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SJC-09960

KLARE ALLEN & others¹ vs. BOSTON REDEVELOPMENT AUTHORITY
& others.²

Suffolk. September 5, 2007. - December 13, 2007.

Present: Marshall, C.J., Greaney, Ireland, Spina, Cowin, &
Cordy, JJ.

Massachusetts Environmental Policy Act. Environment,
Environmental impact report. Administrative Law, Judicial
review. Words, "Likely."

Civil action commenced in the Superior Court Department on
January 12, 2005.

The case was heard by Ralph D. Gants, J., on a motion for
judgment on the pleadings.

Leave to prosecute an interlocutory appeal was allowed in
the Appeals Court by William I. Cowin, J.

The Supreme Judicial Court on its own initiative transferred
the case from the Appeals Court.

¹ Rose Arruda, Jeanette Avant, Dolly Battle, Alma Feliciano,
Angela Francis, Joan Francis, Cornelius Reddick, Diane Williams,
and Trena Williams, ten residents of Boston.

² University Associates Limited Partnership, Trustees of
Boston University, and Boston Medical Center Corporation.
Several other parties were named as defendants in proceedings
before the Superior Court. However, they did not file a petition
for interlocutory relief, pursuant to G. L. c. 231, § 118, first
par., from the judge's order entered on August 2, 2006.
Therefore, those other defendants are not part of this appeal.

John M. Stevens (Seth D. Jaffe with him) for University Associates Limited Partnership & others.

Saul A. Schapiro for Boston Redevelopment Authority.

Douglas H. Wilkins (Timothy J. Roskelly with him) for the plaintiffs.

The following submitted briefs for amici curiae:

Martha Coakley, Attorney General, & Pierce O. Cray, Assistant Attorney General, for Secretary of Environmental Affairs.

Albert P. Zabin for Community and Environment, Inc.

Eloise Lawrence & Peter Shelley for Conservation Law Foundation & another.

Tarek F. Maassarani, of the District of Columbia, for city of Newton.

Andrew A. Rainer for The Council for Responsible Genetics.

William I. Althen, of the District of Columbia, for American Society for Microbiology.

Alvin Dunn, of the District of Columbia, for Infectious Diseases Society of America.

Mary R. Jeka for Tufts University.

Ronald W. Ruth, David A. Brown, & Matthew L. Mitchell for Massachusetts Chapter of the National Association of Industrial and Office Properties.

Paul G. Cushing for Partners HealthCare System, Inc.

Andrew A. Rainer for Daniel Goodenough & others.

Jo Ann Shotwell Kaplan & Martin J. Newhouse for New England Legal Foundation.

SPINA, J. In the present case, we consider the planned development by University Associates Limited Partnership (University Associates)³ of a project known as BioSquare Phase II, a biomedical research complex in the South End neighborhood of Boston, which will include the National Emerging Infectious Diseases Laboratory (Biolab). This laboratory will be a Biosafety Level 4 facility,⁴ requiring the highest level of

³ The partners of University Associates Limited Partnership are the trustees of Boston University and Univer Development Foundation, Inc., whose sole member is Boston Medical Center Corporation.

⁴ According to the National Institutes of Health, Biosafety Level 4 laboratories deal with pathogens that are highly virulent for humans and infectious by the aerosol route. Such pathogens

security, where medical research will be conducted on the most dangerous diseases and toxins, including, but not limited to, the Ebola virus, smallpox, anthrax, and botulism.⁵ The plaintiff residents of Boston commenced an action in the Superior Court pursuant to G. L. c. 214, § 7A; G. L. c. 30, § 61; and G. L. c. 231A, challenging the adequacy of the environmental reviews of BioSquare Phase II pursuant to the Massachusetts Environmental Policy Act (MEPA), G. L. c. 30, §§ 61-62H, and the regulations promulgated thereunder, 301 Code Mass. Regs. §§ 11.00 (1998). In a thorough and well-reasoned memorandum of decision on the plaintiffs' motion for judgment on the pleadings, the judge concluded, as to Count II of the amended complaint, that the November 15, 2004, certification by the Secretary of the Executive Office of Environmental Affairs (Secretary) that the final environmental impact report (EIR) submitted by University Associates adequately and properly complied with MEPA was arbitrary and capricious. Accordingly, the judge vacated the Secretary's certification of the final EIR and remanded the

often are capable of direct transmission from person to person, and they produce diseases for which there is no specific treatment or prevention available.

⁵ At the time University Associates submitted its draft environmental impact report to the Secretary of the Executive Office of Environmental Affairs (Secretary) in the fall of 2003, there were only three Biosafety Level 4 laboratories in the entire United States. One facility is operated by the Centers for Disease Control and Prevention in Atlanta, Georgia; a second facility is operated by the United States Army Research Institute on Infectious Diseases at Fort Detrick in Frederick, Maryland; and a third facility is operated by the Southwest Institute for Biomedical Research in San Antonio, Texas.

matter to the Secretary for further administrative action.⁶

University Associates, the trustees of Boston University, Boston Medical Center Corporation (BMC), and the Boston Redevelopment Authority (BRA) (collectively, the defendants) filed a petition, pursuant to G. L. c. 231, § 118, first par., for interlocutory relief from the judge's order. See note 2, supra. A single justice of the Appeals Court granted the petition, and the case was transferred from the Appeals Court on our own motion. For the reasons that follow, we now affirm.⁷

1. Statutory and regulatory scheme. Before considering the specific facts in this case, we begin with a brief overview of MEPA, and the regulations promulgated thereunder, so as to put the proceedings here in context. General Laws c. 30, § 61, sets forth a broad policy of environmental protection in this

⁶ The judge also ordered that, because separate findings made by the Division of Capital Asset Management (DCAM) and the Boston Redevelopment Authority, pursuant to G. L. c. 30, § 61, pertaining to the transfer of certain land on which part of BioSquare Phase II was to be constructed, were based, at least in part, on an inadequate final EIR, those findings were vacated and any agency action premised on the issuance of such findings was stayed until an adequate supplemental final EIR was issued and new § 61 findings were rendered. This portion of the judge's order is not before us in the present interlocutory appeal.

⁷ We acknowledge the amicus briefs filed by the Secretary of Environmental Affairs; Partners HealthCare System, Inc.; the city of Newton and United for Justice with Peace; the Infectious Diseases Society of America; the Conservation Law Foundation and the Lawyers' Committee for Civil Rights Under Law of the Boston Bar Association; Alternatives for Community and Environment, Inc.; the Council for Responsible Genetics; the New England Legal Foundation and Associated Industries of Massachusetts; the Massachusetts Chapter of the National Association of Industrial and Office Properties; Tufts University; the American Society for Microbiology; and Daniel Goodenough, Jean Guillemin, Lynn Klotz, David Ozonoff, and Marc Pelletier.

Commonwealth by directing "[a]ll agencies, departments, boards, commissions and authorities" to "review, evaluate, and determine the impact on the natural environment of all works, projects or activities conducted by them and . . . use all practicable means and measures to minimize damage to the environment."⁸ See 301 Code Mass. Regs. § 11.01. See also Enos v. Secretary of Env'tl. Affairs, 432 Mass. 132, 136 (2000). The statute mandates that any determination made by a Commonwealth agency include "a finding describing the environmental impact, if any, of the project and a finding that all feasible measures have been taken to avoid or minimize said impact." G. L. c. 30, § 61. "In aid of this directive, G. L. c. 30, §§ 62-62H, establishes a process, supervised by the Secretary, for thorough consideration of the potential environmental impact of certain projects through preparation of draft and final environmental impact reports (EIRs), and submission of these EIRs to interested State agencies and to the public." Enos v. Secretary of Env'tl. Affairs, supra. The MEPA review process is "concerned with ensuring that relevant information [about potential environmental damage] is gathered before a project is allowed to proceed [to the permitting stage]." Id. at 139.

The review of a project under MEPA begins when the project's

⁸ A "[p]roject" that is subject to review pursuant to G. L. c. 30, § 61, is any "work, project, or activity either directly undertaken by an agency, or if undertaken by a person, which seeks the provision of financial assistance by an agency, or requires the issuance of a permit by an agency." G. L. c. 30, § 62.

proponent files an environmental notification form (ENF) to inform the Secretary of the nature of the project. See G. L. c. 30, § 62A; 301 Code Mass. Regs. § 11.05. After a thirty-day review period, during which the Secretary consults with the project proponent and with any agency from which a permit or financial assistance may be sought, the Secretary issues a written certificate stating whether an EIR is required. See G. L. c. 30, § 62A; 301 Code Mass. Regs. § 11.06. If one is required, the Secretary shall "limit the scope of the report to those issues which by the nature and location of the project are likely to cause damage to the environment." G. L. c. 30, § 62A. See 301 Code Mass. Regs. § 11.06(9)(a). Further, "[t]he secretary shall determine the form, content, level of detail and alternatives required for the report." G. L. c. 30, § 62A. See 301 Code Mass. Regs. § 11.06(9)(c).

In accordance with G. L. c. 30, § 62B, an EIR shall contain statements describing "the nature and extent of the proposed project and its environmental impact; all measures being utilized to minimize environmental damage; any adverse short-term and long-term environmental consequences which cannot be avoided should the project be undertaken; and reasonable alternatives to the proposed project and their environmental consequences."⁹ See

⁹ The Legislature has given the phrase "damage to the environment" a broad scope, defining it as "any destruction, damage or impairment, actual or probable, to any of the natural resources of the commonwealth . . ." (emphasis added). G. L. c. 30, § 61. The statute further provides that "[d]amage to the environment shall not be construed to include any insignificant damage to or impairment of such resources." Id. In the MEPA

301 Code Mass. Regs. § 11.07(6). Once an EIR (draft or final) is submitted to the Secretary, public notice of the availability of the EIR is issued, and a thirty-day review period begins. See G. L. c. 30, § 62C. See also 301 Code Mass. Regs. § 11.08(1) (stating that EIR review period lasts for thirty-seven days). During this time, any person or reviewing agency can submit written comments on the EIR to the Secretary, which then become part of the public record. See G. L. c. 30, § 62C; 301 Code Mass. Regs. § 11.08(4).

Within seven days after the conclusion of this public review period, the Secretary issues a written certificate indicating whether, in the Secretary's judgment, the EIR "adequately and properly complies" with the provisions of MEPA, G. L. c. 30, §§ 62-62H. G. L. c. 30, § 62C. See 301 Code Mass. Regs. § 11.08(8). The MEPA review process culminates with the Secretary's certification of a final EIR. See Enos v. Secretary of Env'tl. Affairs, supra at 137. The certificate issued by the Secretary does not constitute approval or disapproval of a particular project, which ultimately is left to various permitting agencies. See G. L. c. 30, § 62C; Enos v. Secretary of Env'tl. Affairs, supra. Rather, the certificate signals that the Secretary, "a disinterested public official with expertise in environmental matters," has determined that the information-

regulations, "[d]amage to the [e]nvironment" is defined as "[a]ny destruction or impairment (not including insignificant damage or impairment), actual or probable, to any of the natural resources of the Commonwealth" 301 Code Mass. Regs. § 11.02(2).

gathering process has been completed in compliance with MEPA. Cummings v. Secretary of Env'tl. Affairs, 402 Mass. 611, 617 (1988). See Enos v. Secretary of Env'tl. Affairs, supra. Once the Secretary issues a certificate on a final EIR, those agencies, departments, boards, commissions, and authorities that are undertaking, funding, or permitting a proposed project use the information set forth in the EIR to assess the project's impact on the environment and to prevent or minimize any consequential damage. See G. L. c. 30, § 61.

2. Factual and procedural background. In 1965, the BRA adopted the South End Urban Renewal Plan, pursuant to which development of the area between the Boston University Medical Center and the Southeast Expressway would focus on medical and institutional uses. University Associates planned to construct within this area a two-phase medical research campus. In 1991, University Associates proposed, and the BRA and the zoning commission of Boston approved, a master plan for BioSquare Phase I, which would be comprised of four research buildings, a hotel, and a parking facility. After several modifications to this master plan, the construction of BioSquare Phase I was largely completed by 2002.

On August 31, 1999, University Associates submitted an ENF to the Executive Office of Environmental Affairs, proposing to commence the development of BioSquare Phase II, which would consist of two research buildings, a parking facility, and a

helipad.¹⁰ The ENF briefly described the probable impact of BioSquare Phase II on specified environmental categories, including land, rare species, wetlands, water, wastewater, transportation, energy, air, solid and hazardous waste, historical and archaeological resources, and other areas of critical environmental concern. It made no mention of the Biolab.

On October 8, 1999, the Secretary issued a certificate on the ENF, concluding that University Associates was required to prepare an EIR for BioSquare Phase II. In setting forth the scope of the EIR, the Secretary directed University Associates to (1) analyze the categories of environmental impacts set forth in its ENF; (2) analyze its preferred build alternative, the no-build alternative, and other site layouts that would minimize over-all environmental impacts; (3) describe each State permit or agency action required for BioSquare Phase II; (4) explain the relationship of BioSquare Phase II to University Associates's other projects in the South End neighborhood and the cumulative impact of one on the others, particularly with respect to traffic, transit, parking, air quality, historic resources, and sewer infrastructure; (5) include a summary of all mitigation

¹⁰ BioSquare Phase II was subject to the provisions of MEPA in the first instance because University Associates needed to obtain permits from various agencies in order to develop the facility, and it was receiving financial assistance from the Commonwealth. In certificates later issued with respect to both the draft EIR and the final EIR, the Secretary noted that MEPA jurisdiction extended "to all aspects of the project that may have significant environmental impacts."

measures to which University Associates had committed; and (6) respond to all substantive comment letters received on the ENF.

Before University Associates submitted a draft EIR to the Secretary in September, 2003, the National Institute of Allergy and Infectious Diseases, an agency within the National Institutes of Health, accepted a grant proposal jointly filed by the trustees of Boston University and the Boston University Medical Center to build and operate the Biolab. In light of this change to the proposed development of BioSquare Phase II, University Associates met with the assistant secretary to discuss whether the Secretary would require any changes to the scope of the draft EIR. The assistant secretary informed University Associates as follows: "The [October, 1999,] scope remains relevant guidance for the analysis of environmental impacts from the revised project. No changes to the scope are necessary, and [University Associates] need not submit a Notice of Project Change prior to or concurrent with the filing [of] the Draft EIR for the project. Of course, the Draft EIR should contain a complete description of the changes to the project since issuance of the scope, and a thorough analysis of potential environmental impacts from the currently proposed development, in accordance with [301 Code Mass. Regs. § 11.07,] as modified by the October 1999 scope."

University Associates submitted its draft EIR to the Secretary on September 30, 2003.¹¹ After setting forth an

¹¹ When University Associates submitted its draft EIR to the Secretary, it also submitted the same set of documents to the BRA to facilitate coordinated review of BioSquare Phase II under both

overview of BioSquare Phase II, the draft EIR analyzed the impact of the project on urban design (including architectural compatibility with surrounding structures), transportation (including traffic conditions and parking), environmental factors (including wind, shadows, solar glare, air quality, noise, hazardous waste, groundwater, historical resources, and construction work), and infrastructure (including water systems, sewer systems, storm drainage, energy, and telecommunications). The draft EIR did not discuss the medical research that would take place within the Biolab, or consider the potential consequences of such work on the surrounding community. It merely stated that in order to accommodate the safety and security requirements of the Biolab, a parcel of land that originally had been designated for a hotel in BioSquare Phase I would be reallocated to other purposes in BioSquare Phase II.

After receiving public comments on the draft EIR,¹² the

MEPA and art. 80 of the Boston Zoning Code. See Boston Zoning Code, art. 80, § 80-6. In accordance with art. 80, the BRA is responsible for, *inter alia*, comprehensive review of large development projects before and during the schematic design stage in order to assess a project's impacts on its surroundings and on Boston resources, and to identify necessary mitigation measures. Id. at §§ 80B-1, 80B-5.

¹² The Secretary received numerous comment letters on the draft EIR from agencies, departments, boards, commissions, and authorities that would be involved in the permitting process for BioSquare Phase II and would be making findings, pursuant to G. L. c. 30, § 61, on the environmental impacts of the proposed project. Letters were submitted by, among others, the Massachusetts Bay Transportation Authority, the Massachusetts Historical Commission, the Department of Environmental Protection northeast regional office, the Boston Water and Sewer Commission, the Boston Redevelopment Authority, the Massachusetts Highway Department, the Massachusetts Water Resources Authority, the City

Secretary determined, in a certificate issued on December 1, 2003, that the draft EIR adequately and properly complied with MEPA and its implementing regulations. She pointed out that MEPA review does not, in itself, result in any formal adjudication approving or disapproving a project and, therefore, her certificate did not constitute a substantive judgment on the proposed land use.¹³ The Secretary stated that BioSquare Phase II could proceed to the stage of a final EIR, where University Associates should provide additional analysis on specified issues.] In particular, she wrote, the final EIR should include more detail on the proposed use of the Biolab and any potential environmental impacts from such use, should address concerns raised about the safety of the Biolab, should discuss design features that the Biolab would employ to enhance safety, should document how the Biolab would meet any applicable State and Federal safety regulations, should evaluate a "worst case" safety event involving the loss of the physical integrity of the containment systems, should address safety considerations relating to the transportation of potentially hazardous biological agents to and from the Biolab, and should respond to the public comments received on the draft EIR, particularly a

of Boston Environment Department, and the environmental health office of the Boston Public Health Commission.

¹³ Although the MEPA review process is not adjudicatory, it may limit the scope of review of environmental issues under G. L. c. 30, § 61, by agencies that issue permits that fail to comment, or that make only limited comments, on an EIR. See 301 Code Mass. Regs. § 11.08(7).

detailed comment letter submitted by a Roxbury organization, Alternatives for Community & Environment (ACE), requesting an analysis of, inter alia, alternative locations for the Biolab in a less densely populated area.¹⁴

On July 30, 2004, University Associates submitted its final EIR to the Secretary. BioSquare Phase II would consist of two medical research buildings, one of which would house the Biolab, and a parking garage. In its discussion of the Biolab's operational, safety, and security issues, University Associates analyzed the public health impacts of a "worst case scenario" involving the loss of the Biolab's containment systems. RWDI West Inc. (RWDI) was hired to perform the risk assessment. It assumed that dry purified anthrax stored in a container was dropped accidentally in the Biolab, releasing ten billion aerosolized anthrax spores.¹⁵ It further assumed that there would be a complete failure of all containment systems, resulting in anthrax spores being expelled from the building through the

¹⁴ In a lengthy comment letter, ACE stated that the draft EIR was fatally deficient because it completely failed to explain that University Associates planned to build, as part of BioSquare Phase II, a Biosafety Level 4 facility where researchers would experiment with the most dangerous live viruses known to exist. ACE emphasized that the omission of this information made it impossible to determine the impacts the Biolab would have on the chosen project site and to evaluate alternatives to the Biolab's design and location. This critical omission, ACE continued, was sufficient cause for the Secretary to determine, in accordance with 301 Code Mass. Regs. § 11.08(8), that the draft EIR was inadequate and that University Associates must file a supplemental draft EIR.

¹⁵ Anthrax was selected because of its resistance to environmental factors, such as sunlight and lack of humidity, and the ease of airborne dissemination.

exhaust system over a period of approximately thirty minutes. Based on an analysis of this event, RWDI and University Associates determined that the risk of public harm was so minute as to be negligible.¹⁶

The final EIR also discussed briefly other potential risk scenarios, including the risk of staff acquiring infections within the Biolab, the release of contaminated air through the exhaust system, the escape of an infected animal, the release of infectious materials during transportation, the unauthorized removal of biological materials from the containment area, and the threat of terrorism. University Associates concluded that, given the specialized precautions taken by the Biolab, the risk of harm from any of these scenarios was insignificant or negligible. In its responses to comments received from ACE, University Associates did not specifically address the issue of

¹⁶ In its description of the methodology used for the "worst case" analysis, University Associates stated that, based on simulations undertaken by the National Institutes of Health, if ten billion anthrax spores were accidentally released, only 400,000 spores would become airborne and respirable. The calculated "worst case" exposure for any single individual resulting from the expulsion of anthrax from the Biolab over a thirty-minute period would be 0.0024 spores. This exposure reflected the most dense dispersion location, and the inhalation of anthrax for the duration of the event. An exposure of 0.0024 spores is significantly less than one spore. A scenario resulting in the inhalation of one spore over the course of the event would require that more than 6,000 individual containers be dropped simultaneously with all caps unfastened while the building exhaust system was operating with all filtration removed. RWDI concluded that because the release and inhalation of a partial spore is not feasible, the risk of public harm from the "worst case" analysis may be practically considered as zero.

alternative locations for the Biolab.¹⁷ After receiving public comments on the final EIR, the Secretary issued a certificate on November 15, 2004, stating that the final EIR adequately and properly complied with MEPA and its implementing regulations. Consequently, the Secretary concluded that the plans for BioSquare Phase II could proceed to the State permitting agencies.¹⁸

¹⁷ In its responses to the ACE comment letter, University Associates noted only that there is a nationwide need to develop national biocontainment laboratories, and that Massachusetts and Boston are biomedical research centers. In responding to a comment letter received from the Worcester Square Area Neighborhood Association, University Associates did state that "[l]ocating the [Biolab] in a rural area would fail to take advantage of the essential benefit of shared intellectual and capital resources achieved by locating the facility within the City of Boston at the Boston University Medical Center Campus."

¹⁸ On February 11, 2005, University Associates notified the Secretary about three laboratory-acquired infections that had occurred in one of Boston University Medical Center's Biosafety Level 2 facilities. University Associates represented to the Secretary that at the time it filed its final EIR, it did not know that three research scientists had become ill while working with *francisella tularensis* (the bacteria that causes tularemia, also known as "rabbit fever") because the infection was not confirmed by the State laboratory until November 12, 2004. It was the assessment of Boston University Medical Center that at no time was there any public health risk associated with this incident because the workers were exposed in a single laboratory, and tularemia cannot be transmitted from person to person. In her response to University Associates, the Secretary noted that MEPA regulations included a discretionary mechanism for her to reopen the environmental review process through a "Notice of Project Change" if she determined that University Associates, "either knowingly or inadvertently, concealed a material fact or submitted false information during MEPA review." 301 Code Mass. Regs. § 11.10(5). The Secretary concluded that, based on the information provided by University Associates, there was no evidence of "a knowing or inadvertent concealment of a material fact or submission of false information during MEPA review." She further stated that the existence of a now-known and reported laboratory-acquired infection did not, by itself, significantly increase the environmental consequences of BioSquare Phase II.

The plaintiffs then commenced the present action against the defendants in the Superior Court, alleging in Count II of their amended complaint, which is the focus of this interlocutory appeal, that the Secretary erred in concluding that the final EIR adequately and properly complied with MEPA.¹⁹ More specifically, the plaintiffs asserted that the final EIR analyzed only a single "worst case" scenario, one involving the hypothetical release of anthrax where the pathogen is transmitted by the inhalation of spores, and did not consider any risk scenario involving the release of a contagious pathogen, which can be transmitted through human contact from person to person. The plaintiffs further asserted that the final EIR failed to analyze alternative locations for the Biolab outside the densely populated neighborhood of the South End.

Subsequently, the plaintiffs filed a motion for judgment on the pleadings pursuant to Mass. R. Civ. P. 12 (c), 365 Mass. 754 (1974). In his memorandum and order on the plaintiffs' motion, the judge found that the Secretary's certification on November 15, 2004, that the final EIR adequately and properly complied with MEPA and its implementing regulations was arbitrary and capricious. Given that BioSquare Phase II would include a Biosafety Level 4 laboratory, the judge concluded that the

Consequently, the Secretary did not require University Associates to submit a "Notice of Project Change."

¹⁹ The issues raised in the remaining counts of the plaintiffs' amended complaint are not presently before this court.

environmental reviews were inadequate because University Associates failed to analyze the risks posed by the potential release of a contagious disease from the Biolab, which could cause catastrophic harm, and because University Associates had not considered locations for the Biolab other than the South End. In the absence of such critical analysis, the judge opined, the Secretary's certification of the final EIR lacked a necessary rational basis. The judge pointed out that those governmental agencies whose permits and financing were necessary for the development of BioSquare Phase II should have the benefit of an EIR that properly evaluated the full extent of the environmental impacts of the Biolab, and considered whether such impacts would be different in another location.²⁰

3. Standard of review. The Secretary has broad discretion

²⁰ In an amicus brief, the Secretary informs us that he is currently overseeing a supplemental administrative process in response to the judge's memorandum and order. On September 5, 2006, the Secretary issued a certificate directing University Associates to prepare and file a supplemental final EIR evaluating an additional "worst case" scenario arising from the release of a contagious pathogen, and identifying feasible alternative locations for the Biolab, including at least one in an area less densely populated than the South End. Even if, as the Secretary suggests, the defendants' interlocutory appeal should be dismissed because the appeal is no longer necessary to facilitate the administration of justice, the public importance of this case, coupled with the fact that the issues have been fully briefed and are likely to arise again when other projects are subject to MEPA review, dictate that we address the issues raised by the defendants. See Lockhart v. Attorney Gen., 390 Mass. 780, 783 (1984), and cases cited (recognizing exception to mootness where issue was one of public importance, was fully argued, and was very likely to arise again). In a reply brief, University Associates asserts that interlocutory review of whether the judge's order properly required further risk analysis remains appropriate.

under MEPA to facilitate environmental planning for proposed projects that will require action by Commonwealth agencies. See Sierra Club v. Commissioner of the Dep't of Env'tl. Mgt., 439 Mass. 738, 748 (2003). See also 301 Code Mass. Regs. § 11.01(1)(d). "The 'informal and informational public consultation' permitted under EIR review and the Secretary's certification are not adjudicatory proceedings." Sierra Club v. Commissioner of the Dep't of Env'tl. Mgt., supra at 747, citing 301 Code Mass. Regs. § 11.08(3). Nonetheless, "[t]he process by which the information is gathered, identified, and applied to the statutory standards under MEPA must be logical, and not arbitrary or capricious." Sierra Club v. Commissioner of the Dep't of Env'tl. Mgt., supra at 749. See Receiver of the Boston Hous. Auth. v. Commissioner of Labor & Indus., 396 Mass. 50, 58 (1985). Therefore, we consider here whether the Secretary's certification of the final EIR had a rational basis. See Sierra Club v. Commissioner of the Dep't of Env'tl. Mgt., supra at 748. We are mindful that appropriate deference must be given to the Secretary's expertise in environmental matters. See Colby v. Metropolitan Prop. & Cas. Ins. Co., 420 Mass. 799, 806 (1995) ("the commissioner's interpretation of the relevant statutes, although not controlling, is entitled to deference").

4. Consideration of "remote" contingencies. The defendants first contend that the judge's conclusion that the environmental reviews of the Biolab were inadequate was based on a fundamental misconstruction of MEPA. They point out that the Secretary is

vested with the authority to gather pertinent information on proposed projects so that State agencies charged with the review of those projects can take appropriate steps "to minimize damage to the environment." G. L. c. 30, § 61. See G. L. c. 30, § 62A; 301 Code Mass. Regs. § 11.01. At the same time, the defendants assert that the provisions of MEPA do not contemplate an analysis of every conceivable environmental impact posed by a project. Rather, they continue, the scope of MEPA is limited to environmental consequences that are "actual," "probable," or "likely," not those that are highly remote. Consequently, the defendants argue that because the Secretary was not required to consider unlikely contingencies, such as the actual release of a pathogen from the Biolab, her certification of the final EIR was proper, not arbitrary or capricious. Further, the defendants contend that even if remote contingencies were a necessary focus of the MEPA review process, the judge here substituted his own opinion for that of the Secretary with respect to what circumstances constituted a plausible "worst case" scenario for analyzing the environmental risks posed by the Biolab's operation. We disagree with the defendants' interpretation of MEPA and the Secretary's corresponding obligations thereunder in certifying the final EIR.

The Secretary's authority over the submission and scope of an EIR flows from G. L. c. 30, § 62A, which provides that "the secretary . . . shall . . . limit the scope of the report to those issues which by the nature and location of the project are

likely to cause damage to the environment" (emphasis added). The regulations promulgated in accordance with MEPA further provide that "[t]he Secretary shall limit the Scope [of the EIR] to those aspects of the Project that are likely, directly or indirectly, to cause Damage to the Environment." 301 Code Mass. Regs.

§ 11.06(9)(a). The focus of this statutory and regulatory scheme is not, as the defendants seem to suggest, on whether the release of a pathogen from the Biolab is probable in the first instance. Rather, the focus is on whether, if such a release occurs, even if the chances are remote, it is "likely to cause damage to the environment." G. L. c. 30, § 62A.

The term "likely" is not defined in MEPA, nor is it understood to be a term of art requiring a specific and limited interpretation. Where a statutory term is not defined, it must be understood in accordance with its generally accepted plain meaning. See Lawrence v. Cambridge, 422 Mass. 406, 410 (1996). The dictionary defines "likely" as "having a better chance of existing or occurring than not," and as "having the character of a probability." Webster's Third New Int'l Dictionary 1310 (1993). "As commonly used and understood, 'likely' is a word that encompasses a range of probabilities depending on the specific context in which it is used. . . . [S]omething is 'likely' if it is reasonably to be expected in the context of the particular facts and circumstances at hand." Commonwealth v. Boucher, 438 Mass. 274, 276 (2002). Given that the nature of a Biosafety Level 4 facility is to conduct research on highly

virulent and infectious pathogens, and given that the Biolab will be located in a densely populated urban area, the likelihood that the release of such a pathogen will cause damage to the environment is extraordinarily high. The fact that University Associates will take all necessary precautions to minimize the chances of a release at the Biolab does not diminish the potential for catastrophic environmental damage if such a release does occur.

The Secretary plainly recognized the inherent hazards associated with the operation of a Biosafety Level 4 facility in the South End because she specifically mandated that University Associates evaluate a "worst case" scenario in its final EIR. However, the Secretary's subsequent determination that the final EIR adequately and properly complied with MEPA, based, in part, on an assessment by University Associates that an accidental release of anthrax from the Biolab would result in negligible public harm, lacked a rational basis because the evaluation of the "worst case" scenario was significantly incomplete. The final EIR failed to analyze the likely damage to the environment caused by the release of a contagious pathogen, whether through laboratory accident, escape of an infected research animal, theft, terrorism, or transportation mishap,²¹ which is a critical

²¹ The Massachusetts Turnpike Authority (MTA) prohibits passenger or commercial vehicles carrying any amount of hazardous material from entering or using all tunnels owned and operated by the MTA, the Metropolitan Highway System tunnels, and the Central Artery North Area tunnels. See 730 Code Mass. Regs. § 7.10 (2003). See also 730 Code Mass. Regs. § 7.02 (2003) (defining "Tunnels"). "Hazardous Material" includes infectious substances.

consideration in a densely populated urban area. As was pointed out in the public comments on the final EIR, anthrax can be spread through the air and may be fatal if inhaled, but it is not a contagion that is transmitted from person to person.

We recognize that the Secretary has considerable discretion over the scope of an EIR given her expertise in environmental matters. At the same time, the purpose of MEPA and the regulations promulgated thereunder is "to provide meaningful opportunities for public review of the potential environmental impacts of Projects for which [State] Agency Action is required, and to assist each Agency in using . . . all feasible means to avoid Damage to the Environment or, to the extent Damage to the Environment cannot be avoided, to minimize and mitigate Damage to the Environment to the maximum extent practicable" (emphasis added). 301 Code Mass. Regs. § 11.01(1)(a). See G. L. c. 30, § 61. The release of a highly virulent and contagious pathogen from the Biolab would present numerous and unique challenges for State agencies, which those agencies likely would not confront if the release involved a noncontagious pathogen. The absence of any information in the final EIR about such a contingency, one likely to cause damage to the environment, was a substantial oversight. Accordingly, we conclude that the judge's determination that the Secretary's certification of the final EIR

See 730 Code Mass. Regs. § 7.02 (1998). See also 49 C.F.R. §§ 171.8, 173.2, 173.134(a)(1) (2006). As a consequence, the transportation of contagious pathogens to and from the Biolab is likely to occur on local streets, exponentially increasing the risk of harm to those along the route of delivery or removal.

was arbitrary and capricious was warranted. The "worst case" scenario put forth by University Associates inadequately addressed the consequences of a release of contagious pathogens from the Biolab, potentially denying State agencies the opportunity for meaningful review of the environmental impact of such a release and consideration of the measures that would be necessary to mitigate environmental damage.

5. Consideration of alternative geographical locations.

The defendants next contend that the judge erred in concluding that the Secretary should have required University Associates to analyze alternative locations for the Biolab. The defendants point out that, pursuant to G. L. c. 30, § 62A, the Secretary is vested with the authority to determine what "alternatives" should be included in a particular EIR, and nothing in MEPA or the regulations promulgated thereunder dictates that one such "alternative" must be the location of a proposed project. Consequently, they continue, the fact that the Secretary did not mandate such an analysis did not render her certification of the final EIR arbitrary and capricious. We disagree.

General Laws c. 30, § 62A, states, in pertinent part, that "[t]he secretary shall determine the form, content, level of detail and alternatives required for the [EIR]." General Laws c. 30, § 62B, provides, in more particular detail, that "[a]n environmental impact report shall contain statements describing the nature and extent of the proposed project and its environmental impact; all measures being utilized to minimize

environmental damage; any adverse short-term and long-term environmental consequences which cannot be avoided should the project be undertaken; and reasonable alternatives to the proposed project and their environmental consequences" (emphasis added). See 301 Code Mass. Regs. § 11.07(4) ("the draft and final EIRs shall present a complete and definitive description and analysis of the Project and its alternatives, and assessment of its potential environmental impacts and mitigation measures sufficient to allow a Participating Agency to fulfill its obligations in accordance with G. L. c. 30, § 61"). Cf. Sierra Club v. Commissioner of the Dep't of Env'tl. Mgt., 439 Mass. 738, 750 (2003) (MEPA does not require exhaustive search for alternatives). In addressing the specific form and content of an EIR, MEPA regulations specify that the EIR shall ordinarily include, inter alia, "[a] description and analysis of . . . all feasible alternatives [to the Project], including but not limited to those indicated in the Scope [of the Project as set forth by the Secretary] . . . [and] a brief discussion of any alternatives no longer under consideration." 301 Code Mass. Regs. § 11.07(6)(f).

We recognize, as did the judge below, that it is not clear from the statute, the regulations, or case law whether the "reasonable alternatives" that must be considered are simply those within the proposed site of BioSquare Phase II, such as a different physical design, or whether "reasonable alternatives" would encompass a different site location altogether. What is

plain from both MEPA and its implementing regulations is that only those project alternatives that are "reasonable" or "feasible" must be included in an EIR so that damage to the environment can be assessed and mitigated. It is left to the discretion of the Secretary to decide specifically what project alternatives are appropriate for inclusion in a particular EIR, and those "reasonable" alternatives will vary depending on the nature of a project.

Here, the Secretary specifically informed University Associates that the final EIR should respond to public comments received on the draft EIR, particularly the detailed letter submitted by ACE, and should present additional narrative or technical analysis, as appropriate, to respond to substantive concerns. The letter from ACE repeatedly and pointedly emphasized that it was imperative for University Associates to address the issue of alternative locations for the Biolab. The Secretary's mandate with respect to the final EIR suggested that she regarded locations outside the South End neighborhood to be "reasonable alternatives" for consideration. However, University Associates never addressed this issue in its final EIR, even insofar as to explain that locations outside the South End would not, for whatever reasons, be feasible. Accordingly, we conclude that the judge correctly determined that the Secretary's certification of the final EIR was arbitrary and capricious because the final EIR did not adequately and properly comply with MEPA where University Associates failed to consider alternative

locations for the Biolab in response to the comment letter from ACE as directed by the Secretary.

6. Conclusion. The order of the Superior Court vacating the Secretary's certification of the final EIR is affirmed. This case is remanded to the Superior Court for further proceedings consistent with this opinion.

So ordered.

CORDY, J. (concurring). Fifteen months ago, following the memorandum and order of the Superior Court judge and the remand of the case to the Secretary of Environmental Affairs for further administrative action,¹ the Secretary directed University Associates to prepare a supplemental final EIR addressing both of the issues that concerned the judge: a "worst case" scenario arising from the release of a contagious pathogen; and an analysis of a feasible alternative location in an area less populated than the South End section of Boston. The studies necessary to this report have since been undertaken by University Associates, and the supplemental final EIR is presently scheduled to be filed with the Secretary in a few months.² Issues with respect to actions the Secretary might take on the basis of that report can be considered by this court (as can any interim order entered by the Superior Court) if and when the full case comes before us. In these circumstances, I would have dismissed this interlocutory appeal, as it is no longer necessary for the court to decide.

In addition, I do not find that the unique issues raised in connection with this project are likely to arise in connection with other projects. The siting of a Level 4 biolaboratory (that will be licensed and regulated by the Federal government) is

¹ The judge's ruling was not stayed pending the resolution of this interlocutory appeal, which appeal is not a matter of right.

² The supplemental EIR was initially scheduled to be filed this past summer, but is now expected by February, 2008.

virtually sui generis in nature, and the temptation to stretch our MEPA statute to ensure that all of the understandable concerns of its neighbors (even those more properly addressed elsewhere) are considered in the State environmental process, poses a risk of unintended consequences for many projects of a different nature.

Insofar as the court has proceeded to decide the case, I concur with its conclusion that the Secretary acted arbitrarily by seemingly requiring a "worst case" scenario and an analysis of an alternative nonurban site in the scope of the final EIR, and then certifying the EIR as complete without actually getting adequate studies of either. I write separately only to express my understanding of the limits of the analysis used by the court to reach this result, and to ensure that the opinion is not construed more broadly than the facts of the case before us would require.

First and most particularly, the court has not ruled, and MEPA does not require, that the Secretary must direct project applicants to consider and analyze unlikely or remote contingencies, and prepare "worst case" scenarios in the event that such contingencies occur. The Secretary's decision with respect to the range of project specific issues "likely to cause damage to the environment," which are to be addressed within the scope of an EIR, rests firmly in his discretion. The court will not substitute its own view of what should be included within such a scope, for that of the Secretary's. Indeed, there are

many projects, such as hospitals, clinics, medical laboratories, nursing homes, prisons, and even food processing plants, whose operation might create some risk of the release of contagious pathogens into the community. The decision of the court today should not be construed to require an environmental study of such risks (and the preparation of worst case scenarios regarding them) as a matter of law or to deem any decision by the Secretary not to require such studies to be an abuse of discretion.

Second, in setting forth the scope of the original EIR, the Secretary directed University Associates to analyze its preferred build alternative, the no-build alternative, and other site layouts that would minimize over-all environmental impacts. The Secretary did not require the study of feasible alternative sites outside the urban area. The court's decision should not be construed to mean that this initial scoping decision was arbitrary and capricious, or was otherwise beyond the Secretary's discretion. It was not. The focus of the judge's inquiry below, and the court's opinion today, is on whether, having changed the scope after (and in response to) public comment on the draft EIR to require such a study, the Secretary abused his discretion by approving the final EIR in its absence.

With these limitations in mind, I concur.