Commonwealth of Massachusetts Executive Office of Environmental Affairs 
MEPA Office



For Office Use Only Executive Office of Environmental Affairs					
MEPA Analyst: Bring Angus					
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# Notice of Project Change

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

Project Name: Tufts Regional Biosafety Laboratory Project in the Grafton Science Park			Ē	OEA #: 11715		
Street: Grafton Science Park						
Municipality: Grafton		Watershed: Blackstone				
Universal Tranverse Mercator Coord	inates:	Latitude: 42° 14' 33.8" N Longitude: 71° 41' 12.84" W				
Status of project construction: %complete						
Proponent: The Cummings School of Veterinary Medicine at Tufts University						
Street: 200 Westboro Road						
Municipality: Grafton		State: MA	Zip C	ode: 01536		
Name of Contact Person From Whom Copies of this NPC May Be Obtained: David Hewett						
Firm/Agency: Epsilon Associates, Inc.		Street: 3 Clock Tower Place, Suite 250				
Municipality: Maynard		State: MA	Zip C	ode: 01754		
Phone: 978-897-7100	Fax: 97	8-897-0099	E-mail	: dhewett@epsilonassociates.com		

In 25 words or less, what is the project change? The project change involves . . . This NPC is being filed solely to inform the public of the proposed project. The project is within the impact thresholds previously reviewed by MEPA for the Grafton Science Park.

See full project change description beginning on page 3.

Date of ENF filing or publication in the Environmental Monitor: Publication date: July 22, 1998

Was an EIR required? ⊠Yes □No; if yes, was a Draft EIR filed? □Yes (Date: ) □No was a Final EIR filed? □Yes (Date: ) □No was a Single EIR filed? ⊠Yes (Date: August 31, 1999)	⊡Nc
Have other NPCs been filed? Yes (Date(s): )	

If this is a NPC solely for <u>lapse of time</u> (see 301 CMR 11.10(2)) proceed directly to "ATTACHMENTS & SIGNATURES" on page 4.

May 2001

## PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER

List or describe all <u>new or modified</u> state permits, financial assistance, or land transfers <u>not</u> previously reviewed: **None.** 

Are you requesting a finding that this project change is insignificant? (see 301 CMR 11.10(6))  $\boxtimes$  Yes  $\square$ No; if yes, attach justification.

Are you requesting that a Scope in a previously issued Certificate be rescinded?  $\Box$  Yes  $\Box$  No; if yes, attach the Certificate

Are you requesting a change to a Scope in a previously issued Certificate?  $\Box$ Yes  $\boxtimes$ No; if yes, attach Certificate and describe the change you are requesting:

Summary of Project Size & Environmental Impacts	Previously reviewed (Overall Grafton Science Park)	Net Change	Currently Proposed* (Biosafety Lab Only)					
LAND								
Total site acreage	106	0	5.4					
Acres of land altered	11.2	0	0 ac					
Acres of impervious area	16.7	0	1.28					
Square feet of bordering vegetated wetlands alteration	0	0	0					
Square feet of other wetland alteration	0	0	0					
Acres of non-water dependent use of tidelands or waterways	0	0	0					
STRUCTURES								
Gross square footage	702,000	0	37,950					
Number of housing units	0	0	0					
Maximum height (in feet)	4-storey	0	53.5 feet					
TRANSPORTATION								
Vehicle trips per day	5,290	0	250					
Parking spaces	1,404	0	19					
WATER/WASTEWATER								
Gallons/day (GPD) of water use	180,000	0	9,500 gpd					
GPD water withdrawal	175,000	0	0					
GPD wastewater generation/ treatment	160,000	0	8,500 gpd					
Length of water/sewer mains (in miles)	0	0	0					

Does the project change involve any new or modified:

1. conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

3. impacts on Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

4. impact on any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☐Yes ⊠No; if yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? ☐Yes ⊠No

5. impact upon an Area of Critical Environmental Concern? Yes No If you answered 'Yes' to any of these 5 questions, explain below: Note that the Project is being reviewed by the Massachusetts Historical Commission (MHC). The Finding of No Adverse Effect issued by the MHC for the overall Science Park was contingent upon them having review of proposed construction within the Park.

**PROJECT CHANGE DESCRIPTION** (attach additional pages as necessary). The project change description should include:

(a) a brief description of the project as most recently reviewed

(b) a description of material changes to the project as previously reviewed,

(c) the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and

(d) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any previously issued Section 61 Finding, include a proposed modification of the Section 61 Finding (or it will be required in a Supplemental EIR).

### Introduction

The proposed Tufts University Regional Biosafety Laboratory (RBL) will be the first building to be constructed within the Tufts Biomedical Science Park (EOEA #11715) (now called the Grafton Science Park). The Science Park underwent comprehensive MEPA review and received a Certificate from the Secretary of Environmental Affairs on its Single Environmental Impact Report (SEIR) in October 1999. The proposed RBL is a relatively small development that is well within the development envelope and impact thresholds that were approved for the overall Grafton Science Park. The proposed RBL is not by itself subject to MEPA review because it does not exceed any MEPA review thresholds. Tufts University is filing this NPC voluntarily as a means of providing public notice rather than because of any requirement in the MEPA Regulations.

Scientists working at the RBL will conduct infectious disease research with a special emphasis on diseases that spread from animals to humans. Given the public's concern with the nature of this type of research, and in cooperation with the MEPA Office, Tufts University is filing this NPC as a means to notify and inform the public about the project.

## **Project Description**

The proposed site for the RBL is within the Grafton Science Park on the western side of Tufts

Cummings School of Veterinary Medicine's 594-acre Grafton campus. The RBL's 5.4-acre site is on the north side of Cornfield Lane at its intersection with Discovery Drive, which is the main entrance road to the Science Park from Route 30. The RBL will have a short entrance driveway from Discovery Drive and 19 outdoor parking spaces. The total disturbed area (limit of work) will be approximately 2.9 acres (126,000 square feet). The total impervious area, including the building, driveway, parking lots and sidewalks, will be just over an acre at approximately 45,900 square feet (1.05 acres). The site is wooded, primarily with oak and pine. No wetlands have ever been delineated on the site.

### Previously Reviewed Grafton Science Park

The approximately 100-acre Grafton Science Park underwent MEPA review and received a Certificate from the Secretary of Environmental Affairs on its SEIR in October 1999. The Certificate anticipated that activities at the Science Park would be related to research and development in the biotechnology, medical and pharmaceutical industries, as well as the physical, biological, behavioral and environmental sciences.

The SEIR approved by MEPA called for up to thirteen 4-story buildings, totaling 702,000 gross square feet to be constructed in two phases: seven buildings in Phase 1 (348,000 square feet) and six buildings in Phase 2 (354,000 square feet). Included in the development approved in the MEPA Certificate was the new access road from Route 30 (*i.e.*, Discovery Drive), up to 1,404 parking spaces, as well as a stormwater drainage system for the park, and water and sewer infrastructure. The MEPA Certificate also discussed a Memorandum of Agreement (MOA) among Tufts, the Department of Food and Agriculture and the Grafton Land Trust. This MOA was executed and Tufts has made a payment to the Land Trust as mitigation for all Phase 1 impacts. Lastly, the MEPA Certificate stated that the Massachusetts Historical Commission reviewed the Science Park and determined that it would have no adverse effect on the Grafton State Hospital Historic District.

The Science Park's roadways and main drainage structures have been constructed, and the water and sewer infrastructure is also in place within Discovery Drive. A new 12-inch water main, built in 2004-05, provides a looped connection between Route 30 and Institute Drive. A new 8-inch gravity sewer line connects to the municipal system on the Tufts campus. The sewer line includes a manhole with a sewer stub to the proposed Project parcel.

#### Additional Review

Over the past several months, National Institutes of Health (NIH) has been continuously reviewing as required, all elements of the laboratory's features, which are being designed to provide the safest possible environment for people working in the laboratory, as well as those in the surrounding community. NIH and the U.S. Centers for Disease Control (CDC) control must approve all elements of the facility. NIH is the lead federal agency for the Environmental Assessment (EA) that is being prepared pursuant to the National Environmental Policy Act (NEPA). The EA will examine all aspects of the project, and in particular, the potential for any threat to human health and safety.

At the local level, in January 2007, the Grafton Planning Board approved Tufts' Amended Grafton Campus Master Plan, which includes the conceptual plan for the proposed project. The project is now undergoing Project Plan review by the planning board.

### Safety Measures

The RBL's design is similar to that of the BSL-2 and BSL-3 labs currently on Tufts campuses and in many major medical schools and hospitals across the U.S. The proposed RBL will support a research

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agenda of enhancing national security through the development and evaluation of improved diagnostics, therapeutics, and vaccines for protection against diseases, and serve as a regional resource to all National Institute of Allergy and Infectious Diseases-approved research organizations in the area. The proposed project is classified as BSL-3 which means the labs are used to study agents that can be transmitted through the air and cause potentially lethal infection. All research work with select agents will be performed inside a biosafety cabinet. Other safety features include clothing decontamination, sealed windows, and specialized ventilation systems.

All biosafety level 3 and animal biosafety level 3 modules at the proposed project will be built to containment standards and the requirements defined in the *Biosafety in Microbiological and Biomedical Laboratories* (BMBL), Fifth Edition (DHHS 2005), National Institutes of Health (NIH) Design and Policy Guidelines (NIH 2003) and the Tufts University *Pre-Construction Biosafety Standard Operating Procedures BSL-3/ABSL-3* and other relevant guidelines. The proposed RBL will meet all current building codes and standards and will be designed and constructed in accordance with applicable wind and seismic codes.

Because safety is of paramount importance, Tufts University has a comprehensive Incident Response Plan, a PI's User's Guide to the Services of the Occupational Health and Biosafety Office, and numerous biosafety and laboratory procedures including BSL-3 Standard Operating Procedures, and General BSL-3 Lab Practices. Tufts University will be responsible for ensuring that all research conducted is in accordance with Federal, state and local regulations. To that end, Tufts has taken the following steps:

- established and implemented policies that provide for the safe conduct of recombinant DNA and infectious agent research;
- established an Institutional Biosafety Committee (IBC) that meets the requirements set forth by the NIH;
- has developed protocols to ensure appropriate training for the Biosafety Officer and laboratory supervisors and staff;
- established procedures to determine the necessity for project-specific health surveillance of recombinant DNA or infectious agent research personnel, and conduct, if necessary, project-specific health surveillance programs; and
- developed a plan for reporting to the Office of Recombinant DNA Activity any significant problems with and violations of the guidelines and significant research-related accidents and illnesses.

The IBC will be responsible for reviewing research protocols and operations for compliance with NIH, the Centers for Disease Control (CDC), state and local guidelines. All recombinant studies and research involving pathogenic microorganisms must be registered with the IBC.

The proposed RBL will be designed to maintain biological containment and will comply with standards set forth by the CDC and NIH. The building will be designed and constructed for seismic, F3 tornados, wind, snow and live/dead loads and to minimize progressive collapse by isolating various load-bearing columns inside a zone from columns supporting another containment zone. Each BSL-3 laboratory will contain shower-out facilities for personnel decontamination and autoclaves for waste sterilization. All BSL-3 laboratories will be operated under negative air pressure relative to the administrative spaces, offices and corridors. The BSL-3 laboratories will have a dedicated ducted exhaust system with no recirculation from the labs to other areas of the building. Air will be discharged outside the building through HEPA filters. All penetrations into the BSL-3 laboratories, wall, ceiling and floors will be sealed. Therefore, routine operations in the proposed facility are not

expected to have any adverse human health effects.

The waste management activities at the proposed facility will be directed by the Office of Environmental Health and Safety in accordance with Federal, state and local regulations. The handling and storage of hazardous materials are addressed in *Tufts University Laboratory Chemical and Biological Materials Safety Manual*, which includes detailed procedures for hazardous waste disposal. Tufts requires that a hazardous waste company transport chemicals if off-campus transportation or transportation on public roads is required. Prior to removal from the lab, all material and waste generated in a BSL-3 lab is autoclaved or chemically treated to inactivate any biological agents present.

#### **ATTACHMENTS & SIGNATURES**

Attachments:

1. Secretary's most recent Certificate on this project

2. Plan showing most recent previously-reviewed proposed build condition

3. Plan showing currently proposed build condition

4. Original U.S.G.S. map or good quality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries

5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)

Signatures: 2/27/0 Signature of Responsible Officer Date / Signature of person preparing Date NPC (if different from above) or Proponent Joseph P. McManus **David Hewett** Name (print or type) Name (print or type) **Cummings School of Veterinary Medicine** Epsilon Associates, Inc. Firm/Agency Firm/Agency 3 Clock Tower Place, Suite 250 200 Westboro Road Street Street Maynard, MA 01754 North Grafton, MA 01536 Municipality/State/Zip Municipality/State/Zip (978) 897-7100 (508) 887-4734 Phone Phone

Cummings School of Veterinary Medicine at Tufts University

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