

**SAFETY
NET**



ACE
alternatives for
community &
environment

Building Power Together for Environmental Justice

November 5, 2004

Mr. John O'Brien, Project Manager
Boston Redevelopment Authority
One City Hall Plaza, 9th floor
Boston MA 02201

Re: Comments on the Final Project Impact Report and Planned Development Area Review
for BioSquare Phase II

Dear Mr. O'Brien:

These are the comments of the Safety Net and Alternatives for Community & Environment (ACE) on the Final Project Impact Report (FPIR) for Biosquare Phase II and Planned Development Area (PDA) review for the proposed Boston University bioterrorism laboratory.

The Safety Net is comprised of public housing residents and others in Roxbury who came together in 2000 to develop a voice and vision for a sustainable Roxbury and equitable metropolitan development. Members of the Safety Net are concerned about BioSquare Phase II because the project is near their neighborhood and they believe that the project as proposed will have adverse environmental, health, safety, and economic impacts. Based in Roxbury, Massachusetts, ACE works in partnership with low income communities and communities of color to achieve environmental justice. The Safety Net and ACE are part of the Stop the BU Bioterrorism Lab campaign, a coalition of many persons and groups, both within and outside Boston, that believe that Boston University's proposed BSL4 Bioterrorism Laboratory¹ presents too many environmental, health, and safety risks to be located safely on Albany Street in Boston's densely populated South End.

Comments on the FPIR

An extensive review of the FPIR demonstrates that the FPIR does not adequately describe the potential impacts of the bioterrorism laboratory project. The BRA should disapprove the FPIR as inadequate and to require University Associates to file a revised FPIR as authorized by Article 80 because the FPIR:

- Does not include a true or accurate "worst case scenario." Instead, the FPIR contains a purported "worst case scenario" that: 1) contains serious mistakes in analysis that cause a

¹ The facility is a bioterrorism laboratory because under federal funding requirements the laboratory must give preference to biodefense research and other NIAID research programs for the first twenty years. The laboratory will host and perform experiments on some of the most dangerous and incurable diseases known, diseases that are easily transmissible, can cause public health crises, and can be used in bioterrorism and biowarfare.

significant underestimate of the potentially devastating and deadly impact of a release of anthrax from the proposed bioterrorism laboratory; 2) fails to perform a site-specific release analysis, 3) fails to consider the environmental impact of the release; and 4) fails to analyze an accidental or intentional release of the deadly and incurable viruses and toxins² that, unlike anthrax, are highly contagious.

- Fails to include a worst case release scenario for when a select agent is in transit to the laboratory or provide other essential information about the transport of hazardous biological and toxic agents to the laboratory.
- Fails to include a threat and vulnerability analysis for a terrorist attack on the laboratory and resulting release of select agents and other damages to the surrounding community.
- Does not include an alternatives analysis of other potential locations for the laboratory or provide the criteria used by University Associates to base its decision to locate the laboratory on Albany Street in Boston's South End.
- Does not include an explanation of how the laboratory will comply with regulatory requirements and fails to list the Boston regulation that prohibits recombinant DNA research requiring BSL4 containment in the City of Boston.
- Does not include a discussion of how the project proponent will assure that its health and safety operating procedures are met, considering that the federal government has not yet chosen the entity that will operate the laboratory and that many outside researchers, including students with no BSL4 experience, will use the laboratory.
- Fails to respond to many comments made on the DPIR, consequently denying the BRA, state and city agencies, and the public the opportunity to review and comment on important issues that have a potential impact on the environment.

The project proponent submitted a combined FPIR/FEIR to the BRA (for the FPIR) and to the Executive Office of Environmental Affairs (EOEA) (for the FEIR). The deficiencies that we noted above are discussed in detail in our comments to EOEA on the FEIR. Rather than repeat them verbatim here, we have enclosed a copy of the comments we submitted to EOEA. Those comments should be considered part of our comments to the BRA on the FPIR and PDA.

The deficiencies in the FPIR/FEIR raise important issues for the BRA about development on Albany Street, in addition to the environmental issues we raised in our comments to EOEA on the FPIR/FEIR:

² Select agents are biological agents and toxins that have a potential to pose a severe threat to public health and safety. The select agent rule is found at 42 CFR Parts 73 and 1003. The list of select agents and toxins, found at 42 CFR § 73.4 and 73.5, is based on criteria specified in the Public Health Security and Bioterrorism Preparedness and Response Act of 2002, including the effect on human health of exposure to the agent or toxin, the degree of contagiousness of the agent or toxin and the method by which the toxin is transferred to humans, and the availability and effectiveness of therapies and vaccines to treat and prevent an illness resulting from the agent or toxin.

- Does a BSL3/4 bioterrorism laboratory belong in Boston? We say no. The pathogens that will be studied and experimented with in the laboratory are those that can cause a public health crisis. If there were a terrorism incident or serious release from the laboratory, the disruption in the South End, Roxbury, and other parts of Boston would be severe. In addition, the tourism industry, a major economic engine for Boston, would suffer if there were a terrorist attack or infiltration of the laboratory and would suffer severe losses if a release from the lab caused illness or death. Such laboratories belong in more secure and less populated locations.
- Are there more suitable locations in and near Boston for a BSL3/4 bioterrorism laboratory? The project proponent's failure to analyze alternative locations for the laboratory raises important issues about whether the BSL3/4 laboratory is the correct development for the proposed location or whether from a development perspective there are better locations in and around Boston. A complete alternatives analysis, which the project proponent should have undertaken, is necessary to understand the options.
- Are there more appropriate developments for BioSquare than the BSL3/4 bioterrorism laboratory? We say yes. For example, the 1999 proposal for the location would have included more R&D space, a hotel/conference center, and retail development on Albany Street. That proposal would generate more construction jobs, more long-term jobs, more jobs for local residents, and a greater variety of jobs, and add more value than the bioterrorism laboratory. A complete alternatives analysis would show that.

Comments on the PDA

As discussed below, we believe that the PDA Master Plan does not meet the requirements of Article 80, Sections 80B and 80C, of the Boston Zoning Code and that the Boston Redevelopment Authority (BRA) should disapprove the Plan.

- I. The PDA Master Plan will be injurious to the neighborhood or otherwise detrimental to the public welfare.

The standard for BRA approval of a PDA Master Plan is set forth in Section 80C-4. That section requires that the:

Boston Redevelopment Authority shall not approve a Development Plan or Master Plan for a Planned Development Area unless the Authority finds that: ...
 (e) on balance, nothing in such plan will be injurious to the neighborhood or otherwise detrimental to the public welfare, weighing all the benefits and burdens.

As discussed above and in our enclosed comments to EOE: 1) the applicant has not provided the necessary information to allow the BRA to make the finding required by Section 80C-4 and consequently the BRA should disapprove the PDA Master Plan; and 2) on balance, the NBL will be injurious to the neighborhood or otherwise detrimental to the public welfare, weighing all the benefits and burdens.

In reviewing the applicant's PDA Master Plan, it is important to note that Section 80C-4 specifically requires that the BRA **shall not approve** (emphasis added) a PDA Master Plan without making the required findings. "Shall" is mandatory, not directory. See, Article 80, Section 80-4, and Article 2-A. The BRA does not have any discretion in that regard. To meet the standard, the BRA must review and analyze all the relevant facts concerning the proposed PDA Master Plan before making the required findings set forth in Section 80C-4.

While Section 80C-4 requires that the BRA balance the benefits and burdens of the proposed PDA Master Plan, it does not allow approval of a PDA Master Plan unless the BRA finds that **nothing** (emphasis added) in the plan will be injurious to the neighborhood or otherwise detrimental to the public welfare. This standard does not allow the BRA to decide that the benefits outweigh the burdens. Instead, the BRA cannot approve the plan if, weighing the benefits and burdens, there is **anything** in the plan that is injurious to the neighborhood or otherwise detrimental to the public welfare.

1. The applicant has not provided the information necessary for the BRA to make a finding that, on balance, nothing in the plan will be injurious to the neighborhood or otherwise detrimental to the public welfare, weighing all the benefits and burdens.

The laboratory that the applicant intends to build on Parcel F during Phase 1 of the project is a bioterrorism laboratory with a Biosafety Level 4 (BSL4) component, where researchers will experiment with the most dangerous live viruses known to exist. These viruses cause incurable illnesses, are transmitted through the air, and may be used in bioterrorism and biowarfare.

There are only three BSL4 laboratories operating in the United States.³ Such laboratories raise unique environmental, health, and safety issues. They must be constructed to exacting standards to minimize the possibility of releases of viruses to the environment through air, water, and other vectors such as the animals that will be intentionally infected with incurable diseases. They require heightened site security that includes a large fenced-in security perimeter. They must have policies and procedures to guard against and prepare for potential accidental and intentional releases of deadly agents. They differ so significantly from other laboratories that they require a thorough review that considers all the facts about the laboratory and its potential impacts. As we explain in our comments to EOE, enclosed, the project proponent has not submitted a worst-case release scenario and failed to discuss and analyze the real threat posed by the laboratory.⁴ Those omissions are sufficient cause to disapprove the PDA Master Plan.

³ The currently operating BSL4 laboratories are: Centers for Disease Control and Prevention, Atlanta, GA; US Army Research Institute on Infectious Diseases at Ft. Detrick, Frederick, MD; and the Southwest Institute for Biomedical Research, San Antonio, TX. There is also a "shoebox" BSL4 laboratory in Athens, Georgia. Those laboratories are in much less densely populated areas than the South End. We are aware of no evidence showing that those laboratories have generated a significant amount of spin-off economic activity.

⁴ The federal government encouraged applicants for federal funding for such laboratories to perform a risk assessment and threat analysis for the bioterrorism lab. Similarly, the Certificate on the DEIR required the applicant to evaluate a worst case safety event involving the loss of the physical integrity of the containment systems. Without having the risk assessment and threat analysis, and the evaluation of the worst case safety event, the BRA will be unable to determine whether nothing in the plan will be injurious to the neighborhood or otherwise detrimental to the public welfare.

Other omissions in the PDA Master Plan that render the Plan unapprovable include:

- For the first twenty years that the bioterrorism laboratory is in operation, its primary mission will be to perform the research required by the federal government, including research on agents that can be used in bioterrorism and biowarfare. The federal government may classify the research as national security, which would prevent the state and city from regulating or overseeing the laboratory to assure that the laboratory does not have an adverse impact on health, safety, and the environment.
- Research at the laboratory may be performed on anthrax, plague, botulism, tularemia, and viral hemorrhagic fevers such as Ebola. Laboratories must be licensed to have these agents, but generally are prohibited from revealing that they have such agents. The applicant has not explained how emergency response measures can be implemented in such an environment -- or how much those measures will cost the City.
- The federal government has said that it cannot guarantee any research funding for the laboratory. Unlike a private entity that builds a laboratory based on market needs, the applicant proposes to build a laboratory where funds for research will be from the federal government but the federal government has said it may not provide research funding. The applicant has not explained how it can make its claims about the laboratory without knowing the level of research funding that will be available.

In addition to the omissions, the PDA Master Plan contains a significant number of claims and conclusions for which the applicant has provided no supporting facts and analyses. Without having the supporting facts and analyses, the BRA lacks the necessary information to make the findings required by Section 80C-4. We discuss those claims and conclusions in the order that they appear in the PDA Master Plan:

- Page 6: The applicant states that the PDA Master Plan complies with the directives of the Urban Renewal Plan for medical/institutional uses. It should explain how a facility that may be used for bioterrorism and bioweapons research required by the federal government complies with the urban renewal plan. We suggest that the laboratory should be considered a defense research facility that is not envisioned in the Urban Renewal Plan.
- Page 6: The applicant states that the PDA Master Plan is consistent with the Development Plan for the South End/Lower Roxbury that established as one of its goals the creation of employment opportunities for South End residents. The applicant should discuss how many jobs would be available in the bioterrorism laboratory for South End and Roxbury residents, based on an analysis of the types of jobs in the bioterrorism laboratory and the population of the South End and Roxbury.
- Pages 6 and 7: The applicant does not explain how the security perimeter necessary for the bioterrorism laboratory will affect accessory, ancillary, and auxiliary uses of the area. It also does not explain how much of the pedestrian plaza and open space will be inaccessible because they are in the security perimeter of the bioterrorism laboratory.
- Page 9: The applicant does not explain how much of the open space will be inaccessible because it is in the security perimeter of the bioterrorism laboratory. It also does not describe the nighttime lighting and how it will affect the streetscape and the use of the open space.

- Pages 12-13: The applicant claims that the project will generate approximately 4,300 construction jobs over the entire life of the project and approximately 4,000 permanent jobs. It provides no data to show how it arrived at those estimates. The applicant should provide that data and also describe the average duration for each of the construction jobs, the number, type, and qualifications needed for the permanent jobs, and the number of jobs that would be created if BioSquare II were developed without the bioterrorism laboratory.
 - Page 13: The roadways in the area are already over capacity. The applicant should explain how it proposes to mitigate the impact of the additional traffic that the project will generate. That issue requires resolution to determine if the project will be injurious to the neighborhood. The applicant also should be required to include the TAPA in the PDA Master Plan so that it is available for the BRA's and public's review.
 - Pages 14-15: The applicant claims that the project contemplates transportation mitigation procedures as outlined in the joint BRA/MEPA DPIR/DEIR, but the mitigation procedures are not approved and may need to be modified. The applicant should be required to include the ITMA in the PDA Master Plan so that it is available for the BRA's and public's review.
 - Pages 15-17: The applicant makes many unsupported and undocumented claims about the public benefits of the project. Without support and documentation, its claims cannot be reviewed and analyzed or form the basis for a finding by the BRA. For example, the applicant claims that the project will include a "unique educational and occupational opportunity for graduates of Boston high schools in biomedical research programs and clinical sciences," without providing any information about the educational qualifications and work experience required for such opportunities or the number and types of such jobs that will be available. Evidence elsewhere shows that research laboratories generate jobs for people with advanced college degrees, but very few jobs for those with high school level educations. The applicant also failed to explain that the security requirements of the NBL would prohibit the access to the bioterrorism laboratory necessary to fulfill its claim that the project would provide a unique educational opportunity. In another example, the applicant claims that the Plan provides for the provision of affordable housing available to South End and Boston residents pursuant to a DIP Agreement, but it does not include the DIP Agreement in the PDA Master Plan, thus preventing the BRA's and public's review of the amount, type, and location of the affordable housing. It also claims that the project will include private investment in research and development, without discussing how that statement is consistent with the requirement that the NBL's primary role is to do the research required by the federal government.
2. On balance, the bioterrorism laboratory in the PDA Master Plan will be injurious to the neighborhood or otherwise detrimental to the public welfare, weighing all the benefits and burdens.

If the BRA determines that the applicant has provided enough information to make the findings required by Section 80C-4, we believe that the BRA must disapprove the PDA Master Plan so long as it includes the bioterrorism laboratory. The applicant has seriously overstated the benefits of the PDA Master Plan with the bioterrorism laboratory and failed to mention the burdens. The applicant can develop BioSquare II without the bioterrorism laboratory. Replacing the bioterrorism laboratory would allow for better use of the project area and remove the serious and significant burdens of having the bioterrorism laboratory at BioSquare II. We believe that

on balance the bioterrorism laboratory will be injurious to the neighborhood or otherwise detrimental to the public welfare, weighing all the benefits and burdens, as follows:

- The health and safety risks of the bioterrorism laboratory are real and potentially catastrophic. The bioterrorism laboratory will use sophisticated technology to decrease the risk of an accidental or intentional release of viruses and to prevent a release resulting from a terrorist attack, but as we have seen in many other instances, accidents occur, sophisticated technologies are imperfect and fail, and some people have nefarious motives. Releases could occur by many means, including a breach of the containment system, infections of workers, or while the viruses were being transported to the lab. The consequences could be deadly if there were a release of an organism from the bioterrorism laboratory into the nearby densely populated neighborhood. More than 50,000 people live within one mile of the project site and more than one million people within ten miles. A release of anthrax from a Soviet bioresearch facility in 1979 caused an anthrax epidemic and the death of persons downwind of the facility.
- The bioterrorism laboratory will not make us more secure, but would be a potential terrorist target. Terrorists might view the NBL as a source for bioweapons agents or a target to destroy. Although the applicant claims the lab will work on vaccines and methods to defend against bioterrorism, many experts agree that in biowarfare research there is little difference between defensive and offensive measures. To study the use of deadly viruses as weapons agents, the lab will produce the agents.
- There may be no public right to know or effective state or local oversight of the bioterrorism laboratory activities. The laboratory will perform research that the federal government may classify as secret national security. When that occurs, state and local officials will be unable to regulate the activities that take place in the lab. There will not be the exchange of ideas that one expects from academic research. The public may not be informed of a release from the lab.
- Decent jobs and other public benefits for local residents are lacking. There is no evidence that the bioterrorism laboratory will provide significant economic and other benefits for the local community. Biomedical research facilities do not generate many jobs for those without a college degree. A 1991 survey of biomedical research related jobs found that only 5% of the jobs would be available to those with only a high school diploma. Given the high security requirements, there may be even fewer jobs available at the bioterrorism laboratory. Most jobs will be for persons with advanced college degrees who can pass security clearances. Biomedical manufacturing facilities generate jobs, but none are planned for the project. Further, much of the research in the bioterrorism laboratory will be on exotic diseases not found in North America, limiting the manufacturing potential arising from the research. A market-driven laboratory would be more likely to generate jobs and manufacturing potential.
- The bioterrorism laboratory does not belong in a residential neighborhood. The bioterrorism laboratory will have a high security perimeter with armed guards and fences, which are incompatible with the nearby residential neighborhood, medical campus, and hospital that is the primary provider of free care in Boston. The other bioterrorism laboratories are in much less densely populated areas.
- If the applicant's forecast is correct, and we doubt that it is, the bioterrorism laboratory would be injurious to the area. The bioterrorism laboratory could further gentrify and

displace lower income residents and threaten blue-collar jobs in the area. If the bioterrorism laboratory causes property values to rise, higher rents and real estate taxes may force more lower income residents from their homes at a time of a severe housing shortage. It might also force out employers, such as those at Newmarket Square, which employ many blue-collar workers. The project, if implemented and successful, would effectively trade many blue-collar jobs, which the City needs, for many fewer white-collar jobs for transient academics.

III. Conclusion

Based on these comments, we request that the BRA disapprove the FPIR and PDA for the reasons we have given.

Please notify us of the date, time, and location of the BRA Board meeting concerning the PDA Master Plan.

Thank you for the opportunity to comment. For follow up on these comments, please contact Eugene B. Benson, Staff Attorney, ACE, at 617-442-3343 x226 and gene@ace.ej.org.

Respectfully submitted,

Alternatives for Community & Environment
Safety Net

enclosures