

# Town Hall Meeting

## Southold, New York

National Bio and Agro-Defense Facility  
(NBAF)

**Moderator:**  
**Pat Wherley**



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# Welcome to the NBAF Town Hall Meeting

- **Meeting Objectives**

- Answer Your Questions on NBAF

- **Meeting Format**

- **Presentation (7:00 – 7:30 p.m.)**

- Presentation by the NBAF Program Manager and subject matter experts.

- **Questions and Answers (7:30 – 9:00 p.m.)**

- Written questions will be sorted by topic by facilitators and asked by the moderator.

- **Open Microphone (9:00 – 10:00 p.m.)**

- Time permitting, attendees can come to the microphone and ask a question that has not been covered.



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# Welcoming Remarks

Supervisor Scott A. Russell  
Southold Town Board



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# Team Introduction

- **Jamie Johnson**, DHS, Director of National Laboratories, NBAF Program Manager
- **Dr. Larry Barrett**, DHS, Director, Plum Island Animal Disease Center (PIADC)
- **Dr. William White**, USDA APHIS, Senior Staff Veterinarian, Foreign Animal Disease Diagnostic Laboratory, National Veterinary Services Laboratories
- **Eugene Cole**, DHS, Office of National Laboratories, Registered Architect



# What can I expect to see in the draft EIS?

- **The proposed scope and content of the draft NBAF EIS would consist of:**
  - Description of the proposed facility
  - Description of the research to be conducted
  - Information on the design, construction and operation
  - Description of the environment at each of the six site alternatives
  - Detailed analyses of the potential environmental and human health impacts of locating and operating the facility at each of the six site alternatives



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# The NBAF Site Alternatives in the NOI

<b>Proposed Location</b>	
<b>Athens, Georgia</b>	<b>South Milledge Avenue Site</b>
<b>Manhattan, Kansas</b>	<b>Manhattan Campus Site</b>
<b>Flora, Mississippi</b>	<b>Flora Industrial Park Site</b>
<b>Plum Island, New York</b>	<b>Plum Island Site</b>
<b>Butner, North Carolina</b>	<b>Umstead Research Farm Site</b>
<b>San Antonio, Texas</b>	<b>Texas Research Park Site</b>

\* No Action Alternative: Do not construct the NBAF and continue to operate Plum Island at BSL-3



# What are the goals of the NBAF?

- Develop countermeasures such as vaccines and anti-viral therapies for foreign animal diseases.
- Provide advanced test and evaluation capability to detect foreign animal and zoonotic diseases (diseases transmitted from animal to humans).
- Conduct basic and applied research on high threat foreign animal diseases.
- Train veterinarians.



# What will we study in the NBAF?

- The NBAF would **not** study anthrax, Ebola, plague or smallpox.
- The mission of the NBAF would be to study animal infectious diseases that threaten our agricultural livestock and agricultural economy.
  - Nipah Virus
  - Hendra Virus
  - African Swine Fever
  - Rift Valley Fever
  - Japanese Encephalitis Virus
  - Foot and Mouth Disease
  - Classical Swine Fever
  - Contagious Bovine Pleuropneumonia
- Zoonotic diseases would be studied and diagnosed in livestock.



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# Why is DHS responsible for the NBAF? What is the role of USDA?

- DHS has the responsibility for detecting, preventing, protecting against and responding to terrorist attacks within the U.S.
  - Transferred ownership of PIADC from USDA to DHS in 2003.
  - PIADC has historically conducted much of the research that would be conducted at the NBAF.
- DHS' responsibilities, as applied to the defense of animal agriculture, are shared with USDA.
  - Requires a coordinated strategy to adequately protect the Nation against biological threats to animal agriculture.



# NBAF is Not a Bioweapons Facility

- The development of bioweapons was outlawed by the 1972 Biological Weapons Convention (BWC), and the United States is a party to this agreement.
- PIADC mission would continue at the NBAF – research, diagnosis and vaccine development.



# What would the NBAF look like?

- DHS completed a feasibility study, which is not site specific. Detailed design will commence if and when a site is selected.
- Conceptual NBAF layouts for each site will be in the draft NBAF EIS.
- The following pictures are of other biocontainment laboratories that have similar security requirements.



# CDC Emerging Infectious Diseases Laboratory



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# Canadian Science Center for Human and Animal Health



# USDA High Containment Large Animal Facility



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# Would the NBAF research be conducted in secret?

- There would be no classified research, but occasionally there may be classified FBI forensics cases.
- Just as at PIADC, which the NBAF would functionally replace, research at the NBAF would be published in publicly available scientific journals.



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# Will the local community be considered for any jobs?

- A total of about 250 to 350 employees will be employed at the NBAF, many from the local community.
  - Positions include researchers, laboratory animal technicians, animal caretakers, laboratory technicians, custodial staff and administrative staff.
  - Employees currently working at PIADC would be given the opportunity to move to the NBAF.





# Would DHS be open to community input?

- DHS would provide updates to the community on the design and construction progress.
- Once the NBAF was operational, community forums would be held just as DHS does for PIADC.
  - The community forum would give local officials opportunities to tour the facility and meet with lab directors.
- DHS and USDA would collaborate with the local university, government and industry laboratories.



# How would DHS handle emergency response?

- The draft NBAF EIS will address the capability of the local communities to support emergency response.
- DHS would build on the existing emergency response system in place for PIADC.
  - NBAF would have state-of-the-art security and emergency response plans that would be practiced with local, county and state agencies. DHS would develop an incident response plan that includes precise detail about what to do if an incident occurred that exceeded the capability of the NBAF security system (e.g., terrorist attack).



# DHS Plum Island Animal Disease Center History and Operations



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# Plum Island Animal Disease Center

- Plum Island is 840 acres, located 1.5 miles off the northeastern tip of Long Island, NY,
- The United States Government has made use of the island for many years
  - American Revolution, Lighthouse
  - Transferred 1952 to U.S. Army Chemical Corps
  - Transferred 1954 to USDA
  - Building 101 laboratory dedicated 1956
- Congress transferred responsibility for the operations of PIADC to DHS in the Homeland Security Act of 2002 – effective June 2003



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# Plum Island Animal Disease Center Agencies and Support Services

- **DHS**

- Scientific Programs
- Administration/Operational Management

- **USDA APHIS**

- Foreign Animal Disease Diagnostic Laboratory (FADDL)



- **USDA ARS**

- Foreign Animal Disease Research Unit

- **Field Support Services Incorporated (FSSI)**

- Operations and Maintenance Contractor

- **Science Applications International Corporation**

- Program Management and Support Services



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# Plum Island Animal Disease Center Facilities

- **Mission:** To protect U.S. livestock from the accidental or deliberate introduction of high-consequence foreign animal diseases
- **Staffing:** 300+
- **Facility:**
  - BSL-2 laboratory space
  - Enhanced BSL-3 laboratory space
  - Agriculture BSL-3 containment for livestock animals for disease studies and vaccine research
  - Maintains the North American FMD Vaccine Bank for U.S., Canada and Mexico



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# Plum Island Animal Disease Center Support Services

- **Self-sufficient: Operations on the island are similar to a small city**
  - **Electrical generation & utilities**
  - **Wastewater treatment**
  - **Fuel storage tanks**



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# Plum Island Animal Disease Center Support Services

- Marine vessels, vehicle fleet and security
- MOA with Southold, NY for Law Enforcement Assistance with PIADC
- Suffolk County Mutual Aid MOA with all fire departments in the Eighth Fire District
- State EOC SOP with USCG regarding Millstone Nuclear Power Station Emergency Response Plan



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# Laboratory Operations



# REPORT SUSPECTED CASES OF FOOT-AND-MOUTH DISEASE

To the nearest Veterinarian  
or Livestock Official



**FOOT SYMPTOMS:**  
Blistered sores on feet  
Swelling of feet  
Pain when the animal

**It's extremely contagious  
and easily carried on:  
Feed, Sheds, Clothing  
and many other ways**

**MOUTH SYMPTOMS:**  
Blistered lips and tongue  
Rough sores  
Swelling of mouth  
Pain when eating

**STAGE SYMPTOMS:**  
Rapid loss of flesh  
Swollen joints, fever  
Inflamed eyelids  
Blistered on face  
Loss of appetite  
Falls and dies

**DEATH MAY FOLLOW**

**YOUR DUTY:**  
Confine sick animals  
Stop all visiting  
Tie dogs; pen fowls, etc.  
Report case at once!

This pestilence of cattle, swine, sheep, etc., causes enormous losses, and must be suppressed at once!

Send for Farmers' Bulletin on "Foot-and-Mouth Disease"

**United States  
Department of Agriculture**

Some things never change – the best way to control a FAD is to keep it out!

If not out – to diagnose it ASAP!

# Keep Foot-and-Mouth Disease OUT of America

Remember to declare **any** visits to farms or contact with livestock.

Remember to declare **all** food and agricultural items in your possession on your Customs form.

*Failure to do so could result in a fine of up to \$1,000.*

**USDA**  
U.S. Department of Agriculture  
Animal and Plant Health Inspection Service

Program APL 96-1084 - Issued March 2001

The U.S. Department of Agriculture is an equal opportunity provider and employer.



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# Research Versus Diagnostics

- Research at the NBAF would be performed on the 8 pathogens listed previously.
- Diagnostic testing would be performed on a larger number of agents from clinical samples, import/export testing and product samples.
- Ensure United States maintains disease-free status.
  - Help diagnose entry of foreign animal and/or zoonotic disease rapidly.
    - Rapid diagnosis key to control of a disease.
    - Protect the Nation's economy.



# How would USDA/DHS respond if there is an outbreak?

- Veterinarians are trained in the recognition of foreign animal diseases. These veterinarians are called Foreign Animal Disease Diagnosticians.
- Foreign Animal Disease Diagnosticians are trained in working with local and state veterinarians, as well as the USDA APHIS in appropriate response to a potential foreign animal disease outbreak.
  - Potential responses would include quarantine, shipment of samples to the NBAF or National Animal Health Laboratory Network for testing.



# Train Veterinarians In Recognizing Foreign Animal Diseases (FAD)

- At PIADC, APHIS holds 4-6 FAD training classes per year.
- Participation is from the State Department, DoD, USDA, and State Diagnostic Labs.
- One of the best “hands on” FAD courses in the world!

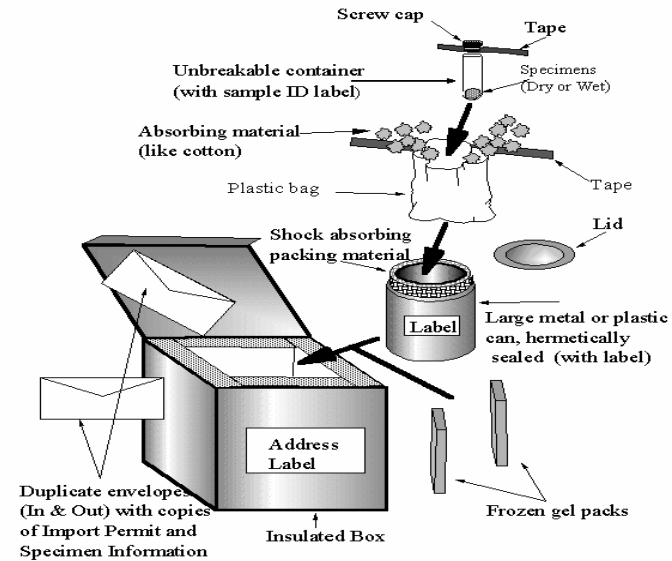


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# Safe Specimen Packaging and Transport



## ■ Packaging

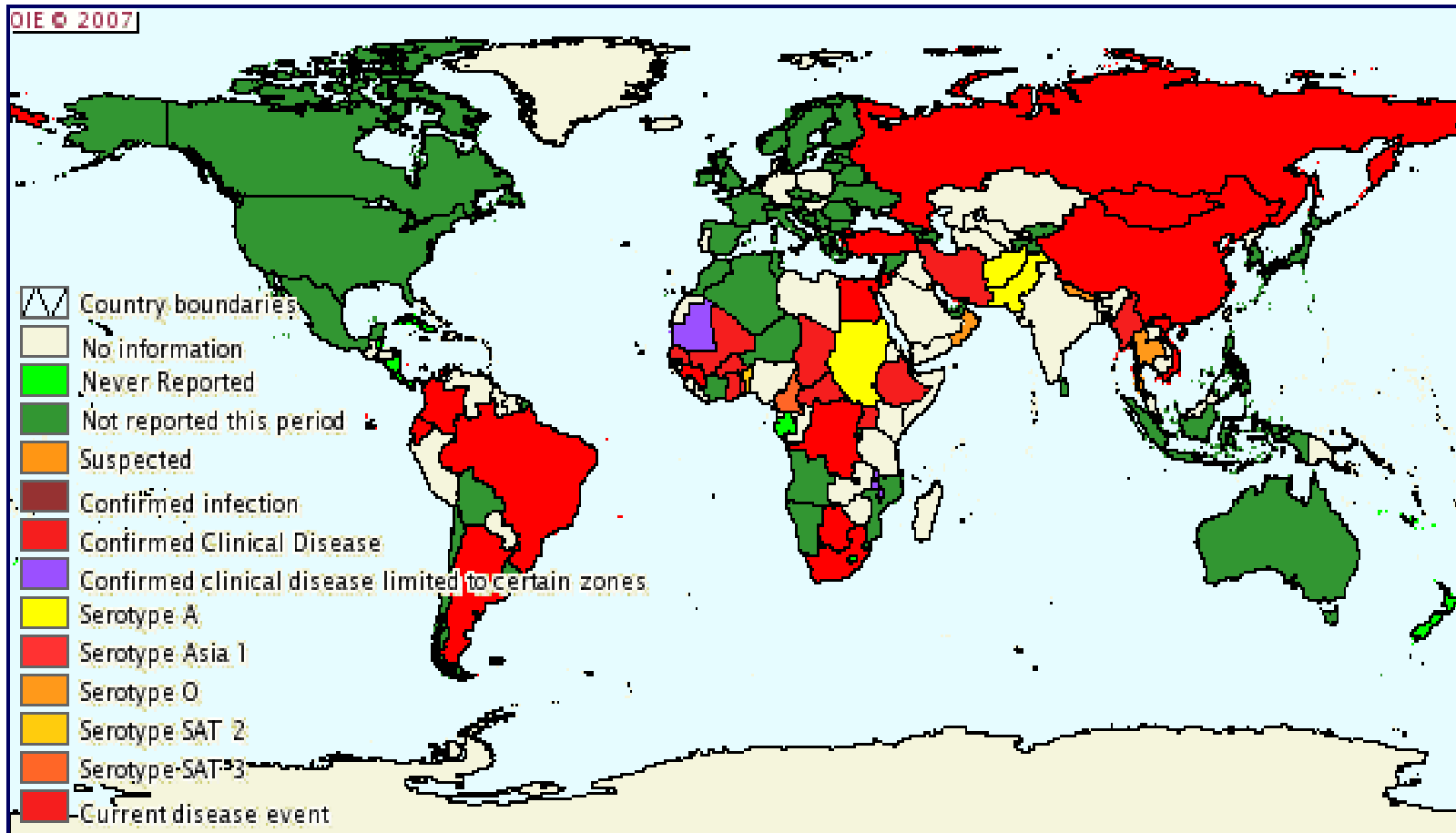
- Must meet the standards set by the national ground transport regulations and the International Air Transport Association.
- Packaging can withstand a drop of 27 feet.
- Packaging is waterproof.
- All packages are clearly marked to specify their contents.



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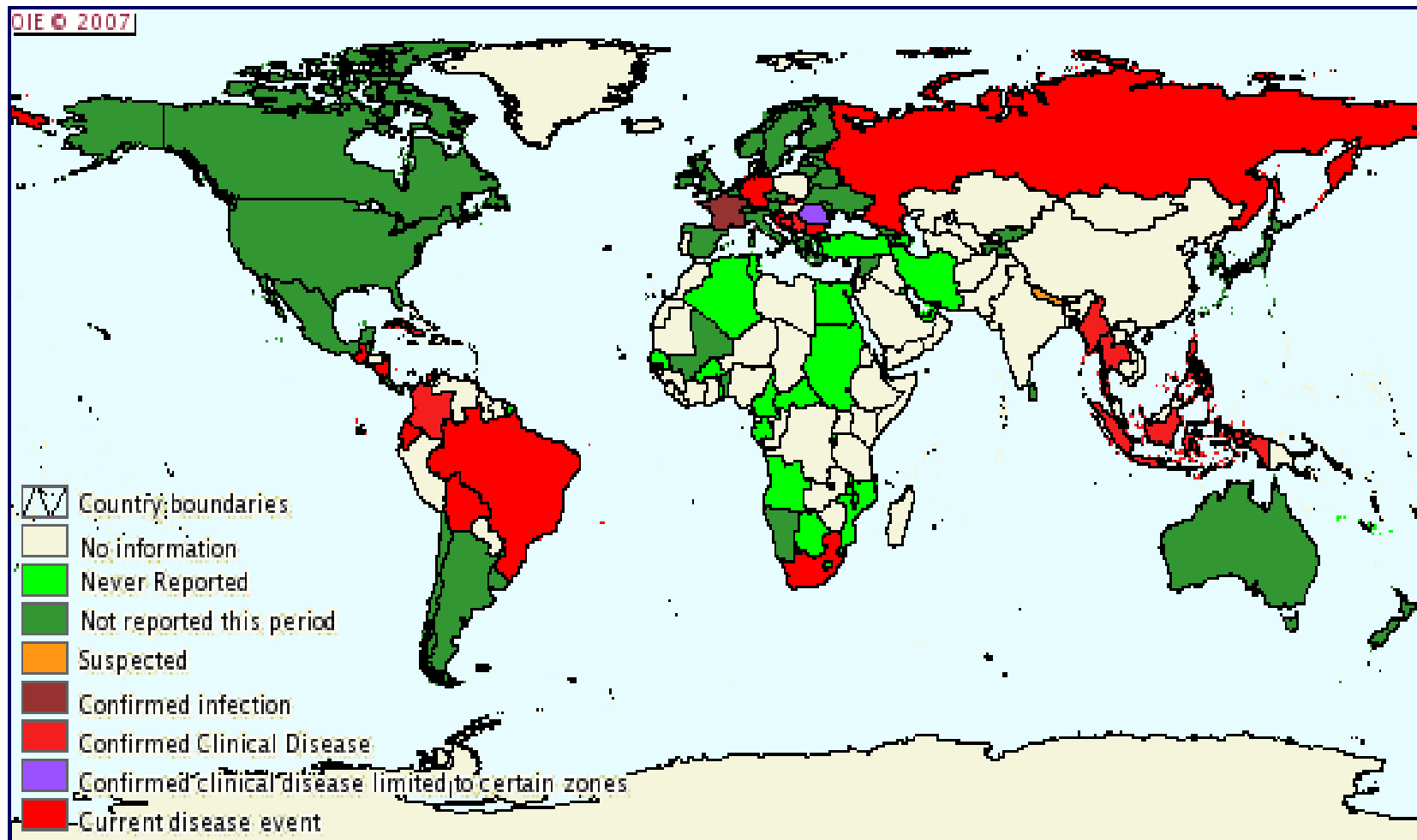
# Foot and Mouth Disease (FMD) Distribution (July-Dec 2006)



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# Classical Swine Fever Distribution (July-Dec 2006)



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# Would the NBAF be safe?

- Safety and security for the NBAF would be based on USDA and CDC regulations and guidance for biocontainment.
  - Redundant safety and security.
  - Dedicated supply and exhaust, vacuum and decontamination systems.
- A variety of available proven technologies would be considered for use in the NBAF design. The EIS will address the potential impacts of the available technologies.
  - All waste will be treated prior to release.
  - All air will be filtered prior to release.

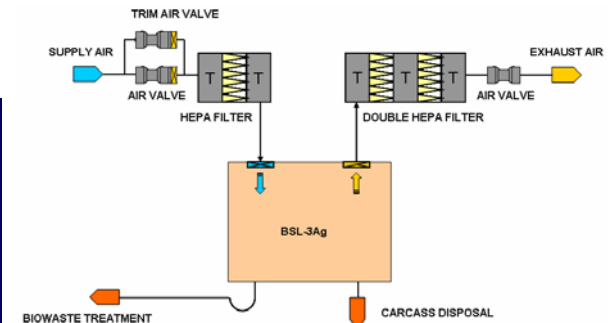


# Biosafety Levels – Facility Requirements

- BSL-1 – Classroom laboratories.
- BSL-2 – Medical and veterinary schools, research institutions and hospitals.
  - Open bench-top, sink for hand washing required, autoclave available.
- BSL-3 – State and Federal public health and animal health laboratories and research institutions.
  - BSL-2 plus: physical separation from access corridors, self-closing, double-door access, exhaust air is not recirculated, negative airflow into lab, back-up redundant systems.
- BSL-4 – Currently there are four facilities operating in the United States in populated urban areas.
  - BSL-3 plus: separate building or isolated zone, dedicated supply and exhaust, vacuum, and decontamination systems, other requirements outlined by NIH and CDC.

# Engineering and Building Features of the NBAF

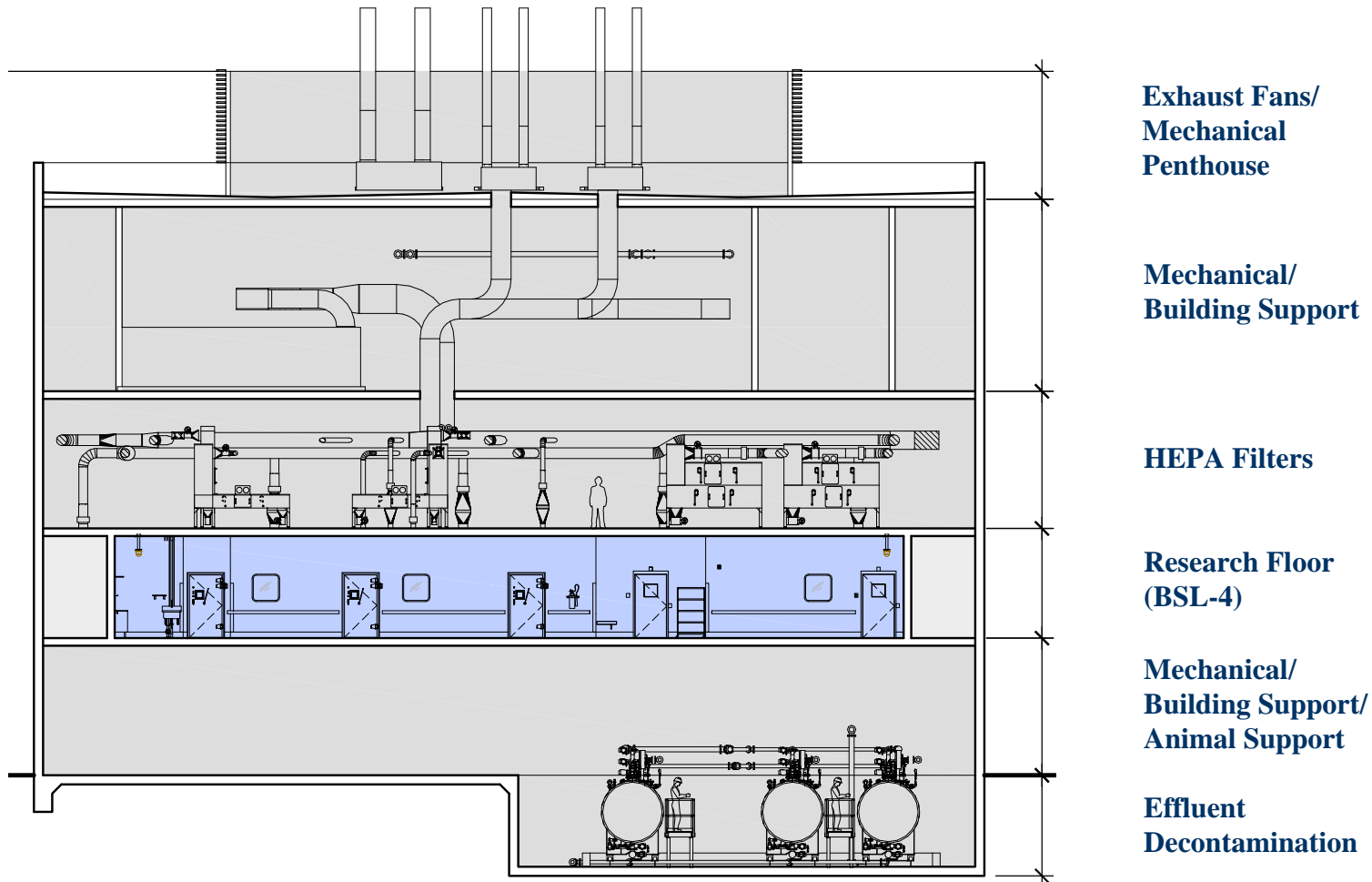
- Physical security
  - Dual perimeter fencing
  - Electronic access control
  - Closed circuit TV surveillance
  - Identification tagging
- Building design
  - “Box in a box” construction
  - Interlocking doors
  - Zoned heating, ventilation and air conditioning systems
  - HEPA filtration, bio-seal dampers
- Personnel security
  - Personnel screening and training



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# TYPICAL STACKING DIAGRAMS – BSL-3Ag & BSL-4



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# Your Questions Are Important

- We are here to answer questions on the NBAF.
- We will return for public meetings after the draft NBAF EIS is published in the summer.



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