DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General
Office of Counsel to the Inspector General

JFK Federal Building, Room 2225
15 New Sudbury Street
Boston, MA 02203

July 18, 2007

Via Federal Express
Eddie J. Davis, Ph.D.
Interim President
Texas A&M University
College Station, TX 77843-1112

Dear Dr. Davis:

This letter is to advise you that the Office of Inspector General (OIG) for the U.S. Department of Health and Human Services (HHS) has preliminary determined that Texas A&M University (TAMU) may be liable for civil money penalties and other sanctions under Part 73 of Title 42 of the Code of Federal Regulations for numerous violations of these regulations. This determination is based on information the OIG has received from the Centers for Disease Control and Prevention (CDC), Division of Select Agents and Toxins (DSAT) following a CDC site visit of TAMU on April 16 through 18, 2007.

The purpose of CDC's site visit was to (1) review the events surrounding the occupational exposure to the select agent or toxin, *Brucella*, that occurred on February 9, 2006 in Room of Building and assess the measures implemented to prevent other such incidents; (2) assess measures implemented by TAMU to protect the staff and public from exposure to pathogenic microorganisms; and (3) to otherwise evaluate your entity's compliance with the select agent regulations. See Enclosure 1 at page 1.

Part 73 of Title 42 of the Code of Federal Regulations sets forth requirements regarding the possession, use, and transfer of select agents and toxins. 42 C.F.R. § 73.2. Those regulations, in part, state and/or require the following.

- A certificate of registration may be amended to reflect changes in circumstances (e.g., changes in the activities involving select agents or toxins, or the addition or removal of select agents or toxins) prior to any change, the Responsible Official must apply for an amendment to a certificate of registration by submitting the relevant page(s) of the registration application. 42 C.F.R. § 73.7(h)(1).

- An individual or entity required to register under this part must designate an individual to be the Responsible Official. The Responsible Official must: (1) be approved by the HHS Secretary or Administrator, Animal and Plant Health Inspection Service (APHIS) following a security risk assessment by the Attorney General of the United States, (2) be familiar with the requirements of this part, (3) have authority and responsibility to act on behalf of the entity, (4) ensure compliance with the requirements of this part, and (5) ensure that annual inspections are conducted for each laboratory where select agents or toxins are stored or used in order to determine compliance with the requirements of this part. The results of each inspection must be documented, and any deficiencies identified during an inspection must be corrected. 42 C.F.R. § 73.9(a).

- An individual or entity required to register under this part may not provide an individual access to a select agent or toxin, and an individual may not access a select agent or toxin, unless the individual is approved by the HHS Secretary or the Administrator, APHIS following a security risk assessment by the Attorney General of the United States. 42 C.F.R. § 73.10(a).

- Each individual with access to select agents or toxins must have the appropriate education, training, and/or experience to handle or use such agents or toxins. 42 C.F.R. § 73.10(c).

- An individual or entity must adhere to the following security requirements to allow access only to individuals with access approval from the HHS Secretary or Administrator, APHIS, and require that individuals with access approval from the HHS Secretary or Administrator, APHIS immediately report to the Responsible Official, any release of a select agent or toxin. 42 C.F.R. §§ 73.11(d)(1) and (d)(7)(iv).

- An individual or entity required to register under this part must develop and implement a written biosafety plan that is commensurate with the risk of the agent or toxin, given its intended use. 42 C.F.R. § 73.12(a).

- The biosafety and containment procedures must be sufficient to contain the select agent or toxin (e.g., physical structure and features of the entity, and operational and procedural safeguards). 42 C.F.R. § 73.12(b).

- An individual or entity required to register under this part must provide information and training on biosafety and security to each individual with

access approval from the HHS Secretary or Administrator before he/she has such access. In addition, an individual or entity must provide information and training on biosafety and security to each individual not approved for access from the HHS Secretary or Administrator before he/she works in or visits areas where select agents or toxins are handled and stored (e.g., laboratories, growth chambers, animal rooms, green houses, storage areas, etc.). The training must address the particular needs of the individual, the work they will do, and the risks posed by the select agents or toxins. 42 C.F.R. § 73.15(a).

- An individual or entity required to register under this part must maintain complete records relating to the activities covered by this part. Such records must include: information about all entrees into areas containing select agents or toxins, including the name of the individual, name of the escort (if applicable), and date and time of entry. 42 C.F.R. § 73.17(a)(4).

- Upon discovery of a release of an agent or toxin causing occupational exposure or release of a select agent or toxin outside of the primary barriers of the biocontainment area, an individual or entity must immediately notify CDC or APHIS. 42 C.F.R. § 73.19(b).

As stated in detail in the CDC Inspectors' Observations, TAMU appears to have violated the above provisions of the select agent regulations. See Enclosure 1 at pages 4-12. Under 42 C.F.R. § 73.21, the OIG is authorized to impose civil money penalties of up to $250,000 against an individual and up to $500,000 against any other person, including any entity, that is in violation of any of the requirements found in Part 73 of Title 42 of the Code of Federal Regulations. 42 C.F.R. § 1003.103(l).

We are writing to extend to you the opportunity to resolve this matter before the initiation of formal administrative proceedings. If you wish to submit information relevant to the OIG's preliminary findings, or if you are interested in proposing an offer of settlement, please do so by August 18, 2007.

Finally, I want to inform you that Special Agent Les Hollie of the OIG's Office of Investigations and I will be joining the CDC inspectors on their site visit to TAMU next Monday and Tuesday, July 23 and 24. We request to interview individuals with knowledge of TAMU's select agents and toxins program and the incidents described in Enclosure 1. Prior to this site visit, CDC will be sending you a list of the individuals that the OIG requests to interview.

If you have any questions, you can reach me by telephone at (617) 565-1053 or by e-mail at john.obrien@oig.hhs.gov. Thank you for your attention to this matter.

Sincerely,

John W. O'Brien
Senior Counsel

cc:
Scott A. Kelly
Deputy General Counsel
The Texas A&M University System

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service
Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

May 4, 2007

Richard Ewing, Responsible Official
Texas A& M University (Registration #C20060605-0489)
1112 TAMU
College Station, TX 77843-1112
FAX: (979) 845-1855

Subject: Texas A& M University: Report of Site Visit; Request for Additional Information

On April 11, 2007, the Centers for Disease Control and Prevention (CDC), Division of Select Agents and Toxins (DSAT) received the APHIS/CDC Form 3 (Report of Theft, Loss, or Release of Select Agents and Toxins) from Texas A&M University (TAMU) reporting the occupational exposure to *Brucella* on February 9, 2006 that resulted in infection of a laboratory worker.

During the period April 16, 2007 through April 18, 2007, the following representatives from the CDC visited TAMU located at 1112 TAMU, College Station, TX 77843:

Diane Martin, Lead Inspector
Richard Henkel, Biosafety Manager
Melissa Resnick, Epidemic Intelligence Service Officer

Individuals from TAMU present during the site visit included:

Richard Ewing, Vice President (VP) of Research, Responsible Official
Angelia Raines, Dir-Office of Research Compliance, alternate Responsible Official
John Salsman, Director, Environmental Health and Safety Department (EHSD)
Brent Mattox, Biosafety Officer, EHSD, alternate Responsible Official
Chris Meyer, Asst. VP, Safety & Security
Tiffany Agnew, Environmental Biosafety Program Coordinator
Thomas Ficht, Professor, Principal Investigator
L.G. Adams, Associate Dean, Principal Investigator
Angela Arenas, Graduate Student
Christine McFarland, Research Associate
Jianwu Pei, Assistant Research Scientist
Linda Clark, Assistant Executive Director, Scott & White Clinic
Jack Crouch, Occupational Medicine Supervisor, Scott & White Clinic
Melissa Kahl-McDonagh, Postdoctoral Research Fellow

The purpose of the site visit was to (1) review the events surrounding the occupational exposure to *Brucella* that occurred on February 9, 2006 in Room of Building and assess the measures implemented to prevent other such incidents; (2) assess measures implemented by TAMU to protect the staff and public from exposure to pathogenic microorganisms; and (3) and to otherwise evaluate your entity's compliance with the select agent regulations (7 C.F.R. part 331, 9 C.F.R. part 121, 42 C.F.R. part 73).

Attachment #1

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Overview of the incident:

The incident occurred in Building Room on the TAMU main campus. A free-standing aerosolization chamber is located in this room. At the time of the incident, the room was shared by three research groups, involving work with *Mycobacterium, Coxiella burnetii, Brucella melitensis, Brucella suis,* and *Brucella abortus*. The room is not currently authorized by DSAT for the performance of aerosolization experiments with *Brucella melitensis, Brucella suis,* and *Brucella abortus*. Based on conversations with the laboratory workers present during the February 9, 2006 occupational exposure, , a researcher from the *Mycobacterium* group who frequently uses the chamber, was asked to assist Melissa Kahl-McDonagh and her fellow *Brucella* researchers with loading and operation of the chamber. has not received select agent access approval from the DSAT. did not receive training to perform aerosolization experiments with *Brucella melitensis, Brucella suis,* and *Brucella abortus*. After completed the aerosolization experiments with *Brucella melitensis* and *Brucella abortus*, she cleaned the aerosolization chamber with disinfectant. This cleaning technique caused head and arm to enter into the interior of the chamber most likely resulted in occupational exposure to either *Brucella melitensis* or *Brucella abortus*. According to laboratorians present during the experiments, the aerosol chamber was not disinfected between the aerosolization experiments with *Brucella melitensis* and *Brucella abortus*.

According to a log kept by she first felt ill on March 25, 2006. On April 12, 2006, she informed Principal Investigator (PI) Dr. Tom Ficht that she had been diagnosed with brucellosis, with isolation of *Brucella melitensis* on April 16, 2006 by the Texas State Public Health Laboratory. She also filed a workman's compensation claim with Texas A& M University. returned to work on April 24, 2006. On April 21, 2006, PI Ficht sent an e-mail (see Attachment #2) to alternate Responsible Official Brent Mattox and alternative Responsible Official Angelia Raines, and the IBSP Coordinator, Tiffany Agnew, to notify them of the occupational exposure that resulted in being diagnosed with brucellosis.

Site visit:

On the morning of April 16, 2007, CDC representatives met with the Responsible Official, Dr. Richard Ewing and alternate Responsible Official Angelia Raines. The CDC representatives requested the following:

- All documents requested by DSAT in a fax sent to TAMU on April 13, 2007 (see Attachment #3).
- All records related to the reported occupational exposure including any updates to training, security plan, incident response plan, and the biosafety plan as a result of the incident, incident/corrective action report, access logs to the area and animal health records.
- Access to individuals involved with the reported February 9, 2006 occupational exposure to conduct interviews.
- Access to inspect room in building where the reported occupational exposure had occurred.

The CDC representatives interviewed the following individuals:

- Richard Ewing, Vice President of Research, Responsible Official
- Angelia Raines, Dir-Office of Research Compliance, alternate Responsible Official
- Brent Mattox, Biological Safety Officer, Environmental Health and Safety (EHS)
- John Salsman, Director, EHS
- Thomas Ficht, Principal Investigator
- Angela Arenas, Graduate Student
- Jianwu Pei, Assistant Research Scientist
- Linda Clark, Assistant Executive Director, Scott & White Clinic
- Jack Crouch, Occupational Medicine Supervisor, Scott & White Clinic
- Melissa Kahl-McDonagh, Postdoctoral Research
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Enclosed as attachment 1 to this letter please find a list of observations and accompanying requests for supplemental information concerning the occupational exposure to *Brucella* that occurred on February 9, 2006 in Room of Building at TAMU. The DSAT should receive the supplemental information **by close of business May 18, 2007.**

The DSAT inspects each registered facility to ensure that it meets the appropriate safety and security standards, as well as record-keeping requirements, found in 42 CFR Part 73 ("Possession, Use and Transfer of Select Agents and Toxins; Final Rule"). Please be advised that the HHS Secretary may revoke a certificate of registration if the entity fails to comply with the provisions of 42 CFR Part 73 (*See* 42 C.F.R. § 73.8). On April 20, 2007, the DSAT faxed TAMU the "Cease and Desist Order" to immediately cease and desist from:

- The use of Room Building Texas A&M University, for any and all manipulations and storage of *Brucella abortus, Brucella melitensis,* and *Brucella suis* until such time as a request for the amendment of the Texas A&M University's certificate of registration has been properly submitted by the Texas A&M University and approved by the Division of Select Agents and Toxins (DSAT), Centers for Disease Control and Prevention (CDC) in accordance with 42 C.F.R. part 73.
- The experimental aerosolization of any select agent or toxin performed at the Texas A&M University.
- Allowing access to select agents and toxins by any individual who has not been approved for such access by the DSAT following a security risk assessment by the Attorney General of the United States.

The DSAT will notify TAMU of any changes to this "cease and desist order" status.

Should you have further questions concerning this correspondence or the requirements of 42 CFR 73, please refer to our web site at http://www.cdc.gov/od/sap/ or contact Diane Martin, Lead Inspector with this office by mail at: Division of Select Agents and Toxins, 1600 Clifton Road, MS A-46, Atlanta, GA 30333, or by phone at (404) 718-2031, or fax at (404) 718-2096.

Sincerely,

Robbin Weyant, PhD, CAPT, USPHS
Director
Division of Select Agents and Toxins
Coordinating Office of Terrorism Preparedness and Emergency Response

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Observations noted on April 16, 2007 through April 18, 2007 at TAMU (Page numbers from the BMBL or 42 CFR Part 73 specifying each requirement are given in parentheses).

Observations:

1. ***An individual or entity required to register under this part must maintain complete records relating to the activities covered by this part. Such records must include: Information about all entries into areas containing select agents or toxins, including the name of the individual, name of the escort (if applicable), and date and time of entry [42 CFR § 73.17(a)(4)].***

   Observation: At the time of the inspection, there was no record of access to located in being kept during the time the room was used for work with select agents.

   Request for supplemental information: Please provide an explanation as to why entries into were not being recorded as required under §73.17 (Records) and how your entity will comply with all the requirements of §73.17.

2. ***A certificate of registration may be amended to reflect changes in circumstances (e.g., changes in the activities involving any select agents or toxins, or the addition or removal of select agents or toxins)(1) Prior to any change, the Responsible Official must apply for an amendment to a certificate of registration by submitting the relevant page(s) of the registration application. [42 CFR § 73.7(h)(1)].***

   Observation: Documentation provided to the CDC Inspectors indicated twelve aerosol experiments with *Brucella abortus* and *Brucella melitensis* had been performed using the aerosol chamber located in located in since October of 2005. To date, DSAT has not received or approved an amendment to update your certificate of registration to include these activities for In addition, your entity was notified on June 7, 2006 (see Amendment #4) that prior to any changes in the activities involving select agents, the entity's certificate of registration must be amended to include this work with select agents such as aerosolization experiments and that this amendment must be approved by DSAT prior to any work being performed.

   Request for supplemental information: Please explain why your entity failed to submit an amendment and receive approval from DSAT prior to the twelve aerosol experiments with *Brucella abortus* and *Brucella melitensis* that had been performed using the aerosol chamber located in since October of 2005.

3. ***An individual or entity required to register under this part may not provide an individual access to a select agent or toxin, and an individual may not access a select agent or toxin, unless the individual is approved by the HHS Secretary or Administrator, following a security risk assessment by the Attorney General [42 CFR § 73.10(a)].***

   Observation: On February 9, 2006 , who has not received access approval from the DSAT, performed aerosolization experiments with *Brucella melitensis* and *Brucella abortus*. After completed the aerosolization experiments with *Brucella melitensis* and *Brucella abortus*, she cleaned the aerosolization chamber by wiping down the rear inside of the chamber with disinfectant. This cleaning technique caused head and arm to enter into the interior of the chamber, most likely resulting in occupational exposure to either *Brucella melitensis* or *Brucella abortus*.

   Request for supplemental information: Please provide an explanation regarding this apparent allowance of unauthorized access to select agents including: (1) Has your entity allowed other

unauthorized access to select agents to other individuals and who are the individuals who had unauthorized access to select agents, along with dates, times, and select agents associated with other incidents of unauthorized access; (2) If your entity has been allowing unauthorized access to select agents besides this incident, what immediate actions have you taken to ensure that these individuals no longer have access; (3) What is your entity's plan of action to assure prevention of similar events from occurring; and, (4) During the unauthorized access, how was the select agent safeguarded against theft, loss, or release (*see* 42 C.F. R. § 73.11(a)) during this allowance of unauthorized access to select agents.

4. ***Each individual with access to select agents or toxins must have the appropriate education, training, and/or experience to handle or use such agents or toxins [42 CFR § 73.10(c)]. An individual or entity required to register under this part must provide information and training on biosafety and security to each individual with access approval from the HHS Secretary or Administrator before he/she has such access. In addition, an individual or entity must provide information and training on biosafety and security to each individual not approved for access from the HHS Secretary or Administrator before he/she works in or visits areas where select agents or toxins are handled or stored (e.g., laboratories, growth chambers, animal rooms, greenhouses, storage areas, etc.). The training must address the particular needs of the individual, the work they will do, and the risks posed by the select agents or toxins. [42 CFR 73.15(a)]***

Observation: On February 9, 2006, performed aerosolization experiments with *Brucella melitensis* and *Brucella abortus*. According to she did not receive training or have any experience in handling *Brucella melitensis, Brucella abortus* or *Brucella suis*.

Request for supplemental information: Please provide an explanation why did not receive the appropriate training prior to her work with select agents. Based on this incident, please describe your entity's plan of action to assure that all individuals who work or visit areas where select agents or toxins are handled or stored will be provided appropriate training.

5. ***An individual or entity may not conduct a restricted experiment with a HHS select agent or toxin unless approved by and conducted in accordance with any conditions prescribed by the HHS Secretary. In addition, an individual or entity may not conduct a restricted experiment with an overlap select agent or toxin unless approved by and conducted in accordance with any conditions prescribed by the HHS Secretary, after consultation with Administrator. Restricted experiments: Experiments utilizing recombinant DNA that involve the deliberate transfer of a drug resistance trait to select agents that are not known to acquire the trait naturally, if such acquisition could compromise the use of the drug to control disease agents in humans, veterinary medicine, or agriculture [42 CFR §73.13 (a),(b)(1)].***

Observation: According to laboratory personnel interviewed by the CDC Inspectors, Dr. Ficht had conducted restricted experiments utilizing recombinant DNA that involve the deliberate transfer of a drug resistance trait to select agents that are not known to acquire the trait naturally, if such acquisition could compromise the use of the drug to control disease agents in humans, veterinary medicine, or agriculture (*see* 42 C.F.R. § 73.13(b)(1)). Specifically, experiments conducted by Dr. Ficht that involved the introduction of plasmids containing kanamycin and chloramphenicol resistance cassettes used as selectable markers in *Brucella melitensis, Brucella abortus* and *Brucella suis*. Please note that during the February 2005 inspection of your entity, the inspectors identified that PI Tsolis's standard operating procedures indicated restricted experiments being conducted and that this work was not reflected on the PI's statement of work for your entity's certification of registration. On April 11, 2005, you responded that "PI Tsolis' recombinant antibiotic resistance work has ceased and is not currently planned (see Attachment #5). If this type of work is considered in the future, an amendment to update the current registration for PI Tsolis will be submitted to the

CDC."

Request for supplemental information: Please provide a detailed description of all select agent work being conducted by PIs at your entity; describe why any restricted experiments have been performed at TAMU without approval from DSAT, and what steps the entity will take to prevent reoccurrence of a restricted experiment being conducted without approval from the DSAT. Also, please provide a list of all select agent strains currently possessed by TAMU in which antibiotic resistance markers have been introduced using recombinant DNA techniques. In addition, please include a copy of any Institutional Biosafety Committee (IBC) minutes for all projects that involve select agents and toxins including a list of the IBC members, date the project was approved, and the justification for this approval.

6. ***An individual or entity must adhere to the following security requirements or implement measures to achieve an equivalent or greater level of security: Allow access only to individuals with access approval from the HHS Secretary or Administrator [42 CFR §73.11(d)(1)].***

Observation: On February 9, 2006, who has not received access approval from the DSAT, performed aerosolization experiments with *Brucella melitensis* and *Brucella abortus*. After completed the aerosolization experiments with *Brucella melitensis* and *Brucella abortus*, she cleaned the aerosolization chamber by wiping down the rear inside of the chamber with disinfectant. This cleaning technique caused head and arm to enter into the interior of the chamber, most likely resulting in occupational exposure to either *Brucella melitensis* or *Brucella abortus*.

Request for supplemental information: As your entity's security plan states in section C (Personnel Security) that "only DOJ authorized persons will have access to select agents," please provide an explanation regarding this apparent allowance of unauthorized access to select agents even though this practice deviates from the current policy outlined in your security plan.

7. ***An individual or entity required to register under this part must develop and implement a written biosafety plan that is commensurate with the risk of the agent or toxin, given its intended use. [42 CFR §73.12]. Ventilation should be provided in accordance with criteria from the Guide for Care and Use of Laboratory Animals. A ducted exhaust air ventilation system is provided. This system creates directional airflow which draws air into the laboratory from "clean" areas toward "contaminated" areas. The exhaust air is not recirculated to any other area of the building. Filtration and other treatments of the exhaust air may not be required, but should be considered based on site requirements, and specific agent manipulations and use conditions. The exhaust must be dispersed away from occupied areas and air intakes, or the exhaust must be HEPA-filtered. Personnel must verify that the direction of the airflow (into the animal areas) is proper. It is recommended that a visual monitoring device that indicates and confirms directional inward airflow be provided at the animal room entry. Consideration should be given to installing an HVAC control system to prevent sustained positive pressurization of the animal spaces. Audible alarms should be considered to notify personnel of HVAC system failure [Biosafety in Microbiological and Biomedical Laboratories (BMBL): D8].***

Observation: For room ocated in building the CDC Inspectors were unable to verify that the room had proper directional airflow at the time of the inspection because the visual monitoring system used to confirm directional airflow for the room was not functioning properly.

Request for supplemental information: As the CDC Inspectors were not able to confirm that the room had directional airflow, please provide documentation that room has a functional visual monitoring device and that the directional airflow is from "clean" area toward "contaminated" area.

8. ***An individual or entity required to register under this part must develop and implement a written biosafety plan that is commensurate with the risk of the agent or toxin, given its intended use. [42 CFR §73.12]. The completed Biosafety Level 3 facility design and operational procedures must be documented. The facility must be tested for verification that the design and operational parameters have been met prior to operation. Facilities should be reverified at least annually against these procedures as modified by operational experience [BMBL: D14].***

   Observation: The entity did not provide documentation for room located in building that annual verification was performed to ensure that the laboratory meets the design and operational parameters.

   Request for supplemental information: Please provide this documentation.

9. ***An individual or entity required to register under this part must develop and implement a written biosafety plan that is commensurate with the risk of the agent or toxin, given its intended use. [42 CFR §73.12]. Equipment and work surfaces in the room are routinely decontaminated with an effective disinfectant after work with the infectious agent, and especially after overt spills, splashes, or other contamination by infectious materials [BMBL: A7].***

   Observation: During the inspection of the aerosol chamber, the CDC Inspectors noted that the interior and exterior of the chamber contained a significant amount of animal hair.

   Request for supplemental information: Please verify standard operating procedures that provide documentation that the chamber is routinely decontaminated with an effective disinfectant after work with the infectious agent to ensure removal of all contaminated materials, including hair and animal waste and explain if there was a deviation in standard protocols, what steps you will take to ensure that standard protocols are followed.

10. ***An individual or entity required to register under this part must develop and implement a written biosafety plan that is commensurate with the risk of the agent or toxin, given its intended use. [42 CFR §73.12]. Continuous flow centrifuges or other equipment that may produce aerosols are contained in devices that exhaust air through HEPA filters before discharge into the laboratory. These HEPA systems are tested at least annually. Alternatively, the exhaust from such equipment may be vented to the outside if it dispersed away from occupied areas and air intakes [BMBL: D11]***

    Observation: According to documentation provided to the CDC Inspectors, the HEPA systems of the aerosol chamber located in room are not routinely verified or tested to ensure that the HEPA filters provide adequate protection. Dr. David McMurray provided documentation to the CDC Inspectors that the routine maintenance of the Madison Aerosol Chamber indicated that testing of the HEPA system is not necessary.

    Request for supplemental information: Please provide documentation from the manufacturer regarding HEPA system maintenance to support this statement.

11. ***An individual or entity required to register under this part must develop and implement a written biosafety plan that is commensurate with the risk of the agent or toxin, given its intended use. [42 CFR §73.12]. All manipulations of infectious materials, necropsy of infected animals, harvesting of tissues or fluids from infected animals or embryonate eggs, etc. are conducted in a Class II or Class III biological safety cabinet [BMBL: C5]***

    Observation: The CDC Inspectors noted that the design of the chamber is such that after the aerosol challenge, the nebulization unit containing infectious material must be disassembled in the laboratory

and not in the biosafety cabinet.

Request for supplemental information: Please provide documentation that safety procedures are established and followed to minimize the risk for laboratorians disassembling the nebulization unit containing infectious material.

12. ***The biosafety and containment procedures must be sufficient to contain the select agent or toxin (e.g., physical structure and features of the entity, and operational and procedural safeguards [42 CFR § 73.12(b)]).***

Observation: Documentation provided to the CDC Inspectors indicated twelve aerosol experiments with *Brucella abortus* and *Brucella melitensis* had been performed using the aerosol chamber located in room located in building since October of 2005. The CDC Inspectors were informed that the established biosafety protocols for work with *Mycobacterium* were used for the aerosol experiments with *Brucella melitensis and Brucella abortus.*

Request for supplemental information: Please provide documentation of (1) the dated risk assessment that was performed that indicated the biosafety procedures for work with *Mycobacterium* was sufficient to be used for the aerosol experiments with *Brucella melitensis and Brucella abortus;* (2) risk assessments for all select agent work being conducted by PIs at your entity to ensure that the biosafety and containment procedures are sufficient to contain the select agent or toxin, and (3) the procedures of how risk assessments are conducted to ensure that the biosafety and containment procedures are sufficient to contain the select agent or toxin.

13. ***An individual or entity required to register under this part must develop and implement a written biosafety plan that is commensurate with the risk of the agent or toxin, given its intended use. [42 CFR §73.12]. When a procedure or process cannot be conducted within a biological safety cabinet, then appropriate combinations of personal protective equipment (e.g. respirators, face shields) and physical containment devices are used [BMBL: C5]***

Observation: On February 9, 2006, aerosolization experiments were performed with *Brucella melitensis* and *Brucella abortus*. According to interviews with the laboratorians present during these experiments, the CDC Inspectors were told that the personal protective equipment being used consisted of an N-95 respirator, safety glasses with splash guards, tyvek suits and gloves. Based on the CDC Inspectors questions to the laboratorians about quantitative or qualitative fit testing for the N-95 respirators, the CDC Inspectors determined that none of these individuals had been fit tested with the N-95 respirators. In addition, the CDC Inspectors received documentation that annual respirator fit testing is not performed for all laboratory workers that use N-95 respirators.

Request for supplemental information: Please provide an explanation why laboratory workers are not tested to ensure that the N-95 respirator being used provides adequate respiratory protection.

Observation: The "Operating Procedures for the cument dated 2/22/07 that was provided to the CDC Inspectors states that N-95 respirators are used for aerosol studies. This contradicts the undated risk assessment document that was provided to the CDC Inspectors which states that powered air purifying respirators should be used.

Request for supplemental information: Please explain this discrepancy.

14. ***An individual or entity required to register under this part must develop and implement a written biosafety plan that is commensurate with the risk of the agent or toxin, given its intended use. [42***

CFR §73.12]. Laboratory and support personnel receive appropriate training on the potential hazards associated with the work involved, the necessary precautions are incorporated into standard operating procedures. Personnel are advised of special hazards and are required to read and follow instructions on practices and procedures [BMBL: B7]

Observation: The entity did not provide documentation that individuals operating the aerosol chamber had received training to ensure safety procedures were followed during operation of the chamber for the twelve aerosol experiments with *Brucella abortus* and *Brucella melitensis* that had been performed using the aerosol chamber located in room located in building since October of 2005. The entity did not provide documentation that individuals operating the aerosol chamber had received training to ensure safety procedures were followed during operation of the chamber.

Request for supplemental information: Please provide documentation that training was conducted including the date of the training, a description of the training provided, and the means used to verify that the employee understood the training.

15. ***An individual or entity required to register under this part must develop and implement a written biosafety plan that is commensurate with the risk of the agent or toxin, given its intended use. [42 CFR §73.12]. Aside from the standard policies, procedures, and protocols for emergency situations established by the facility director, appropriate special policies and procedures should be developed as needed and approved by the Institutional Animal Care and Use Committee (IACUC) and the Institutional Biosafety Committee (IBC) [BMBL: A1]***

Request for supplemental information: Please provide documentation that the animal work that had been performed using the aerosol chamber located in room located in building since October of 2005 was approved by the Institutional Biosafety Committee (IBC) of TAMU. Please provide a copy of any IBC minutes approving the project including a list of the IBC members, date the project was approved, the justification for this approval, and the date(s) of the approval.

16. ***Upon discovery of a release of an agent or toxin causing occupational exposure or release of a select agent or toxin outside of the primary barriers of the biocontainment area, an individual or entity must immediately notify CDC or APHIS [42 CFR §73.19 (b)]. An Individual or entity must adhere to the following security requirements or implement measures to achieve an equivalent or greater level of security: Require that individuals with access approval from the HHS Secretary or Administrator immediately report any of the following to the Responsible Official, any release of a select agent or toxin [42 CFR §73.11 (d)(7)(iv)].***

Observation: Based on documentation provided to the CDC Inspectors, PI Ficht sent an e-mail on April 21, 2006 to alternate Responsible Official Brent Mattox and alternate Responsible Official Angelia Raines that notified them of occupational exposure.

Request for supplemental information: Please explain why the alternate Responsible Officials failed to immediately report the occupational exposure to the DSAT as required by 42 CFR §73.19 (b).

Request for supplemental information: Please provide a summary of events that occurred when this email was received by the alternate Responsible Official who was acting on behalf of the Responsible Official including the follow up review that was conducted as a result of this e-mail report. Please also explain why the alternate Responsible Official who was acting on behalf of the Responsible Official did not follow the security protocols outlined in the "TAMU Facilities and Research Laboratories with Select Agents" security plan.

17. ***An individual or entity required to register under this part must develop and implement a written biosafety plan that is commensurate with the risk of the agent or toxin, given its intended use. [42 CFR §73.12].An appropriate medical surveillance program is in place. All personnel receive appropriate immunizations or tests for the agents handled or potentially present. When appropriate, a serum surveillance system should be implemented. In general, persons who may be at increased risk of acquiring infection, or for whom infection might have serious consequences, are not allowed in the animal facility unless special procedures can eliminate the extra risk. Assessment should be made by the Occupational Health Physician [BMBL: A3].***

Observation: On February 9, 2006, aerosolization experiments with *Brucella melitensis* and *Brucella abortus*. After completed the aerosolization experiments with *Brucella melitensis* and *Brucella abortus*, she cleaned the aerosolization chamber by wiping down the rear inside of the chamber with disinfectant. This cleaning technique caused head and arm to enter into the interior of the chamber and most likely resulted in occupational exposure to either *Brucella melitensis* or *Brucella abortus*. Based on information provided by to the CDC Inspectors, no follow up was conducted by TAMU following her occupational exposure even though she informed PI Ficht on April 12, 2006 that she had been diagnosed with brucellosis.

Request for supplemental information: Please describe the medical surveillance system in place at your entity including the post-exposure protocols and explain why your entity failed to follow up regarding occupational exposure.

18. ***Establish a protocol for intra-entity transfers under the supervision of an individual with access approval from the HHS Secretary or Administrator, including chain-of-custody documents and provisions for safeguarding against theft, loss, or release [42CFR § 73.9(a)].***

Observation: Based on documentation provided to the CDC Inspectors, the preparation of test samples for the twelve aerosol experiments with *Brucella abortus* and *Brucella melitensis* that had been performed using the aerosol chamber located in room located of building since October of 2005, was completed in laboratory room located in building

Request for supplemental information: Please provide the intra-entity transfer documentation that ensures that a security protocol was in place when these transfers occurred from laboratory room (building to room (building

19. ***Upon discovery of a release of an agent or toxin causing occupational exposure or release of a select agent or toxin outside of the primary barriers of the biocontainment area, an individual or entity must immediately notify CDC or APHIS [42 CFR §73.19 (b)].***

Observation: Upon review of clinic records, there were laboratorians identified with elevated titers to *Coxiella burnetii,* the causative agent of Q-fever. On April 24, 2007, Angelia Raines submitted APHIS/CDC Form 3 to report the possible occupational exposure to *Coxiella burnetii*.

Request for supplemental information: Please provide occupational health records including the baseline titers pertaining to the exposed individuals that are related to this incident. In addition, please provide the records for John Park, Gordon Draper, Laura Quinlivan, Wilhelmina Boehout, Joshua Hill, Katia Mertens, Kasi Russel-Lodrigue, Jared Barker and James Samuel.

Request for supplemental information: Please provide a copy of the medical surveillance plan and describe the follow up that was conducted based on the plan as a result of the incident.

Request for supplemental information: Please describe corrective measures that have been implemented in order to prevent future incidents.

Request for supplemental information: Please describe any training that has been conducted as a result of this incident. Please provide documentation that training was conducted including the date of the training, a description of the training provided, and the means used to verify that the employee understood the training.

Request for supplemental information: Please explain how your incident response and biosafety plans have been modified as a result of this incident.

20. ***Upon discovery of a theft or loss of a select agent or toxin, an individual or entity must immediately notify CDC or APHIS [42 CFR §73.19 (a)].***

Observation: On January 29, 2006, Angelia Raines, the alternate Responsible Official reported a mouse that was infected with *Coxiella burnetii* was discovered missing on 12/21/06. Based on the response from Ms. Raines on 1/18/07, the DSAT has the following additional questions:

Request for supplemental information: Please explain how "Scot Holster" is listed on the "Facility Access Log" for Room (Building when he is not listed as on the "Personnel who are have approved access to Lab (1/19/07)."

Request for supplemental information: Please provide a detailed description of the follow up conducted by your entity that explains your determination that your investigation had been "closed" because "the missing mouse was most likely included in the autoclaved bedding material and disposed." Please provide any logs or documentations that will support your determination. Since you reported the incident to local authorities (case #12-06-5068), please provide results of their investigation.

Request for supplemental information: Please explain how the inventory records are reconciled as indicated on Section 5B of your approved application. Please provide a detailed description and supporting documents of how the inventories were verified during the report of the loss to ensure select agents were safeguarded against theft, loss, or release.

Request for supplemental information: Please explain what security measures are in place at your entity to ensure select agents were safeguarded against theft, loss, or release.

Request for supplemental information: Please describe how your security and incident response plans have been reviewed and revised (if needed) as a result of your investigation to this report of loss.

Request for supplemental information: Please provide documentation regarding the training that was conducted in follow up to this incident including the date of the training, a description of the training provided, and the means used to verify that the employee understood the training.

21. ***An individual or entity required to register under this part must designate an individual to be the Responsible Official. The Responsible Official must: (1) Be approved by the HHS Secretary or Administrator following a security risk assessment by the Attorney General, (2) Be familiar with the requirements of this part, (3) Have authority and responsibility to act on behalf of the entity, (4) Ensure compliance with the requirements of this part [42 CFR § 73.9(a)].***

Request for supplemental information: Based on the above observations noted during the inspection,

please provide documentation that the Responsible Official is familiar and ensures compliance with the requirements of the select agent regulations including documentation of the most recent annual inspection conducted for each laboratory and assurances that no select agent or toxin work is being performed without the proper oversight.

Recd 4-17-07

From: Tom Ficht <tficht@cvm.tamu.edu>
To: "Mattox, Brent S" <bsmattox@tamu.edu>, Angelia Raines <ARaines@vprmail.tamu.edu>, Tiffany Agnew <tmagnew@tamu.edu>
Date: 4/21/2006 1:28:18 PM
Subject: FW: Workmen's Compensation

> Brent
>
> I wanted to let you know that has been diagnosed with
> brucellosis. apparently contracted the disease during an
> experimental challenge at LARR (CMP) on the ninth of February 2006. At that
> time along with Dr. McMurray were training us in the use of the
> Madison chamber for aerosol inoculations.
>
> has been home sick for several weeks being treated by her personal
> physician and was only recently diagnosed. I heard about this last week
> (Mon or Tues) and instructed other personnel present at that challenge to
> have an an immediate blood draw for testing. The results should be
> available in another week or two.
>
> We do not know the exact cause of exposure, although we assume
> it may have occurred as a result of cleaning out the Madison chamber after
> an aerosol run. In the future we plan to flush the chamber with
> disinfectant rather than using manual cleaning methods. The chamber will be
> wiped out after running disinfectant through the chamber, but this will
> involve the use of a long-handled applicator or mop. In addition, we will
> not rely on the use of N95 face masks and will instead use positive air
> displacement respirators.
>
> In the initial aerosol trials we relied on the experience of the TB
> researchers for the level of precaution typically employed in such
> experiments. It is suspected
> that a conjunctival route of infection is responsible for
> infection, perhaps as a result of manually cleaning the Madison chamber.
> It is my fault for not recognizing the differences between Brucella and
> Mycobacteria in regard to routes of infection.
>
> An isolation was made from a blood culture by physician and
> sent to TDH for confirmation. It would be helpful if EHSD could requested
> a sample of this isolate for culture confirmation here.
>
>
>
> Thomas A. Ficht, Ph.D.
> Professor
> Veterinary Pathobiology
> Texas A&M University
> 4467 TAMU
> College Station, TX 77843-4467
> 979-845-4118 ph
> 979-862-1088 fax

Attachment #2

SBU

COPY

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service
Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

April 13, 2007

Richard Ewing, Responsible Official
Texas A& M University (Registration #C20060605-0489)
1500 Research Parkway, Suite B150, TAMU 1186
College Station, TX 77843-1183
Fax: (979) 862-3176

Subject: 42 C.F.R. § 73.19 (Notification of theft, loss, or release)

Dear Dr. Ewing:

This is to acknowledge the receipt of the APHIS/CDC Form 3 (Report of Theft, Loss, or Release of Select Agents and Toxins) from Texas A& M University dated April 11, 2007 that reported an occupational exposure to *Brucella*. Based upon the review of the report, the Centers for Disease Control and Prevention (CDC), Division of Select Agents and Toxins (DSAT) has additional questions:

1. Please provide a copy of the medical surveillance plan and describe how the follow up was conducted as a result of the incident.
2. Please provide all occupational health records pertaining to the exposed individuals and any individuals that have presented with symptoms associated with a possible exposure to *Coxiella, Brucella,* or *Mycobacterium tuberculosis*.
3. Please provide documentation in regards to the risk assessment that was preformed for work with *Brucella*.
4. Please describe the decontamination procedures used for the aerosol chamber and any modifications incorporated to these procedures as a result of this incident.
5. Please provide all standard operating procedures (SOPs) and certification documents as it relates to the aerosol chamber.
6. Please provide a summary of events that occurred with this incident including the follow-up review that your entity conducted to assure that any other similar incidents do not occurred.
7. Since your entity failed to meet the reporting requirements of 42 C.F.R. § 73.19, please provide a plan of how Texas A& M University will achieve compliance with 42 C.F.R. 73. In addition, please explain if your entity failed to meet other required federal and state reporting requirements.
8. Please provide access logs for Room and all rooms were work with *Brucella* is performed.
9. Please explain how your incident response plan, security plan, and biosafety plan have been modified as a result of this incident.

Attachment #3

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SBU

10. Please provide any personal protective equipment or entry requirements that may be needed prior to entry into your laboratories.
11. Please provide any documents regarding unexpected animal illness.
12. Please provide an assessment of the risks of continuing to utilize the aerosol chamber.
13. Please provide a detail description of the measures implemented to protect the employees from exposures while decontaminating the aerosol chamber including any enhanced personal protective equipment (PPE) utilized and the medical surveillance activities implemented. The long term follow-up of employees should be included in this response.

The DSAT will be conducting an inspection of your entity on April 16, 2007 to assess the measures implemented by Texas A& M University to protect the staff and public from exposure to pathogenic microorganism, the measures implemented to prevent further incidents and to evaluate your entity's compliance with the select agent regulations. Please make available all staff members involved in the incident described in your report dated April 11, 2007 to be interviewed by the inspection team.

On April 16, 2007, the following representatives from the CDC will be visiting Texas A& M University:

Diane Martin, Lead Inspector
Richard Henkel, Biosafety Officer
Melissa Resnick, EIS Officer

Please have the response and any supporting documentation available for the inspectors upon their arrival to your entity on April 16, 2007.

Please contact Lori Bane, Compliance Officer with the DSAT at 404-718-2006 or at the address listed below if you have questions.

Robbin Weyant, PhD, CAPT, USPHS
Director
Division of Select Agents and Toxins
Coordinating Office of Terrorism Preparedness and
Emergency Response

FAX HEADER 1: SELECT AGENTS PROGRAM 4047182096
FAX HEADER 2:

TRANSMITTED/STORED : APR. 13. 2007 2:32PM FILE MODE OPTION	ADDRESS	RESULT	PAGE
9688 MEMORY TX	979 862 3176	OK	2/2

REASON FOR ERROR
E-1) HANG UP OR LINE FAIL
E-2) BUSY
E-3) NO ANSWER
E-4) NO FACSIMILE CONNECTION

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service
Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

April 13, 2007

Richard Ewing, Responsible Official
Texas A& M University (Registration #C20060605-0489)
1500 Research Parkway, Suite B150, TAMU 1186
College Station, TX 77843-1183
Fax: (979) 862-3176

Subject: 42 C.F.R. § 73.19 (Notification of theft, loss, or release)

Dear Dr. Ewing:

This is to acknowledge the receipt of the APHIS/CDC Form 3 (Report of Theft, Loss, or Release of Select Agents and Toxins) from Texas A& M University dated April 11, 2007 that reported an occupational exposure to *Brucella*. Based upon the review of the report, the Centers for Disease Control and Prevention (CDC), Division of Select Agents and Toxins (DSAT) has additional questions:

1. Please provide a copy of the medical surveillance plan and describe how the follow up was conducted as a result of the incident.
2. Please provide all occupational health records pertaining to the exposed individuals and any individuals that have presented with symptoms associated with a possible exposure to *Coxiella*, *Brucella*, or *Mycobacterium tuberculosis*.
3. Please provide documentation in regards to the risk assessment that was preformed for work with *Brucella*.
4. Please describe the decontamination procedures used for the aerosol chamber and any modifications incorporated to these procedures as a result of this incident.
5. Please provide all standard operating procedures (SOPs) and certification documents as it relates to the aerosol chamber.
6. Please provide a summary of events that occurred with this incident including the follow-up review that your entity conducted to assure that any other similar incidents do not occurred.
7. Since your entity failed to meet the reporting requirements of 42 C.F.R. § 73.19, please provide a plan of how Texas A& M University will achieve compliance with 42 C.F.R. 73. In addition, please explain if your entity failed to meet other required federal and state reporting requirements.
8. Please provide access logs for Room and all rooms were work with *Brucella* is performed.
9. Please explain how your incident response plan, security plan, and biosafety plan have been modified as a result of this incident.

SBU

COPY

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service
Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

To: Richard E. Ewing, Responsible Official (R. O.)
Vice President for Research
Texas A&M University
1112 TAMU
College Station, TX 77843-1112
FAX: (979)845-1855

From: Centers for Disease Control and Prevention, Division of Select Agents and Toxins

Date: June 7, 2006

Re: Facility Inspection Report Response: Texas A&M University

Thank you for your inspection report responses dated May 4, 2006 and May 15, 2006 to the deficiencies listed in the report from the February 22-24, 2006 inspection of your facility. Please submit additional information with supporting documentation, as noted below, by June 15, 2006:

Observation 5

Requirement: An individual or entity required to register under this part must develop and implement a written biosafety plan that is commensurate with the risk of the agent or toxin, given its intended use. The biosafety plan must contain sufficient information and documentation to describe the biosafety and containment procedures. [42 CFR 73.12(a)]

Observation: PI Samuel's and Tesh's biosafety plans did not contain sufficient site specific information and documentation to describe the biosafety and containment procedures for work with select agents in laboratory suite . Please provide documentation that addresses this requirement.

Entity Response: Tesh-No experiments utilizing the select agent E. coli DH5alpha(pCKS-112) are carried out in the suite. Room is used to store the agent and the registration has been amended to reflect this. All work on the agent is carried out in Room . PI Samuel's plan has bee updated and included in Appendix D.

CDC Response: Please provide updated documentation that PI Samuel's biosafety plan includes, either by inclusion or reference, all of the standard BSL-3 microbiological practices as outlined in "Biosafety in Microbiological and Biomedical Laboratories" 4th ed., p. 27-28.

Observation 12

Requirement: The plan must be reviewed annually and revised as necessary. Drills or exercises must be conducted at least annually to test and evaluate the effectiveness of the plan. The plan must be reviewed and revised, as necessary, after any drill or exercise and after any incident. [42 CFR 73.14 (d)]

Observation: The entity incident response plan provided to inspectors was not dated. Although the plan documentation indicates that it will be reviewed and revised annually, there was no signature page or other method to document review. The plan stated that biannual exercises to train response personnel and evaluate the adequacy of the plan would be conducted but there was no evidence of an exercise being completed. The incident response plan template used by the principal investigators did not include a provision for drills or exercises to be conducted at least annually. Please provide documentation to address these requirements.

Entity Response: The entity response plan (crisis management plan) reviewed by the inspection team was a copy of information contained by our website. A signed and dated copy is attached. [See Appendix] The new incident

Attachment #4

SELECT COPY

response plan template, to be used by all principal investigators, now includes a provision for drills or exercises to be conducted at least annually, and is attached. [See Appendix E]

CDC Response: The entity crisis management plan (CMP) states that the CMP shall be reviewed annually and modified as necessary. It also states that biannual exercises shall be held to train response personnel and evaluate the adequacy of the CMP. The entity crisis management plan submitted to CDC on May 15, 2006 is signed and dated in March 2003. The CMP packet does contain a "record of changes" log noting updates to the plan from 2004 and 2005 but it is not clear that this is a review or that these changes have been approved by management. Please provide documentation that this plan has been reviewed annually as stated. Please also provide an example of a report of a biannual exercise completed to evaluate the adequacy of the CMP and train response personnel.

Observation 26

Requirement: Biological safety cabinets and other physical containment devices are used whenever conducting procedures with a potential for creating aerosols. These include necropsy of infected animals, harvesting of tissues or fluids from infected animals or eggs, or intranasal inoculation of animals. At BSL-3 all work should be done in a primary barrier, otherwise respirators should be worn by personnel in the room. [BMBL, p. 66, C(4)]

Observation: Laboratory room [redacted] in the [redacted] contains an aerolization chamber used by PI Ficht for work with select agent. There were no SOP's available for review by inspectors to ensure appropriate safety precautions have been established for this procedure. Please provide documentation that this departure has been addressed.

Entity Response: SOP's for the aerolization chamber are now in place. [See Appendix H]

CDC Response: As discussed during the February 22-24 inspection, it was stated that Principal Investigator Ficht would be performing aerosol work with select agents. Please be reminded that 42 CFR 73.7 states that prior to changes in the activities involving any select agents or toxins the certificate of registration must be amended by the entity to include that work. Prior to the work being approved by the Select Agent Program, standard operating procedures regarding the aerosol challenge will need to be submitted to address the following additional issues:

1) Please describe the mechanism used to ensure that after the aerosol procedure, there is no residual select agent remaining on the animal surface.
2) Are there any laboratory air sampling procedures to verify no equipment leaks?
3) How does the laboratorian know the nebulizer is functioning properly and not leaking?
4) Is the HEPA filtration system for aerolizer equipment certified?
5) Is the microisolator cage filtration system certified?
6) Has it been determined how many air changes/hour it takes to remove infected particles after each run?
7) Are the animals anaesthetized prior to transfer back to the microisolator cages? If not, describe the procedure if animals escape. Describe the procedure for animal bites or scratches.
8) Please provide more detail on the cleaning of the chamber to ensure that the worker is not exposed to any agent during the cleaning process.
9) Is there any air sampling of the chamber after cleaning?
10) How has it been determined that dipping the probe in 10% bleach provides adequate contact time for decontamination?

Based upon review of Amendment #29968, it is the Select Agent Program's understanding that Principal Investigator Samuel is currently approved to perform aerosolization work with *Coxiella* burnetii. Please provide clarification of the current status of this work including how the aerosol procedure is being conducted.

Observation 38

Requirement: HEPA filtered exhaust air from a Class II biosafety cabinet can be recirculated into the animal room if the cabinet is tested and certified at least annually. When exhaust air from Class II cabinets is to be discharged to the outside through the building exhaust air, system, the cabinets must be connected in a manner that avoids any interference with the air balance of the cabinets or the building exhaust system. When Class III biological safety cabinets are used, they should be directly connected to the exhaust system. If Class III cabinets are connected to the

VPR

April 11, 2005

VIA FACSIMILE @ 404/498-2265
(Original to follow via U.S. Mail)

Diane P. Martin, Lead Inspector
Select Agent Program
Department of Health and Human Services
Centers for Disease Control and Prevention (CDC)
1600 Clifton Road N.E., MS E-79
Atlanta, Georgia 30333

RE: FACILITY INSPECTION REPORT – TEXAS A & M UNIVERSITY

Dear Mrs. Martin:

We are in receipt of your letter, dated March 25, 2005, detailing the observations made during the February 15 – 18, 2005 CDC Facility Inspection for Texas A & M University. The University has carefully reviewed the observations and offers its comments within Attachment 1-A-05.

If you require additional information or clarification on the comments contained within the attachment, please feel free to contact Angelia Raines, Research Compliance Director, in my office at 979/847-9362 or araines@vprmail.tamu.edu.

We appreciate your continued support and guidance on compliance issues in the CDC Select Agent Program.

Respectfully submitted,

Richard E. Ewing
Responsible Official

Attachment

xc: Dr. Robert M. Gates
President

Dr. David B. Prior
Executive Vice President and Provost

Dr. Fuller W. Bazer
Associate Vice President for Research

Texas A&M University
C20031123-0124
CDC030217
Accession #:
47567
Facility Inspection Report
Response (via mail)

Total # of Pages:
15

Received/Generated:
4/15/2005 at 10:27 AM
Input Date:
5/13/2005
Accessioned by
Paul Johnson
FOR OFFICIAL USE ONLY

RECEIVED
2005 APR 14 PM 12:27
CDC SELECT AGENT PROGRAM

RC-004

Attachment #5

COPY

13. Requirement: To apply for a certificate of registration an entity must, in accordance with § 73.21, submit the information requested to the HHS Secretary or the USDA Secretary as specified in the registration application package [CDC Form 0.1319]. Information submitted will be used to determine whether the applicant would be eligible to conduct activities under this part. Minimum information required includes the location, including building and room and floor plans for each building and room, where each select agent or toxin will be stored or used. [42 CFR 73.7 (b)(2)(iii)]

CDC Observation:	TAMU Comment:
Equipment and structures have been added to rooms and Floor plans on file at the CDC Select Agent Program do not include this added equipment.	Bldgs. are currently utilized for research not involving select agents but are occasionally modified to allow for this type of research to occur. At the time of inspection, no SBAT work was occurring in any of the buildings. When select agents are in use, all buildings housing the select agents are returned to the original design (large animal stalls) as were viewed in and and identical to the floor plans on file at CDC. Prior to work with SBATs, AND will be returned to the original design as shown on the floor plans submitted to CDC.

14. Requirement: A certificate of registration will be valid only for the specific select agents and toxins, and the specified activities and locations that are consistent with the information provided by the entity upon which the certificate of registration or amendment was granted. The Responsible Official must promptly notify the HHS Secretary in writing in accordance with § 73.21, if a change occurs in any information submitted to the HHS Secretary in the application for the certificate of registration or amendments. This includes modifications to the list of individuals approved under § 73.8, changes in area of work, or changes in protocols or objectives of studies. To apply for an amendment to a certificate or registration to add select agents or toxins or to change specified activities or locations, an entity must obtain the relevant portion of the registration application package and submit the information requested in the package to the agency that issued the certificate of registration. The package must be submitted to the appropriate address specified in the package. [42 CFR 73.7 (d)]

CDC Observation:	TAMU Comment:
Standard operating procedures for PI Tsolis identified recombinant antibiotic resistance work with a select agent. The PI's statement of work from the registration did not include this information.	PI Tsolis' recombinant antibiotic resistance work has ceased and is not currently planned. If this type of work is considered in the future, an amendment to update the current registration for PI Tsolis will be submitted to the CDC.

15. Requirement: Personnel wash their hands after handling cultures and animals, after removing gloves, and before leaving the animal facility. [BMBL, p.64, A(10)]

From: Origin ID: MULA (404)718-2032
Select Agent Program

1600 Clifton Road, NE
MS A-46
Atlanta, GA 30329

FedEx Express

CLS#222307/2U23

Ship Date: 04MAY07
ActWgt: 1 LB
System#: 8654691/INET7011
Account#: S *********

Delivery Address Bar Code

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Invoice #
PO #
Dept #

SHIP TO: (000)000-0000 BILL SENDER

Richard Ewing
Texas A&M University
1186TAMU
1500 Research Parkway,Suite B150
College Station, TX 778431112

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Shipping Label: Your shipment is complete

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
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Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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* * * COMMUNICATION RESULT REPORT (MAY. 4. 2007 1:55PM) * * *

FAX HEADER 1: SELECT AGENTS PROGRAM 4047182096
FAX HEADER 2:

TRANSMITTED/STORED : MAY. 4. 2007 1:49PM FILE MODE	OPTION	ADDRESS	RESULT	PAGE
1032 MEMORY TX		919798451855	OK	20/20

REASON FOR ERROR
E-1) HANG UP OR LINE FAIL
E-2) BUSY
E-3) NO ANSWER
E-4) NO FACSIMILE CONNECTION

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service
Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30333

May 4, 2007

Richard Ewing, Responsible Official
Texas A& M University (Registration #C20060605-0489)
1112 TAMU
College Station, TX 77843-1112
FAX: (979) 845-1855

Subject: Texas A& M University: Report of Site Visit; Request for Additional Information

On April 11, 2007, the Centers for Disease Control and Prevention (CDC), Division of Select Agents and Toxins (DSAT) received the APHIS/CDC Form 3 (Report of Theft, Loss, or Release of Select Agents and Toxins) from Texas A&M University (TAMU) reporting the occupational exposure to *Brucella* on February 9, 2006 that resulted in infection of a laboratory worker.

During the period April 16, 2007 through April 18, 2007, the following representatives from the CDC visited TAMU located at 1112 TAMU, College Station, TX 77843:

Diane Martin, Lead Inspector
Richard Henkel, Biosafety Manager
Melissa Resnick, Epidemic Intelligence Service Officer

Individuals from TAMU present during the site visit included:

Richard Ewing, Vice President (VP) of Research, Responsible Official
Angella Raines, Dir-Office of Research Compliance, alternate Responsible Official
John Salsman, Director, Environmental Health and Safety Department (EHSD)
Brent Mattox, Biosafety Officer, EHSD, alternate Responsible Official
Chris Meyer, Asst. VP, Safety & Security
Tiffany Agnew, Environmental Biosafety Program Coordinator
Thomas Ficht, Professor, Principal Investigator
L.G. Adams, Associate Dean, Principal Investigator
Angela Arenas, Graduate Student
Christine McFarland, Research Associate
Jianwu Pei, Assistant Research Scientist
Linda Clark, Assistant Executive Director, Scott & White Clinic
Jack Crouch, Occupational Medicine Supervisor, Scott & White Clinic
Melissa Kahl-McDonagh, Postdoctoral Research Fellow

The purpose of the site visit was to (1) review the events surrounding the occupational exposure to *Brucella* that occurred on February 9, 2006 in Room of Building and assess the measures implemented to prevent other such incidents; (2) assess measures implemented by TAMU to protect the staff and public from exposure to pathogenic microorganisms; and (3) and to otherwise evaluate your entity's compliance with the select agent regulations (7 C.F.R. part 331, 9 C.F.R. part 121, 42 C.F.R. part 73).