National Bio and Agro-Defense Facility
Draft
Environmental Impact Statement
(NBAF Draft EIS)

Public Meeting

Role of the Moderator

- **Establish a respectful and fair process with no favoritism toward people or points of view**
- **Provide an opportunity for the public to provide comments on the draft EIS**

NBAF Draft EIS Public Meeting Objectives

- **Inform the public**
  - Potential effects
    - siting
    - building
    - operating the proposed NBAF at the six site alternatives and the No Action alternative
- **Solicit public comments**

NBAF Draft EIS Meeting Agenda

1. **Presentation**
   - NBAF Draft EIS Impact Analysis Results
2. **Informal Questions and Answers**
   - Focus on clarifying the presentation, the content of the NBAF EIS, or the NEPA process
   - Questions and answers will be recorded
   - Go to a microphone to ask your question
   - Please ask just one question

NBAF Draft EIS Meeting Agenda (con't)

3. **Formal Comments**
   - All comments received throughout the 60-day comment period **(ending August 25, 2008)** will be given equal consideration, whether written or spoken
   - When called, commentors will come to the microphone, state their name and organization, if any, for the record
   - Each commentor has three minutes to speak
   - Comments will be recorded by the court reporter

Public Meeting

National Bio and Agro-Defense Facility
Draft Environmental Impact Statement (NBAF Draft EIS)

James Johnson
NBAF Program Manager
Director, Office of National Laboratories
Science & Technology Directorate
U.S. Department of Homeland Security (DHS)

Why The NBAF?

To protect the United States from the numerous infectious foreign animal diseases present throughout the world that could threaten our public health, agriculture and economy

- **Homeland Security Presidential Directive**
  - Develop a plan to provide safe, secure and state-of-the-art agricultural biocontainment laboratories for research
  - Develop current and new countermeasures
- **The NBAF is critical to fulfilling both these requirements**

The NBAF Will Provide Research and Diagnostic Capability

- **Perform basic and advanced research on livestock**
- **Develop diagnostic tests to more rapidly detect entry of foreign animal diseases**
- **Develop countermeasures such as vaccines**
- **Enhance training capabilities for veterinarians**
- **Help the United States maintain disease-free status for foreign animal diseases**

NBAF Description

- **The NBAF would consist of a main laboratory facility and support facilities**
- **Laboratory buildings would contain BSL-2, BSL-3Ag, and BSL-4 laboratories and support spaces**
- **Support facilities would include a central utility plant, an entry guard house, a central receiving facility, and parking**
- **500,000 square feet**
- **Owned by DHS with USDA as the main tenant**

Description of the Alternatives

- No Action Alternative - **The NBAF would not be built.**
- Action Alternatives – **Construct the NBAF at one of the six site alternatives:**

USDA and DHS Working Together

- **USDA protects U.S. agriculture from the potential introduction of animal disease pathogens including those that can affect human health**
- **USDA maintains research, diagnostic and training programs at Plum Island Animal Disease Center**
- **The DHS science program brings additional funding and resources to more quickly develop new state-of-the-art vaccines and diagnostics**
- **The NBAF is needed to continue USDA's mission to protect U.S. agriculture from foreign animal diseases**

USDA and DHS Working Together

- **Synergies**
  - Share well-equipped facility
  - Efficient scientific exchanges and sharing of research materials
  - Research done by ARS and DHS can identify new tools for APHIS to use in disease detection and response
  - APHIS investigations and surveillance can identify emerging and re-emerging diseases to help set DHS and ARS research priorities
- **Due to space constraints and lack of BSL-4 facilities, our programs address limited numbers of high consequence pathogens and we are not prepared for the "unexpected" emerging pathogen that may have serious consequences for animal and human health**
- **USDA is working together with DHS to better meet the national needs for protection through the NBAF**

How Are We Doing the Draft EIS?

- **National Environmental Policy Act of 1969 (NEPA)**
- **NEPA Team Composition & Methodology**
- **Independent and multidisciplinary team**
  - No vested interest in outcome
  - EIS team comprised of 50 scientists, engineers, and support staff
- **The greater the potential effect, the more comprehensive the analysis**
- **Original analysis and use of existing and peer reviewed data**
- **Case studies**
- **Scoping comments**

Content of Draft EIS

- **Summary (Executive Summary)**
- **Introduction and Background (Chapter 1)**
- **Purpose and Need for the Proposed Action (Chapter 1)**
- **Alternatives (Chapter 2)**
- **Affected Environment (Chapter 3)**
- **Environmental Impacts (Chapter 3)**
- **Cumulative Impacts (Chapter 3)**
- **Technical Appendices (Appendices B-E)**

Purpose and Need for the Proposed Action

- **Purpose –** to comply with Homeland Security Presidential Directive 9 to improve domestic research capability on foreign animal and zoonotic diseases. The NBAF would allow for basic research, diagnostic testing and validation, countermeasure development, and diagnostic training.
- **Need –** to protect U.S. agriculture and economic interests from the effects of outbreaks of foreign animal and zoonotic diseases
- **Proposed Action –** to site, construct, and operate the NBAF
- **Alternatives –** six sites and No Action

Other Alternatives Considered

- **Upgrade the existing Plum Island Animal Disease Center (PIADC) to meet NBAF Mission**
- **Use existing laboratory facilities**
- **Other alternatives considered – 29 sites responded to DHS**
- **Scoping comment suggestions**

The Preferred Alternative has not yet been determined

Resources Analyzed

- **Air Quality**
- **Biological Resources**
- **Cultural Resources**
- **Geology and Soils**
- **Health and Safety**
- **Hazardous, Toxic, or Radiological Waste (Existing)**
- **Infrastructure**
- **Land Use**
- **Noise**
- **Socioeconomics**
- **Traffic and Transportation**
- **Visual Resources**
- **Waste Management**
- **Water Resources**

Site Comparison of Key Effects

- **No sites with major adverse effects under normal operations**
- **Most sites Minor or Negligible Effects**
  - 10 out of 14 Resource Categories
- **Four Resource Categories with Moderate Effects**

Moderate Effect Resource Categories

Air Quality

Plum Island and Texas Research Park

Infrastructure

All Sites

Traffic and Transportation

South Milledge Site and Texas Research Park

Visual

South Milledge Site, Manhattan Campus, Flora Industrial Park and Umstead Research Farm

South Milledge Avenue Site - Moderate Effect Resource Categories

- **Infrastructure**
  - Water, Electricity, Fuels and Natural Gas, Sanitary Sewage, Steam and Chilled Water
    - Capacity exists improvements to infrastructure necessary
- **Traffic and Transportation**
  - Improvements necessary
- **Visual**
  - Topographical prominence – seen from Botanic Gardens and University of Georgia facilities
  - NBAF similar in size to a 400-bed hospital
  - Nighttime lighting

Health and Safety Summary

Potential Effects of an Accidental Release

Accident Scenarios and Pathogens Evaluated

- **Accident Scenarios**
  - Operational Accidents
  - Natural Phenomena Accidents
  - External Events
  - Intentional Acts
- **Pathogens Evaluated**
  - The NBAF risk assessment specifically addressed:
    - Foot and Mouth Disease Virus
    - Rift Valley Fever Virus
    - Nipah Virus
  - These three pathogens effectively bounded the hazards, accidents, and consequences for the NBAF.

Health and Safety Summary

- **Low accident risk at all sites**
- **Consequences**
  - Mainland environmental consequences support spread and growth of the virus if released
  - Environmental consequences are lessened if there is a viral release on Plum Island due to reduced opportunity for spread and growth

Consequences – South Milledge Avenue Site

Opportunity for Spread and Growth

- Wildlife - white tail deer and boar
- Livestock – cattle (20-30 per km^2)
- Vectors - Mosquitoes, and ticks

Health and Safety Summary

How would the NBAF reduce risk?

Low likelihood and minimal consequences because:

- NBAF would be designed, constructed, and operated with rigorous safety controls to reduce risks of accidents as is true at other, similar facilities
- NBAF would be constructed to resist natural phenomena hazards (seismic, high winds, etc.) and external events (accidental aircraft crash, etc.) to greatly reduce potential releases
- NBAF would be designed and operated with numerous layers of safety and security controls that greatly reduce the likelihood and consequences in the event of an accident or intentional act

Socioeconomic Summary

- **Methodology**
- **Case studies and simulations used to estimate socioeconomic consequences**
- **Three pathogens were evaluated:**
  - Foot and Mouth Disease Virus (FMD)
  - Rift Valley Fever Virus (RVF)
  - Nipah Virus

Socioeconomic Summary

- **Impacts of an Accidental Pathogen Release**
- **FMD release would not affect public health costs**
- **FMD results in losses to livestock sector**
  - Estimated total nation-wide cost of FMD outbreak over extended period of time: $2.8 - $4.2 billion
  - Primary losses result from foreign ban of U.S. livestock products
- **RVF could affect human health and commercial livestock with economic impacts**
- **Nipah Virus can also affect livestock and people**

South Milledge Avenue Site - Potential Impacts from an Accidental Pathogen Release

- 2002 animal production in the six –county region - $559 million
  - Majority was from poultry and egg production – not expected to be at risk
- FMD Total economic cost estimate - $3.35 billion
- RVF could affect human health and commercial livestock with high economic impacts over the long-term
- Nipah effects much lower than FMD and RVF

Socioeconomic Summary

Normal Operations

- **Under normal operations, no significant adverse impacts**
- **Short-term economic effects (over the 4-year construction phase):**
  - 3,370 to 4,050 person years of employment
  - $130 million to $185 million of labor income
  - $35 to $72 million in federal, state, and local taxes

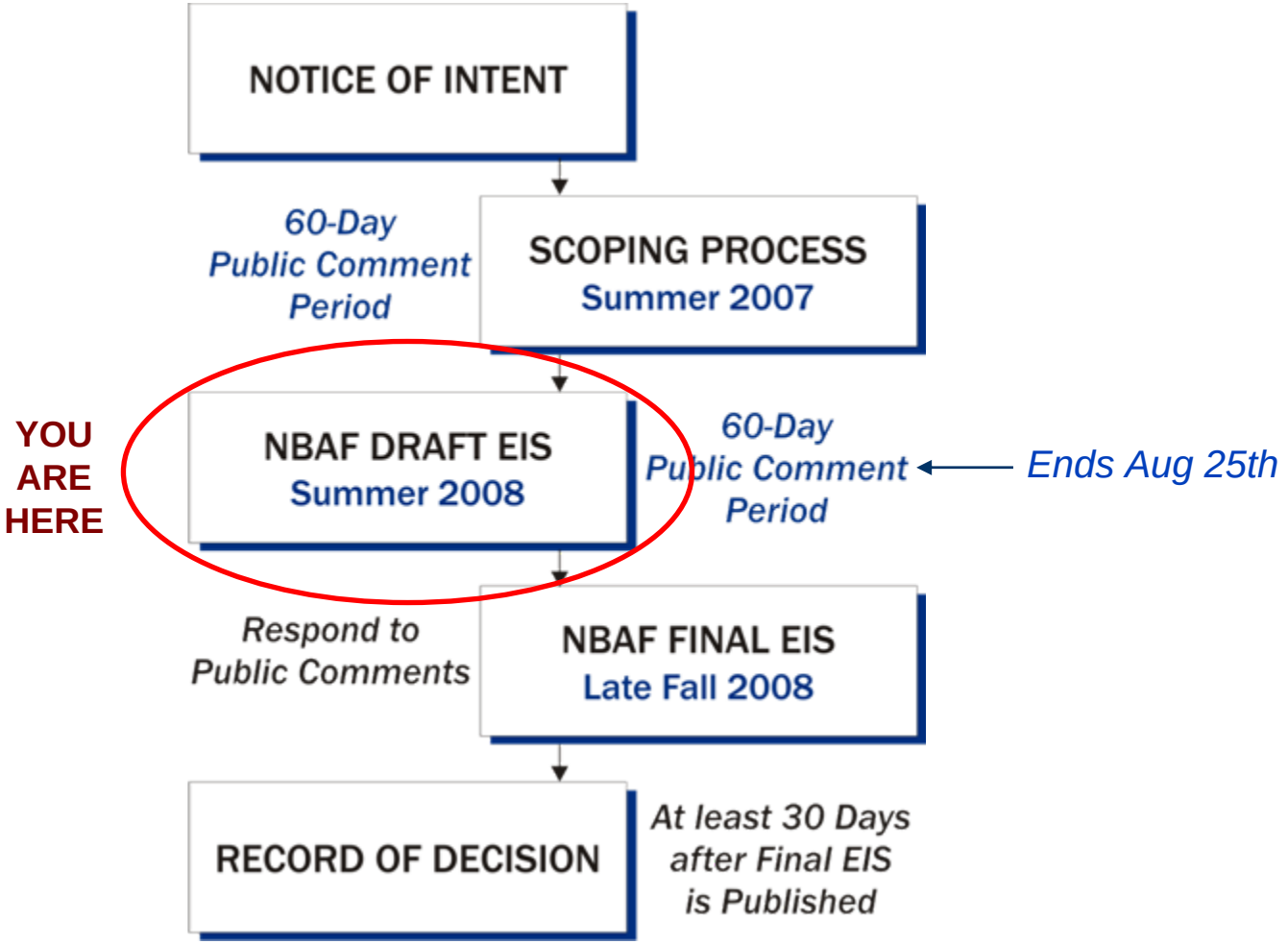
Socioeconomic Summary

- **Long-term annual economic benefits:**
  - 450 to 510 total jobs
  - $25 to $31 million of labor income
  - $2.8 to $5.5 million in Federal, State, and Local taxes

Potential economic benefit

- **Prevention or reduction of economic loss through containment or prevention of FAD outbreak**

NBAF NEPA Schedule



Your Comments Are Important

Comment Period Ends August 25, 2008

You have access to the following tools to assist you in submitting comments:

Comment Forms: To prepare and submit written comments
Court Reporter: To record oral comments
Exhibit Area: To view materials and speak informally with subject matter experts

Fax comments to:
1-866-508-NBAF (6223)

http://www.dhs.gov/nbaf

Oral comments may be submitted by calling our 24-hour toll-free number:
1-866-501-NBAF (6223)

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

Questions and Answers

Questions and Answers

- **Clarifying questions on the NEPA process and the presentation.**
- **Go to the microphone and the next person in line will be called on by the moderator.**
- **Direct your question to the moderator, who will restate it.**

Formal Comments

Formal Comments

- When called, commentors will come to the microphone, and may state their name and organization, if desired, for the record.
- Commentors will be limited to 3 minutes each.
- Time permitting, others may comment.
- Comments will be recorded by the court reporter.
- The Program Manager will not address comments at this time. These comments, as well as those collected throughout the comment period, will be addressed and responded to in the final EIS.

Thank You for Your Interest

- **We want your comments.**
- **If you think of a comment later, please submit it by August 25, 2008 for it to be addressed and responded to in the final EIS.**

How to Comment

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