. v. Hawn*, Not Reported in F.Supp.2d, 2007 WL 1141788 (N.D.Ill. 2007).

2. The DEIS Fails to Consider the Current Ongoing Impacts of Existing Hazardous, Toxic, or Radiological Waste Contamination at the South Milledge Avenue Site on the Local Environment.

93| 18.2

The construction of the 500,000 – 520,000 sq. ft. NBAF facility will involve a great deal of land disturbance. After failing to adequately determine if contamination exists at the South Milledge Avenue site, the DEIS could not and indeed did fail to address the possibility that construction and operation of the NBAF would disturb possible existing contamination in the soils. The potential impacts to the local environment include additional contaminant releases. These releases could adversely affect the local water supply and the health, safety, and property values of adjoining property owners.

3. The DEIS Fails to Address Whether Existing Contamination Could Affect Outdoor Pre-Infection Test Animals.

The Feasibility Study disclosed that pre-infection test animals will be kept outside of the NBAF facility for processing and quarantining. Feasibility Study §1.1, p.2. However, the DEIS does not mention that there would be livestock on-site outside the facility, and fails to assess the impacts that existing contamination such as contaminated groundwater could have on those animals.

4. The DEIS Fails to Address Whether Existing Contamination Could Affect Decommissioning of the NBAF Facilities.

94| 18.2

A proper remediation action under CERCLA would involve treatment to permanently and significantly reduce the volume, toxicity or mobility of the hazardous substances, pollutants, and contaminants, in addition to removal of the waste from the site and disposal at an appropriate facility. 42 U.S.C. § 9621(b). This standard presupposes accurate testing to determine the type and extent of contamination. Without an adequate and complete assessment of the contamination that exists at the South Milledge Avenue site prior to installation of the NBAF, remediation of contamination contributed by the construction and operation of the facility cannot be fully addressed. This inability to properly plan will particularly hinder the adequate clean up of the site at the end of the NBAF's useful life, and this can have potential cumulative effects to the contamination of the local environment which are not discussed in the DEIS.

98

Comment No: 93

Issue Code: 18.2

DHS notes the commentor's concern. As discussed in Section 3.12.3.2 of the NBAF EIS, DHS does not expect construction or operational impacts at the South Milledge Avenue Site due to existing hazardous, toxic, or radiological waste contamination. Should a decision be made to build NBAF and a site is selected, additional data gathering might need to be performed. However, at this time, there are no recognized environmental conditions (RECs) associated with the South Milledge Avenue Site that warrant further testing or investigations.

Comment No: 94

Issue Code: 18.2

DHS notes the commentor's concern. As stated in Section 2.2.3 of the NBAF EIS, once the proposed NBAF has reached its life expectancy, DHS may choose to decommission the facility and transition the property for future use according to current agreements. In addition, a separate NEPA evaluation would be conducted at that time.

Development of standards for biosafety laboratories and associated equipment has focused on the construction and operation of new or existing facilities. Standard laboratory procedures and decontamination protocols would be performed according to the Biosafety in Microbiological and Biomedical Laboratories (BMBL) (Centers for Disease Control and Prevention and NIH 2007) to ensure worker safety and to ensure health and safety of the general public. It is anticipated that site-specific protocols and a decontamination and decommissioning plan would be developed for this action, should it occur. The plan would address such factors as decontamination methodologies; disposition of used equipment and re-use, disposal, or salvaging of site materials; and post-decontamination monitoring.

Culler, Esq., Jenny

Page 100 of 133

WD0753

5. The DEIS Fails to Consider Site Remediation as a Mitigation or Conservation Option.

94 cont. | 18.2

The DEIS should have, but did not, consider restoring and enhancing the Athens site by identifying and cleaning up any existing pollutants. The regulations instruct that the agency "shall to the fullest extent possible...(f) Use all practicable means ... to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment." 40 C.F.R. §1500.2. The DEIS could have included or considered adequate testing for hazardous, toxic, and/or petroleum waste at the South Milledge Avenue site in order to remediate the contamination to mitigate impacts from migration resulting from land disturbance activity and NBAF operations. In that case, the DEIS would have been able to set forth a plan for remediating any hazardous waste at the site, or at the very least consider the impacts of no remediation.

L. WASTE MANAGEMENT

1. The Methodology Employed in the DEIS for Waste Stream Analysis is Fatally Flawed.

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95 | 18.2

The DEIS methodology is flawed in that it fails to consider information and comments submitted by the general public associated with waste management capabilities in the Athens-Clarke County area as well as surrounding areas. Notably, DHS was required to accept and consider public comments and information submitted during the scoping session. However, the DEIS acknowledges that DHS did not consider any information other than that provided by the submitted expression of interest, site visits and publicly available information when determining the affected environment and waste management impacts for the proposed Athens site.

In addition, the methodology focuses only generally on the *assumed* characteristics and composition of the proposed waste stream as opposed to the *actual* characteristics and composition of the proposed waste stream. DHS previously acknowledged that it has not yet determined the pathological waste disposal method for the proposed NBAF, and the DEIS further admits that waste generation rates from the facility will depend on the chosen disposal method. Accordingly, the DEIS cannot adequately assess the waste stream for the proposed NBAF until the disposal method is determined. To the extent alternate disposal methods are being considered, the DEIS was required to analyze the waste stream under each alternative. The DEIS is devoid of this information and thus fails to accurately assess and evaluate the impacts associated with the proposed NBAF facility.

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Comment No: 95

Issue Code: 18.2

DHS notes the commentor's concerns regarding the waste management assessment methodology. Table 3.13.2.2-2 in Section 3.13.2 of the NBAF EIS lists the waste streams, origins, and pretreatment methods applicable to the liquid waste streams generated by the operation of the NBAF and ultimately destined for the sanitary sewer. Similarly, Table 3.13.2.2-3 lists the waste streams, origins, and pretreatment methods applicable to the waste solids that will be generated by the operation of the NBAF and ultimately destined for offsite disposal. These tables include all of the liquid and solid residuals from all of the different types of carcass disposal methodologies being considered. Table 3.13.2.2-4 provides a brief description and comparison of the three most likely technologies being considered for carcass and pathological waste disposal (i.e., incineration, alkaline hydrolysis, and rendering).

The commentor is correct in stating that the actual characteristics of the wastes generated by the facility will not be known until a site is chosen, additional technology and design decisions are made, and wastes are generated and characterized. For this reason, Section 3.13.2.2 documents the methods that would be used to render any potentially infectious liquid waste streams non-infectious, and the pretreatment methods that could be used to sterilize and/or decontaminate any solid waste streams before they are sent offsite for additional treatment and/or disposal. Section 3.13.4.3 specifically addresses the ability of the South Milledge Avenue Site to handle the volume of sanitary wastewater and waste solids that could be generated by the operation of the facility.

Because the method of carcass and pathological waste disposal has not yet been determined, Section 3.4 (Air Quality) assumes that the treatment technology with the greatest potential to negatively impact air quality, incineration, will be used in order to assess the maximum adverse effect. Similarly, because alkaline hydrolysis would have the greatest impact on sanitary sewage capacity, Section 3.3 (Infrastructure) assumes that alkaline hydrolysis will be used so that the maximum sanitary sewage impacts are assessed.

Culler, Esq., Jenny

Page 101 of 133

WD0753

2. The DEIS Fails to Adequately Address any Wastewater Discharges Associated with the Construction of the NBAF in Athens, Georgia.

96| 18.2

As with other conclusions presented in the DEIS, the DEIS simply states that the “wastewater stream would be disposed of in accordance with applicable permits and regulations” without providing any supporting analysis or even assessment of what permits are required and how the compliance with such permits could be achieved. The DEIS acknowledges that the construction of the proposed NBAF will generate construction debris, sanitary solid waste, and wastewater, but fails to indicate the relative volumes of such waste and the proposed methods and location for disposal of construction generated wastes.

3. The DEIS Fails to Adequately Assess the Wastewater Impacts During Operation of the Proposed NBAF.

The DEIS fails to provide critical details regarding the design and operation of the NBAF, to account for the limitations of the Publicly Owned Treatment Works (POTW) proposed to receive its liquid wastes, and to address the potential consequences to downstream water users. The DEIS is not adequate to assess the impacts of the proposed facility.

- The risks associated with the research on biological and agricultural diseases and pathogenic agents that have the potential to adversely affect U.S. domestic livestock and wild animals are extraordinary. One of the primary potential mechanisms for accidental or intentional release of these agents would be via water-borne discharge. However, risk issues related to intentional, accidental, or negligent acts of humans do not appear to be adequately addressed. Based on recent documented incidents at several “biosecure” facilities in the U.S. and elsewhere, the human factor, especially in a setting like the Milledge Avenue site, presents unacceptable risks.
- The DEIS does not provide sufficient details on the collection, conveyance, or pretreatment processes for the various NBAF liquid waste sources to adequately evaluate their efficacy, biosecurity, or likely performance.
- The DEIS does not provide critical details on the treatment effectiveness of the disinfection and decontamination processes. The effectiveness of these processes should be demonstrated for each disease agent to be studied, and for each operational area and wastestream at the NBAF. Details on these processes and their effectiveness are required for a proper evaluation of potential impacts of the NBAF.
- Details were not provided in the DEIS regarding the administrative procedures proposed to assure zero release of pathogenic agents. The biosecurity of the NBAF, and the safety of its liquid waste discharges, will depend on these policies, procedures, and measures. Potential impacts of the

100

Comment No: 96

Issue Code: 18.2

DHS notes the commentor’s concerns regarding the waste management assessment methodology. Table 3.13.2.2-2 in Section 3.13.2 of the NBAF EIS lists the waste streams, origins, and pretreatment methods applicable to the liquid waste streams generated by the operation of the NBAF and ultimately destined for the sanitary sewer. Similarly, Table 3.13.2.2-3 lists the waste streams, origins, and pretreatment methods applicable to the waste solids that will be generated by the operation of the NBAF and ultimately destined for offsite disposal. These tables include all of the liquid and solid residuals from all of the different types of carcass disposal methodologies being considered. Table 3.13.2.2-4 provides a brief description and comparison of the three most likely technologies being considered for carcass and pathological waste disposal (i.e., incineration, alkaline hydrolysis, and rendering). Section 3.3.3.3.4 describes the preliminary tissue digester wastewater constituent concentrations as well as the influent limits of the Middle Oconee WWTP. The NBAF would be required to meet or exceed all sewage acceptance criteria and pretreatment requirements.

The commentor is correct in stating that the actual characteristics and quantities of the construction and operational wastes generated by the facility will not be known until a site is chosen, additional technology and design decisions are made and waste streams characterized. Each alternative location has access to construction debris landfills and pending construction contract formulation many potential construction waste streams may require recycling or reuse.

Culler, Esq., Jenny

Page 102 of 133

## WD0753

96 cont. | 18.2

NBAF cannot be assessed without specifications on these administrative controls.

- The strength and characteristics of the commingled liquid wastes to be discharged from the NBAF were not specified in the DEIS. Anticipated pretreatment requirements for each operational area and wastestream of the NBAF were not identified. Conventional waste pretreatment limits do not address the unique risks associated with NBAF disease agents. In addition, the ACC wastewater treatment facility is not designed to treat the type of waste generate by the NBAF. Thus, DHS has failed to accurately assess the potential for wastewater from the NBAF to simply “pass through” the ACC wastewater treatment facility.
- While the DEIS discusses disinfection and decontamination processes for certain categories of liquid wastes, the specific treatment technologies to be used, and the methods for verifying zero-discharge were not provided.
- The DEIS provides no substantive documentation of the potential effectiveness of the treatment processes at the ACC’s Middle Oconee Water Pollution Control Plant (MOWPCP). This facility is only required to treat wastewater to secondary levels and it discharges fecal bacteria levels only marginally suitable for human contact. This facility cannot be assumed to be capable of effectively reducing or eliminating exotic disease pathogens from the NBAF. The potential for pollutants from the wastewater stream at NBAF to “pass through” the MOWPCP is not adequately considered.
- The DEIS was not clear on whether all source areas of liquid wastes within the NBAF would be disinfected and decontaminated. To provide optimum assurance of total and absolute destruction of all disease agents all wastestreams should be decontaminated. Redundant cycles of decontamination should be performed on all liquid wastes. Testing should be performed on all decontamination batches to confirm the effectiveness of the treatments and that all materials are biologically inert.
- The MOWPCP has no demonstrated analytical capacity to detect disease agents entering its treatment works, at any point within its plant, or at its outfall.
- The precursor DHS disease research operation, PIADC, has had a variety of regulatory compliance issues, including numerous NPDES violations and CERCLA violations requiring site remediation. This history raises serious concerns regarding whether the NBAF could maintain an absolutely safe and biosecure facility and assure zero-discharge of pathogen agents via its wastestream.

Culler, Esq., Jenny

Page 103 of 133

## WD0753

96 cont. | 18.2

- The DEIS fails to accurately consider the regulatory compliance history of the Athens wastewater treatment system. The unified government of ACC, owner-operator of the wastewater treatment POTW proposed to receive liquid wastes from the NBAF, has had numerous violations of its NPDES permits. Discharge of liquid wastes from the NBAF to a POTW with a mixed compliance record poses an unacceptable risk to the surrounding community.
- The DEIS fails to adequately consider the treatment capabilities of the Athens wastewater treatment facility. The MOWPCP is not designed to treat the types of waste generated by the proposed NBAF and thus the potential for certain waste discharges to pass through the MOWPCP has not been considered or adequately assessed.
- The DEIS fails to consider the impacts the wastewater discharge/stream from the NBAF will have on the sewage sludge currently generated and disposed of by the MOWPCP. Presently sludge products from the MOWPCP are conveyed to a county landfill for use as daily cover. It is reported that ACC is considering marketing these biosolid products to the public for use in gardens and yards as a soil additive. The DEIS is devoid of any analysis regarding the potential impacts wastewater constituents from the proposed NBAF will have on sewage sludge. DHS was required to assess the impacts to sewage sludge generated by MOWPCP as well as the corresponding health impacts associated with biosludge comprised of wastewater constituents from the proposed NBAF. See Tabs 59 and 60.
- The receiving waters for the MOWPCP are already listed on the Georgia Environmental Protection Division impaired waters list as having concentrations of fecal coliform bacteria above acceptable standards for all intended uses. Any additional discharges to the MOWPCP must assure that increased discharges to the Middle Oconee River do not result in violations of water quality standards.
- The DEIS fails to take into account several public and private potable water supply intakes that exist downstream of the Middle Oconee WPCP and the potential impact NBAF will have on those intakes. In addition, hundreds of landowners and farmers along the river and reservoirs downstream have riparian rights to use the river for agricultural purposes including livestock watering. The river is used as a public fishery and for recreation, and it provides habitat and water to wildlife including deer. All of these are potentially significant receptors for disease agents that could be released from the NBAF.
- The accidental or intentional water-borne release of disease agents from NBAF could result in a significant and unprecedented liability to ACC, GAEPD, and others involved in the treatment, disposal, or distribution of wastewater or biosolids from the MOWPCP. Contamination of private or

Culler, Esq., Jenny

Page 104 of 133

WD0753

96 cont.] 18.2

public lands involved in the treatment and disposal of the wastewater and biosolids from the NBAF, to include collection sewers, the POTW, outfalls, and sludge handling facilities, with actual or suspected disease agents, could expose the parties to a CERCLA action requiring assessment and remediation.

- The DEIS fails to adequately assess solid waste disposal from the proposed NBAF. While DHS acknowledges that the NBAF will generate a substantial amount of solid waste and potentially hazardous waste, there is no analysis of the ability of Athens, the surrounding counties, Georgia or even the region to actually properly dispose of this waste. The DEIS is devoid of any calculations regarding the projected tons of waste to be produced and the remaining life (or capacity) of nearby landfills to accommodate the volumes and type of waste generated. Rather, DHS simply asserts that the disposal of solid waste and potentially hazardous waste will not be an "issue" without any sort of supporting data. Again, this is the type of analysis that is strictly prohibited by NEPA. The DEIS is required to identify the landfills that would accept the waste being generated by the NBAF and assess, among other matters, the compliance history of the landfills, the relative capacity of the landfills to handle the volume of waste generated as well as the ability of the landfills to properly dispose of the types of waste generated by the NBAF.

4. The DEIS Fails to Accurately Assess and Evaluate Cumulative Impacts from the NBAF Wastewater.

97] 18.2

The DEIS fails to accurately assess and evaluate the cumulative impacts of the NBAF on the wastewater treatment capability of ACC and the MOWPCP. Specifically, the DEIS only discusses potential future projects of the University of Georgia as opposed to future projects of ACC and the surrounding area. Likewise, the DEIS appears to draw an arbitrary two mile radius around the proposed NBAF site for the consideration of other impacts on the wastewater treatment capabilities of the area. However, UGA is not representative of the entire Athens area and the arbitrary two-mile radius fails to accurately assess other potential impacts. As the DEIS notes, the Athens area, as with the surrounding areas, is continuing to experience a significant population growth. In addition, the entire area has been and continues to experience drought like conditions raising serious concerns about adequate water resources. The cumulative impacts analysis fails to address these concerns.

In addition to the comments specifically enumerated herein, this letter also specifically incorporates by reference the comments and analysis set forth in the report of Dr. David L Hargett of August, 2008 attached hereto at Tab 40.

Comment No: 97

Issue Code: 18.2

DHS notes the commentor's concern. Cumulative wastewater impacts from the construction and operation of the NBAF at the South Milledge Avenue Site are discussed in Section 3.13.4.3 of the NBAF EIS. This area is expected to undergo rapid population growth, which would cause increased use of the Middle Oconee Wastewater Treatment Facility capacity. Because the NBAF is projected to use less than 2% of this capacity, however, it is not expected to have a significant impact on this capacity. If the population in this region continues to grow, it is likely that additional wastewater treatment facilities would be constructed.

Potable water supply for the South Milledge Avenue Site is discussed in Section 3.3.3.1.1 of the NBAF EIS. As discussed in this section, the J.G.Beacham Water Treatment Plant is being upgraded to meet current and future demands.

Athens Clarke County is still experiencing drought conditions due to many months of below-average rainfall. If drought conditions continue, this may result in limited water resources.

Culler, Esq., Jenny

Page 105 of 133

WD0753

**M. HEALTH AND SAFETY**

98| 19.0  
8 cont.| 4.0  
9 cont.| 4.2

The discussion in the DEIS of health and safety falls short of providing a good faith and fair analysis of significant environmental impacts. The DEIS fails to provide full “environmental disclosure” to the public, fails to assess direct, indirect and cumulative impacts, and does not provide the appropriate level of information necessary for agency decision makers and the public to compare the risks associated with the alternatives. It was evident from the scoping meetings that the public was concerned about the consequences of a release and the impacts on health and safety. The final scoping document summarized these concerns into three statements: potential effects on surrounding communities from an accidental or intentional (e.g., terrorist) release of a dangerous pathogen; effects on humans, such as injury, sickness, or death from released pathogens (including potential contamination of the food supply) as well as the health and safety of facility employees; questions regarding potential evacuation, quarantine, vaccines, and the ability of local public responders to handle the special requirements of a BSL-4 facility. Scoping Report for the National Bio- and Agro-Defense Facility Environmental Impact Statement, Department of Homeland Security, 2-3 (Feb. 2008)(“Scoping Report”). *The DEIS discussion of Health and Safety notably omits all three of these topics.*

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As a result, the Health and Safety discussion does not address the appropriate scope and significant issues to be analyzed. Specifically, the DEIS neglects to fully identify and assess the consequences of a release from the facility, conduct site specific analysis, apply analysis of risk to appropriate ranges of distance and time, and rely on necessary details and factual foundations. The DEIS focuses unduly on the facility in isolation, relies on inappropriate data and provides an excess of overly technical explanations and overbroad evaluation of risk probabilities. The review of health and safety implies that the conclusions ultimately reached are based on a thorough analysis that was not in fact performed. The failure of the DEIS to analyze certain facility risks and potential accidents in the DEIS is arbitrary and capricious and a clear violation of NEPA.

- 98 cont. | 19.0
1. The Health and Safety Section of the DEIS Does Not Adequately Evaluate the Consequences of a Release on the Public and Environment.

The DEIS should communicate in the Health and Safety section the specifics regarding the major human and environmental impact that would result from the release of an infectious agent into the surrounding community and/or environment. It should be supported by detailed analyses and transparent communication of the available scientific information regarding possible risk. Risk assessment can and should be used to address both the probability *and* the consequences of adverse events, such as the release of human or animal pathogens from a biocontainment facility that leads to morbidity and mortality. National Academy of Sciences, *Letter from Committee on Technical Input on Any Additional Studies to Assess Risk Associated with Operation of the National Emerging Infectious Diseases Laboratory* (Apr. 29, 2008), also available online at

Comment No: 98

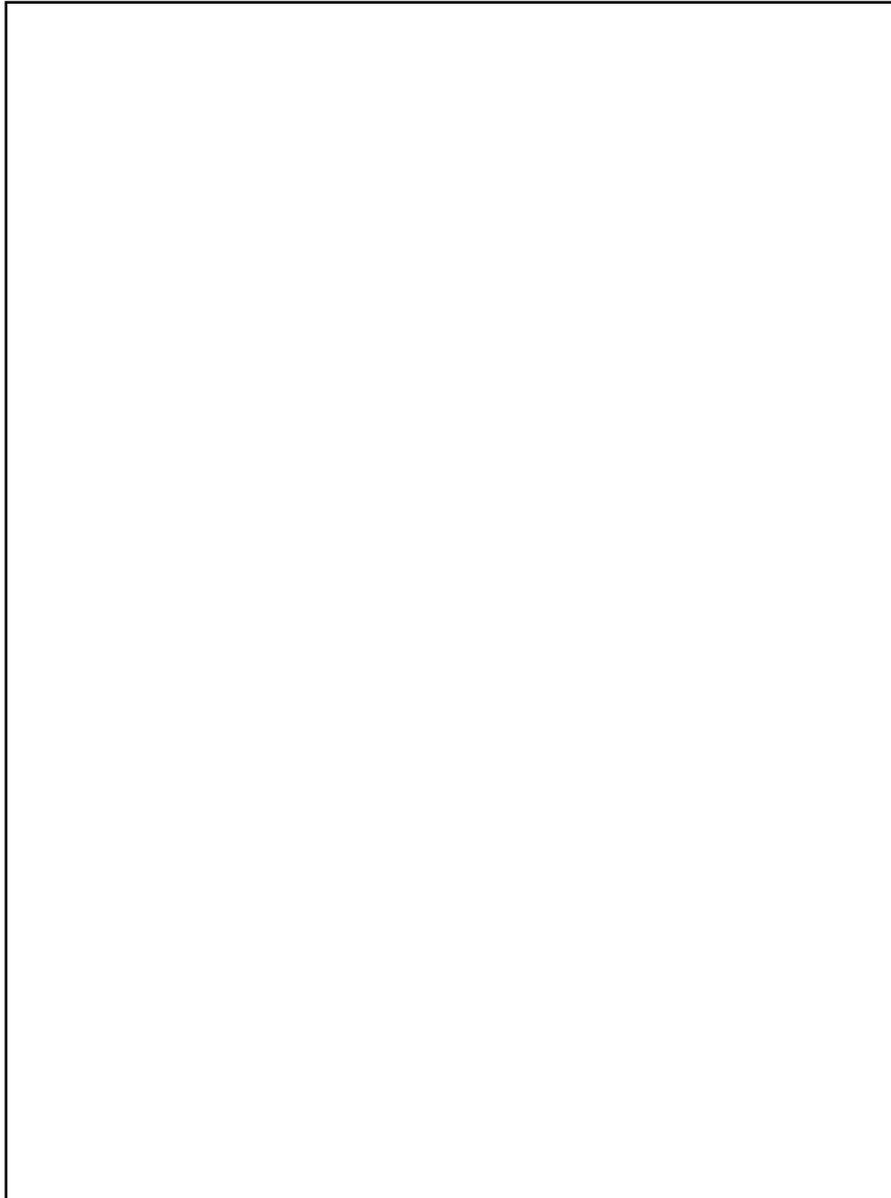
Issue Code: 19.0

DHS disagrees with the commentator that the health and safety section of the DEIS does not adequately evaluate the consequences of a release on the public and environment. 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)?

DHS recognizes the issues in conveying highly technical methodology and analytical results to persons not familiar with the risk assessment field. Information is contained within the body of the EIS that summarizes the risk assessment process so that the lay reader can obtain a general understanding of the comprehensive nature of the analysis. Results are summarized for each potential NBAF location in qualitative terms e.g. low, moderate and high risk. The supporting information and data is provided so that the interested reader is able to understand how the quantitative approach is summarized qualitatively. Site specific meteorological data was obtained from the nearest measurement location in order to arrive at the near and far field concentrations.



Appendix E provides additional technical information so the reader with a comprehensive understanding or interest is provided with additional information to gain a through understanding of the methodology and results. An assessment of the potential effects to livestock and wildlife is provided in each site specific analysis in Section 3.14.

Culler, Esq., Jenny

Page 106 of 133

WD0753

<http://www.nap.edu/catalog/12208.html> ("NAS Committee Letter"), and attached hereto at Tab 61. However, the DEIS fails to address consequences and presents a skewed picture of the real-life risks to health and safety.

- a. *The DEIS Fails to Adequately Describe the Diseases to Be Studied at the NBAF, the Gaps in Scientific Knowledge Related to Each Disease, and the Measures DHS Would Utilize to Try to Prevent the Spread of a Released Pathogen.*

99| 19.0

The DEIS largely ignores what would happen to the public after a dangerous release. It fails to represent such threats as might exist to local communities and the public at large by leaving out important medical and epidemiological aspects of disease transmission. Some disclosure of human health effects is buried in Appendix D, but the public should be informed of those primary concerns up front.

Additionally, the likelihood that the DHS would order the slaughter local livestock, wildlife, and/or domesticated pets to prevent the spread of a suspected or actually released pathogen is not addressed, nor is the likelihood for human travel restrictions or quarantines. 42 C.F.R. §70.6 contains the regulations authorizing "the detention, isolation, quarantine, or conditional release of individuals, for the purpose of preventing the introduction, transmission, and spread of the communicable diseases listed in an Executive Order..." See Tab 62. It is reasonably foreseeable that pathogen release threats or scares may occur just like bomb threats occur. It is also reasonably foreseeable that individuals working in or near the NBAF will at some point be suspected to have become infected, or may actually become infected with one or more of the zoonotic diseases that will be studied there, and the DEIS is obligated to disclose and consider how the detention, isolation, quarantine, and conditional release will be carried out.

Executive Order 13295 contains the most recently revised list of quarantinable communicable diseases. These include "Cholera, Diphtheria; infectious Tuberculosis; Plague; Smallpox; Yellow Fever; and Viral Hemorrhagic Fevers (Lassa, Marburg, Ebola, Crimean-Congo, South American, and others not yet isolated or named.)" See Exec. Order 13295 at Tab 63. The DEIS fails to disclose or consider whether any of the diseases and fevers to be studied at the NBAF are Viral Hemorrhagic Fevers and, as such, are already technically quarantinable communicative diseases under this Executive Order. Additionally, it fails to disclose or consider that it is reasonably foreseeable that a follow-up Executive Order will be issued to add certain of the diseases to be studied at the NBAF to the list of quarantinable communicative diseases simply because these diseases will be known to be present within the United States once they are studied at the NBAF, and the DEIS ignores the direct, indirect, and cumulative impacts that such an Executive Order and an actual resulting quarantine would have on the local area, the state, and the nation.

105

Comment No: 99

Issue Code: 19.0

DHS disagrees that the DEIS fails to adequately describe the diseases to be studied at the NBAF, the gaps in scientific knowledge related to each disease, and the measures DHS would utilize to try to prevent the spread of a released pathogen. Section 3.14 addresses all eight pathogens currently identified for study at the NBAF. Each pathogen is described to the level of detail necessary to understand the need for specific research and the hazard each presents. The pathogens are proposed for study specifically because of the gaps in our scientific knowledge and to develop vaccines or health care approaches to mitigate an outbreak of disease. The EIS disclosed the potential environmental impact upon release of one of the bounding pathogens.

DHS notes the commenter'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 (FMD) virus, Classical Swine Fever virus, Vesicular Stomatitis virus, Rift Valley Fever (RVF) virus, Nipah virus, Hendra virus, and African Swine Fever virus. Table 2.2.1-2 identifies the applicable characteristics of these pathogens and the biosafety levels at which they would be studied. 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 evaluation of the new pathogen(s) to determine if the potential challenges and consequences were bounded by the current risk assessment. If not, a new risk assessment would be prepared and a separate NEPA evaluation may be required. The human health and safety and economic effects of an accidental release of FMD virus, RVF virus, and Nipah virus are presented in Chapter 3, Section 3.10 and Section 3.14 and in Appendix D and Appendix E 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 be released to the environment.

The EIS acknowledges that emergency response plans would be developed location specific should one of the action alternatives be selected. The development of these plans is a sophisticated process requiring multi-agency federal, state, and local coordination. The development of the plans post decision would allow for a tailored plan that takes into account the local conditions and considerations.

The EIS, as a public document with a wide array of lay readers and members of the scientific community, strives to strike a balance between presenting highly scientific information and more general information that is understood by a member of the public unfamiliar with specific technical methodology and scientific jargon.

Culler, Esq., Jenny

Page 107 of 133

WD0753

- b. *The DEIS Omits Important Information about Human Illness, Human Mortality Rates and Other Factors from the Health and Safety Section.*

Any information provided in the DEIS related to mortality rates and infection rates is hidden in Appendix D, entitled "Potential Economic Consequences of Pathogen Release from the Proposed NBAF". It does not make sense for such information to not be featured prominently in the Health and Safety section, and its omission from Health and Safety is a failure to properly disclose extremely important and relevant information to the public. The DEIS should feature the discussion on human health impacts of the pathogens to be studied at the NBAF. A recent National Geographic article does a better job of describing and explaining zoonotic diseases, their impacts on animals and humans, and what science has yet to determine about transmission. David Quammen, *Deadly Contact: How Animals and Humans Exchange Disease*, National Geographic, October 2007, attached hereto at Tab 64. The DEIS should address the information and concerns presented in this article.

- c. *The DEIS fails to employ modeling that would help plot the path and magnitude of various release scenarios*

The DEIS should have employed modeling as a means to assess how disease caused by the selected pathogens may spread. The DEIS recognizes that the processes of transmission are major parameters in determining the results of a release. A National Academy of Sciences (NAS) letter, paraphrased in the DEIS, describes the importance and also the challenge of using modeling to predict transmission patterns and rates.

Modeling is another way of assessing how disease caused by a pathogen may be spread. Modeling may also be an important tool in devising appropriate mitigating strategies. Calculating the subsequent outcome of a potential release of a biological pathogen with models is difficult and uncertain. The process of *transmission*, which has a high degree of uncertainty, is a major parameter in determining the results of a release. It is also difficult and uncertain to estimate the number of contacts between animals, between people, or between animals and people. In addition, since RVFV is predominantly a vector borne disease, the potential for widespread transmission is amplified by mosquitoes.

DEIS 3-366, *citing* NAS Committee Letter. However, no modeling was even attempted as a component of the health and safety evaluation. The statement that "the accuracy and precision of a *single model* to simulate both the transmission of an aerosol-transmissible pathogen and that of a fomite-transmitted pathogen is uncertain and requires great effort to verify or validate the results (NAS Committee Letter)(emphasis supplied)," does not in any way explain why two different models could not have been run, one specifically tailored to an aerosol and one tailored to a fomite transmitted pathogen. DEIS, 3-366. There was no mention of cost prohibition for performing this evaluation, and the NAS Committee Letter does not ever state that models should not be used in risk assessments.

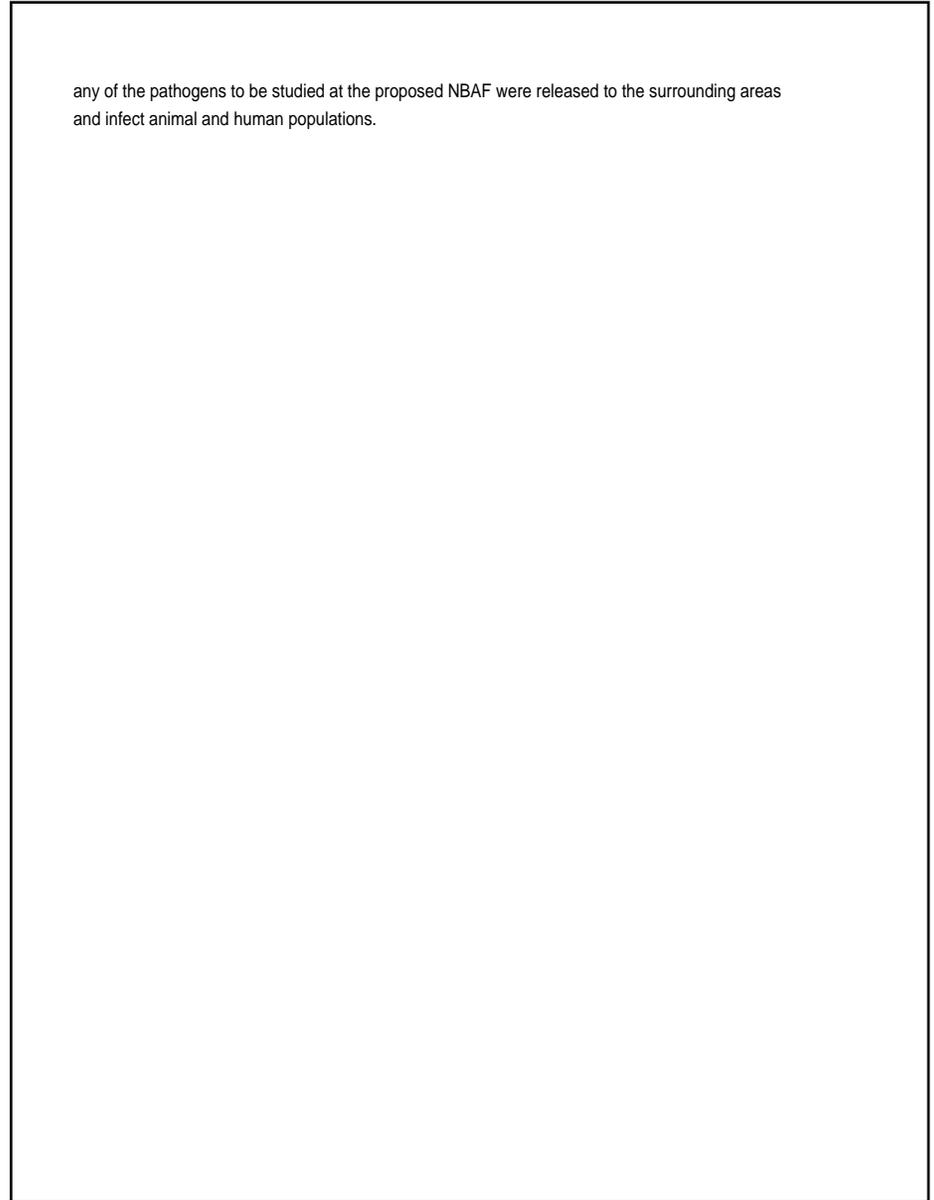
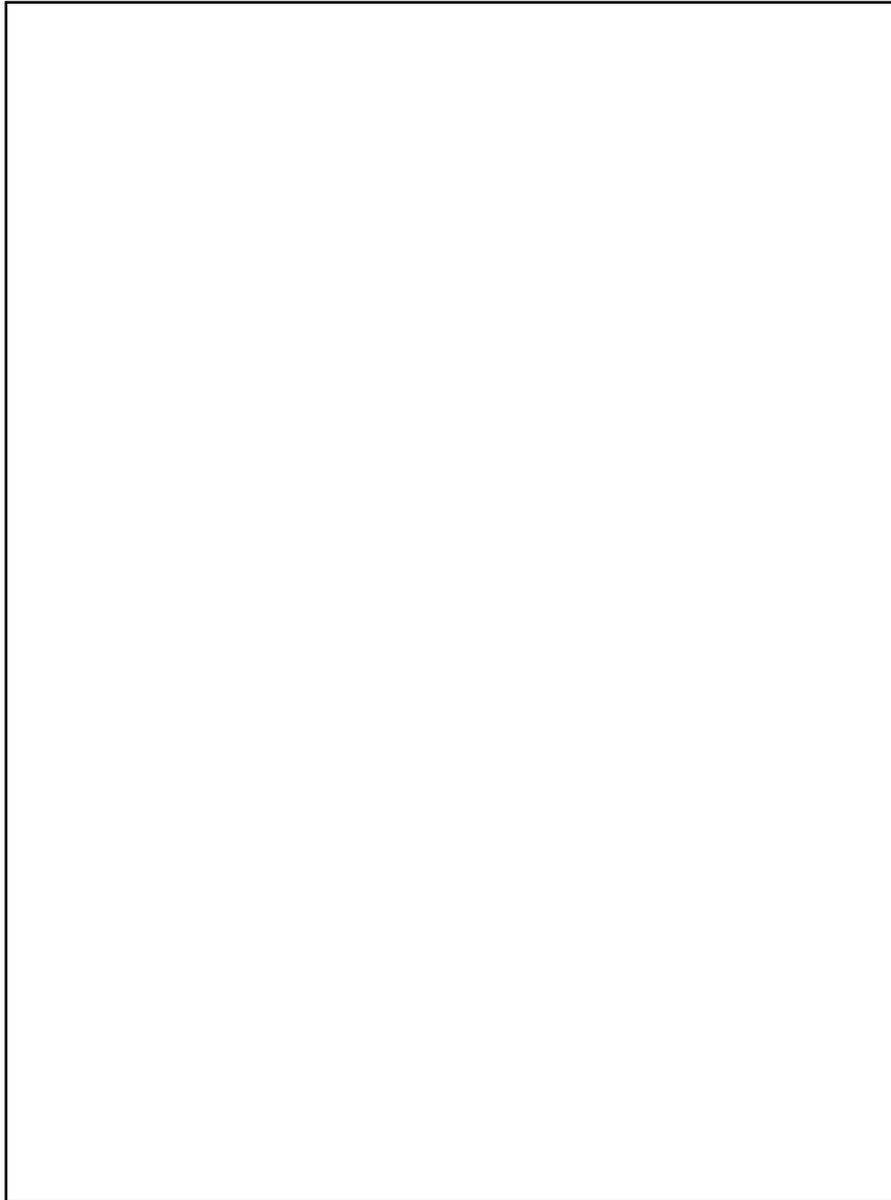
106

Comment No: 100 Issue Code: 19.0

DHS disagrees that the DEIS omits important information about human illness, human mortality rates and other factors from the health and safety section. Sections 3.8.9, 3.10.9, 3.14.1 and Appendix E address pathogen effects. Additionally, Appendix B provides information regarding human health impacts that have resulted from biocontainment lapses. The EIS was intended and designed to be as forthright and transparent regarding the hazards presented by the various pathogens recommended for study at the NBAF. The Appendices contain additional and detailed information so that the interested readers would be able to reach a deeper understanding of the information and data presented in the body of the EIS, while not adding bulk to the EIS chapters.

Comment No: 101 Issue Code: 21.0

DHS disagrees with the commentor's statement that the DEIS fails to employ modeling that would help plot the path and magnitude of various release scenarios. As reported by the National Academy of Sciences and the National Institutes of Health's Blue Ribbon panel to Advise on the Risk Assessment of the National Emerging Infectious Disease Laboratories at Boston University Medical Center, calculating the outcome of a release of a biological pathogen using mathematical models is extraordinarily difficult. Where there is a compelling rationale for the use of mathematical modeling for determining the post release spread and growth of disease, and where there are adequate and relevant input data available for such modeling, the modeling can be done credibly and transparently. The results would be interpreted and presented in light of the strength of the data used to develop them. Quantitative mathematical modeling of the bounding pathogens and disease spread was not performed as there was not enough input data available to yield meaningful results. The infectious disease transmission potential and uncertainty of transmission must be understood and assessed to determine the disease related impact on the population of a release of an infectious pathogen. The three bounding pathogens analyzed were suitable for qualitative modeling. Available relevant data was used to describe and assess the likelihood and potential consequences for each of these in a range of pathogen release scenarios. In contrast, quantitative analysis uses epidemiologic data and mathematical modeling to measure likelihood and consequences associated with a given scenario. The lack of sufficient epidemiological data for the three bounding pathogens precluded meaningful quantitative modeling. It should be noted that the risk analysis approach used standard methodology and a conservative approach to describe potential impacts. Appendix D utilized a case study and literature review approach for assessing the potential economic damage to the U.S. economy if one of the pathogens proposed for study at the NBAF were to be released into the surrounding environment. These relevant studies, simulations, and research regarding economic costs of previous outbreaks of the bounding pathogens were performed by academic researchers or agencies. To the extent feasible, the EIS impacts analysis applied these event outcomes to the regional characteristics of each proposed alternative site to assess their relative economic vulnerability to possible pathogen releases from the NBAF. The characteristics of the relevant economic regions of influence are used to distinguish, where possible, the magnitude of losses among the different alternative sites. The diseases caused by the three pathogens sufficiently cover the spectrum of outcomes likely to occur if



Culler, Esq., Jenny

Page 108 of 133

WD0753

101 cont. | 21.0

In fact the DEIS' paraphrasing of their letter appears to be inaccurate. The next sentence of the DEIS reads "Simple descriptions and qualitative discussions have distinct advantages over the use of controversial and complex models," when in fact the NAS Committee Letter actually indicates that "the behavior of simple models is relatively well understood, and the effects of changing inputs are relatively transparent." DEIS, 3-364 and NAS Committee Letter at 12, Tab 61. Although the DEIS then refers to its "simple descriptions and qualitative discussions" as a "model," it is not a model as the NAS Committee Letter contemplated and fails to provide uncertainty and sensitivity analyses or consideration of the impact of local conditions such as public health infrastructure on the consequences. *Id.* at 13. The DEIS should include a range of models to predict transmission rates and areas, and to instruct the decision makers with regard to appropriate mitigations that also should be set out and considered in this DEIS.

- d. *The DEIS fails to adequately discuss the consequences of intentional acts.*

102 | 21.0

The DEIS references a Threat Risk Assessment (TRA) in lieu of evaluating the risk or consequences of intentional acts. The TRA is not included in the DEIS or available to the public, and the summary provided does not adequately inform decision makers or the public about the potential risks involved in the siting of the NBAF. The 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," DEIS, 3-430. "The threat assessment combines information from the analysis of assets, threats, and vulnerabilities to *determine the level of risk* posed by operating the NBAF." *Id.* However, the TRA as described did not focus or communicate the potential environmental consequences of intentional destructive acts.

The DEIS indicates that "the TRA cannot be specifically incorporated for obvious security reasons, the essential results are provided in this section to address the risk associated with intentional acts." *Id.* However, the "essential results" provided are inadequate. The U.S. Department of Energy, in a publication entitled "Recommendations for Analyzing Accidents under the National Environmental Policy Act", states that "[a]nalysis of such acts poses a challenge because the potential number of scenarios is limitless and the likelihood unknowable," and in light of that reasoning focuses its recommendations on the environmental consequences and not on the probability of intentional destructive acts. This DEIS must do the same.

2. The DEIS Fails to Provide a Sufficient Site Specific Analysis.

25 cont. | 26.0

103 | 21.0

The DEIS does not, in a meaningful way, differentiate between the different potential sites. The use of modeling to compare site specific results would have been helpful in this context, but was not performed. It describes consequences only in very broad brush strokes that don't actually provide specifics on the consequences particular to

Comment No: 102

Issue Code: 21.0

DHS disagrees that the DEIS fails to adequately discuss the consequences of intentional acts. The risk and potential consequences of intentional acts was evaluated. For those situations similar to NBAF accidents and natural phenomena events that could result in a release of a pathogen to the local environment the accidents analyses, Section 3.14, bounded the consequences from a deliberate event. For other nefarious activities (e.g. the theft and use of a pathogen) the Threat Risk Assessment (TRA) identified measures to prevent obtaining a pathogen for criminal or terrorist intent. For each of the consequence categories, the evaluation of risks and the associated identification of critical security features to mitigate the consequences or prevent an attack or obtain a pathogen were incorporated into the TRA. The TRA analysis, like that for the accidents, was comprehensive and bounding. The evaluation demonstrated that the risks from intentional acts could be reduced to very low levels with the implementation of identified security features. Due to security considerations the TRA methodology and analysis and NBAF design and operational recommendations are designated For Official Use Only.

Comment No: 103

Issue Code: 21.0

DHS disagrees that the DEIS does not, in a meaningful way, differentiate between the different potential sites. The initial NBAF selection process eliminated sites with environmental or other issues. The NBAF EIS analysis was comprehensive, and in most cases, does not show significant differences between sites. See comment 101 regarding the question of modeling.

Culler, Esq., Jenny

Page 109 of 133

WD0753

103 cont.| 21.0  
25 cont.| 26.0

any of the sites under consideration. Although stating that it developed detailed analysis of potential consequences associated with operation of NBAF for each potential site, there is little to no evidence of this outside of a table or two, which provide numeric ranks for concentration and risk estimates and whose foundation is difficult to discern at best. It does nothing to explore or explain the magnitude of a potential release and what such release would mean in real terms to the surrounding communities of each site. Or even on a broader level, with the exception of noting that mosquito vectors will very easily become endemic at the Athens site, the DEIS does not describe whether the characteristics of any particular site would impact facilitate the spread of a released pathogen to the surrounding regions and the country as a whole, which could have a large impact on the effectiveness of any containment measures successfully isolating an outbreak.

As a threshold matter the "site-specific" analysis does not appear to describe any differentiation from site to site. The site specific consequences for FMD, RVFV and Nipah for each site, despite variations of human populations, surrounding environments, etc. are nearly identical. Compare DEIS at 3-448-449, 3-458-459, 3-468-469, 3-477-478, 3-487-488, and 3-489-499. The "analysis of potential sites fails to investigate the different factors of each site central to determining risks such as wind patterns, population densities, the proximity of hospitals, locations and interactions of vectors, transportation patterns, etc. See NAS Committee Letter at 11, Tab 68. Subsections discussing the site specific consequences for FMDV, RVFV and Nipah virus instead simply describe the severity of each pathogen release by comparing it to the severity of another pathogen release in an amazing display of circular reasoning:

"The consequences of a large release of FMD virus would be as severe as that of RVFV or Nipah virus in this area."  
 "The consequences of a large release of RVF virions would be as severe as that of FMDV or Nipah virus in this area."  
 "The consequences of a large release of Nipah virions would be as severe as that of RVFV or FMDV in this area."

DEIS, 3-449, 3-459, 3-469, 3-478, 3-488, and 3-499. This, the DEIS fails to adequately compare and contrast the health and safety components of the potential sites in a meaningful way.

- a. *The DEIS Fails to Adequately Evaluate and Consider Emergency and Accident Response Capabilities and Needs at the Proposed South Milledge Avenue NBAF Site.*

104| 19.2

To comply with NEPA, this DEIS must evaluate thoroughly the adequacy of existing emergency response programs and personnel. It must detail emergency response needs including notification of paid and volunteer first responders, training and equipment needs, and funding requirements. Yet, emergency response is just one area of local infrastructure which does not appear to have been evaluated in the health and safety evaluation. The DEIS provides no analysis of the available medical facilities and

Comment No: 104 Issue Code: 19.2

DHS disagrees that the DEIS fails to adequately evaluate and consider emergency and accident response capabilities and needs at the proposed South Milledge Avenue NBAF Site. Section 3.10 addresses capabilities and services of fire protection, law enforcement, and medical facilities each of which has emergency and accident response capabilities. Should the NBAF Record of Decision call for the design, construction, and operation of the NBAF, then site specific protocols and emergency response plans would be developed, in coordination with local emergency response agencies, that would consider the local response capabilities, diversity and density of human, livestock, and wildlife populations residing within the area.

Culler, Esq., Jenny

Page 110 of 133

WD0753

104 cont. | 19.2

technologies. No mention is made as to whether the local hospitals have isolation wards should they become necessary. It is likely that both professional and volunteer medical technicians and firefighters would respond to an emergency in the event of an accident or attack at or near the NBAF. Could they handle accidental or deliberate releases involving genetically modified biological agents? How will first responders be notified? How will they be protected? How and when will they be trained and equipped? How and when will the public be notified?

The DEIS must also assess the level of emergency preparedness at local agencies. The DEIS should also describe the security provisions that will be used for individuals, including laboratory workers, who are infected with select agents and hospitalized. The National Academy of Sciences has highlighted the importance of analyzing a risk all the way through to the emergency response level. "In addition to laboratory-related intervention to *minimize the occurrence* of such events (that is, prevention measures), risk assessments should address the capabilities of the medical and public health systems to *respond to untoward events*." NAS Committee Letter at 9 (emphasis original). Although the DEIS states that the "focus of the risk assessment performed on the NBAF was on potential bounding consequences, as well as the identification of safety controls to prevent the release or mitigate the consequences, including the *need for a robust and comprehensive emergency response program*" such a program is never detailed. DEIS, 3-366 (emphasis supplied). [Further critique of the DEIS' treatment of emergency preparedness is contained elsewhere within these comments.]

b. *The DEIS Fails to Adequately Discuss How the Surrounding Environment Affects Risks and Consequences.*

105 | 21.0

The DEIS states that "the potential for amplified transmission was the primary focus of the NBAF risk assessment," however, the effects of amplified transmission were not considered "consequences." The DEIS clearly states that "the consequences of a release of an infection pathogen from a high-biocontainment laboratory depend on numerous factors, such as the characteristics of the pathogen, the pathway by which it is spread, and the size and characteristics of the population that is exposed to it," but no serious discussion of these factors was included. *See discussion infra.*

The predicted results of several of the accident analyses in Appendix E result in "significant potential for widespread infection in the environment" (see, e.g. DEIS, E-137). Given this reality, construction of the NBAF near a populated site is an unnecessary risk. Furthermore, the risk estimates in the DEIS are presently unbounded in magnitude because of the weaknesses and limitations in the analysis and data (as described below). "***With the exception of the proposed Plum Island NBAF site location in NY, the other site alternatives are in population areas (high density of people and animals) and the surrounding ecosystems that provide favorable environments to support pathogen spread and growth in the event of a release.***" DEIS, E.5 Summary, quoting from DEIS, E-163. For a facility such as the NBAF, having major potential health and economic impact on the near environment, one might expect a formal

109

Comment No: 105

Issue Code: 21.0

DHS disagrees that the DEIS fails to adequately discuss how the surrounding environment affects risks and consequences. Quantitative mathematical modeling of the bounding pathogens and disease spread was not performed as there was not enough input data available to yield meaningful results. The infectious disease transmission potential and uncertainty of transmission must be understood and assessed to determine the disease related impact on the population of a release of an infectious pathogen. The three bounding pathogens analyzed were suitable for qualitative modeling. Available relevant data was used to describe and assess the likelihood and potential consequences for each of these in a range of pathogen release scenarios. The lack of sufficient epidemiological data for the three bounding pathogens precluded meaningful quantitative modeling. It should be noted that the risk analysis approach used standard methodology and a conservative approach to describe potential impacts. Appendix D utilized a case study and literature review approach for assessing the potential economic damage to the U.S. economy if one of the pathogens proposed for study at the NBAF were to be released into the surrounding environment. These relevant studies, simulations, and research regarding economic costs of previous outbreaks of the bounding pathogens were performed by academic researchers or agencies. To the extent feasible, the EIS impacts analysis applied these event outcomes to the regional characteristics of each proposed alternative site to assess their relative economic vulnerability to possible pathogen releases from the NBAF. The characteristics of the relevant economic regions of influence are used to distinguish, where possible, the magnitude of losses among the different alternative sites. The diseases caused by the three pathogens sufficiently cover the spectrum of outcomes likely to occur if any of the pathogens to be studied at the proposed NBAF were released to the surrounding areas and infect animal and human populations.

The fundamental questions addressed in Section 3.14 for the health and safety analysis are:

1. 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)?
2. What are the probabilities (likelihood for each type of release) of such a sequence of events?
3. 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)?

Section 3.10 addresses capabilities and services of fire protection, law enforcement, and medical facilities each of which has emergency and accident response capabilities. Should the NBAF Record of Decision call for the design, construction, and operation of the NBAF, then site specific protocols and emergency response plans would be developed, in coordination with local emergency response agencies, that would consider the local response capabilities, diversity and density of human, livestock, and wildlife populations residing within the area.

Culler, Esq., Jenny

Page 111 of 133

WD0753

105 cont. | 21.0

uncertainty analysis. This was not apparent from the material in the DEIS (with the exception that 95% values were used on certain distributions).

- c. *The DEIS Fails to Adequately Discuss in Detail How Surrounding Community and Population Affect Risk and Consequences.*

The DEIS underestimates the local human and animal populations at risk. The DEIS fails to account for the adjacent bedroom communities and the increase in population that occurs in Athens during the day. Similarly, the DEIS fails utterly to account for the fact that on days in which the UGA football team plays at home the population of Athens *doubles*.

- d. *The DEIS Fails to Adequately Evaluate Local Economic Hardship Following a Release.*

Local economic hardships pertinent to health and safety should have been evaluated and communicated. Constraints that the normal or abnormal operation of the NBAF may place on local access to healthcare, emergency services, and livelihoods should have been explored. [Additional critique of this omission is contained elsewhere within these comments.]

3. The DEIS Relies on Insufficient Facts and Assumptions.

- a. *The DEIS Fails to Study an Appropriately Diverse Selection of Pathogens.*

25 cont. | 26.0

106 | 21.0

The DEIS' decision to analyze the impacts from only two<sup>1</sup> pathogens listed to be the subjects of initial study at NBAF is inadequate and misleading. Three out of the five pathogens listed were not analyzed in terms of the method of transport, transmission and exposure. In analyzing only two diseases, DEIS asks the public to simply trust its conclusory statement that the two studied are the diseases that will cause the most extreme and damaging impacts if they were to be released from the facility. However, there is no way to know from the DEIS whether this is a valid conclusion, because the analysis has not been done (or if done elsewhere, not disclosed).

The DEIS' logic of using only the "bounding" diseases asks the public to trust that DHS actually knows that these diseases are the most potentially devastating in the event of an outbreak. The reality is that DHS does not know about the potential effects of many zoonotic diseases or other foreign animal diseases that will be studied initially and could be studied in the future at the NBAF. For example, the Hendra Virus, which was not studied in detail in the DEIS, was featured in a National Geographic article. (Quammen, attached hereto at Tab 64.) This article describes the rapid onset, excruciating manifestations, and rapidly resulting morbidity for horses infected with the

<sup>1</sup> Although the DEIS at the outset intimates that three pathogens will be analyzed, the DEIS for the most part omits any discussion of Nipah.

Comment No: 106

Issue Code: 21.0

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 (FMD) virus, Classical Swine Fever virus, Vesicular Stomatitis virus, Rift Valley Fever (RVF) virus, Nipah virus, Hendra virus, and African Swine Fever virus. Table 2.2.1-2 identifies the applicable characteristics of these pathogens and the biosafety levels at which they would be studied. Due to the uncertainty of which pathogens may be studied in the future within the NBAF the EIS does not and cannot exclude any specific animal or zoonotic pathogen. The EIS bounding scenarios are based on those pathogens currently identified for research within the proposed NBAF. Section 3.14 addresses all eight pathogens currently identified for study at the NBAF. Each pathogen is described to the level of detail necessary to understand the need for specific research and the hazard each presents. The pathogens are proposed for study specifically because of the gaps in our scientific knowledge and to develop vaccines or health care approaches to mitigate an outbreak of disease. The EIS disclosed the potential environmental impact upon release of one of the bounding pathogens. 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 evaluation of the new pathogen(s) to determine if the potential challenges and consequences were bounded by the current risk assessment. If not, a new risk assessment would be prepared and a separate NEPA evaluation may be required.

The previously selected pathogens [foot and mouth disease virus, Nipah virus, and Rift Valley Fever virus] present the most significant and unique challenges compared to any other pathogens proposed for study or that would be present in the proposed NBAF. These pathogens present the most demanding and bounding challenges regarding containment, emergency response, infectious potential, transmissibility and contagion, human health impacts, animal health impacts, economic impacts, and ecologic impacts. As part of the EIS analytical process it was concluded that the remaining candidate microbes pose risks that in most cases do not equal, and in no cases exceed, those risks posed by the three selected microbes. Section 3.14.1 expands on why the three pathogens were chosen for the bounding analysis.

The risk analysis, including infective dose, is based on methodologies and data found in the scientific literature and professional opinion. The risk analysis is conservative and presents the underlying assumptions and data used in the process so that the impacts evaluation process is transparent to the decisionmakers and the public. The EIS analysis is compliant with 40 CFR 1502.22. The risk analysis has been peer reviewed with no challenge to the use of Department of Energy or chemical industry methodologies used in the EIS analysis. Appendix E presents a detailed overview of the methodology, data, and assumptions used in the risk analysis.

Culler, Esq., Jenny

Page 112 of 133

WD0753

106 cont. | 21.0

Hendra virus, and the inexplicable appearance and disappearance of the disease in both human and animal subjects. The reservoirs for the virus during its latent stages are an utter mystery to scientists, but the DEIS misleads the public to believe that it has scientific knowledge to somehow rule out Hendra virus as a more economically and medically threatening disease than the Nipah virus.

The National Academy of Sciences Committee recommended that when performing risk assessments, the selection of agents to be studied should include "a variety of agents with appropriately diverse transmission characteristics (bloodborne, transmitted on fomites, spread by aerosol, and/or requiring vectors and the potential for maintenance in existing reservoir species. In addition to portal of entry into the host, such aspects of transmission as high or low  $R_0$  latency, and incubation periods should be thoroughly addressed." NAS Committee Letter at 10, Tab 61. The committee also believes that it may be helpful . . . to clarify . . . what agents will *not* be researched." *Id.* Yet, the DEIS does not provide any clarity on the issues.

DHS *anticipates* that the NBAF *would initially focus* on African swine fever virus, classical swine fever virus, contagious bovine pleuropneumonia bacteria, FMDV, Japanese encephalitis virus, and RVFV research under BSL-3Ag biocontainment and protocols, as well as Hendra virus and Nipah virus research under BSL-4 biocontainment and protocols.

DEIS, 3-366 (emphasis supplied). This statement and many others leave open the likely probability that other agents will be research subjects at the NBAF, both initially and in the future. The DEIS fails to describe at all the expectations for future or peripheral research subjects. "FMDV, RVF, and Nipah virus present the most significant and unique challenges compared to any of the other pathogens *currently* proposed for study at the NBAF." DEIS, 3-366 (emphasis supplied). So what may be studied later? Anthrax is a zoonotic agent. Similarly focused, DHS funded labs in the United States, such as Texas A&M's National Center for Foreign Animal and Zoonotic Disease Defense<sup>2</sup>, commonly study Avian influenza at the BSL-3 level. This seems an appropriately likely candidate for study at the NBAF and would likely have significant impacts on the risk analysis. As such, it or a like pathogen, should have been included in the analysis. Yet, if the DEIS included avian diseases it would not have been able to even attempt to justify its decision not to include extensive data on chicken farming, quail hunting, etc. in Georgia, and the potential impacts from a release of an avian pathogen from the NBAF. Furthermore, the analysis should have given some thought to the risks posed by other infectious agents, some of which do not even exist today and/or whose risks to health and the environment are not yet known. With a 50 year projected lifespan, the DEIS must take into consideration foreseeable impacts.

<sup>2</sup> Texas A&M's National Center for Foreign Animal and Zoonotic Disease Defense research currently focuses on Rift Valley Fever, Foot and Mouth Disease, and Avian Influenza.

Culler, Esq., Jenny

Page 113 of 133

WD0753

b. *The DEIS Relies on an Unsupported Assumption of Infectious Dose.*

106 cont. | 21.0

The DEIS relies on an oversimplification of what constitutes an infectious dose of the pathogens to be studied at the NBAF. The DEIS describes the "existence of the pathogen in sufficient quantity (infectious dose)" as an element required for the development of a detailed accident, consequence, and risk analysis. While this concept sounds simple and the DEIS portrays it as such, it is anything but simple. The NIH Recombinant DNA Guidelines and the CDC/NIH Guidelines for Bio-safety in Microbiological and Biomedical Laboratories recognize that an organism's ability to infect a host is dependent on the interaction and contribution of many factors such as: virulence, pathogenicity, environmental stability, route of spread, communicability, operations, quantity, availability of vaccine treatment, gene product effects such as toxicity, physiological activity and allergenicity, as well as infectious dose. Infectious dose is highly variable. "Infectious dose can vary from one to hundreds of thousands of units. The Complex nature of the interaction of microorganisms and the host presents a significant challenge even to the healthiest immunized laboratory worker, and may pose a serious risk to those with lesser resistance. Barbara Johnson, *OSHA Infectious Dose White Paper*, Applied Biosafety, 4(4) pp160-165 (2003), attached hereto at Tab 65.

Even defining what infectious dose means is difficult. It is not a term found in medical texts, probably because the response of any given host to infection varies widely and depends on a number of factors. *Id.*. "Despite the seeming simplicity of infectious dose measurements, the pitfalls are many and complex." *Id.* For example, the route of administration has a major effect of the infectious dose, there is huge animal to animal variability, and perhaps most importantly here, extrapolation to humans fails. Not only are humans at times more sensitive to pathogens than much smaller animals such as mice, variables in the human population likely to alter infectious dose include sex, age, nutritional status, pregnancy, metabolic disorders, gastric characteristics, previous exposure, medications, immunizations, health status, and even genetics. If that weren't enough, variations in the pathogen itself affect infectivity.

The DEIS risk assessment relies upon the measure of an infectious dose of FMD on the amount of 10 virions and then extrapolates that for RVFV and Nipah. ***But the "infectious doses" of RVFV and NiV are unknown.*** DEIS, 3-389. In addition, the DEIS assumes the infectious dose to be the same regardless of the mode of transmission. *Id.* Given that "DHS plans to perform research at the NBAF to study how these pathogens enter the animal, what types of cell the pathogen affects, what effects the pathogen has on cells and animals, how newly developed countermeasures help protect the animal against pathogen and prevent disease, and new detection methodologies," the reliance on a static infectious dose for multiple agents on humans and animals is misguided. DEIS, 3-369.

The DEIS needs to substantiate the assumption of the various infectious doses, provide an educated analysis of the potential ranges of infectious doses, or at the very least, provide a scholarly basis for its use in light of the fact that "there is no single standardized protocol for testing infectious dose in animals, making legitimate controlled

Culler, Esq., Jenny

Page 114 of 133

WD0753

106 cont. | 21.0

comparisons of study results very difficult” and “extrapolation of infection and toxicity data among animal species and from animals to humans has proven to be unreliable for most biological (and chemical) agents.” Johnson White Paper at 160-165. (See also 40 C.F.R. §1502.22, “When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.... (b) If the information relevant....cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include...3. a summary of existing credible scientific evidence...and, 4. the agency’s evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community.”)

- c. *The DEIS Determination and Use of the Source Term in Its Analysis of Probability and Risk Is Inapplicable.*

The calculations of Source Term Analysis are fatally flawed because they apply a standard meant for exposure to airborne radioactive material to pathogen exposure. The formula used in the DEIS come from the *Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facility Documented Safety Analyses*. The DEIS needs to demonstrate whether the formula used for radioactive material applies to biological material.

- d. *The estimates of equipment reliability and operator performance are speculative.*

The accident analysis contained in Appendix E and the Health and Safety section is highly qualitative, as clearly stated at DEIS, E-68 because it includes speculation about equipment reliability and operator performance. This fact necessarily makes the estimates of economic loss (such as those given at DEIS, ES-12) much less reliable or scientifically robust. Real losses could be much greater. The critical point here is that just because the DEIS does make conservative assumptions for some component variables, this does not imply that the overall analysis is conservative. The DEIS should provide the public with a measure of the power of the statistical assumptions, or the level of confidence that one may have in those data.

4. The Methods of Analysis Fail to Incorporate Known or Reasonably Foreseeable Risk Factors.

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107 | 21.0

The NBAF Hazard and Accident Analysis Methodology appears to be the only health and safety related assessment performed. Unfortunately the goal of the hazard assessment was “to determine the types and number of controls (engineered barriers and administrative/procedural controls) that will prevent and/or mitigate the hazards to a reasonable and acceptable level of risk to the workers and the public given the operating mission objectives.” DEIS, E-2. While this is an important *second* step in the analysis, it is a far cry from determining the probability and the consequences of adverse events,

Comment No: 107

Issue Code: 21.0

DHS disagrees that the methods of analysis fail to incorporate known or reasonably foreseeable risk factors. The risk assessment as detailed in Section 3.14 and Appendix E provides a robust analysis of the probability and consequences of an adverse event. This section presents the overall objectives, 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 operations of the DHS NBAF.

The infectious disease transmission potential and uncertainty of transmission must be understood and assessed to determine the disease related impact on the population of a release of an infectious pathogen. The three bounding pathogens analyzed were suitable for qualitative modeling. Available relevant data was used to describe and assess the likelihood and potential consequences for each of these in a range of pathogen release scenarios. It should be noted that the risk analysis approach used standard methodology and a conservative approach to describe potential impacts. The initial NBAF selection process eliminated sites with environmental or other issues. The NBAF EIS analysis was comprehensive, and in most cases, does not show significant differences between sites. The EIS analysis of the “possibility and probability” of an adverse events is a critical consideration in the development of the NBAF final design criteria and operational procedures; thereby, avoiding or decreasing the potential for adverse consequences from an off-normal event. Chapter 3, 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. The specific objective of the hazard identification, accident analysis, and risk assessment 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 risk of an accidental release of a pathogen is extremely low.

Culler, Esq., Jenny

Page 115 of 133

WD0753

such as the release of human or animal pathogens from a biocontainment facility that leads to morbidity and mortality.

107 cont. | 21.0

The methods employed by the DEIS for the risk assessment are inadequate. The DEIS identifies the letter report of the National Academy of Sciences (NAS), 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, and its discussion of important considerations when developing a risk assessment and states that, “[m]uch 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 (NAS Committee Letter).” DEIS, 3-362 (emphasis supplied). What portions were not adopted, and why? The failure of the DEIS to explain the rationale behind any decisions to reject advice from that National Academy of Sciences is certainly problematic. The NAS letter summarizes its suggested approach as electing “to structure its suggestions . . . around a small number of overarching questions about the risks associated with operating the [lab]:

- What could go wrong? That is, what might be the sequence of events that could cause an infectious agent to escape the laboratory, set up a chain of transmission, and cause infectious disease in the surrounding community?
- What are the probabilities of such a sequence of events?
- What would be the consequences of such a sequence of events?”

The DEIS paraphrases this quote and splits their discussion into 3 parts to consider Scenarios of Release, Pathogens Considered in the NBAF Analysis, and the Probability of Release. This only hits two of the three important considerations, significantly omitting a discussion of release *consequences*. Although the DEIS assessment contains very detailed descriptions of various scenarios and probabilities, the concerns and advice of the panel regarding the information necessary to communicate risk and to compare sites did not inform the foundation for the DEIS’s underlying analysis. The DEIS actually appears to repeat many of the same mistakes made by the Boston risk assessment, which were the very mistakes the NAS sought to eliminate. Although the form of the DEIS discussion intimates to the reader that it has followed the NAS advice, it has not done so in depth.

As is evident from the flow chart provided on page 3-363, the model created and used defines its terms such that the “consequences” considered are not the impacts that would actually affect the surrounding communities, environments, regions, etc. but rather a number that stands in for a class of unexplored impacts. The model confuses consequences with a numerical valuation of risk and/or the release outside of the lab itself instead of equating it with the potential effects of such a release on the surrounding communities and environment. The DEIS spends too much time analyzing the possibility and probability of adverse events and dismissing them and not enough time addressing the potentially all too real environmental and health consequences of both accidents and intentional adverse events.

Culler, Esq., Jenny

Page 116 of 133

WD0753

- a. *The DEIS Fails to Adequately Consider Incubation Periods in Its Analysis of Risk.*

108| 19.0

Although the DEIS purports to have considered the incubation periods in the assessment of risk, the only mention of incubation periods in the entire health and safety chapter was the simple statement that "FMDV spreads quickly through herds and flocks of susceptible animals. With an incubation period of as little as twelve hours, the disease can spread quite rapidly." DEIS, 3-448, 3-458, 3-468, 3-477, and 3-487 (the same sentence was repeated verbatim in each site "specific" analysis). No further analysis beyond that statement was discussed with regard to FMDV, nor were any of the incubation periods for any of the other pathogens apparently examined for the purposes of the health and safety chapter of the DEIS.

The most comprehensive discussion of incubation periods is contained within Appendix D, which is intended to explore Potential Economic Consequences of Pathogen Releases from the Proposed NBAF. In contrast to the quotes referenced above, Appendix D states that the average incubation period of FMD is 2-14 days. DEIS, D-4. RVF has an incubation period of 3 days for sheep, dogs and cattle, as little as 12 hours for lambs, and 2 to 6 days for humans. DEIS, D-10.; Nipah in humans has an average incubation period of 10 days, ranging from 1-32 days. DEIS, D-19.

Although describing the incubation periods, the economic analysis performed does not squarely approach the implications of long incubation periods on the spread of the pathogens, whether to humans or animals. This has a direct impact on the direction and speed of infections, the adequacy of any response, and the eventual magnitude of an outbreak. As such, it should have been considered in the analysis of risk.

- b. *NBAF Accident Scenarios Failed to Include an Analysis of Possible Delays in Reporting Releases of Harmful Biological Agents or Pathogens.*

109| 21.0

25 cont.| 26.0

Similar to incubation periods a delay in reported releases of harmful biological agents or pathogen directly affects the spread of a potential outbreak and the success of responses to such a release. Delays in reporting can have a number of causes. As Appendix D points out:

Further exacerbating the threat of RVF is the fact that the disease is difficult to detect during the early stages of an outbreak. Often detection is confirmed only after large numbers of animals and human beings have already been infected and a large reservoir of virus has been built-up. This scenario would be particularly likely in the United States, where RVF detection in either the human or animal populations could be subject to much delay and misdiagnosis because neither physicians nor veterinarians in the U.S. would have any practical experience or little academic knowledge of the disease. Only limited testing and identification for the virus and disease are currently available. Hence, an investigation of a

115

Comment No: 108

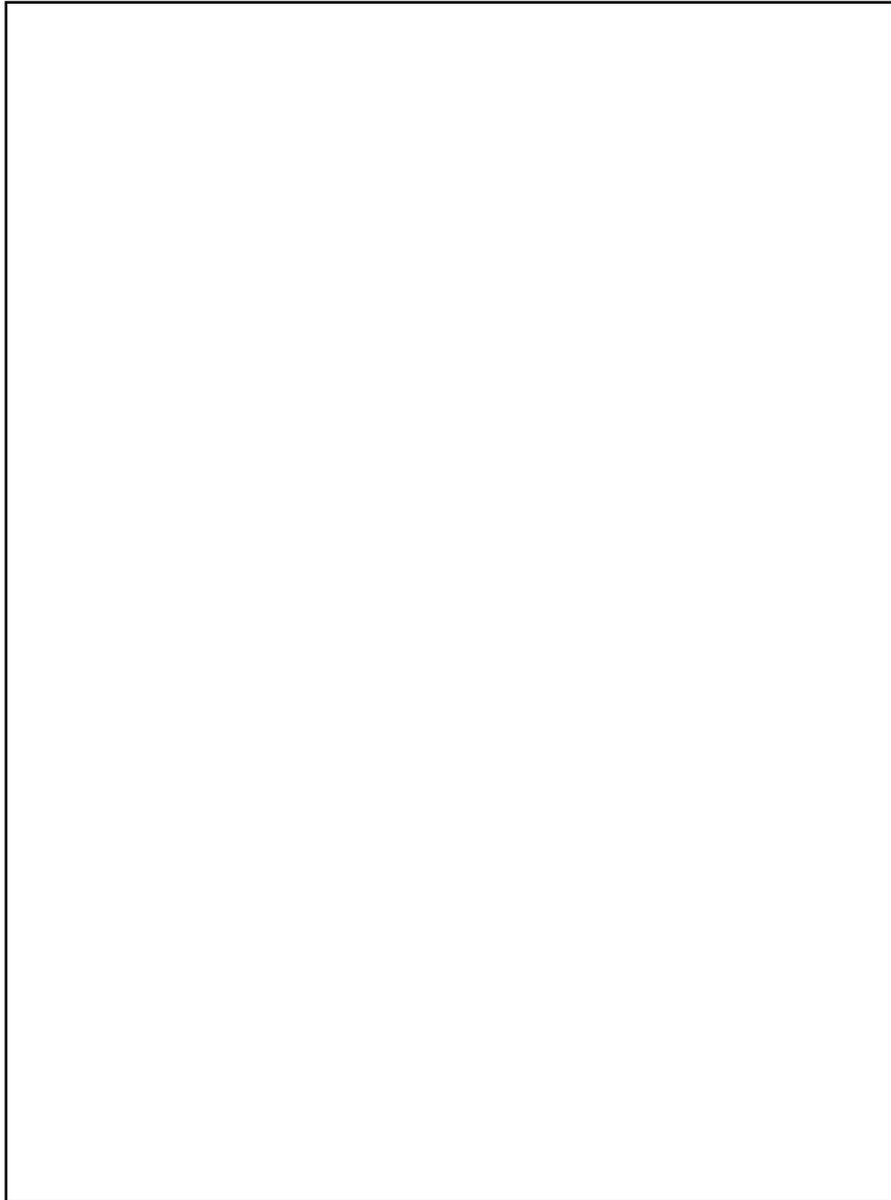
Issue Code: 19.0

DHS notes the commentor's concern regarding incubation periods of the pathogens proposed for study at the NBAF. The risk analysis in Section 3.14 conservatively assumes that the accidental or deliberate release of a pathogen and exposure of a susceptible species at infective dose levels will result in disease. Site specific operational, safety, security and emergency response plans are not included in the NBAF EIS. DHS prepared the NBAF EIS in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and CEQ's regulations for implementing NEPA (40 CFR 1500 et seq.). Should the NBAF Record of Decision call for the design, construction, and operations of the NBAF then site specific operational, safety, security 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 would have site-specific standard operating procedures and response plans in place prior to the initiation of research activities at the proposed NBAF.

Comment No: 109

Issue Code: 21.0

DHS understands the commentor's concern regarding a potential delay reporting a pathogen release resulting in a disease outbreak. Accident events would be reported and the appropriate responses taken to prevent the release of a pathogen outside of the NBAF structure, similarly, an employee potentially exposed to a pathogen would report the event; thereby, avoiding exposure to others or the environment. A deliberate security breach has been taken into consideration and addressed in a separate Threat and Risk Assessment (TRA). 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. DHS is aware of the historic biosafety lapses and will consider these events to improve the structural and engineered safety in the final design of the NBAF. 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. Should the NBAF Record of Decision call for the design, construction, and operations of the NBAF then site specific protocols and emergency response plans 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 area. 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. Section 3.8.9 addresses existing and potentially applicable response plans that provide insight into some of the livestock and wildlife protective and mitigating measures that could be employed in the event of a pathogen release from NBAF. Section 3.14 addresses accident scenarios, including external events such as a terrorist attack. A TRA was developed 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-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. The TRA and security actions that would be implemented, based on TRA recommendations, are For Official Use Only.

Culler, Esq., Jenny

Page 117 of 133

WD0753

potential RVF outbreak outside of East Africa, Saudi Arabia, or Yemen would likely be initiated only after the occurrence of acute signs in a significant number of animals or human beings was observed. This awareness might arise only after the sudden death of a large number of lambs or the occurrence of an "animal abortion storm" in a region with favorable climatology for the principal vector

DEIS, D-12. Appendix D goes on to recount a scenario run by the Rift Valley Fever working group in 2004 in which the U.S. government takes 27 days to identify the disease as RVF, "by which time the number of infected animals and humans have tripled," long after RVF is projected to have been effectively introduced into the local mosquito populations on day 5. DEIS, D-13.

109 cont. | 21.0 Whether a delay is due to a lack of knowledge that a release has occurred until signs of infection are apparent, to a desire to avoid stigma or punishment, to a break in standard operating procedures it can have a significant impact on the magnitude of a potential outbreak and should have been a factor considered in the health and safety chapter's analysis of accident scenarios.

c. *The DEIS's Choice of Agents Renders Its Analysis of Risk Impractical as a Means for Evaluating the Variability of Impacts by Site.*

110 | 21.0 The choice of agents to study renders discussion of the variability of impacts by site more difficult. The DEIS, in explaining its selection of agents to study states, "For the purposes of evaluating the potential consequences associated with the operation of the NBAF, only pathogens required to be at either the biocontainment level of BSL-3, BSL-3E, BSL-3Ag, and BSL-4 were considered, since these agents represent the greatest potential for large adverse consequences, ease of dissemination, and animal-to-person, animal-to-animal, or other vector-borne transmissions. DEIS, 3-367-368. However, the DEIS should also have considered the level of information necessary to compare the risks associated with each of the alternative locations. Considering pathogens that spread more easily would improve analyses of how risks vary depending on location. *NIH Draft Report Does not Adequately Analyze Risks of Biocontainment Laboratory Proposed in Boston*, National Academies, Nov. 29, 2007. <http://eee8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=12073>.

d. *The DEIS Fails to Adequately Consider and Disclose the Increased Risk of Release from the Teaching Activities at the NBAF.*

111 | 21.0 Despite noting that the facility would be used to teach and that students would observe and participate in the work performed there, the DEIS provides no evidence that they were included in the accident probability analysis.

116

Comment No: 110 Issue Code: 21.0

DHS disagrees that the DEIS's choice of agents renders its analysis of risk impractical as a means for evaluating the variability of impacts by site. The bounding pathogens [foot and mouth disease virus, Nipah virus, and Rift Valley Fever virus] selected present the most significant and unique challenges compared to any other pathogens proposed for study in the proposed NBAF regardless of alternative site location. These pathogens present the most demanding and bounding challenges regarding containment, emergency response, infectious potential, transmissibility and contagion, human health impacts, animal health impacts, economic impacts, and ecologic impacts.

Comment No: 111 Issue Code: 21.0

DHS notes the commentor's concern regarding the questions of whether DHS and USDA adequately consider and disclose the increased risk of release from the teaching activities at the NBAF. DHA considered whether the presence of very small quantities of a virus not subject to research but present in the NBAF should be subject to a bounding analysis. DHS and USDA reached consensus that the selected three pathogens present the bounding consequence conditions. There would be a limited poultry NBAF mission. However, there would be no avian pathogens present that present unique or bounding challenges compared to the three selected pathogens. Poultry viruses would be used only for occasional training exercises as part of the Foreign Animal Disease Program.

Culler, Esq., Jenny

Page 118 of 133

WD0753

- e. *The Risk Analysis Based on a Single Exposure to a Single Pathogen to Predict Illness is Flawed.*

112| 21.0 The DEIS improperly uses a static assessment to determine the probability of illness based on a single instance of exposure. Additionally, this method appears to use a static assessment that determines the probability of individual illness based on a single exposure. Regan Murray, James Uber, and Robert Janke, *Model for Estimating Acute Health Impacts from Consumption of Contaminated Drinking Water* (2006), attached hereto at Tab 66. This analysis does not incorporate the dose and dose-response curve—the amount of contaminant consumed and the probability of a given health response—that are the main criteria used to determine health impacts. *Id.* It is too narrow a study that presumes only one exposure to a released pathogen, especially one that may be aerosolized and therefore breathed in repeatedly. “The same information is important for assessing risks associated with exposure to viruses, bacteria and protozoans. However, biological risk assessment requires the consideration of additional factors such as multiple infectivity paths (person to person, environment to person), possible secondary transmission paths (person to environment to person, environment to person to person), immunity to disease, microbial incubation periods, and the potential for asymptomatic carriers of disease.” *Id.* Instead, a disease transmission model should have been used.

The DEIS also only evaluates exposure to one pathogen at a time. Despite superficially evaluating such foreseeable events as a plane crash into the lab, the DEIS does not include adequate discussion of the consequences of such an event where exposure to pathogens include not only widespread dispersal, but widespread dispersal of *multiple pathogens*. The DEIS contemplates exposure to only one pathogen at a time.

- f. *The DEIS Does Not Adequately Analyze the Effect of an Escaped Vector.*

113| 21.2 The risk assessment is further insufficient, because it does not adequately analyze the hazard scenario where a vector escapes into the environment, especially an infected mosquito or multiple infected mosquitoes. Due to the earlier analysis that indicated that released mosquitoes could very easily become endemic to the Athens, Georgia, site (DEIS, 3-385), it is irrational for DHS not to consider the mosquito vector release scenario to the fullest extent in this DEIS. Although the DEIS states that “[b]ecause of this potential for continuity in the environment, it is critical that RVFV not be released into the environment. Once in the environment, the virus could become established in a mosquito population and remain prevalent as a significant reservoir that can continuously cause re-infection.” DEIS, 3-385. However, little more than two pages are dedicated to the evaluation of this potentially devastating impact in the body of the DEIS, one at DEIS, 3-385, and the other at DEIS, 3-421. Moreover, this impact is only really considered for Rift Valley Fever Virus, and the potential effects of any other vector-borne diseases that will be studied at the NBAF are swept under the rug. Japanese encephalitis, for example, is a disease that DHS anticipates it will study at the NBAF. DEIS, E-15. Japanese encephalitis is a “significant zoonosis: in humans it can result in a serious and potentially fatal encephalitis.”

117

Comment No: 112 Issue Code: 21.0

DHS notes the commentor’s comment regarding the risk analysis being based on a single exposure to a single pathogen to predict illness is flawed. The bounding pathogens [foot and mouth disease virus, Nipah virus, and Rift Valley Fever virus] selected present the most significant and unique challenges compared to any other pathogens proposed for study in the proposed NBAF regardless of alternative site location. These pathogens present the most demanding and bounding challenges regarding containment, emergency response, infectious potential, transmissibility and contagion, human health impacts, animal health impacts, economic impacts, and ecologic impacts. A single exposure presents the most logical accident or deliberate event. Should the NBAF Record of Decision call for the design, construction, and operations of the NBAF then site specific protocols and emergency response plans 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 area. 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. Under an accident condition the NBAF would halt operations until the situation is under control and the NBAF could conduct safe operations. Multiply exposures would be avoided. The exposure to multiple pathogens would have to be assessed based on the actual event and consequence observations. Emergency response plans would be implemented according. It is not expected that mitigations responses would more severe than that for the release of a single and bounding pathogen.

Comment No: 113 Issue Code: 21.2

DHS disagrees with the commentor’s assertion that the DEIS does not adequately analyze the effect of an escaped vector. The bounding pathogens [foot and mouth disease virus, Nipah virus, and Rift Valley Fever virus] selected present the most significant and unique challenges compared to any other pathogens proposed for study in the proposed NBAF regardless of alternative site location. These pathogens present the most demanding and bounding challenges regarding containment, emergency response, infectious potential, transmissibility and contagion, human health impacts, animal health impacts, economic impacts, and ecologic impacts. The EIS acknowledges the significance of the escape of a vector in Sections 3.8, 3.10, 3.14, and Appendices D and E.

Culler, Esq., Jenny

Page 119 of 133

WD0753

[http://www.cfsph.iastate.edu/Factsheets/pdfs/japanese\\_encephalitis.pdf](http://www.cfsph.iastate.edu/Factsheets/pdfs/japanese_encephalitis.pdf). It is also a mosquito-borne disease, related to the West Nile Virus that already exists in the United States. *Id.*

- 114| 21.0 g. *The DEIS Fails to Adequately Consider the Facility Design in the Analysis of Operational Risk.*

Appendix E points out that “[t]he conceptual design includes a break room within biocontainment to allow employees to get food and drinks without leaving the BSL-3E area. Such a design leads to potential cross-contamination and resulting ingestion of contaminated foods or potential intentional acts such as the infections resulting from a disgruntled employee contaminating pastries in a break room. Harding and Byers, 2006. Another example hazard is a release from a drainage system such as what occurred in August 2007 at the Pirbright site in the United Kingdom, resulting in the probable release of FMDV (NEEG 2007).” E-31. Yet even though these risks are mentioned in the Appendix, there is no evaluation of the risk and no discussion of mitigations that would be appropriate. The accident analysis provides no evaluation of this risk.

- h. *The DEIS Fails to Adequately Consider Risk from Reused, Older, or Damaged Packaging in Its Analysis.*

115| 21.0 The DEIS analysis improperly assumes “that the packages and equipment in use would be new and degradation would not initially be a significant contributor to the failure probability”, while then admitting in the same paragraph that “[t]he likelihood of encountering degraded transport packages or process equipment may increase with operating history and could be further enhanced by personnel complacency.” DEIS, 3-413. However, the DEIS does not clarify whether the value then assigned to the risks associated with packaging takes into account later wear and tear. If it did, one would expect to see a graph of declining safety over time, and a comparison of the available data related to the degradation of transport packages or process equipment at the Plum Island Animal Disease Center or other animal disease laboratories. Because the DEIS apparently did not conduct this analysis, all extrapolations stemming from the figures provided in this section are erroneous and must be recalculated.

- i. *The DEIS Improperly Ignores Likelihoods of Laboratory Acquired Infections of the Nipah Virus and Other Pathogens Likely to Be Studied at the NBAF.*

116| 21.0 In its discussion of Operational Accident 2 – LAI (laboratory acquired infections), the DEIS indicates that “[w]hile humans can be infected with the Nipah virus, there are no documented cases of acquiring the disease through a LAI.” 3-419. As a newly discovered virus without a long history of lab research and with documented transmission to humans through animals, whose mode of transmission is as yet uncertain, the DEIS’ discount of risk for an LAI on the basis that since it has not happened yet, it will not in the future, is unsupported and indefensible. See WHO Nipah Factsheet, available at <http://www.who.int/mediacentre/factsheets/fs262/en/>.

118

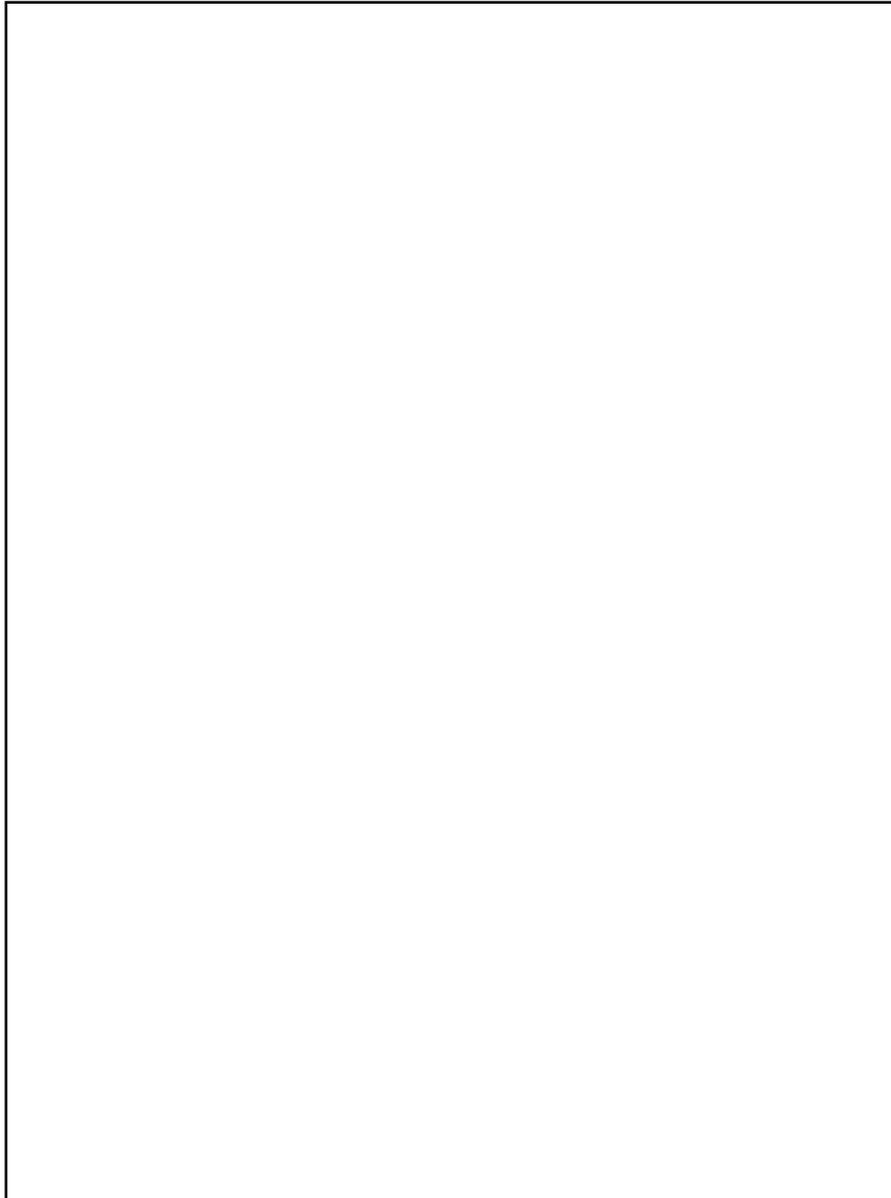
Comment No: 114 Issue Code: 21.0

DHS disagrees with the commentor’s statement that the risk analyses failed to adequately consider the facility design in the analysis of operational risk. The hazards evaluation in Section 3.14 and Appendix E identified and evaluated a wide range of realistic scenarios that were postulated to result in an adverse consequence, along with a qualitative evaluation of the protective features in place to prevent or mitigate the hazards and their adverse consequences. The overall accident and risk analysis that examined possible sequences and post-release events focused attention on the magnitude of the possible consequences of a release by considering mechanisms of transmission, susceptibility, virulence, and other aspects that influence the growth and spread of disease. The number of accident scenarios analyzed in detail was determined from the wide array of hazard scenarios that lead to high likelihood and consequences to the workers, public, and/or the environment. Recent events considered included 1) the infection of workers with *Brucella* sp. at one of Texas A&M University’s BSL-3 laboratories in 2006; 2) a 1-hr power outage in 2007 at the new BSL-4 facility of the Centers for Disease Control and Prevention in Atlanta, before work with pathogens begun, wherein the main and back-up power systems both failed and the negative air-pressure system shut down; and 3) in 2007, a release of FMDV to livestock on farms near the Pirbright high biocontainment laboratory in the United Kingdom due to a damaged and leaking drainage system at the facility. Development of scenarios to address the numerous and varied situations that can lead to an adverse consequence provides insights into the consideration of additional measures that will enhance laboratory safety. A separate Threat and Risk Assessment (TRA) was developed 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-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.

Comment No: 115 Issue Code: 21.0

DHS notes the commentor’s concern regarding the degradation of packages and equipment. A robust management and system maintenance program and process would be in place with attention to formality of operations, configuration management, quality assurance, and training would significantly reduce the likelihood of human error and mechanical failure. A spill consequence would result in no health effects to the worker and negligible off-site consequences as an infectious dose would not be released. 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.

Comment No: 116 Issue Code: 21.0



DHS notes the commenter's concern regarding laboratory acquired infections. 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. DHS is aware of the historic biosafety lapses and will consider these events to improve the structural and engineered safety in the final design of the NBAF. 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. Should the NBAF Record of Decision call for the design, construction, and operations of the NBAF then 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.

Culler, Esq., Jenny

Page 120 of 133

WD0753

116 cont.| 21.0

Further, in the consideration of Unmitigated Off-site Consequences, the DEIS concludes that “[t]his accident scenario is essentially only applicable to RVFV. FMD is not considered to be available as an LAI, although it is identified as transmittable as an LAI at DEIS, D-3, and humans are not considered susceptible to the disease. While humans can be infected with the Nipah virus, there are no documented cases of acquiring the disease through a LAI.” DEIS, 3-420. This conclusion is, again, unsupported and indefensible, and the DEIS should evaluate the risks of LAI for all pathogens, considering its admission that accidents will happen in the laboratory.

- j. *The DEIS Bases Its “Site Specific” Assessments on the Same, and Often Inappropriate Set of Facts, Rendering the Analysis of Accident Probabilities Invalid.*

117|21.0

3 cont.| 26.0

The lack of site specific data renders the Accident Analysis invalid. For example, in its analysis of the probability for a potential aircraft crash into the NBAF, found in Appendix E, the representative airport chosen for estimating aircraft crash frequencies was the Manhattan Regional Airport near Manhattan Kansas. DEIS, E-146. This is a far cry from Hartsfield-Jackson Atlanta International Airport, the *world's busiest airport* by passenger traffic, as well as landings and take-offs, or even the Athens-Ben Epps Airport. Airports Council International available at [http://www.aci.aero/cda/aci\\_common/display/main/aci\\_content07\\_c.jsp?zn=aci&cp=1-5-54-57-666-2](http://www.aci.aero/cda/aci_common/display/main/aci_content07_c.jsp?zn=aci&cp=1-5-54-57-666-2); U.S. Department of Transportation Federal Aviation Administration Airport Master Record for Athens-Ben Epps Airport, attached hereto at Tab 67. The general aviation traffic for the Manhattan airport was stated to be 9,011 takeoffs and landings per year. The number at Hartsfield is around 994,346. Airports Council International. The number at Athens-Ben Epps was 53,357 in 2007. Airport Master Record for Athens-Ben Epps Airport.

Although the DEIS states in this section that “[t]he qualitative analysis of potential outcomes considered the impact of the local characteristics (population density, livestock availability, wildlife, and vector availability) for each of the six proposed sites as discussed in Section 3.14.4,” as discussed in more detail below, Section 3.14.4 contains only the most superficial of analysis for each of the proposed sites. DEIS, 3-365, *see also* other related discussions *infra*. For all intents and purposes no site specific analysis regarding release probabilities was discussed and no evidence of its performance provided.

119

Comment No: 117

Issue Code: 21.0

DHS disagrees with the commentor's statement that the lack of site specific data renders the Accident Analysis invalid. The EIS accidents analysis is thorough, detailed, comprehensive and considers the impact of the local characteristics (population density, livestock availability, wildlife, and vector availability) for each of the six proposed sites as discussed in Section 3.14. The proposed NBAF facility design is similar for all sites. The initial NBAF selection process eliminated sites with environmental or other issues. The NBAF EIS analysis was comprehensive, and in most cases, does not show significant differences between sites. Should the NBAF Record of Decision call for the design, construction, and operations of the NBAF then site specific operational, safety, security 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 would have site-specific standard operating procedures and response plans in place prior to the initiation of research activities at the proposed NBAF.

Culler, Esq., Jenny

Page 121 of 133

WD0753

118| 21.0

k. *The DEIS Analysis of Transport, Transmission & Exposure Estimates Is Inadequate.*

i. The DEIS Fails to Adequately Consider the Ease of Transmission by a Mosquito Vector, the Relative Difficulty in Finding and Eliminating an Infected Mosquito Vector, and the Relatively Low Confidence that an Escaped Mosquito Vector Has Been Eliminated.

The DEIS describes vector transmission of RVFV, one of the pathogens to be studied at the proposed NBAF (DEIS, 3-384), and indicates that “[t]he release of a pathogen as a result of loss of biocontainment of a vector is a credible scenario and appropriate for detailed analysis.” (DEIS, 3-421). However, there is not follow-up detailed analysis of what happens from the “loss of biocontainment of a vector”, which translates in common parlance to mean “what happens when an infected mosquito escapes from the laboratory.” Not only is it disingenuous for the DEIS to use such obfuscating language to discuss the possibility that an infected mosquito would escape the NBAF, but it is also suspect that there are no descriptions of what the methods are for mitigating the risk of insect escape. In table 3.14.3.1-5, the DEIS asserts that there will be some “biocontainment, procedures, monitoring, response” in order to mitigate accidental loss of an animal or insect. DEIS, 3-422. But there are no protocols for the insectaries themselves, or for response in the event of insect escape.

The possible loss of an infected insect is not sufficiently explored. Although the DEIS and Appendix E purport to contain a scenario describing the loss of an insect it does not in fact do so. DEIS, E.4.1.3, & 3-421. The subsection labeled “Loss of Infected Animal/Insect,” only describes the potential loss of an animal. DEIS, E-105-111 & 3-421. As such, the risk ranks were based on an animal respiration rate which does not at all account for the vector transmission that would ensue from the loss of an infected insect. Moreover, even if the loss of an animal is the starting point, the scenario does not take into account transmission from an infected animal to a vector such as an insect. Despite the conclusion that “the existence of an insectary...provides an opportunity for infected insects to escape from the facility, particularly during transport to/from different sections (biosafety levels) in the facility” and “Smaller organisms like insects are more probable to escape from the facility than larger animals such as swine or cattle,” at no point does the DEIS properly contemplate the impacts from the escape of an insect. DEIS, E-24.

120

Comment No: 118

Issue Code: 21.0

DHS disagrees that the EIS analysis of transport, transmission and exposure estimates is inadequate. The EIS acknowledges the significance of the escape of a vector in Sections 3.8, 3.10, 3.14, and Appendices D and E. The NBAF would provide state-of-the-art operating procedures and biocontainment features to minimize the potential for laboratory personnel to become contaminated with a pathogen and subsequently cause an accidental expose to a susceptible species. The air dispersion analysis includes information regarding the atmospheric transport of a pathogen beyond the distance where a susceptible species would be exposed to an infectious dose. Section 3.14 and Appendix E provide detailed descriptions and analysis of atmospheric transport and the consequences from the release of a pathogen.

Culler, Esq., Jenny

Page 122 of 133

WD0753

- ii. The DEIS Fails to Adequately Consider the Transmission of FMD by Human Vectors.

118 cont. | 21.0

The DEIS recognizes that “though humans are not considered susceptible to infection, FMDV can persist in the human upper respiratory tract for up to 48 hours, making humans potential vectors if they are exposed,” the DEIS does not follow this mode of transmission through the potential consequences. DEIS, 3-369 Inapposite to this declaration that humans can be vectors for FMD, not 15 pages later the DEIS states that “FMDV and Nipah virus are not considered as having biological vector transmission.” DEIS, 3-384.

- iii. The DEIS Evaluation of Atmospheric Transmission is Inadequate.

The DEIS acknowledges that “it is suspected from past events that the transport of viable FMD, RVF or Nipah virions via an atmospheric pathway can occur and could potentially result in infections as significant distances from the release point,” but does not give any indication what a “significant distance is” and does not then relate that information to site-specific surroundings (such as Atlanta, for example). DEIS, 3-367.

5. The Health and Safety Section Obscures Data and Misleads the Public.

- a. *The DEIS Presents a Misleading and Incomplete Picture of Health and Safety Risks to the Public by Failing to Properly Address the Probabilities and by Omitting the Consequences from Its Review.*

119 | 19.0

3 cont. | 26.0

Neither the Accidental Release nor the Health and Safety section of the DEIS address both the probability and the consequences of adverse events. The Health and Safety section of the DEIS, although asserting that it “presents the overall objectives, 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 operations of the DHS NBAF,” fails to consider and communicate sufficiently detailed information concerning the potential consequences of the project. The methodology, results and conclusions provided do not provide an adequate risk assessment such that would adequately and sufficiently fulfill the self-stated objectives of the analysis or inform decision makers responsible for making the ultimate decision whether the NBAF should be built, and if so, where. The objectives of the Health and Safety section specifically, and those of the DEIS as a whole are not met.

Comment No: 119

Issue Code: 19.0

DHS disagrees with the commentor's statement that neither the accidental release nor the health and safety section of the DEIS address both the probability and the consequences of adverse events. Section 3.14 and Appendix E are comprehensive and address both probabilities and consequences of an adverse event. In addition Sections 3.8, 3.10, 3.14, and Appendices D and E address the consequences from a release a pathogen and vectors.

Culler, Esq., Jenny

Page 123 of 133

WD0753

120| 23.0

3 cont.| 26.0

b. *The DEIS Fails to Provide Full Environmental Disclosure to the Public and Omits Critical Available Data and Information.*

i. The DEIS Fails to Adequately Disclose that the NBAF Will House a Vaccine-Producing Laboratory, and Fails to Consider the Associated Risks.

Although public statements by DHS have assured the public that vaccines will not be manufactured at the facility, that mission is clearly contemplated for the NBAF. The Site Feasibility Study incorporates considerations for a “small scale vaccine and reagent production” component to the NBAF. See Feasibility Study, § 1.1 p. 2. Further, the Notice of Availability of the NBAF DEIS clearly states that “[t]he cGMP laboratory would be needed for vaccine candidate production.” 73 Fed. Reg. at 125, 36540.

“Some specific biologic products have been selected to date; however, the design of the facility has been planned to provide flexibility in the future for a variety of product types and manufacturing processes. Some general process areas include the following:

- Production of plasmid DNA products and natural antigens;
- Production of monoclonal antibodies;
- Production of diagnostic reagents;
- Production of recombinant protein therapeutics and bacterial vaccine; and
- Dedicated Formulations/Aseptic Fill area.”

DEIS, E-28. Therefore, the failure of the DEIS to consider and discuss issues related to vaccine production is misleading and renders the DEIS inadequate.

ii. *The DEIS Fails to Disclose and Consider the Impacts on Health and Safety of the Vector Control Programs the NBAF Will Employ.*

The expected impacts on aquatic organisms and insects, especially honeybees, has been discussed in the section on biological resources. However, it bears repeating that the insecticides that the DHS currently uses at PIADC for “vector control”, which is the preventative killing of mosquitoes around the PIADC facility, will likely be used at the NBAF, as well. Both of these insecticides have human health impacts, not to mention potential impacts to the family pets. [See the more detailed discussions elsewhere in these comments.]

Comment No: 120

Issue Code: 23.0

DHS disagrees with the commentor’s statement that the DEIS fails to provide full environmental disclosure to the public and omits critical available data and information. Chapter 2 discloses that the NBAF would house a cGMP module for small-scale vaccine and reagent production. The cGMP module would allow for production and testing of two vaccine candidates at any given time. Similarly, Chapter 2 states that supporting laboratory modules would include insectary spaces necessary to support the research. The BSL-2 insectary would be for the combined functions of breeding, rearing, manipulating, and holding/incubating of arthropod vectors that would be used in the research programs. Other insectary research spaces within BSL-3E and BSL-3Ag would be used for holding infected live insects or arthropods and for virus transmission studies to and from both infected and non-infected large animals and small animals. The cGMP and insectary activities were considered in the impacts analysis. Both the cGMP and insectary spaces would utilize proven designs and implement operational procedures that would ensure the safety of associated operations. The NBAF pest control program would use registered pesticides and comply with the instructions for the safe application of their use.

Culler, Esq., Jenny

Page 124 of 133

WD0753

- iii. The DEIS Fails to Adequately Disclose Information about the NBAF Insectaries, and to Consider Risks Associated with the Insectaries.

120 cont.| 19.0

3 cont.| 26.0

The NBAF-1 Feasibility Study does not appear to include any specific plans for the design of the insectary in the NBAF, not to mention the design for the redundant safety measures touted by the DHS as included in each area of the proposed NBAF. While it concludes that there will be insectary spaces in BSL-2, BSL-3E, and BSL-3Ag (Feasibility Study §1.1, p. 2), it also omits any discussion of insects in the table discussing the animal species to be housed in the NBAF (*Id.* at §4.1, p. 3). The insectaries are apparently not yet designed. "The arthropod biocontainment guidelines published by the Journal of the American Society for Tropical Medicine and Hygiene (ASTMH) and as reprinted in the BMBL, will be referenced to design the Insectaries." *Id.* at §4.3, p. 3. Therefore, the safety measures for insectaries, and the risks that are associated with insectaries, are either not known or are not disclosed and considered in the DEIS.

#### N. MITIGATION

3 cont.| 26.0

The presentation of the mitigation section in the DEIS is fatally flawed because it misleads the public into believing that the agency *will* implement the mitigations discussed. Yet, the public can have no assurances that the agency will do what it says it plans to do in the NBAF. The DEIS makes it sound to a reader like the agency will be bound to comply with all of its promises, but that is not at all true. ***The agency simply must consider, but is not obligated to adopt the mitigation measures.*** See *Strycker's Bay Neighborhood Council, Inc. v. Karlen*, 444 U.S. 223 (1980). The fact that this is not presented clearly in the document shows bad faith. The DEIS should prominently state in the mitigation section that it is not required to perform any of the mitigations that it considers so that the public can properly evaluate the possible reality of the project. Likewise, since the mitigations are not a given --- but the implementation of all of the mitigations is essential for the agency to conclude that the risks from the "normal operations" of the NBAF are not significant --- the DEIS should also evaluate the risks and consequences of the NBAF in light of a wide range of scenarios, from the scenario where the agency does not choose to implement any mitigations all the way up to the scenario in which the agency implements all of the mitigations. Otherwise, the public is inadequately informed about the real-life potential risks and consequences of the NBAF.

121| 22.0

1. The DEIS Fails to Adequately Disclose and Consider Measures to Mitigate the Risk that an Employee Will Accidentally Carry a Pathogen Out of the NBAF.

The DEIS admits that "prevention of accidents is realistically not attainable", but then fails to outline each and every possible way that the procedures at the NBAF could mitigate the risk of accidents. DEIS, 3-390. The DEIS does contain some information about the safety redundancies that will supposedly be built in to the structure of the NBAF. Yet, supposedly the employee safety protocols will be developed at a later date,

123

Comment No: 121

Issue Code: 22.0

DHS notes the commentor's concern regarding measures to mitigate the risk that an employee could accidentally carry a pathogen out of the NBAF.

Section 3.14 and Appendix E 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. As described in Section 2.2.2.1, 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. While human errors are possible, training and inherent biocontainment safeguards reduce the likelihood of a release.

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; such plans would be approved by an Institutional Biosafety Committee that would have community representation.

Culler, Esq., Jenny

Page 125 of 133

WD0753

121 cont. | 22.0

illegally circumventing the NEPA process. The DEIS should disclose and consider whether the reporting policies related to employee accidents will discourage or encourage reporting. For example, if the policy at the NBAF is to terminate clumsy employees who demonstrate a greater risk of causing an accidental release of a pathogen, then employees will not be likely to report accidents they cause. However, if the policy is to encourage reporting and not to terminate employees if they have reported causing multiple accidents, then DHS may be left with clumsy employees and a less safe laboratory.

Additionally, it may not always be apparent that an accident has even occurred in the NBAF. The DEIS reports that many pathogens can be carried on the breath. DEIS, 3-390. There is also a significant threat that pathogens could be carried on an employee's skin, clothing, nares, or hair. DEIS, 3-385. Will there be a device set up to test each employee's breath, skin, nares, hair, and clothing before he or she leaves the NBAF? If the device detects a pathogen, will that employee be quarantined for some period of time? All of these scenarios are reasonably foreseeable, but not addressed anywhere in the DEIS.

122 | 23.0

2. The DEIS Identifies the Operation of the NBAF Itself as a Mitigation of Potential Disease Outbreaks, but Fails to Adequately and Critically Evaluate the Anticipated Capabilities of the NBAF to Become an Outbreak Detection and Response Center.

The DEIS presumes that the discovery of the cure or treatment for some of the pathogens desired to be studied at the NBAF will be the significant positive impacts from the facility. DEIS, ES-10. However, this impact is wholly speculative. Additionally, in the event that there are some scientific successes at the NBAF it is uncertain how vaccine creation and distribution would take place. The DEIS indicates that DHS or one of the other NBAF partners would need an industry partner for large-scale vaccine development. DEIS, 2-3. But the DEIS fails to disclose or discuss whether this industry partner would work in the NBAF for vaccine development or at another off-site location, or whether the agency has already chosen an industry partner or had discussions with potential industry partners for this collaboration. It is reasonably foreseeable that there would be direct, indirect, and cumulative impacts associated with the involvement of an onsite or an off-site industry partner, but none of these impacts are considered or disclosed in the DEIS.

In fact, the consideration of the vaccine component of the NBAF should also take into account the present-day difficulties that the United States experiences with vaccine distribution, which has recently come under sharp criticism from the Centers for Disease Control and others. A January 25, 2006, *Boston Globe* article highlights the problems with the government's purchasing of vaccines from private companies, the lack of an adequate tracking system for the shots, and the reluctance of private vaccine companies to share information with the CDC. Stephen Smith, *Flu vaccine distribution flawed, CDC contends: Expanded federal role in tracking shots eyed*, *Boston Globe*, January 25, 2006. The DEIS does not even address, much less explore, ways to mitigate any problems with vaccine distribution from the NBAF, even though this has been identified

124

Comment No: 122

Issue Code: 23.0

DHS notes the commentor's concern regarding large scale vaccine production. Large-scale vaccine and reagent production would not occur within the NBAF cGMP module. For large-scale manufacturing an industry partner facilities would be used and prior to production an appropriate risk assessment and NEPA review would be conducted at that time.

Culler, Esq., Jenny

Page 126 of 133

WD0753

122 cont.) 22.0 as a major problem. See GAO Testimony before the Subcommittee on Health and the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives, *Flu Vaccine: Recent Supply Shortages Underscore Ongoing Challenges*, Statement of Janet Heinrich, Director, Health Care – Public Health Issues, November 18, 2004. This discussion further dovetails with the concerns that the DEIS fails to address related to the potential administration of the NBAF by a private contractor corporation, and these concerns are set out in more detail elsewhere herein.

3. The DEIS Fails to Adequately Consider Mitigations Related to Biological Resources.

123| 22.0 The DEIS gives no consideration to mitigating light pollution, such as using shields for the outdoor facility lights in order to direct light down to the facility rather than out into the atmosphere where it is more detrimental to migratory birds and the ability to see the stars in a night sky. Neither does the DEIS consider mitigations for disrupting the wildlife corridor in the Important Bird Area, such as the purchase or creation of additional important habitat near the proposed Athens NBAF location that could help to offset the cumulative impacts of the facility. It is apparent from a read of the Mitigations section that the agency does not have any plans to seriously attempt to make up for the harms that the construction and operation of the NBAF will cause to the environmental quantitatively or qualitatively.

4. The DEIS Fails to Adequately Consider and Evaluate Conservation Methodologies as Mitigation Measures.

DHS fails to consider conservation potentials of various alternatives and mitigation measures. 40 C.F.R. §1502.16(e). For example, there are no alternative energy sources considered to replace or mitigate the infrastructure needs for the NBAF. The DEIS contains many, many conclusory statements designed to assure the public that the NBAF will abide by the best known methods for construction and operation of the facility, but these “trust us” sections are not backed up with statements about which best management practices will be used, or whether the agency will go above and beyond the regulations and do more to protect the environment and mitigate against risk. For example, the DEIS indicates that “[s]ustainable building practices would be employed where safety allows.” DEIS, 2-4. However, “sustainable building practices” are not defined or identified, there is no indication of what would constitute a situation in which safety would *not* allow sustainable building practices, and there is no way to know what conservation or mitigation might be achieved by such practices, if any.

5. Although the Agency Is Encouraged to Include Monitoring in Its EIS as a Mitigation, the DEIS Fails to Do So.

“Agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases.” 40 C.F.R. §1505.3. The siting of the NBAF in the United States at any location (and *certainly* and *especially* on the mainland at the Athens, Georgia, location with its increased chances of a released pathogen to become

125

Comment No: 123 Issue Code: 22.0

DHS notes the commentor's concerns regarding mitigation for impacts to biological resources. Section 3.15 provides a list of mitigative measures for resources including biological resources that may be implemented with the NBAF. Mitigative measures for biological resources may include standard construction best management practices (BMPs) to eliminate or minimize erosion, the use of established vegetative buffer zones, implementation of low-impact design (LID) measures, and water conservation measures. DHS would comply with any monitoring measures required by local, state, or Federal agencies.

Culler, Esq., Jenny

Page 127 of 133

WD0753

123 cont. | 22.0 endemic to the area) is an important case where the agency should provide for monitoring on every conceivable level to ensure that the mitigations work and the conclusory statements throughout the DEIS come to fruition. For example, the DEIS repeatedly states that all applicable laws will be followed to avoid violations of water quality, air quality, wastewater pretreatment standards, construction best management practices, safety protocols, and on and on. Yet, there are no measures that the DEIS revealed or considered for future public disclosure of the agency's compliance with its promises.

#### O. UNAVOIDABLE ADVERSE IMPACTS

124 | 23.0 The DEIS fails to include any discussion about the inevitable suffering and death of animal test subjects. Once again, it is obvious that the agency is seeking to obscure the ugly truths about the NBAF.

Furthermore, the DEIS fails to disclose the irretrievable commitments of nonrenewable resources necessary for the operation of the NBAF, such as the use of fossil fuels. DEIS 3-509.

#### P. RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY

125 | 23.0 While the DEIS uses the section title "Relationship between Short-Term Uses of the Environment and Long-Term Productivity", the reverse is really true. The estimated 50 year lifespan of the NBAF is a very short time of usefulness from a facility for the amount of environmental harm the NBAF could and will cause to the environment. A review of the Plum Island Closure Cost Estimate Study reveals that the PIADC may be transitioned to another user, indicating that DHS could one day simply hand the NBAF over to a private laboratory with unidentified and unknowable goals, emissions, and threats to the environment. That study also indicates that the costs for decommissioning the PIADC, while not disclosed, are apparently enormous and paid over many years of the decommissioning process, which includes such activities as bio-decontamination, asbestos/hazardous material abatement, demolition/mothball, and remediation/recycling/disposal. The DEIS should consider the impacts of these activities on the environment and on the communities surrounding the proposed Athens site. Certain of these remediation activities may not even be possible, or may be cost prohibitive in an area that is surrounded by the biological wealth as is the Athens site.

#### XII. THE DEIS FAILS TO CONSIDER OR TAKE A HARD LOOK AT FUNDING AND BUDGET ISSUES.

126 | 2.0 The success and continuation of the NBAF and the research proposed is fully dependent on political processes. Congress has only provided partial funding to date for development and construction of the NBAF, and there are no guarantees that the construction of the NBAF will be fully funded, much less its continued operations. The DEIS does not take a hard look at the potential for the funding to end or be reduced, and it makes no analysis of the economic or environmental impacts to the communities where

126

Comment No: 124 Issue Code: 23.0

DHS notes the commentor's concerns about animal test subjects. Animal testing is a necessity for NBAF to carry out its mission to study foreign animal, zoonotic (transmitted from animals to humans) and emerging diseases that threaten our agricultural livestock and agricultural economy. DHS and USDA veterinarians who would manage and conduct necessary animal testing and who would supervise all animal care provisions share the commentor's concern that animal test subjects be treated as humanely as possible. As discussed in Section 2.2.2.6 of the NBAF EIS, the APHIS Institutional Animal Care and Use Committee (IACUC) reviews all protocols and proposals for research, testing, and education that involve the use of vertebrate animals to be certain that care and use of animals is in compliance with the Animal Welfare Act as amended (7 USC, 2131-2156), Guide for Care and Use of Laboratory Animals (Institute for Laboratory Animal Research 1996), guidelines of the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC), and state and local regulations.

DHS notes the commentor's concerns for consideration of irretrievable commitments of resources. DHS considers and discloses the irreversible or irretrievable commitments of resources consistent with the Council on Environmental Quality regulations for implementing NEPA (40 CFR 1502.16) in Chapter 3 of the NBAF EIS. Specifically, for the construction and operation of NBAF at each candidate site, projected irreversible or irretrievable resource commitments associated with the proposed action at each site are identified in Section 3.2 for land resources and Section 3.3 for infrastructure resources including fossil fuels.

Comment No: 125 Issue Code: 23.0

DHS notes the commentor's statements and concerns regarding decommissioning of PIADC and NBAF and associated costs. No decisions have yet been made regarding the future operation of PIADC or whether to construct and operate NBAF. Should a decision be made to construct NBAF and, if so, a site is selected, DHS would determine alternatives regarding the future of PIADC, encompassing its decommissioning, and would perform a separate NEPA analysis at that time for any such action. As stated in Section 2.2.3 of the NBAF EIS, once the proposed NBAF has reached its life expectancy, DHS may choose to decommission the facility and transition the property for future use according to current agreements. In addition, a separate NEPA evaluation would be conducted at that time. Section 2.2.3 discusses the types of laboratory procedures and decontamination protocols to be developed for the decommissioning of the NBAF. Such plans would include decontamination methodologies, disposition of used equipment, disposal of site materials, and post-decontamination monitoring.

While the potential costs of proposed actions are not a factor in the environmental impact analysis presented in the NBAF EIS, cost information and the scope of the cost analysis performed is summarized in Section 2.5 to provide pertinent information to the DHS Under Secretary for Science and Technology so that the Under Secretary may make a more informed decision with respect to the

alternatives presented in the NBAF EIS.

Comment No: 126

Issue Code: 2.0

DHS notes the commentor's concerns regarding funding for NBAF over the longer term and statements regarding the site consortium's offer of land for NBAF.

The U.S. Congress and the President are responsible for determining funding priorities for government programs. DHS spends funds in accordance with congressional intent. However, DHS expects that Congress will appropriate and fully fund the ongoing design and construction, if a decision is made to build NBAF, as well as the subsequent operations for NBAF to fulfill its mission and comply with regulations and operating procedures. During operations, DHS would maintain the NBAF and ancillary facilities in compliance with applicable environmental, safety, and health requirements and provide for safe operation and maintenance. While the potential costs of proposed actions are not a factor in the environmental impact analysis presented in the NBAF EIS, cost information and the scope of the cost analysis performed is summarized in Section 2.5 of the NBAF EIS to provide pertinent information to the DHS Under Secretary for Science and Technology so that the Under Secretary may make a more informed decision with respect to the alternatives presented in the NBAF EIS.

DHS notes the commentor's concern regarding the state and local government's cost associated with constructing the NBAF. As noted above, 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 whether to respond with a proposal and what to offer in the proposal (land donation, funding, or other assets) is solely at the discretion of the consortium, and the state and local officials that form a part of the consortium, and is part of its bid site package. The amount of funding and how the funding is paid for (bonds, taxes, etc) and a determination of the potential net economic, employment or revenue benefit to the community and local government were determined by the state and local government officials and not the decision of the Federal government.

Culler, Esq., Jenny

Page 128 of 133

WD0753

126 cont. | 2.0

the NBAF may be located in the event that the construction of the facility is completed, but the operations stall. Because the NBAF will be a federal facility, we understand that the federal government will not pay taxes on the land to the local communities, and the consequences of having donated a large area of federally controlled land that does not contribute to the tax base and then also does not contribute otherwise to the local economies are not considered at all.

127 | 4.0

**XIII. DHS IS ILLEGALLY SEGMENTING OR TIERING CERTAIN CRITICAL COMPONENTS OF THE NBAF.**

It is imperative within NEPA that the agency's consideration of all environmental issues occur in the environmental impact statement. NEPA requires that the analysis and comments "shall accompany the proposal through the existing agency review processes...." 42 U.S.C.A. §4332(c). "[A]n agency must give consideration to environmental issues in its decision-making process. An agency may not carry out its environmental review outside the decision-making process." D. R. Mandelker, NEPA Law and Litigation, 2d Ed., Section 7:15, pp. 7-76. It appears that the following items have been improperly excluded from the DEIS, completed outside the NEPA process, or are being improperly postponed until the NEPA process has been completed, precluding public review, assessment, and comment.

1. Actual building design and construction plans.
2. Air quality considerations. "Additional modeling may be needed once the NBAF design and location have been determined." DEIS, ES-8.
3. "Draft cost and engineering analysis along with the threat and risk assessment are being conducted in parallel with the NBAF EIS. Data from these analyses have been used...in the final design...to be completed after the EIS ROD is issued." DEIS, 1-7.
4. If the DHS determines that the NBAF will be contractor-operated, then it will go through a "Program Management Plan" analysis. DEIS, 2-5.
5. Standard Operating Procedures and emergency protocols will be established after the site construction is completed. DEIS, 2-5.
6. It is anticipated that site specific protocols and decontamination procedures will be developed in the event the NBAF is decommissioned. DEIS, 2-9.
7. The EIS shall be only one of five reports to be considered by DHS in making its final determination in the Record of Decision. DEIS, 2-50.
8. DHS contracted out the study of the NBAF to Dial-Cordy and Tetra-Tech, which is of great concern if the DHS has either (1) divulged national classified information to these private companies or (2) is not including the classified information into their final analysis of the NBAF.

127

Comment No: 127

Issue Code: 4.0

DHS notes and disagrees with the commentor's concerns regarding segmentation and tiering of analyses. DHS prepared the NBAF EIS in accordance with the provisions of NEPA (42 U.S.C. 4321 et seq.) and CEQ's regulations for implementing NEPA (40 CFR 1500 et seq.). The primary objective of the EIS is to evaluate the environmental impacts of the no action and site alternatives for locating, constructing and operating the NBAF. As summarized in 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 comparison among the alternatives.

It is not clear from the commentor's assertions where DHS might have engaged in illegally "tiering certain critical components" or actions related to NBAF. On the contrary, DHS has set forth its decision making process in Sections 1.5 and 2.6. Further, DHS has stated categorically that should a decision be made to build NBAF and a site is selected, DHS would determine alternatives regarding the future of PIADC, encompassing its decommissioning, and for Plum Island and would perform a separate NEPA analysis at that time as related to DHS's stated intent to replace PIADC.

As discussed in Section 2.2, 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 regarding air quality modeling. The potential effects of NBAF construction and operations on air quality are discussed in Section 3.4. Section 3.4.1 describes the methodology used in assessing potential air quality consequences at each site. For operations, the U.S. Environmental Protection Agency dispersion modeling program, SCREEN3, was used to predict potential bounding case emissions at each site based on the current state of facility design. Should a decision be made to build the NBAF and following site selection and final design, a complete emission inventory would be developed and refined modeling performed as necessary in accordance

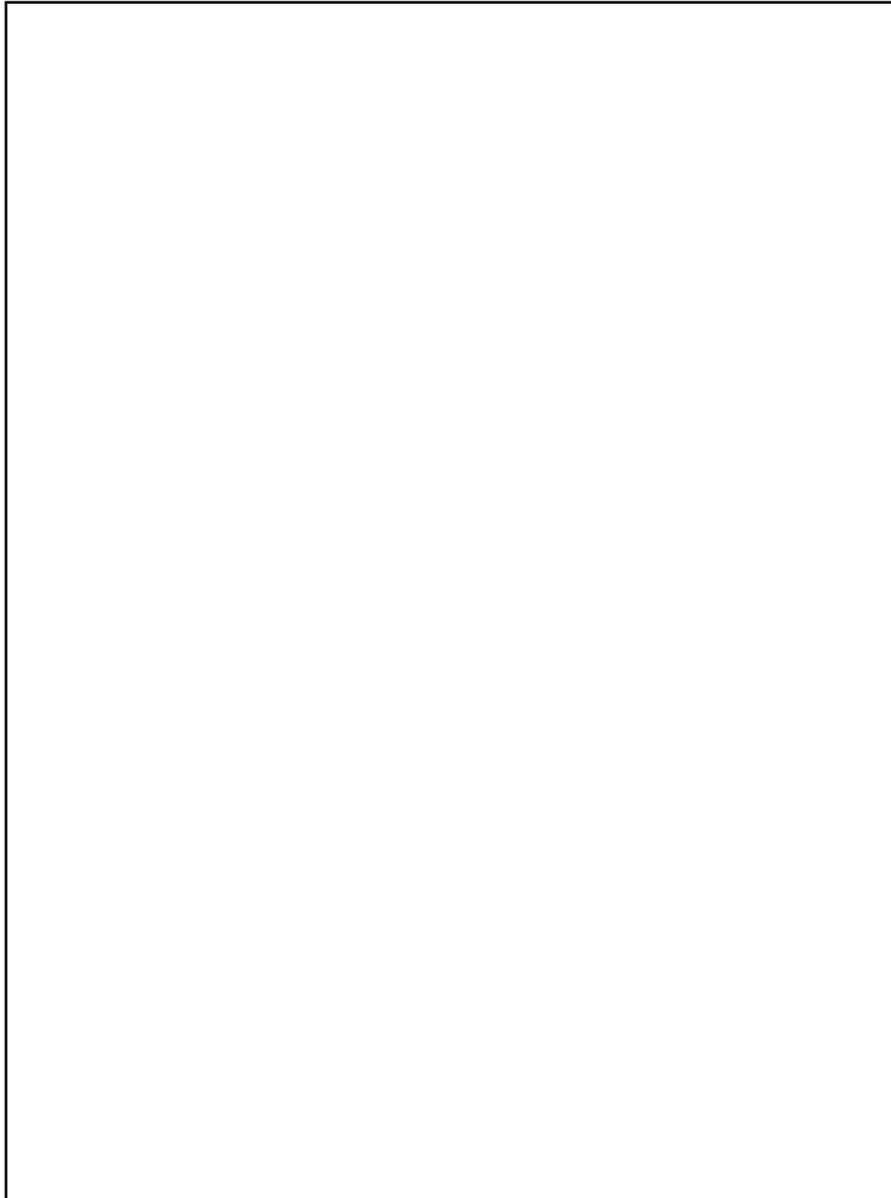
with state-specific air quality permitting requirements.

As noted by the commentor and as described in Sections 1.5 and 2.6, several studies have been prepared outside to support the development of the NBAF EIS but also to provide pertinent information to the DHS Under Secretary for Science and Technology so that the Under Secretary may make a more informed decision with respect to the alternatives presented in the NBAF EIS. As described in Section 2.6, DHS will consider the following reports, in addition to the NBAF EIS, in formulating the Record of Decision: Threat Risk Assessment (TRA), Site Cost Analysis, Site Characterization Study, and the Plum Island Facility Closure and Transition Cost Study. The Cost Analysis, Site Characterization Study, and the Plum Island Facility Closure and Transition Cost Study and other support documents were made available on DHS's NBAF Web page (<http://www.dhs.gov/nbaf>) in early August 2008. The TRA is designated For Official Use Only.

DHS notes the commentor's concerns regarding program management plan requirements. 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.

DHS notes the commentor's concerns regarding the preparation of site-specific standard operating procedures (SOPs) and emergency protocols. As stated in Section 2.2 of the NBAF EIS, safety and biocontainment protocols would be addressed in facility-specific standard operating procedures (SOPs), and emergency response procedures, that would be developed according to USDA guidelines and prior to commissioning and operation of the NBAF. In reality, development of these SOPs would occur concurrent with final facility design but could not be finalized until the completion of facility construction so as to be fully reflective of "as built" facility conditions, staffing, facility certification and permitting requirements, as well as to incorporate the latest lessons learned from relevant biosafety laboratory operations. These SOPs would be approved by an Institutional Biosafety Committee comprised of committee members with overlapping and interdisciplinary expertise, including infectious disease specialists, safety experts, and community representatives as discussed in Section 2.2.2.6 of the NBAF EIS.

DHS notes the commentor's concerns regarding decontamination procedures in the event the NBAF is decommissioned. As stated in Section 2.2.3, once the proposed NBAF has reached its life expectancy, DHS may choose to decommission the facility and transition the property for future use



according to current agreements. In addition, a separate NEPA evaluation would be conducted at that time. Section 2.2.3 discusses the types of laboratory procedures and decontamination protocols to be developed for the decommissioning of the NBAF. Such plans would include decontamination methodologies, disposition of used equipment, disposal of site materials, and post-decontamination monitoring.

DHS notes the commenter's statement regarding the five reports that will be considered by the DHS Under Secretary for Science and Technology, Jay M. Cohen, with other Department officials, in making final decisions regarding the NBAF. These reports are identified in Section 2.6 and also discussed above.

No classified information has been used in the preparation of the NBAF EIS. Further, no classified information has been divulged to persons or DHS contractor personnel in any way connected to the preparation of the NBAF EIS or related analyses to those whom are not cleared and/or otherwise authorized to handle such information.

Culler, Esq., Jenny

Page 129 of 133

WD0753

128| 3.0

**XIV. DHS FAILS TO ADEQUATELY ADDRESS HOW THE NBAF WILL COMPLY WITH CERTAIN FEDERAL LAWS AND EXECUTIVE ORDERS.**

**A. THE CLEAN AIR ACT.**

What levels and kinds of pollutants are likely to be emitted from the facility? Will substances used at the proposed NBAF, either during construction or operations fall under the CAA regulations? Please elaborate and explain how the NBAF will comply.

**B. COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT.**

Will substances used at the proposed NBAF, either during construction or operations fall under the CERCLA regulations? Please elaborate and explain how the NBAF will comply.

**C. RESPONSIBILITIES OF FEDERAL AGENCIES TO PROTECT MIGRATORY BIRDS: EXECUTIVE ORDER 13186.**

Information and concerns regarding migratory birds are submitted infra. Please review the balance of the agencies' responsibilities to protect migratory birds, and describe how the NBAF will comply with these responsibilities.

**D. PROTECTION AND ENHANCEMENT OF THE CULTURAL ENVIRONMENT: EXECUTIVE ORDER 11593.**

**E. FEDERAL ACTIONS TO ADDRESS ENVIRONMENTAL JUSTICE IN MINORITY POPULATIONS AND LOW-INCOME POPULATIONS: EXECUTIVE ORDER 12898.**

Under Executive Order 12898, "to the greatest extent practicable and permitted by law, and consistent with the principles set forth in the report on the National Performance Review, each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Exec. Order 12898 at 1-101. This letter has already discussed the ways in which the DEIS falls short of its responsibilities towards minority and low-income populations; please ensure that the FEIS complies with Executive Order 12898.

128

Comment No: 128

Issue Code: 3.0

DHS notes the commentor's concerns for demonstrating compliance with federal regulations and Executive Orders. Should a decision be made to build NBAF, DHS would meet all federal, state and local statutory and regulatory requirements.

DHS notes the commentor's concerns regarding Clean Air Act compliance. The potential effects of NBAF construction and operations on air quality are discussed in Section 3.4 of the NBAF EIS. Section 3.4.1 describes the methodology used in assessing potential air quality consequences at each site. Following final design, the potential and actual NBAF air emissions will be evaluated against state and federal legislation such as but not limited to the Clean Act and specifically to demonstrate compliance with National Ambient Air Quality Standards. In coordination with the applicable, state and local air resource agencies, a detailed emissions inventory will be developed, refined modeling performed, appropriate air permit authorizations requested with public advertisement for comment, if required.

DHS notes the commentor's concerns regarding Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and associated Emergency Planning and Community Right-to-Know Act (EPCRA) requirements. First, none of the site alternatives are included on the National Priorities List. Extensive site investigations have been performed at Plum Island including the Plum Island Site for NBAF as discussed in Section 3.12.6.1 of the NBAF EIS. In addition, each candidate site alternative has had Phase I Environmental Site Assessments (ESAs) prepared in accordance with the American Society for Testing Materials (ASTM) standard E-1527-05 for determining recognized environmental concerns (RECs), as described in Section 3.12.1 of the NBAF EIS. DHS continues to perform investigations and undertake remedial actions at Plum Island to address historical releases.

Should a decision be made to build NBAF, DHS would minimize the use of hazardous and toxic materials during construction and operations and will comply with release reporting and recordkeeping requirements under applicable federal, state, and local regulations. In summary and as discussed previously, site-specific protocols and emergency response plan(s) would be developed for NBAF, in coordination with local emergency response agencies that would consider the diversity and density of human, livestock, and wildlife populations residing within the area. The NBAF site-specific emergency response plan would be developed and coordinated with the local emergency management plan as required under the requirements of EPCRA Section 301 and 302. Further, DHS would comply with applicable hazardous and toxic chemical reporting and Community Right-to-Know provisions under EPCRA Sections 311 and 312, including making available lists of any hazardous and toxic materials, as defined under EPCRA, and Material Safety Data Sheets (MSDSs) available to regulatory agencies and the public.

DHS notes the commentor's concerns regarding compliance with Executive Order 13186 and the

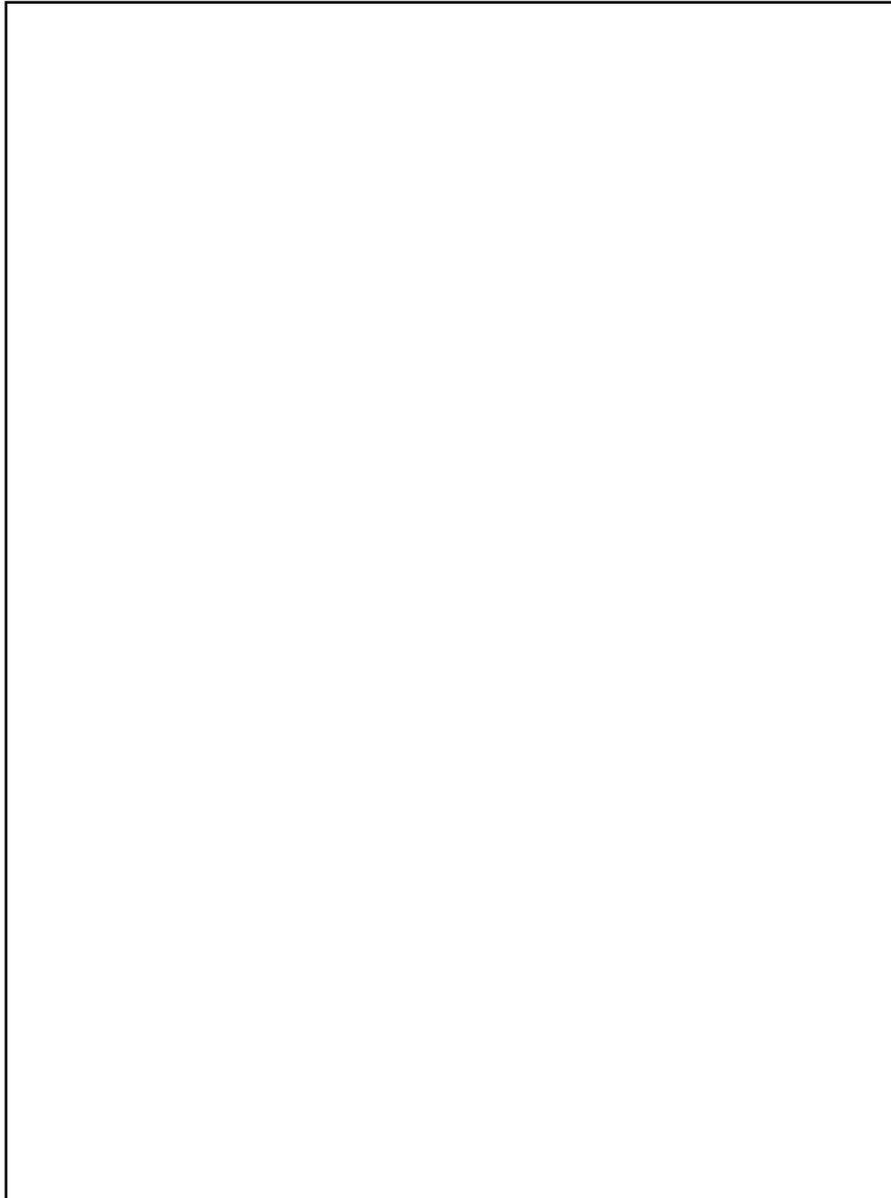
Migratory Bird Treaty Act. DHS has initiated consultation with the U.S. Fish and Wildlife Service field offices regarding potential impacts on biological resources, including wildlife, from construction and operation of NBAF. No potential impacts have been identified relative to migratory birds or affected flyways. The results of these consultations are documented in Appendix G of the NBAF Final EIS. Nevertheless, should NBAF be built and regardless of the site selected if it is built, the design and construction of NBAF would incorporate a facility profile and would employ other mitigation measures such as the use of and shielded lighting to minimize the potential consequences on native and migratory birds.

DHS notes the commentor's concerns regarding compliance with Executive Order 11593 and the National Historic Preservation Act. Section 3.9.1 describes the methodology used in assessing potential impacts on cultural resources at each site as a consequence of the proposed action. Consultations have been initiated with the State Historic Preservation Officers regarding potential impacts on cultural resources including recognized historic properties at each site, and DHS has determined that no historic or cultural resources would be affected by NBAF construction at any site. The results of the Section 106 consultations are documented in Appendix G of the NBAF Final EIS.

DHS notes the commentor's concerns regarding compliance with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. 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 under any of the alternatives as described in Section 3.1.1 of NBAF Final EIS.

DHS notes the commentor's concerns regarding compliance with with Executive Order 13295. NBAF's mission does not include the study of human diseases, and no diseases on the List of Quarantinable Communicable Diseases would be studied at NBAF. Consequently, consideration of these diseases is not within the scope of the NBAF EIS. DHS is not responsible for maintaining the List of Quarantinable Communicable Diseases, and would not add any diseases to the list as suggested by the commentor, as this responsibility falls to the U.S. Department of Health and Human Services.

DHS notes the commentor's concerns regarding compliance with the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). DHS would not be producing or using any chemical in the facility, or importuning any substances in violation of the TSCA, that are not legally available within the U.S. All construction contracts would stipulate compliance with applicable federal, state, and local laws and regulations regarding handling, storage,



and disposal of chemicals or potentially toxic substances. This would apply to any required routine herbicide or pesticide application relative to compliance with FIFRA during construction and operations. Any such usage would be administered by licensed applicators. The NBAF mission does not include experimental development or use of non-regulated FIFRA chemicals.

DHS notes the commentor's concerns regarding compliance with the Georgia Underground Storage Tank Act. As noted in 3.2.3.3.2 for the South Milledge Avenue Site, storage tanks would be required to support the operations of NBAF. This would be for storage of liquid fuel to operate emergency power generators. However, these storage tanks would be aboveground and not underground storage tanks.

Culler, Esq., Jenny

Page 130 of 133

WD0753

128 cont. | 3.0

**F. REVISED LIST OF QUARANTINABLE COMMUNICABLE DISEASES: EXECUTIVE ORDER 13295.**

Please describe which of the diseases to be studied at the NBAF already meet the definitions of the kinds of diseases that are quarantinable, and which DHS expects to be added to this list after the opening of the NBAF and the introduction of these diseases onto the U.S. mainland.

**G. TOXIC SUBSTANCES & CONTROL ACT.**

The Toxic Substances Control Act of 1976 (TSCA) was enacted by Congress to give EPA the ability to track the 75,000 industrial chemicals currently produced or imported into the United States. EPA repeatedly screens these chemicals and can require reporting or testing of those that may pose an environmental or human-health hazard. EPA can ban the manufacture and import of those chemicals that pose an unreasonable risk. Will substances used at the proposed NBAF, either during construction or operations fall under the TSCA regulations? Please elaborate and explain how the NBAF will comply.

**H. EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW.**

The Emergency Planning and Community Right-to-Know Act (EPCRA) was created to help communities plan for emergencies involving hazardous substances. EPCRA has four major provisions: one deals with emergency planning and three deal with chemical reporting. Will substances used at the proposed NBAF, either during construction or operations fall under the EPCRA regulations? Please elaborate and explain how the NBAF will comply.

**I. FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT.**

EPA regulates pesticides through the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). Under FIFRA, no one may sell, distribute, or use a pesticide unless it is registered by the EPA, or it meets a specific exemption as described in the regulations. Will vector controls or other pesticides anticipated for use by the NBAF be registered per FIFRA. Are any experimental uses or specific exemptions anticipated? Will substances used at the proposed NBAF, either during construction or operations fall under the FIFRA regulations? Please elaborate and explain how the NBAF will comply.

129

Culler, Esq., Jenny

Page 131 of 133

WD0753

128 cont. | 3.0

**J. GEORGIA UNDERGROUND STORAGE TANK ACT.  
O.C.G.A. §12-13-1 et seq.**

It is the public policy of the State of Georgia, in furtherance of its responsibility to protect the public health, safety, and well-being of its citizens and to protect and enhance the quality of its environments, to institute and maintain a comprehensive state-wide program for the management of regulated substances stored in underground tanks. Please elaborate and explain how the NBAF will comply.

129 | 23.0

**XV. THE DEIS LACKS FULL DISCLOSURE REGARDING THE LIKELIHOOD THAT CONTRACTORS WILL RUN THE NBAF.**

DHS has indicated that the NBAF may be a government-owned, government-operated facility, or it may be a government-owned, contractor-operated facility. DEIS, 2-4. This "GOGO" versus "GOCO" analysis has been swept under the rug for the most part in the DEIS, but it could have significant consequences for the operation of the facilities and the likely expansion of the NBAF or sister facilities that could spring up around the NBAF. For example, it is disclosed that the NBAF is meant to act as a vaccine creation and distribution laboratory. If the contractor is a private vaccine producer, such as GlaxoSmithKline, Inc., or the Athens locally based Meriel, Inc., then there are issues regarding that private company's intellectual property rights in any vaccines that are created under their watch, their culture of competition and not collaboration with other companies for the research edge, and their resulting financial interests in keeping the cost of the vaccines high and avoiding the production of generic versions of the vaccines for as long as the law allows. This scenario is in conflict with the stated national interests in protecting food supplies for the good of the whole economy, and the DEIS should consider the pros and cons of a GOGO versus a GOCO system with all of these conflicts in mind. This analysis should include, *inter alia*, the economic impacts on taxpayers on a federal, state, and local level in the event the federal government may be purchasing the vaccines from the private contractor.

Furthermore, it is not clear whether DHS has already entered into preliminary discussions or negotiations for a private contractor of the NBAF facility. Please note that AT&T had a representative speak in favor of the proposed Athens NBAF location at the public comment session on August 14, 2008. It is noted in the DEIS at 2-5 that AT&T has managed Sandia National Laboratories in the past, indicating that AT&T is a foreseeable choice for a contractor to run the NBAF. If the DHS has already been considering the choice of contractors, it should include this information in the DEIS for public review and comment.

130

Comment No: 129

Issue Code: 23.0

DHS notes the commentor's concerns regarding the role of contractor's in operating NBAF. As previously noted (see response to Comment No. 127), the NBAF may be operated as a Government Owned/Government Operated facility (GOGO) or as a Government Owned/Government Operated facility (GOCO), but this decision has not been made and will not be until after the Record of Decision is issued and assuming the decision is made to build NBAF and a site is selected. Should a decision be made to operate NBAF as a GOCO facility, procurement of such services would follow the Federal Acquisition Regulations and applicable DHS procurement requirements administered through DHS's Federal Law Enforcement Training Center, Biocontainment Procurement Branch.

Culler, Esq., Jenny

Page 132 of 133

WD0753

XVI. THE COMMENTERS HEREBY SUBMIT AND INCORPORATE BY REFERENCE FULLY INTO THEIR COMMENTS THE REPORTS, PAPERS, AND COMMENTS OF: DR. DEAN STAUFFER, DR. ROBERT E. MCCORMACK, DR. BENTLEY COFFEY, DR. FINIS CAVENDER, DR. DAVID HARGETT, DR. DAVID WENNER, DR. BRUCE OTT, DR. SALLY WALKER, DORINDA DALLMEYER, AND THE UPPER OCONEE WATERSHED NETWORK, ATTACHED HERETO AT TAB 40.

These reports have been cited throughout these Comments on the DEIS, but not in full, and the Commenters submit the entirety of these reports, along with the studies, literature, or other materials they cite, for full consideration and review by the DHS during this public comment period.

XVII. THE COMMENTERS HEREBY SUBMIT AND INCORPORATE BY REFERENCE FULLY NEWSPAPER ARTICLES, BLOGS, AND OTHER OPINION PIECES FOR REVIEW, ATTACHED HERETO AT TAB 69.

XVIII. THE INFORMATION THAT IS PROVIDED IN THE DEIS CLEARLY DEMONSTRATES THAT THE CONSTRUCTION AND OPERATION OF THE NBAF AT THE SOUTH MILLEDGE AVENUE SITE WOULD BE ARBITRARY, CAPRICIOUS, AND DIAMETRICALLY OPPOSED TO THE MISSION OF THE DEPARTMENT OF HOMELAND SECURITY.

2 cont. | 5.2

The DEIS in and of itself is legally deficient for all of the reasons indicated herein, and almost certainly for other reasons that could not be readily identified in the unconscionably short time period the Commenters were given to review the documents. However, the DEIS as submitted for review does provide some data and information. Even with this limited information *it is crystal clear that locating the NBAF at the South Milledge Avenue Site in Athens, Georgia would be irresponsible, short-sighted, and a blatant violation of the mission of the Department of Homeland Security to enhance national security rather than reduce it. Further, the selection of Athens Georgia site would be a betrayal of the Department's obligations to protect the citizens of the United States and the natural and human environment in which we live.*

The environmentally preferable alternative is defined as "the alternative that will best promote the national environmental policy as expressed in NEPA's section 101 (42 U.S.C.A. §4321). Ordinarily, the environmentally preferable alternative is that which causes the least harm to the biological and physical environment; it also is the alternative which best protects and preserves historic, cultural, and natural resources." 36 C.F.R. §220.3. The proposed Athens NBAF location is not the environmentally preferable alternative. It is clear from the information provided in the DEIS that from an environmental perspective, the Athens site is the worst choice for the NBAF. The Athens site was singled out in the DEIS as being the most impacted (or tying for most impacted) for Visual Effects, Infrastructure, Noise, Traffic, and cumulative Water Resource impacts. DEIS, ES 9-10. Further, the Athens site was noted to involve increased risks

7 cont. | 21.2 |

Culler, Esq., Jenny

Page 133 of 133

WD0753

7 cont. | 21.2

from the pathogens to be studied at the NBAF due to its proximity to waterbodies (DEIS, ES10), its proximity to rich and diverse wildlife, agricultural, and farming populations, lending it the ability to "provide[] a significant opportunity for the spread of viruses via vectors and infected wildlife" (DEIS, 3-442), and its climate, conducive for infected mosquitoes and other insects to spread the disease and cause it to become endemic to the area (DEIS, 2-38).

Construction of the NBAF at the Athens site also involves greater damage to the environment because there will be noise impacts to migratory and other birds at the Botanical Gardens and throughout the Audubon Important Bird Area. There will significant detrimental impacts to the streams, wetlands and other water bodies in the Middle Oconee River watershed. The blasting necessary at the Athens site would increase the impacts on wildlife, and could result in groundwater impacts and reduced overall site stability. The selection of this site will interfere with well planned and logical land use plans adopted by not only Athens-Clarke County but adjoining municipalities. The Athens site does not have the positive impacts touted by DHS and in fact, the direct and consequential costs far outweigh those purported socioeconomic benefits.

2 cont. | 5.2

*If the DHS chooses the Athens site for the NBAF, it will do so in blatant disregard of the environmentally preferable alternative.*

Athens, Georgia, is neither a logical nor safe location for the NBAF. The damage to the human and natural environment will be severe. The risks to people, livestock, wildlife, and the economy are too enormous to overlook. The safety of the region is too critical to gamble with on the assumption that if constructed, NBAF will operate without incident. An objective, open minded review of this DEIS and the comments presented herein should convince any reviewer that Athens is a dangerous and foolhardy choice. Any objective review should ultimately lead to one inescapable conclusion: both the short term and long term risks attendant to locating the NBAF in Athens very heavily outweigh any ephemeral political or financial gain that would be had in choosing this site.

On behalf of our clients and the citizens of this State, we thank you for the opportunity to express these concerns. We trust that DHS will heed those concerns and will not burden Athens, Georgia with this unwarranted risk.

Very truly yours,



Donald D.J. Stack, Esq.  
Jenny R. Culler, Esq.

Cumberland, Veronica

Page 1 of 1

03/21/2008 THU 15:44 FAX HDA

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FD0036

August 21, 2008

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

Fax # 1-866-508-NBAF (6223)

Dear Mr. Johnson:

Please accept this letter as a show of support for the National Bio and Agro-Defense Facility to be located in Flora, Mississippi.

1|24.5 I would be happy for Mississippi to be a part of protecting our nation's security against bioterrorism. Mississippi has great educational facilities which will provide very capable, talented individuals who can fill the positions. These positions will assist in keeping our bright young citizens in the community and the State. Mississippi will truly embrace the opportunity for the new jobs.

Also, with today's tremendous technology, I believe the facility would be safe & secure.

Thank you for allowing the opportunity to show our support for the NBAF.

Sincerely,

  
Veronica Cumberland

Comment No: 1

Issue Code: 24.5

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