

# **RECORD OF DECISION**

## **FINAL ENVIRONMENTAL IMPACT STATEMENT**

### **Construction and Operation of New U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) Facilities and Decommissioning and Demolition and/or Re- use of Existing USAMRIID Facilities at Fort Detrick, Maryland**

U.S. Army Medical Research and Materiel Command  
Fort Detrick, MD 21702

and

U.S. Army Garrison  
Fort Detrick, MD 21702

January 2007

Approved by:

  
WILLIAM H. THRESHER  
Chief of Staff, OTSG/MEDCOM

**07 FEB 2007**

\_\_\_\_\_  
Date

## **1.0 INTRODUCTION**

The purpose of this Record of Decision (ROD) is to announce the decision by the Department of the Army (DA) to construct and operate new U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) Facilities and to decommission and partially demolish the existing USAMRIID Facilities, and to re-use the remaining USAMRIID Facilities on Area A of Fort Detrick, Maryland. This ROD also explains the process used to make this decision. The proposed action is the subject of a Final Environmental Impact Statement (FEIS) entitled *Construction and Operation of New U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) Facilities and Decommissioning and Demolition and/or Re-Use of Existing USAMRIID Facilities at Fort Detrick, Maryland*, dated 29 December 2006, which is incorporated by reference into this decision document.

### **1.1 Decision**

Based on the analysis contained in the FEIS addressing the Army's mission needs, the potential impacts of the Army's action on human health and the environment, and the proposed means by which to mitigate such impacts, the Army has chosen Construction and Operation of New USAMRIID Facilities and Decommissioning and Partial Demolition of the Existing USAMRIID Facilities and Re-Use of the Remaining Facilities on Area A of Fort Detrick, Maryland (Alternative II) as its course of action. The Army determined that the selected alternative most closely achieves the purpose of and need for the proposed action while maintaining a high level of environmental stewardship.

This decision was based upon a thorough analysis of the potential environmental, health, and socioeconomic impacts of the alternatives considered, the means to mitigate such impacts, the issues of concern, and comments provided by the general public and government agencies throughout the EIS development process. See Sections 2.0, 3.0, and 4.0, respectively, for details of the alternatives, the potential environmental consequences, and the mitigation mechanisms.

### **1.2 Background**

The FEIS was prepared by USAMRIID and the Fort Detrick U.S. Army Garrison (USAG) in compliance with the *National Environmental Policy Act of 1969* (NEPA), as amended (Title 42, U.S. Code [USC], 4321-4347), regulations of the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] 1500-1508) and the Army NEPA Regulation, 32 CFR 651.

The Notice of Intent (NOI) for preparation of the Draft Environmental Impact Statement (DEIS) was published in the *Federal Register* (71 FR 6456 - 6457) on 8 February 2006. On 11 August 2006 the Notice of Availability (NOA) for the DEIS appeared in the *Federal Register* (71 FR 46220) in the weekly listing of EISs received by the USEPA pursuant to 40 CFR 1506.9. USAMRIID and USAG conducted a Public Meeting on the DEIS in Frederick, Maryland on 30 August 2006. Written comments on the DEIS were received through 25 September 2006. See Section 1.4 for details of public and agency involvement.

After careful consideration of all comments and suggestions, the EIS was finalized. The NOA for the FEIS appeared in the *Federal Register* on 29 December 2006 (71 FR 78427) in the weekly listing of EISs received by the USEPA.

### **1.3 Purpose and Need**

USAMRIID, an organization of the U.S. Army Medical Research and Materiel Command (USAMRMC), was established in 1969 to conduct basic research, applied research, and advanced technology development on biological threats, resulting in medical solutions to protect military personnel. USAMRIID's medical countermeasures against diseases such as anthrax, smallpox, botulinum intoxication, and Ebola have included development of vaccines and drugs, diagnostic capabilities, and medical management procedures.

USAMRIID has established itself as the lead biodefense laboratory of the Department of Defense (DoD), with unique high-level biocontainment laboratory facilities (as regulated by the Centers for Disease Control and Prevention (CDC)) and expertise to safely conduct critical biomedical research, development, test, and evaluation (RDT&E). In addition to its original mission to protect military personnel, USAMRIID has been assigned a second mission, to leverage these capabilities to support government-wide biological defense efforts by acting as the DoD's lead laboratory for test and evaluation (T&E) of medical biological defense products.

USAMRIID must expand its facilities to meet both the requirements for increased understanding of current biological threats and the threat of emerging diseases to U.S. military service members and citizens. Replacing the existing USAMRIID facilities in the central portion of Area A of Fort Detrick, Maryland is essential to accelerate the RDT&E of vaccines, drugs and diagnostics for military and civilian applications. This laboratory complex, built primarily in the 1950s and 1960s for 325 personnel, now houses approximately 750 staff. Major utilities and other support systems within it have exceeded their life expectancies and cannot readily accept new technologies. Despite high levels of maintenance that consume up to 25% of its operating budget, the existing facilities no longer provide an adequate platform for USAMRIID to execute its critical missions.

Existing biocontainment laboratory facilities elsewhere in the U.S. are lacking in capacity and flexibility to support USAMRIID's mission requirements for work at BSL -4, i.e., laboratories meeting the most stringent safety and security requirements. (Note: BSLs are designations within a well-defined system established by the CDC and the National Institutes of Health (NIH) consisting of facilities, equipment, and procedural guidelines designed to minimize risk of exposure to potentially hazardous biological pathogens for laboratory workers and the outside environment.) Several planned new biodefense research facilities that will have BSL-3 and BSL-4 laboratories are in design or under construction. However, all of these existing and planned facilities are considerably smaller than the existing or the proposed new USAMRIID facilities. Additionally, the mission responsibilities of the existing and planned facilities complement those of USAMRIID, but none of them has the responsibility to address the spectrum of validated biological warfare agents and naturally occurring pathogens of military relevance that are mandated in USAMRIID's mission.

The 2005 Base Realignment and Closure (BRAC)-stipulated creation of the Biodefense Center of Excellence at Fort Detrick may include relocation of 120 - 140 personnel currently assigned to medical biodefense research functions at the Walter Reed Army Institute of Research and the Naval Medical Research Center to the planned new Joint Medical Biological Defense Research Center of Excellence at Fort Detrick. Some of the laboratory functions required by the BRAC mission may be accommodated within the existing USAMRIID facilities after occupancy of the new USAMRIID facilities. Additionally, renovated space would provide flexibility for

accommodation of other organizations reassigned to Fort Detrick as a result of future BRAC Commission decisions.

For purposes of the USAMRIID EIS, the potential operational impacts of the BRAC components relocated to the existing USAMRIID facilities were included in the evaluation. Separate NEPA documentation analyzing all of the environmental, health, and socioeconomic impacts of the BRAC mission on Fort Detrick has been prepared by the U.S. Army Corps of Engineers, contemporaneous with the USAMRIID EIS process. The analysis and conclusions of that document were taken into account in the decisions made in this Record of Decision.

#### **1.4 PUBLIC AND AGENCY INVOLVEMENT**

The NOI for preparation of the DEIS was published in the *Federal Register* (71 FR 6456 - 6457) on 8 February 2006. The NOI also was published in local newspapers, and a letter was mailed to Federal, state, and local government agencies and potentially interested members of the public announcing publication of the NOI and the scoping activities.

As part of the scoping process, USAMRIID and USAG conducted a Public Scoping Meeting in Frederick, MD, on 22 February 2006. Written scoping comments from other government agencies and members of the public were received through 10 March 2006. Twelve members of the public spoke at the Public Scoping Meeting, and written comments were submitted by seven members of the public, two interest groups, and five government agencies. In all, a total 81 comments were identified for response. There was considerable repetition, as 27 of the identified comments essentially duplicated concerns expressed by other comments.

On 11 August 2006, the NOA for the DEIS appeared in the *Federal Register* (71 FR 46220) in the weekly listing of EISs received by the USEPA. A supplemental NOA was published in the local newspapers and sent to the Federal, state, and local government agencies and potentially interested members of the public, along with copies of the DEIS.

USAMRIID and USAG conducted a Public Meeting on the DEIS in Frederick, Maryland on 30 August 2006. Nine members of the public spoke at the meeting, and written comments were submitted by eleven members of the public and four governmental agencies during the 45-day comment period that ended on 25 September 2006. Additional comments from nine state and local governmental agencies were received in a letter from the Maryland Department of Planning dated 28 September 2006. In all, there were 70 unique comments plus 16 written comments that were essentially verbatim repetitions of an oral comment at the Public Information Meeting, for a total of 86 comments identified for response.

A project web site for the USAMRIID EIS (<http://www.usamriid.army.mil/eis>) was developed and linked to the Fort Detrick web site. The project web site included notices for the public meetings, email and phone contact information, background information on the EIS, and links for downloading a copy of the DEIS or other project documents. It also provided an online comment form that was utilized by members of the public during the public scoping period and again during the comment period for the DEIS.

## 2.0 ALTERNATIVES

An EIS must identify and explain the “range of alternatives.” This includes all reasonable alternatives, which must be rigorously explored and objectively evaluated, and all other alternatives that are eliminated from detailed study with a brief discussion of the reasons for any alternative being judged to be unreasonable. Three reasonable alternatives for the proposed action were evaluated in detail in the FEIS. See Sections 2.1, 2.2, and 2.3. Two additional alternatives that had been identified were rejected as unreasonable, as documented in Section 2.4.

The proposed new USAMRIID facilities will be located adjacent to the existing USAMRIID facilities on Area A of Fort Detrick, which will be decommissioned and either demolished or re-used following occupancy of the new USAMRIID facilities. These new facilities will be located within the National Interagency Biodefense Campus (NIBC) on Area A of Fort Detrick and near the biomedical research facilities of USAMRIID mission partners, including the Agricultural Research Service Foreign Disease-Weed Research Unit of the U.S. Department of Agriculture (USDA), the National Institute of Allergy and Infectious Diseases (NIAID) Integrated Research Facility (IRF), and the Department of Homeland Security (DHS) National Biodefense Analysis and Countermeasures Center (NBACC).

The proposed new USAMRIID facilities will include biocontainment laboratories designed, constructed, and operated to BSLs -2, -3, and -4 and enhanced BSL-3 standards. The animal facilities will be designed, constructed and operated to ABSL-2 and enhanced ABSL-3 standards. (Note: BSLs and ABSLs are designations within a well-defined system established by the CDC and NIH consisting of facilities, equipment, and procedural guidelines designed to minimize risk of exposure to potentially hazardous biological pathogens for laboratory workers and the outside environment.) These BSL and ABSL facilities will enable USAMRIID researchers to safely conduct the research and development and medical T&E work required to support USAMRIID’s evolving missions.

The United States Army is firmly committed to compliance with both international and domestic law including, but not limited to, the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BWC) and the Biological Weapons Anti-terrorism Act. This project is not meant in any way to violate the commitment of the United States to the BWC. It does not involve in any way the development, production, stockpiling, acquisition, or retention of (1) microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes, or (2) weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.

The construction will occur in two stages. Stage 1 will provide approximately 700,000 gross square feet (gsf) of new building space for the replacement of outdated and compressed existing USAMRIID facilities in order to sustain the current mission and to expand medical T&E capacity in support of immediate DoD and national demand. Stage 2 will encompass approximately 400,000 gsf of new building space for the balance of USAMRIID's expanded mission and for additional capacity to meet intensified national requirements for medical T&E in support of biodefense research as well as to accommodate increased collaborative efforts among USAMRIID’s mission partners. In addition, approximately 200,000 gsf of the existing

USAMRIID facilities may be renovated and re-used for laboratory or non-laboratory use, to be determined by evolving biodefense requirements.

The decommissioning and demolition and/or re-use of existing USAMRIID facilities will occur following occupancy of the new Stage 1 and Stage 2 buildings. Decommissioning will entail vacating and decontamination of USAMRIID laboratories and animal facilities in Buildings 1301, 1408, 1412, and 1425 using procedures developed by USAMRIID specifically for BSL -2, -3, and -4 laboratories. USAMRIID Buildings 1408, 1412, and 1414 will be demolished; the latter two buildings, both dating from 1958, are outdated and compressed. USAMRIID Building 1425, dating from 1969, will either be totally demolished or partially demolished, depending on the alternative selected. Additional structures to be demolished or removed within the scope of the proposed action will include Buildings 1413, 1415, 1436, and 1438. The decommissioned laboratories used by USAMRIID in Building 1301, which is operated by the USDA, will be available for renovation and re-use by the USDA.

The existing USAMRIID facilities now house approximately 750 staff in approximately 500,000 gsf of floor space. At present, it is not known exactly how many persons will work in the new USAMRIID facilities. It is estimated that approximately 900 people will staff the Stage 1 building, and a total of approximately 1,300 people will be employed upon completion of Stage 2.

## **2.1 Alternative I - Construction and Operation of New USAMRIID Facilities and Decommissioning and Demolition of the Existing USAMRIID Facilities on Area A of Fort Detrick, Maryland**

This alternative incorporates the construction, operational, decommissioning, and demolition activities discussed above. Except for the laboratories used by USAMRIID in USDA Building 1301, all of the existing USAMRIID facilities in the central portion of Area A of Fort Detrick would be decommissioned and completely demolished following construction and occupancy of the proposed Stage 1 and Stage 2 buildings.

This would fulfill the purpose of and need for the proposed action by providing approximately 1,100,000 gsf of floor space with much-needed additional and state-of-the-art BSL-2, -3, -4, and enhanced BSL-3 laboratory capacity and ABSL-2 and enhanced ABSL-3 animal facilities for RDT&E activities in support of the current and expanded mission requirements of USAMRIID. Furthermore, locating the proposed new USAMRIID facilities on the NIBC is critical to maintaining interagency cooperation and coordination with the NIAID IRF and the DHS NBACC Facility, which were sited near the existing USAMRIID facilities in response to Congressional mandates.

## **2.2 Alternative II - Construction and Operation of New USAMRIID Facilities and Decommissioning and Partial Demolition of the Existing USAMRIID Facilities and Re-Use of the Remaining Facilities on Area A of Fort Detrick, Maryland**

Under this alternative, which incorporates the construction, operational, decommissioning, and demolition activities discussed above, approximately half of Building 1425 will be decommissioned and demolished after construction and occupancy of the proposed Stage 1 and Stage 2 buildings. The remaining portion of Building 1425 (about 200,000 gsf) will be decommissioned, renovated, and re-used for laboratory or non-laboratory purposes (e.g., administrative offices or training), to be determined by evolving biodefense requirements. Except for the laboratories in USDA Building 1301, all other existing USAMRIID facilities in the

central portion of Area A of Fort Detrick, as specified above, will be decommissioned and demolished.

This alternative will fulfill the purpose of and need for the proposed action by providing approximately 1,300,000 gsf of floor space, with much-needed additional and state-of-the-art BSL-2, -3 and -4 and enhanced BSL-3 laboratory capacity and ABSL-2 and enhanced ABSL-3 animal facilities in support of the current and expanded mission requirements of USAMRIID. Furthermore, locating the proposed new USAMRIID facilities on the NIBC is critical to maintaining interagency cooperation and coordination with the NIAID IRF and the DHS NBACC Facility, which were sited specifically near the existing USAMRIID facilities in response to Congressional mandates.

Under Alternative II, the renovated space in Building 1425 will provide flexibility for contingencies such as an extended delay of the Stage 2 construction or accommodation of organizations reassigned to Fort Detrick as a result of future BRAC Commission decisions. This is the Army's preferred alternative.

### **2.3 Alternative III - No Action**

No Action, in this case, means not constructing and not operating the proposed new USAMRIID facilities. This alternative is not the preferred option because it does not address USAMRIID's critical need for expanded and state-of-the-art BSL-2, -3 and -4 and enhanced BSL-3 laboratory capacity and ABSL-2 and enhanced ABSL-3 animal facilities. Under the No-Action Alternative, USAMRIID would continue using its existing outdated, compressed, high-maintenance and energy-inefficient facilities at Fort Detrick at current levels of operation. USAMRIID would have to conduct significant portions of its RDT&E activities as an extramural program, using several dispersed facilities owned and operated by other government agencies, academic institutions, or private research institutes with appropriate state-of-the-art BSL-2, -3 and -4 and enhanced BSL-3 laboratory capacity and ABSL-2 and enhanced ABSL-3 animal facilities. Since the existing and planned high-level biocontainment laboratory and animal facility capacity nationwide, particularly at BSL-4, is limited and committed to other programs, as noted previously, this alternative is not compatible with USAMRIID's missions to meet current and future biological threats to U.S. military personnel and citizens.

### **2.4 Unreasonable Alternatives**

Alternative IV (Construction and Operation of New USAMRIID Facilities on Area B of Fort Detrick, Maryland and Decommissioning and Demolition and/or Re-use of Existing USAMRIID Facilities on Area A) would fulfill the purpose of and need for the proposed action by providing much-needed additional and state-of-the-art BSL-2, -3 and -4 and enhanced BSL-3 laboratory capacity and ABSL-2 and enhanced ABSL-3 animal facilities in support of the current and expanded mission requirements of USAMRIID located within approximately two miles of the biodefense laboratories of mission partner agencies. Its environmental consequences would likely be similar to those of Alternative I or Alternative II, except for the specific location. Details of the construction and operation of the proposed new USAMRIID facilities and the decommissioning and demolition and/or re-use of the existing USAMRIID facilities would be essentially the same as those of the Area A action alternatives.

However, Alternative IV has been rejected as unreasonable, and therefore it was not evaluated in detail in the EIS. Although a specific substitute location for the proposed new USAMRIID

facilities has not been identified on Area B of Fort Detrick, it would be further removed from the NIBC than for either Alternative I or Alternative II and, therefore, less favorable for utilization of existing infrastructure and for synergy among personnel from the mission-partner agencies and the new USAMRIID facilities. The location on Area B of Fort Detrick would not be consistent with Installation land use planning. In addition, it would require development of utilities and roadways, many of which already exist on Area A, and would result in greater potential environmental impacts than those of the Area A action alternatives.

Alternative V (Construction and Operation of New USAMRIID Facilities at a Location other than Fort Detrick and Decommissioning and Demolition and/or Re-use of Existing USAMRIID Facilities on Area A of Fort Detrick, Maryland) would partially fulfill the purpose and need for the proposed action by providing much-needed additional and state-of-the-art BSL-2, -3 and -4 and enhanced BSL-3 laboratory capacity and ABSL-2 and enhanced ABSL-3 animal facilities in support of the current and expanded mission requirements of USAMRIID, but it would be contrary to both the congressional intent for USAMRIID to provide the core of the NIBC and the intent of the 2005 BRAC Commission in choosing Fort Detrick as the destination for many activities around the country to co-locate with similar organizations, especially USAMRIID. Furthermore, it would not have the potential savings inherent in co-location on the NIBC and it would tend to discourage scientific synergy among researchers from USAMRIID and mission partners.

Although a specific substitute location other than Fort Detrick has not been identified, details of the construction and operation of the proposed new USAMRIID facilities and the decommissioning and demolition and/or re-use of the existing USAMRIID facilities would be essentially the same as those of the Area A action alternatives. During the construction phase, this alternative would likely result in more significant environmental, health, and socioeconomic impacts and higher costs than either Alternative I or Alternative II because of the specialized supporting infrastructure, logistics, and security requirements available through the NIBC that would all have to be provided. Depending on site-specific factors, the environmental and socioeconomic impacts during operation outside Fort Detrick may be more or less significant than those of the Area A action alternatives. The health impacts at any location other than Fort Detrick would be similar to those of Alternatives I and II, i.e., negligible and mitigable. For all these reasons, Alternative V is not reasonable. It was, therefore, not subjected to detailed evaluation in the EIS.

## **2.5 Preferred Alternatives**

Alternative III, the No-Action Alternative, would be the least disruptive to natural and cultural resources and is, thus, the environmentally preferred alternative. However, Alternative III would not meet the critical mission requirements of USAMRIID. The Army's preferred alternative, Alternative II, best meets those requirements.

Alternatives I and II both provide the necessary facilities to support the RDT&E activities of the current and expanded mission requirements of USAMRIID. The potential adverse impacts of the Alternatives I and II were found to be qualitatively similar, mostly minor, and mitigable, as discussed in Sections 3.0 and 4.0.

Under Alternative II, the renovated space in Building 1425 will provide flexibility for contingencies such as an extended delay of the Stage 2 construction or accommodation of organizations reassigned to Fort Detrick as a result of future BRAC Commission decisions.



These potential advantages outweigh the negligible to minor increased environmental, health, and socioeconomic impacts and cost increments of Alternative II relative to Alternative I. Therefore, Alternative II has been selected as the preferred option.

### 3.0 ENVIRONMENTAL CONSEQUENCES

The significant issues analyzed in the FEIS included: safety of laboratory operations and demolition of the existing biocontainment laboratories; public health and safety; handling, collection, treatment, and disposal of research wastes; water supply and other utility requirements; traffic; pollution prevention; and analysis of other risks to include discussion of the risk of terrorist attack. In addition, possible adverse health and safety impacts on laboratory workers in the proposed new USAMRIID facilities and on nearby residents during the operational phase of the project were identified and evaluated. The risks were deemed to be negligible and mitigable through adherence to *Biosafety in Microbiological and Biomedical Laboratories* (BMBL) and other standards for safe operational practices.

The three reasonable alternatives identified in Section 2.0 were considered and evaluated in detail to determine how well each one met the mission requirements of USAMRIID and their respective environmental, socioeconomic, and health impacts. The potential adverse impacts of the two Area A action alternatives (Alternatives I and II) were found to be qualitatively similar, mostly minor, and mitigable by adherence to regulatory requirements, use of best management practices during construction/demolition/renovation, and implementation of security and biosurety measures described in the FEIS. See Tables 1 and 2. Under Alternative III (No Action) the impacts associated with implementation of either Alternative I or Alternative II would not occur at or near Fort Detrick, Maryland.

**Table 1. Summary of Potential Environmental Impacts from Construction/Demolition/Renovation of the Proposed New USAMRIID Facilities.**

Environmental Attribute	Potential Environmental Impacts
	Alternative I or Alternative II
Land Use	Minor impacts from land disturbance, mitigated by adherence to COMAR 15% afforestation requirements
Climate	No impacts to climate.
Geology	Minor potential for sinkhole formation, mitigated by good structural design practices. Mitigation of potential adverse impacts to topography and stormwater runoff patterns through use of BMPs.
Soils	Temporary, minor soil erosion in areas where ground cover is removed, mitigated through use of BMPs.
Water Resources	Minor sedimentation in surface waters, mitigated through use of BMPs. Increased stormwater runoff due to impervious surfaces, mitigated by upgrading of stormwater management facilities. Minor impacts to groundwater, mitigated by compliance with groundwater protection requirements.
Wetlands and Floodplains	Negligible impacts to wetlands and floodplains.
Plant and Animal Ecology	No critical habitats will be adversely impacted; it is not likely that there will be impacts to special-status species. Negligible impacts to plant and animal species, mitigated by BMPs. Positive impacts to local plant and animal ecology due to COMAR 15% afforestation requirements.
Air Quality	Temporary, localized minor generation of fugitive dust, mitigated through the use of BMPs. Negligible increase of vehicular emissions.
Historic and Cultural Resources	Significant impacts to NRHP-eligible historic sites. Buildings 1412, 1414, and 1415 will be demolished.
Socioeconomic Environment	Minor positive economic impact to the economy of Frederick.
Noise and Lighting	Temporary localized minor noise expected. Negligible adverse impacts on worker hearing mitigated by OSHA compliance; impacts on the public mitigated by adherence to COMAR and City of Frederick noise control regulations. Negligible impacts from lighting.
Odors	Transient, localized minor incidence of objectionable odors expected.
Transportation	Minor temporary increased traffic and congestion in the immediate vicinity of construction/demolition/renovation. Workers may be bused from Area B.
Energy Resources	Negligible impacts to depletable energy resources.
Pollution Prevention and Waste Management	Temporary minor impact on the waste management system of Fort Detrick. Contractors will be responsible for disposal of construction, demolition, and renovation waste off-site.
Hazardous Material Management	Minor impacts expected. USAG oversight of hazardous material handling will insure compliance with OSHA and RCRA regulations.
Human Health and Safety	Potential minor impacts to construction workers mitigated by compliance with OSHA regulations. Negligible to minor impact to the public due to accidents resulting from increased heavy truck traffic.
Environmental Justice	Negligible impacts to minority and/or low-income communities due to the fact that all vendors and contractors must adhere to Equal Employment Opportunity and Affirmative Action contract requirements.
Cumulative Impacts	The cumulative impacts will be minor and mitigable.

**Table 2. Summary of Potential Environmental Impacts from Operation of the Proposed New USAMRIID Facilities.**

Environmental Attribute	Potential Environmental Impacts
	Alternative I or Alternative II
Land Use	Site is consistent with Fort Detrick IMP for land use. Minor positive impacts due to the fact that the new USAMRIID facilities will be attractive, landscaped buildings that will complement future Installation development.
Climate	No impacts to climate.
Geology	Negligible impacts associated with groundwater contamination, mitigated by engineering controls and adherence to SOPs.
Soils	Negligible soil erosion, mitigated by stormwater management requirements as determined by MDE.
Water Resources	Minor impact on Monocacy River water supply source; Water supply limitations for the proposed new USAMRIID facilities during drought; Groundwater contamination mitigated by adherence to construction standards and operational practices for containment of wastewater leakage (e.g., secondary containment). Minor impacts to local groundwater recharge resulting from increased impervious surface area. Minor impacts from increased stormwater runoff due to impervious surfaces, mitigated by upgrading of stormwater management facilities.
Wetlands and Floodplains	Negligible impacts to wetlands and floodplains.
Plant and Animal Ecology	It is not likely that there will be impacts on special-status species. Negligible disruption of habitat for resident plant and animal species; minimal displacement of deer and some bird species anticipated.
Air Quality	Minor pollutant emissions due to increased use of boilers and incinerators, mitigated by adherence to air permit requirements. Reduced air emissions from the Building 190 Boiler Plant due to the fact that the new USAMRIID facilities will use the CUP to supply steam requirements. Negligible increase of vehicular emissions due to increased traffic.
Historic and Cultural Resources	Negligible impacts to the NRHP-listed buildings and archeological sites on the Installation.
Socioeconomic Environment	Minor positive impacts on local economies. No significant adverse effect on the property values of adjoining residences is anticipated.
Noise and Lighting	Noise impacts from normal operations expected to be temporary, localized, and minor. Noise impacts from emergency generators mitigated by use of a sound buffering structure and restrictions on scheduled testing. Minor impacts from lighting.
Odors	Transient, localized minor incidence of objectionable odors from autoclaving, steam sterilization and laboratory animal operations at the proposed new USAMRIID facilities. Potential minor increased incidence of petroleum odors from boiler plant or incinerator operations.
Transportation	Minor increases of traffic loading on the Installation and adjacent areas. Minor increased demand for parking, mitigated by dedicated parking facility.

**Table 2. Summary of Potential Environmental Impacts from Operation of the Proposed New USAMRIID Facilities  
(continued).**

Environmental Attribute	Potential Environmental Impacts
	Alternative I or Alternative II
Energy Resources	Minor increases in consumption of natural gas, electrical power, and steam and resultant increased utility requirements.
Pollution Prevention and Waste Management	Minor increases in quantities of wastewater, special medical waste, general solid waste, hazardous waste, and radiological waste, mitigated by source reduction. Releases of toxic or hazardous materials to the environment mitigated by compliance with permit requirements.
Hazardous Material Management	Minor impacts expected. USAG oversight of hazardous material handling will insure compliance with OSHA and RCRA regulations.
Human Health and Safety	Negligible impacts to worker health and safety, mitigated by adherence to safety standards (e.g., BMBL). Negligible impacts to public health and safety from laboratory operations and associated shipment of etiologic agents. Significant positive impacts to public health and safety due to the planned research activities.
Environmental Justice	Negligible impacts to minority or low-income populations.
Cumulative Impacts	Negligible cumulative impacts on human health and safety for operation of the NBACC Facility, NIAID, and proposed new USAMRIID facilities; mitigated by adherence to BMBL engineering measures and safety practices. Minor adverse cumulative impacts on traffic and parking demand by the proposed new USAMRIID facilities; mitigated by Installation roadway improvements and central NIBC parking lot. Minor limitations on the required water supply due to drought conditions in the Monocacy River, mitigated by water conservation measures and development of additional water supply sources. Minor cumulative impacts to stormwater management, mitigated by implementation of new regional stormwater management plan. Minor cumulative impacts of increased baseline noise levels, mitigated by scheduling of emergency generator testing. Increased natural gas consumption will not result in increased overall air emissions by Fort Detrick due to the fact that the new USAMRIID facilities will use the CUP to supply steam requirements.

## 4.0 MITIGATION OF IMPACTS

Table 3 provides details of the proposed mitigation measures for the adverse potential environmental, socioeconomic, and health impacts of the proposed action, which will be incorporated in the design of the project. All practicable means to avoid or minimize environmental harm from the selected alternative have been adopted. The mitigation measures described in Table 3 are incorporated into this decision and are considered part of the selected alternative.

The evaluation for potential health impacts during the operational phase of the proposed new USAMRIID facilities included hazard assessments presented in Appendix I of the FEIS. The hazard assessments addressed potential risks to the public resulting from laboratory accidents, escape of an infected animal, biological material shipment, terrorist acts, external acts (laboratory-associated mechanical failures, human errors, external accidents, and man-made or natural disasters), or contact with biosafety laboratory workers. The risks were deemed to be negligible and mitigable through adherence to the CDC/NIH *Biosafety in Microbiological and Biomedical Laboratories* (BMBL) and other standards for safe operational practices, and implementation of measures for security and biosurety described in the FEIS.

The only potentially significant adverse impact associated with the two Area A action alternatives was to historical and cultural resources, by the demolition of three existing USAMRIID buildings which had been designated as eligible for the National Register of Historic Places (NRHP). All matters pertaining to these impacts have been resolved by agreement between USAG and the Maryland Historical Trust (the State Historic Preservation Office [SHPO]). Signing of the Memorandum of Agreement, in which the SHPO consented to demolition of the buildings, included the completion of a Formal Recordation Process to ensure that information about the properties will be available to the public and future researchers after demolition.

**Table 3. Summary of Mitigation Measures and Mechanisms.**

<b>Environmental Attribute</b>	<b>Impact</b>	<b>Mitigation Measure</b>	<b>Mechanism</b>
Land Use	Land disturbance	15% afforestation requirement	USAMRMC financial responsibility. USAG selection of forestation site and oversight of compliance.
Geology	Potential for sinkhole formation	Good structural design practices and use of BMPs during construction/demolition/renovation	USAMRMC construction contract terms and construction management
	Potential pathways for groundwater contamination	Engineering controls and adherence to SOPs	USAMRMC and USAG oversight during operation
	Potential adverse impacts to topography and stormwater runoff patterns	Use of BMPs during construction/demolition/renovation	USAMRMC construction contract terms and construction management
Soils	Soil erosion during construction/demolition/renovation	Use of BMPs during construction/demolition/renovation	USAMRMC construction contract terms and construction management
		Adherence to MDE stormwater management requirements	USAG Stormwater Management Plan and NPDES Permit Compliance
Water Resources	Sedimentation to surface waters	Use of BMPs during construction/demolition/renovation	USAMRMC construction contract terms and construction management
		Adherence to MDE stormwater management requirements	USAG Stormwater Management Plan and NPDES Permit Compliance
	Increased stormwater runoff due to impervious surfaces	Adherence to MDE stormwater management requirements	USAG Stormwater Management Plan and NPDES Permit Compliance
	Damage to aquifer during construction/demolition/renovation	Good construction/demolition/renovation practices	USAMRMC construction contract terms and construction management
	Potential groundwater contamination during operation	Secondary containment for potential wastewater leakage and for ASTs/USTs	USAMRMC design standards, construction contract terms and construction management
Plant and Animal Ecology	Adverse impacts to plant and animal species	Use of BMPs during construction/demolition/renovation	USAMRMC construction contract terms and construction management
	Potential development of forested land	Forestation requirements	USAMRMC financial responsibility. USAG selection of forestation site and oversight of compliance.

**Table 5-4. Summary of Mitigation Measures and Mechanisms (continued).**

<b>Environmental Attribute</b>	<b>Impact</b>	<b>Mitigation Measure</b>	<b>Mechanism</b>
Air Quality	Fugitive dust	Use of BMPs during construction/demolition/renovation	USAMRMC construction contract terms
	Pollutant emissions due to increased use of boilers and incinerators and emergency generator	Adherence to air permit requirements	USAG permit compliance
Historic and Cultural Resources	Demolition of NRHP-eligible historic sites	Recordation process	USAG compliance with DA regulations and SHPO requirements
	Damage to other historic and cultural resources	Use of BMPs during construction/demolition/renovation and adherence to Maryland SHPO requirements	USAMRMC construction contract terms and USAG compliance with DA regulations and SHPO requirements
Noise	Noise effects on construction worker hearing	OSHA compliance	USAMRMC construction contract terms
	Impacts on public health during construction/demolition/renovation	Adherence to noise control regulations	USAMRMC construction contract terms
	Emergency generator noise	Noise control enclosure, restrictions on scheduled testing	USAMRMC and USAG compliance with schedule
Transportation	Increased traffic	Potential and ongoing infrastructural improvements	Ongoing discussions between USAG and the City of Frederick and Frederick County
	Construction worker parking	Contract requirements	USAMRMC construction contract terms
	Proposed new USAMRIID facilities worker parking	Dedicated parking facility	USAMRMC construction contract management
Pollution Prevention and Waste Management	Construction wastes	Contract requirements for disposal of all wastes outside Fort Detrick and in accordance with regulatory requirements	USAMRMC construction contract terms
	Wastes generated by proposed new USAMRIID facilities operations	Pollution prevention through source reduction and conservation	USAG and USAMRMC compliance with USAG, CDC, and DA requirements
Human Health and Safety	Potential construction/demolition/renovation-related injury	Compliance with OSHA regulations	USAMRMC construction contract terms
	Proposed new USAMRIID facilities worker health and safety	Adherence to BMBL and OSHA safety standards	USAMRMC compliance with CDC/NIH requirements and OSHA/USAG standards



## **5.0 OTHER CONSEQUENCES**

### **5.1 Irreversible and Irretrievable Commitment of Resources**

There will be an irreversible and irretrievable commitment of non-renewable energy resources due to implementation of the proposed action. Fossil fuels will be directly consumed by construction equipment during the approximately six-year construction/demolition/renovation phase. On a long-term basis, fossil fuels will indirectly provide electrical power and steam to operate the proposed new and renovated USAMRIID facilities.

### **5.2 Unavoidable Significant and Adverse Impacts**

As noted in Section 4.0, the only potentially significant adverse impact was to historical and cultural resources, by the demolition of three existing USAMRIID buildings which had been designated as eligible for the NRHP. The completion of a Formal Recordation Process ensures that information about the properties will be available to the public and future researchers after demolition.

### **5.3 Environmental Justice**

Executive Order (EO) 12898 *Federal Actions to Address Environmental Justice in Minority and Low Income Populations* requires Federal agencies to consider whether their projects will result in disproportionate adverse impacts on minority or low-income populations. After careful review of the potential impacts and the potentially affected communities, the Army has determined that these segments of the local population will not be adversely impacted disproportionate to the entire Frederick community. The City of Frederick and Census block group 7507-3, the area within Frederick that would be most directly impacted by the proposed action, are not considered poverty areas (i.e., less than 20 percent of the population living below the poverty level).

### **5.4 Global Commons**

EO 12114 *Environmental Effects Abroad* requires Federal agencies to consider the potential impacts that major Federal actions may have on the environment outside the United States, its territories and possessions. The proposed action will have no discernable direct or indirect impact outside of the studied region.

### **5.5 Historical Preservation**

The *National Historic Preservation Act of 1966* (NHPA), as amended (16 USC 470), and EO 13287 *Preserve America* obligate Federal agencies to manage prehistoric and historic resources in such manner that will support the agency mission while preserving historic resources for the benefit of present and future generations. The analysis presented in the FEIS shows that the proposed action will have negligible impact on identified historical and cultural resources other than the three existing USAMRIID buildings to be demolished (see Sections 4.0 and 5.2 above).

## **5.6 Security**

Potential terrorist acts have been evaluated under both USAMRIID-specific and Fort Detrick general scenarios and a local threat assessment (Joint Services Vulnerability Analysis). Specific vulnerabilities cannot be discussed in public for obvious reasons. However, mitigating actions against credible threats have been put in place including: hardening of entry points, multiple checkpoints on approach or access to buildings, fences, offset distances for parked vehicles, armed guards, and other randomized security measures. In addition, the proposed action will be in accordance with all applicable security regulations, as discussed in the FEIS. These issues were taken into account in this decision.

## **6.0 Point of Contact**

Further information regarding this ROD or the FEIS may be obtained through the public USAMRIID EIS web site (<http://www.usamriid.army.mil/eis>) or may be requested by contacting Ms. Caree Vander Linden, USAMRIID Public Affairs, 1425 Porter Street, Fort Detrick, MD 21702-5011; telephone: (301) 619-2285; fax: (301) 619-4625, or email: [caree.vanderlinden@us.army.mil](mailto:caree.vanderlinden@us.army.mil).

Copies of the FEIS are available for reference at the following locations: Frederick County Public Library (110 East Patrick Street, Frederick, MD 21701), Fort Detrick Post Library (1520 Freedman Drive, Fort Detrick, MD 21702), and the National Cancer Institute - Frederick Scientific Library (Building 549, Fort Detrick, MD 21702).