ENVIRONMENTAL ASSESSMENT

Demolition of McGuire Central Heat Plant at Joint Base McGuire-Dix-Lakehurst, New Jersey

July 2012

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Report Documentation Page

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Finding of No Significant Impact (FONSI)

Environmental Assessment (EA)
Demolition of McGuire Central Heat Plant at Joint Base McGuire-Dix-Lakehurst (JB MDL), New Jersey

Purpose

The purpose of the proposed action is to reduce the infrastructure utility and maintenance costs at JB MDL. The building demolition would also help meet the Air Force strategic goal to reduce facilities and infrastructure costs by 20 percent by the year of 2020.

The U.S. Air Force has prepared this EA IAW the National Environmental Policy Act (NEPA); the Council on Environmental Quality (CEQ) regulations implementing NEPA; and the Title 32, Code of Federal Regulations, Part 989, as amended, Environmental Analysis Process (EIAP). The EA is attached to this FONSI.

Proposed Action

The Proposed Action is the demolition of the Central Heat Plant (Building 2101) and supporting structures on McGuire in Burlington County, NJ.

Description of the Alternatives

Alternative 1 – Demolish the Central Heat Plant (Preferred Alternative) .

The project would demolish the Central Heat Plant, including removal of pavement, walkways, utilities, former fuel tanks (structures 2120, 2121, and 2123), Heat Plant Storage Control Building 2122, and associated equipment. The work would include decommissioning the plant, asbestos removal, the removal of demolition debris, removal of the concrete foundation and slab, hauling, disposal, excavation and backfill and removal and termination or capping of utility services.

The contractor would coordinate the decommissioning process with the JB MDL utility shop, Communication Squadron, and natural gas provider prior to the demolition phase. The contractor would conduct an environmental analysis of the facility to determine the presence of asbestos, asbestos containing material, and lead-based paint. The testing and analysis phase would be deemed completed once final test reports are accepted and approved by the Contracting Officer. Following the test and analysis phase, the contractor would completely remove these materials in conformance with all applicable New Jersey Department of Environmental Protection (NJDEP) and United States Environmental Protection Agency (USEPA) laws and guidelines.

Construction debris (concrete, asphalt, metal and wood) would be recycled to the extent practicable. The site would be restored to a more natural condition, with the application of topsoil, fertilizer and grass seed. The project would last approximately 4 months.

No Action Alternative

Under this alternative, JB MDL would retain the buildings in their current deteriorated, unoccupied states, with all utilities (e.g., electricity and heating, ventilation, and air conditioning systems) remaining off, and no renovations or repairs undertaken until a beneficial re-use could be found.

Summary of Anticipated Environmental Impacts Associated with the Proposed Action

Based on the analysis in the EA, which is herewith incorporated by reference, I determine that no significant adverse effects are expected on any resource area as a result of the implementation of the proposed action. We would adhere to all installation management plans, policies and procedures. Furthermore, the project would adhere to several construction Best Management Practices (BMPs) to minimize environmental and safety impacts. The Proposed Action would result in less than significant impacts to land use, air quality, soils, water resources, biological resources, cultural resources, materials and wastes, safety, and transportation and traffic. The building demolition would have minor positive impacts by helping to meet the Air Force strategic goal of reducing facilities and infrastructure costs by 20 percent by 2020. There would be short-term positive impacts on socioeconomics in the form of short-term jobs. There would be long-term positive impacts on stormwater runoff at the site. Overall, the analysis in the EA indicates that the proposed action would not result in or contribute to significant adverse direct, indirect, or cumulative impacts to the resources in the region.

Public Review and Interagency and Intergovernmental Coordination Planning

The Interagency and Intergovernmental Coordination for Environmental Planning process associated with the preparation of the EA was conducted for 30 days, beginning February 6, 2012. The public and agency review of the draft EA and draft FONSI was conducted between June 1, 2012 and July 6, 2012. Copies of these documents were available for public review at the Pemberton Library, Burlington County. All public comments received were addressed in the Final EA.

Finding of No Significant Impact

The Air Force, JB MDL has determined that the Preferred Alternative is Alternative 1 and that the JB MDL would proceed with demolition of the Central Heat Plant.

I conclude that the environmental effects of the Proposed Action at JB MDL are not significant, that preparation of an Environmental Impact Statement is unnecessary, and that a FONSI is appropriate. The EA, prepared IAW NEPA, CEQ regulations, and 32 Code of Federal Regulations 989 as amended, is herein incorporated by reference.

for Joseph E. Whitlock, COL, USArmy Deputy Commander

JOHN M. WOOD, Colonel, USAF
Commander

7 Aug 12
Date

Attachment: Environmental Assessment

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List of Acronyms

AFI	Air Force Instruction
APE	Area of Potential Effect
BFSA	Bulk Fuel Storage Area
BMPs	Best Management Practices
BOMARC	Boeing Michigan Aeronautical Research Center
BTU	British Thermal Unit
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon monoxide
CR	County Route
CRM	Cultural Resources Manager
cy	Cubic yards
DoD	Department of Defense
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
FONSI	Finding of No Significant Impact
FY	Fiscal Year
GIS	Geographic Information System
GSF	Gross square feet
HAZMART	Hazardous Material Control Program
ICRMP	Integrated Cultural Resources Management Plan
JB MDL	Joint Base McGuire-Dix-Lakehurst
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NJ	New Jersey
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NJPDES	New Jersey Pollution Discharge Elimination System
NJSA	New Jersey Statutes Annotated
NOA	Notice of Availability
NOx	Nitrogen oxides
NRHP	National Register of Historic Places
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated biphenyl
PM	Particulate matter
RACM	Regulated Asbestos-Containing Material
RONA	Record of Non-Applicability
SAGE	Semi-Automatic Ground Equipment Complex
sf	Square feet
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	Sulfur dioxide
SVOC	Semi-volatile organic compound
tpy	Tons per year
USEPA	United States Environmental Protection Agency
USC	United States Code
VOC	Volatile Organic Compound

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1. PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 Introduction

Joint Base McGuire-Dix-Lakehurst (JB MDL) (Figure 1-1) proposes to demolish the Central Heat Plant (Building 2101) and supporting structures on the McGuire area, in Burlington County, NJ. This Environmental Assessment addresses the potential environmental, socioeconomic, and cultural impacts of this proposal at JB MDL.

This Environmental Assessment (EA) has been prepared to document the potential for environmental impacts resulting from the demolition of the plant. This EA has been prepared under the provisions of, and in accordance with, the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321 *et seq*.), Council of Environmental Quality [CEQ] Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] 1500-1508), and 32 CFR 989 (*Air Force Environmental Impacts Analysis Process*).

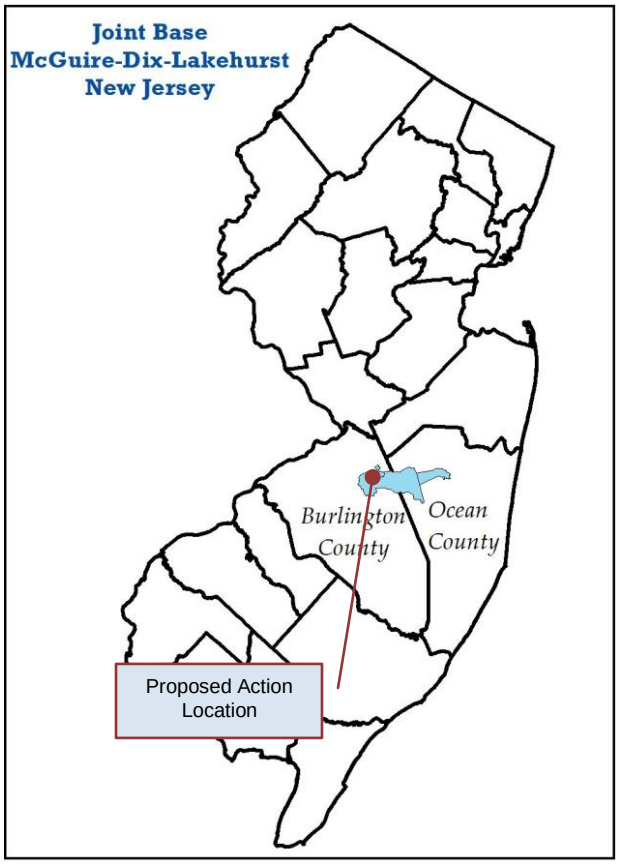

Figure 1-1. Location of JB MDL

1.2 Purpose and Need

The Proposed Action is needed to complete the transition from a centralized heat plant to individual heating systems within each building. The action would reduce the utility and maintenance costs at JB MDL.

1.3 Scope and Content of the Environmental Assessment

This Environmental Assessment evaluates the individual and cumulative effects of the alternatives with respect to land use, air quality, soils, water resources, cultural resources, socioeconomics, infrastructure, materials/waste, and human health and safety.

1.4 Decisions to be Made

JB MDL will decide on the whether to demolish the Central Heat Plant (Proposed Action), or continue to leave the buildings "as is" for potential future reuse (No Action Alternative).

1.5 Interagency Coordination and Public Involvement

Public participation is a significant component of the NEPA process. The following provides a listing of key public notification and participation events that have and will occur as part of this environmental review process:

- JB MDL conducted intergovernmental coordination for environmental planning pursuant to the requirements of NEPA as required under Executive Order (EO) 12372, which has since been superseded by EO 12416 – *Intergovernmental Review of Federal Programs*, and

subsequently supplemented by EO 13132. Based on the scope and setting of the project, JB MDL coordinated with the State Historic Preservation Office (SHPO) on February 6, 2012. The response from SHPO is provided in **Appendix A.**

- The project site is located in a densely developed area that is unlikely to contain archeological sites; however, if sites are discovered, JB MDL would cease all disturbance activity, secure the site(s) and contact the JB MDL Cultural Resources Manager (CRM). The CRM will take necessary actions pursuant to the JB MDL Integrated Cultural Resources Management Plan (ICRMP).
- JB MDL published and distributed the Draft EA and Draft Finding of No Significant Impact (FONSI) for a 30-day public comment period between June 1, 2012 and July 6, 2012. The mailing list for the Draft EA is provided in Chapter 10. Notification of the availability of the Draft EA and FONSI has been accomplished through publication of a legal Notice of Availability (NOA) in the Burlington County Times, the local newspaper that services the JB MDL region. Upon distribution of the Draft EA to the public, copies of the Draft EA and important reference documents were made available for public review at the Pemberton Branch of the Burlington County Library. The JB MDL Public Affairs Officer is the primary point of contact for any inquiries from the local news media.
- JB MDL received responses and/or comment letters from all interested parties in association with the public circulation of the Draft EA. Copies of received responses/comments on the Draft EA, as well as responses to these comments, are provided in **Appendix D**.

2. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action

JB MDL proposes to demolish the Central Heat Plant on McGuire (Building 2101), including removal of pavement, walkways, utilities, former fuel tanks (structures 2120, 2121, and 2123), Heat Plant Storage Control Building 2122, and associated equipment (Figure 2-1).

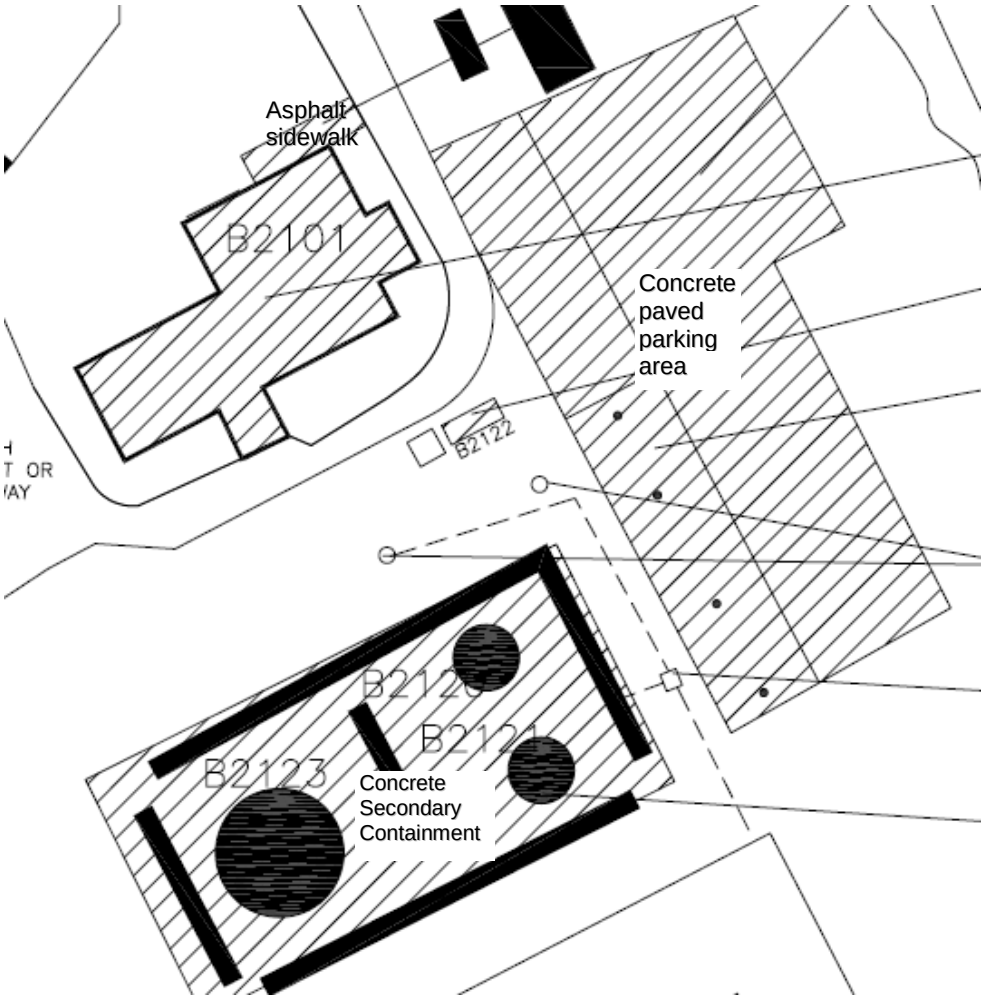

Figure 2-1. Central Heat Plant Buildings

2.2 Alternatives

This EA evaluates the individual and cumulative effects of the following alternatives with respect to land use, air quality, topography and soils, water resources, cultural resources, socioeconomics, infrastructure, materials and waste, and human health and safety.

2.2.1 Alternative 1 – Demolish the Central Heat Plant (Preferred Alternative)

The project would demolish the Central Heat Plant, including removal of pavement, walkways, utilities, former fuel tanks (structures 2120, 2121, and 2123), Heat Plant Storage Control Building 2122, and associated equipment. The work would include decommissioning the plant, asbestos removal, the removal of demolition debris, removal of the concrete foundation and slab, hauling, disposal, excavation and backfill, and removal and termination or capping of utility services.

The contractor would coordinate the decommissioning process with the JB MDL utility shop, communication squadron, and natural gas provider prior to the demolition phase. The contractor would conduct an environmental analysis of the facility to determine the presence of asbestos, asbestos containing material, and lead-based paint. The testing and analysis phase would be deemed completed once final test reports are accepted and approved by the Contracting Officer. Following the test and analysis phase, the contractor would completely remove these materials in conformance with all applicable New Jersey Department of Environmental Protection (NJDEP) and United States Environmental Protection Agency (USEPA) laws and guidelines.

Construction debris (concrete, asphalt, metal and wood) would be recycled to the extent practicable. The site would be restored to a more natural condition, with the application of topsoil, fertilizer, and grass seed. The project would last approximately 4 months.

2.2.1.1 Description of the Central Heat Plant

The Central Heat Plant was built in 1956 and is 24,256 square feet. It is located near the intersection of West Arnold Avenue and Vandenberg Avenue. When it was operated, the boilers generated 262 Million British Thermal Units (BTUs) of heat. The building is approximately 75 feet tall and has a basement approximately 25 feet deep. It is comprised of an original building and an addition. When first used, coal was the fuel source. Later, at an unknown date, the plant was converted to use number 2 fuel oil as its primary fuel source. A transition to natural gas as the primary fuel source occurred sometime in the 1970's, although fuel oil was used occasionally as a back-up fuel source.

Asbestos and lead based paint are known to exist in the facility. Sampling conducted in August 1999 confirmed asbestos within the insulation covering the precipitator towers. Although laboratory tests have not been performed to confirm all its locations, a visual survey by a qualified asbestos building inspector and project designer in September 2011, identified asbestos in the form of pipe insulation, boiler, holding tank and duct coverings, floor tiles, window caulking/glazing, and corrugated building siding.

The asbestos insulation and coverings were found to be damaged in several areas of the building, with some significantly damaged friable materials on most floors and in the basement area (see Section 3.10.2 for additional details).

2.2.2 Alternative 2 – No Action Alternative

As required under NEPA and 32 CFR 989, the No Action Alternative (Alternative 2) is retained in this EA for comparative analysis. Under this alternative, JB MDL would retain the Central Heat Plant and associated structures in their current deteriorated, unoccupied states, with all utilities (e.g., electricity and heating, ventilation, and air conditioning systems) remaining off, and no renovations or repairs undertaken until a beneficial re-use could be found.

2.2.3 Best Management Practices

To minimize impacts on the environment, JB MDL would incorporate the following best management practices (BMPs) for the implementation of the Proposed Action:

- The contractor would submit a Burlington County Erosion and Sediment Control Plan, and receive certification of the plan, prior to commencing site work.
- A site-specific construction and operation health and safety plan, a hazardous waste management plan, and material recycling plan would be provided by the contractor, and approved by JB MDL, prior to the initiation of work on JB MDL. The plans would meet the requirements in US Army Corps of Engineers EM385-1-1, Safety and Health Requirements Manual.

- A site-specific health and safety plan would be developed by the contractor to address measures to protect workers from contaminated groundwater at the site and prevent the spread of contaminated groundwater to non-contaminated areas. If during demolition there are discharges of hazardous substances to the environment, under N.J.S.A. 58:10-23.11, the discharge shall be remediated.
- The contractor would conduct an engineering survey to determine if any hazardous materials, regulated waste, chemicals, gases, explosives or flammable materials are on the work site, which may still present a hazard. The contractor would remove these materials in accordance with state and federal regulations.
- A comprehensive asbestos survey and mitigation plan (Asbestos Hazard Abatement Plan) would be conducted by the construction contractor and must be approved by JB MDL prior to commencing site work. Generators of regulated asbestos containing materials (RACM) shall submit a written notification of intention to demolish in accordance with 40 CFR 61.145 to 61.155 and N.J.A.C. 7:26-2.12(d) and (e) to the USEPA, NJ Department of Community Affairs, NJ Department of Labor, and NJ Department of Health and Senior Services at least 10 days prior to beginning the demolition activity.
- Lighting ballasts that may contain polychlorinated biphenyls (PCBs) and mercury would be removed and disposed of before the demolition phase, in accordance with the applicable regulations at appropriate receiving facilities.
- The contractor would follow the fire protection requirements in National Fire Protection Association (NFPA) 241: Standard for Safeguarding Construction, Alteration, and Demolition Operations.
- All on-road vehicles and non-road construction equipment at the construction site shall comply with the three minute idling limit pursuant to N.J.A.C. 7:27-14 and N.J.A.C. 7:27-15. All non-road diesel equipment shall comply with the 2004 Federal Clean Air Nonroad Diesel Rule.
- All weight tickets for material landfilled or recycled would be submitted to JB MDL. All hazardous waste manifests would be signed by the JB MDL Environmental Division.
- The contractor would prepare a plan for the transport of demolition debris from the site to various disposal and recycling facilities that considers the minimum impact on local communities, particularly hospitals, schools, and other sensitive receptors, and the installation's residents and employees.
- The contractor would stage all equipment and materials within the project site, and limit all disturbance to the site.
- The demolition area would be clearly marked to ensure that only authorized personnel are allowed within restricted areas of the site.
- All building materials and foundations would be removed from the site.
- A Digging Permit from JB MDL would be required prior to any subsurface disturbance. All utility lines serving the buildings would be disconnected and capped in a manner that does not interfere with other mission activities prior any demolition work. Before demolition begins, electric, gas, sewer, water, steam and overhead lines would be located and shut off, capped, or controlled. Water lines serving the site would be capped at the mains to eliminate stagnant dead ends on the system.
- The contractor would provide 2 weeks written notification to the Contracting Officer prior to roadway closures for utility work. The Contractor would attempt to maintain traffic flow by working half roadway at a time.

- In the event of a hazardous material or petroleum spill, the contractor would immediately contact x911 in accordance with base spill response policy.
- To reduce the potential for spills during operation, the demolition contractor would:
    - Inspect equipment and vehicles for leaks daily.
    - Store hazardous materials and wastes in a manner that provides secondary containment in the event of a spill.

3. AFFECTED ENVIRONMENT

3.1 General Overview

This section specifically describes current baseline environmental, cultural, and socioeconomic conditions of JB MDL. The potential direct, indirect, and cumulative effects of the Proposed Action components and alternatives on each of the resources are addressed in Section 4.

3.1.1 Project Location

The project study area is located in the McGuire area of JB MDL, surrounded by Burlington County, NJ, in the central part of the State. JB MDL is located within the Pinelands National Reserve, also referred to as the Pinelands. This reserve consists of approximately 1.1 million acres in southern NJ, managed by the NJ Pinelands Commission. The Pinelands National Reserve includes portions of seven counties, including: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, and Ocean.

3.1.2 Scope of Affected Environment

This EA evaluates the individual and cumulative effects of the following alternatives with respect to land use, air quality, soils, water resources, cultural resources, socioeconomics, infrastructure, materials and waste, noise, health and safety, and transportation and traffic. The demolition would have negligible impacts to biological resources based on its location in a highly developed area with no special status species present. The buildings' windows and doors are intact so that wildlife, including birds and bats, cannot enter. The project would also have negligible impacts to environmental justice.

3.2 Land Use

In the NJ Pinelands, specific areas have been designated for environmental protection, forestry, and agriculture, with growth being directed and encouraged in and around areas capable of accommodating further development. The Pinelands Comprehensive Management Plan zones JB MDL as "Military and Federal Installation Area" defined as Federal enclaves within the Pinelands. Permitted uses are those associated with function of the installation or other public purpose uses (NJ Pinelands, 2011).

The Central Heat Plant is located on McGuire. The site is surrounded primarily by industrial and aviation facilities, with the Bulk Fuel Storage Area to its east, an auto hobby shop to the north, an electric shop to the west, and squadron aviation facilities to the west and south. There is a child development center to the northeast, approximately 550 feet from the Central Heat Plant.

The closest housing area to the study area is a dormitory approximately 1,300 feet to the northeast.

3.2.1 Surrounding Off-Base Land Uses

The Central Heat Plant is located 2,700 feet from the nearest base boundary. The closest off-base residential area is 3,500 feet to the north. There are no adjacent privately owned parcels near the project area.

3.3 Air Quality

3.3.1 Ambient Air Quality

Ambient air quality in an area can be characterized in terms of whether or not it complies with the primary and secondary National Ambient Air Quality Standards (NAAQS). The Clean Air Act (CAA) requires the USEPA to set NAAQS for pollutants considered harmful to public health and the environment.

NAAQS are provided for six principal pollutants, called criteria pollutants (as listed under Section 108 of the CAA), including the following: carbon monoxide (CO), lead, nitrogen oxides (NOx), ozone, particulate matter (PM), and sulfur dioxide (SO_2).

Each state and locality has the primary responsibility for air pollution prevention and control. The CAA requires each state to promulgate a State Implementation Plan (SIP) that provides for implementation, maintenance, and enforcement of the NAAQS in each Air Quality Control Region in the state. In addition, the CAA allows states to adopt air quality standards more stringent than the Federal standards. Regions that comply with the standards are designated as attainment areas. In areas where the applicable NAAQS are not being met, a non-attainment status is designated (USEPA, 2007). Currently, the entire State of NJ does not meet the NAAQS for ozone and is classified as moderate non-attainment for ozone.

Atmospheric ozone occurs when NOx, CO and Volatile Organic Compounds (VOCs) react in the atmosphere in the presence of sunlight (a photochemical reaction). NOx and VOCs are called ozone precursors and are regulated as a means of controlling ozone production. Motor vehicle exhaust, industrial emissions, and chemical solvents are the major anthropogenic sources of these chemicals.

The October 29, 2007 NJ SIP established general conformity budgets for McGuire AFB and Lakehurst for VOCs and NOx (NJDEP, 2007). These proposed budgets were established to provide the bases the operational flexibility to meet their missions and future missions of the DoD. There is no specific SIP budget for the Dix area.

Since the 2007 SIP budget was established, McGuire implemented several energy conservation projects, including the decentralization of the heating plant by installing individual natural gas boilers in buildings. This action is the impetus for the Proposed Action, as the Central Heat Plant is no longer in service. The decentralization results in an estimated energy savings of approximately 136,000 million British Thermal Units (BTU) per year. Based on the Title V air permit limits of the former heat plant, this action reduced the potential to emit for NOx emissions by about 7.5 tons and VOC emissions by 0.4 tons annually[1].

3.3.2 General Conformity Rule

The General Conformity Provision of the CAA (42 USC 7401 *et seq.*; 40 CFR 50-87) Section 176(c), including the USEPA's implementation mechanism, the General Conformity Rule (40 CFR 51, Subpart W), requires Federal agencies to prepare written Conformity Determinations for Federal actions in or affecting NAAQS non-attainment areas or maintenance areas. Since Burlington County is currently in non-attainment status for ozone, the procedural requirements of the General Conformity Rule are in effect for the Proposed Action. Ozone producing air emissions associated with the proposed action would occur during demolition and site restoration phases. A Conformity Rule Compliance analysis is provided in Appendix B.

3.4 Topography and Soils

The area surrounding the Central Heat Plant has fairly level topography. The soil type within the study area is Adelphia-Urban Land Complex with 0-5 percent slopes. Adelphia soils consist of loamy soils with a fluctuating water table. They have moderately slow to moderate permeability and are drained readily by open ditches and underdrains. Urban land consists of cut and fill areas, most of which have been developed for residential, commercial, or industrial use. During development, the original soil horizon was destroyed in at least 70 percent of the area (USDA, 1971).

[1] Assumes natural gas has an energy density of 900 BTU/cubic foot, under the maximum throughput of 41,000 cubic feet/hour and emission limits of 4.1 pounds NOx/hour and 0.226 pounds VOC/hour.

3.5 Water Resources

3.5.1 Regulatory Framework

Water resources at JB MDL are also regulated under Federal Clean Water Act under the jurisdiction of the NJDEP. NJDEP has the primary responsibility for protecting NJ's surface and ground waters from pollution caused by improperly treated wastewater and its residuals, as well as destruction of watersheds from development.

3.5.2 Surface Water Resources

The closest water body to the project area is a tributary to the South Run stream, located 55 feet from the edge of the closest pavement to be removed under the project and about 250 feet north of the Central Steam Plant building.

The South Run stream is considered an "ordinary" wetland under the New Jersey Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A), as it is a swale and is surrounded by lawns and impervious surfaces, and does exhibit any of the characteristics for exceptional resource value wetlands (N.J.A.C-7:7A-2.4(b) and (d)). A transition area is not required adjacent to a freshwater wetland of ordinary resource value.

3.5.3 Groundwater

The near-surface aquifer underlying the project area is comprised of the sand/silt Kirkwood formation (approximately 20-30 feet thickness from the ground surface), underlain by the clay Vincentown formation. The groundwater table is encountered approximately 10-15 feet below ground surface. Local groundwater flow is generally from the southwest to the northeast, towards the tributary to South Run. Groundwater contamination in the area is discussed under Section 3.10.3.

3.5.4 Stormwater Management

All construction projects at the base shall have site-specific soil erosion and stormwater management plans considering runoff control during and after construction. Proposed projects that disturb more than 1 acre of soil must obtain authorization under NJ Pollution Discharge Elimination System (NJPDES) Permit No. NJG008323, or under an individual permit. The procedures and practices included in these plans shall be in accordance with the Standards for Soil Erosion and Sediment Control under Chapter 251, P.L. 1975, the Soil Erosion and Sediment Control Act and the Federal Water Pollution Control Act, 33 U.S.C. 1323. JB MDL and its projects must comply with the stormwater requirements of the Energy Independence and Security Act of 2007, 42 USC 17001, et seq., (Section 438, Stormwater Runoff).

3.6 Cultural Resources

3.6.1 Area of Potential Effect

The Area of Potential Effect (APE) for architectural history and archaeology includes the area bounded by West Arnold Avenue, Vandenberg Avenue, West Third Street, and the Bulk Fuel (aviation fuel) Storage Area to the east. The APE for archaeology includes all areas of ground disturbance associated with the proposed project. The presence of archaeological resources and the potential to affect those resources is discussed below.

3.6.2 National Register of Historic Places

There are no known archaeological sites or historic architectural resources within the project APE listed in either the National Register of Historic Places (NRHP) or the New Jersey State Register.

Between 1995 and 1998, McGuire AFB inventoried Cold War Era buildings (ca 1945-1989) and evaluated them under criteria for exceptional significance, as they had been built less than 50 years prior. The only properties considered eligible for listing on the NRHP were those associated with the Semi-Automatic Ground Environment (SAGE) Complex and Boeing Michigan Aeronautical Research

Center (BOMARC) facility. The Central Heat Plant is located 0.65 miles from the SAGE facility, with the Bulk Fuel Storage area and the golf course located between them. BOMARC is located several miles from the proposed solar sites.

3.6.3 Potential for Archeological Sites

There are no known archaeological sites within the APE for the project. A phase I archaeological survey was conducted in 1994 by Argonne National Laboratory (1995) in areas of high archaeological sensitivity on McGuire (ANL, 1995). Three historic archaeological sites (28-BU-458, 28-BU-459, 28-BU-473) were identified and found to be eligible for listing in the National Register upon further investigation (Mariah Associates, Inc. 1996). Those sites are more than a half mile from the project study area.

3.6.4 Potential for Historic Architectural Resources

The Central Heat Plant was constructed in 1956. It is a flat-roofed building originally rectangular in form, and is now L-shaped. The exterior is clad in industrial metal siding, entry and roll-up doors are metal, and the windows are metal-sash fixed or awning; numerous window openings in the original portion of the building have been enclosed. The building has little architectural detail. It is not significant for either its relationship to the base's mission or its design or construction. Due to its expansion alternations during the 1970's the building lacks integrity of design, materials and feeling (BAH, 2012).

In a letter dated March 30, 2012, the NJ SHPO concurred with the assessment that Building 2101 is not eligible for listing in the NJ and National Registers of Historic Places (Appendix A) and that no historic properties would be affected by the Proposed Action.

3.6.5 Native American Consultation

No Native American Traditional Cultural Properties, protected tribal resources, tribal rights, sacred tribal sites, or Indian lands are known to be present within the study area. The likelihood of finding Native American artifacts or sites within the project area is low, as this area has been extensively disturbed from extensive military development.

3.7 Socioeconomics

JB MDL spans more than 20 miles east to west with 42,037 contiguous acres. It is located within two of the largest counties in New Jersey, Ocean and Burlington, and bordered by 10 townships or boroughs.

The Joint Base is one of the largest employers in New Jersey - the only other entity employing more than JB MDL is the State of New Jersey. JB MDL has approximately 40,000 assigned personnel with a mix of approximately 31 percent military and 69 percent civilian. In Fiscal Year 2010, the annual payroll was approximately $2 billion, with base contract expenditures of approximately $2.1 billion. Service members and family members living and working on and around JB MDL contribute to an overall economic impact of $6.9 billion to the state.

3.8 Infrastructure

The infrastructure associated with the Central Heat Plant is described in Table 3-1.

Table 3-1. Central Heat Plant Infrastructure

Infrastructure	Size
Central Heat Plant Building 2101	24,256 square feet
Heat Plant Storage Control Building 2122	440 square feet
Fuel Tank 2120	150,000 gallon
Fuel Tank 2121	150,000 gallon

Infrastructure	Size
Fuel Tank 2123	850,000 gallon
Secondary Containment - concrete	48,200 square feet
Sidewalks - asphalt	1,120 square feet
Parking Areas – mostly concrete	18,930 square feet

JB MDL has 1,4014,376 gross square feet (gsf) of buildings[2]. Of this, 4,968,149 square feet (sf) occurs on McGuire, 6,346,063 sf occurs on Dix, and 2,700,164 sf occurs on Lakehurst. The Central Heat Plant and Storage Control Buildings make up 24,696 sf, or 0.2 percent of current base building square footage.

Primary utilities at the building include potable water, electric, natural gas, and sanitary sewer. There are 6 boilers within the building, as well as 2 expansion drums, a cold water storage tank, a preheat tank and feed tanks for chemicals and water softeners.

3.9 Materials and Waste

JB MDL adheres to a Hazardous Material Control and Management Plan which defines the procedures for the handling and disposal of hazardous waste. According to the management plan, each department and tenant must possess a Hazardous Waste Coordinator and Spill Response Coordinator. The base hazardous material control program (HAZMART) process receives hazardous materials at a central location where they are distributed on an as-needed basis and their usage and disposal are tracked. The Spill Response Coordinator and/or the Hazardous Waste Coordinator must be contacted in the event of a spill.

3.10 Human Health and Safety

3.10.1 Demolition Safety

According to Occupational Safety and Health Administration (OSHA), demolition work involves many of the hazards associated with construction. However, demolition incurs additional hazards due to unknown factors such as: deviations from the structure's design introduced during construction, approved or unapproved modifications that altered the original design, materials hidden within structural members, and unknown strengths or weaknesses of construction materials.

In the heavy and civil engineering construction sector in NJ, the rate of injury cases per 100 full-time workers is 3.7 (BLS, 2010).

3.10.2 Asbestos

During a site survey on September 13 and 14, 2011, several areas of the Central Heat Plant were identified as potentially containing asbestos (Mason, 2011). Table 3-2 lists the finding of the survey.

Table 3-2. Areas of Suspected Asbestos

Room	Asbestos Material	Location	Square feet	Linear Feet	Hazard Ranking	Comments
Basement	6” pipe insulation A/C	North End Elevated		140	5	Several areas of contamination on floors and horizontal surfaces. Partial cleanup 10/2011.
Basement	12” pipe insulation	West wall		12	1	
Basement	24” pipe insulation	North end elevated		82	5	
Basement	Various fittings	Throughout north end area		25	1	
Basement	Various fittings	Throughout central area		15	5	

[2] From ACES database, as of 21 February 2012.

Room	Asbestos Material	Location	Square feet	Linear Feet	Hazard Ranking	Comments
Storage Room	2" pipe insulation A/C	Elevated		25	5	
1st Level	9'x9' Brn F/T (2 layers)	Storage room northwest corner	620		4	
Locker room	4" pipe insulation A/C	Elevated		20	5	
Locker room	6" pipe insulation A/C	Elevated		20	5	
East Side	4" pipe insulation A/C	Elevated		10	5	
East Side	6" pipe insulation A/C	Elevated/near compressor		65	5	
East Side	12" pipe insulation	Elevated/near compressor		27	5	
East Side	24" pipe insulation	Lines to pumps (2)		24	5	
East Side	24" pipe insulation elbows	Lines to pumps (4)		12	5	
East Side	Asbestos debris	On top of boilers 5&6			1	Materials from damaged insulation on precipitator towers
2nd level	14" pipe insulation	Overhead and through west wall		25	1	
2nd level (Chem test area)	12" pipe insulation A/C	Southeast corner behind tank		25	5	
2nd level	6" pipe insulation A/C	South side of tank		15	1	
2nd level	4" pipe insulation A/C	South side of tank/ northeast corner		85	1	encapsulated
2nd level	Storage tank	Outer insulation	375		5	
2nd level	(6) 24" elbows	Throughout overhead		18	1	
3rd level	Storage tank	Northeast side	800		5	
3rd level	2" pipe insulation	Under tank service platform west/south		4	5	
3rd level	Storage tank	South east side	200		5	Extends from 2nd level on boilers 5&6
5th level	Jacket insulation	Electrical precipitators (2)	9000		1	
Exterior	Corrugated siding	Entire south end of building	14000		7	
Totals			**24,995**	**649**		

Hazard Ranking: 1 – The highest ranking, ACM is significantly damaged; 2 –potential for significant damage; 3 – potential for moderate damage; 4: potential for damage: 5-7: materials are currently in good condition, but with a range of moderate to low in the likelihood of future disturbance.
Source: Mason, 2011.

Generators of RACM shall submit a written notification of intention to demolish in accordance with 40 CFR 61.145 to 61.155 and N.J.A.C. 7:26-2.12(d) and (e) to the USEPA, NJ Department of Community Affairs, NJ Department of Labor, and NJ Department of Health and Senior Services at least 10 days prior to beginning the demolition activity.

3.10.3 Site Contamination

There are two installation restoration sites at or near the project study area. These sites are the Central Heat Plant and the Bulk Fuel Storage Area.

3.10.3.1 Central Heat Plant

The area around the central heat plant (site designation SS-42) was investigated since 1996 for potential contamination from fuel oil spills, and former coal piles and coal combustion. A Draft Remedial Investigation report was completed in December 2011 for Operable Unit 02, which includes SS-42. Areas of concern included groundwater, former coal storage area north of the heat plant, and surface water/sediment in the South Run Tributary. Semi-volatile organic compounds (SVOCs) were detected above levels of concern in surface samples (0-12 inches) at four locations surrounding the heat plant. However, all sample locations were adjacent to asphalt roads, parking areas, and concrete-paved storage areas. The concentrations of SVOCs at these locations may be related to runoff from the pavement. Benzo(a)pyrene, was detected in a subsurface sample above the Level of Concern at a depth of 5.5 to 6.0 feet.

During the investigation, monitoring well SS-42MW04 was found to contain approximately 4 inches of light non-aqueous petroleum. The product was removed with a bailer and subsequent gauging of this well for product has found none. Thirteen SVOCs were detected in direct push technology groundwater samples, with seven in excess of the Practical Quantitation Limit/level of concern. None were detected at concentrations exceeding their respective NJ groundwater quality criteria.

A human health risk assessment was conducted for a construction worker exposure. The total cancer risk (3.8E-6) is within the acceptable risk range of 1.0E-6 to 1.0E-4, with the risk driver being naphthalene in groundwater. The non-carcinogenic Hazard Index of 1.2 is above the threshold of concern where there is concern for potential health effects, with the hazard driver also being naphthalene in groundwater. The hazard index evaluates the toxicity of various chemicals relative to chronic or short-term exposures. The Hazard Index is the sum of more than one hazard quotient for multiple substances and/or multiple exposure pathways.

3.10.3.2 Bulk Fuel Storage Area

The Bulk Fuel Storage Area (BFSA) (site designation ST-09) consists of eight above-ground storage tanks (500,000- to 850,000-gallon capacities). It is located immediately east of the Central Heat Plant (Figure 3-1). Fuels currently stored at the site include JP-8 jet fuel and heating oil. In the past, aviation gasoline (avgas) and JP-4 jet fuel were also stored and dispensed from the facility. MAFB previously estimated that approximately 400,000 to 500,000 gallons of mixed fuels is present on the water table at the BFSA. The Draft Remedial Investigation (dated December 2011) identified a fuel product contour line from this site that extends slightly onto the fuel tank area for the Central Heat Plant (Figure 3-1).

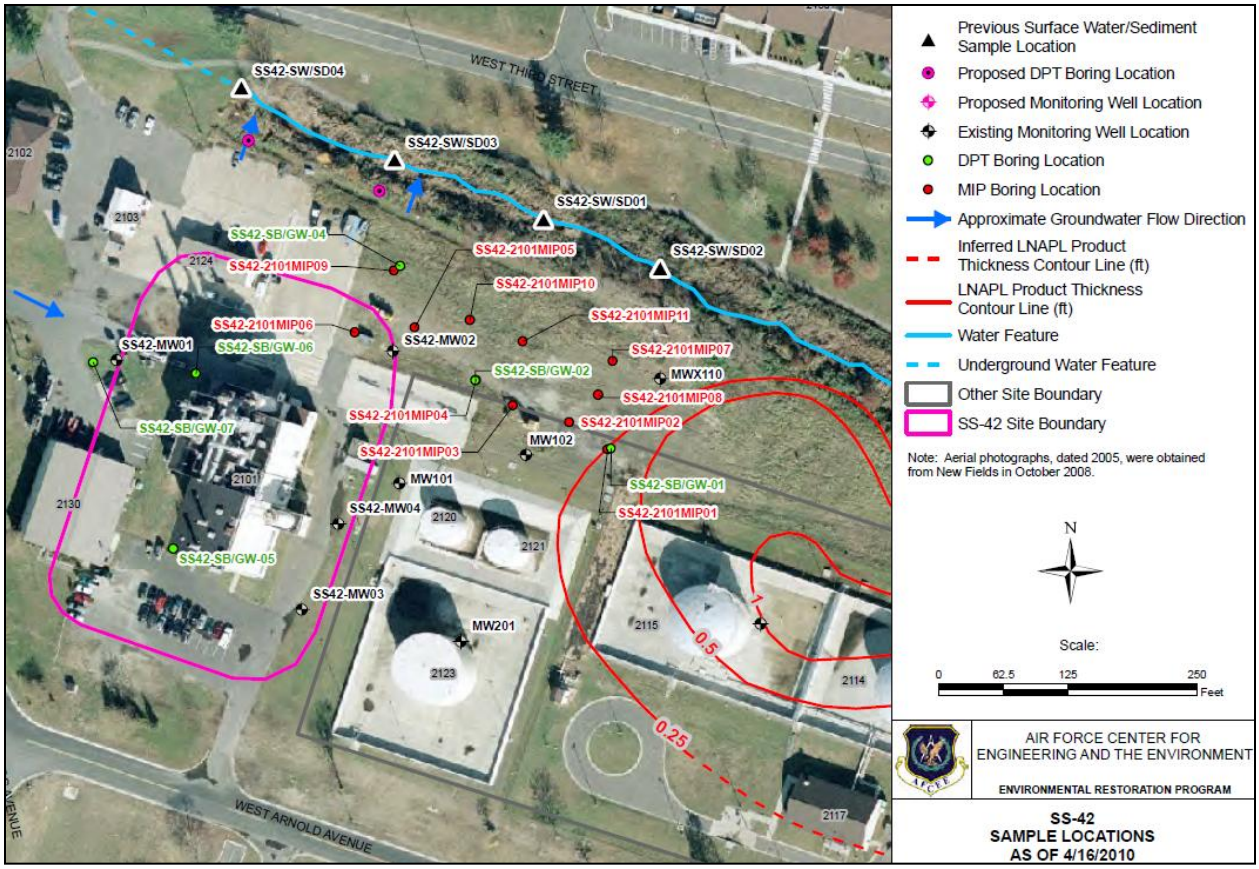

Figure 3-1. SS-42 Remedial Investigation Sample Locations

3.11 Transportation and Traffic

Commercial traffic (trucks) traveling to and from the McGuire area use Checkpoint 9 off of Saylors Pond Road. Checkpoint 9 is available 24 hours a day, but is actively manned between 5am and 4:30 pm. Trucks arriving outside those times are instructed to call security for entrance. Based on data from the 2011 Joint Base Regional Transportation Mobility Study (T&M, 2011), Checkpoint 9 received 3,813 trucks (inbound) on one day in November 2010. The peak hours on the study day were between 6am and 8am where an average of 460 trucks entered per hour. Between 8 am and 5pm, the gate received 180 trucks per hour.

The primary routes from this checkpoint include: Saylors Pond Road (Route 670), Route 68, CR 537, Route 206, CR 616, and CR 528. Several small towns are located within 5 miles of the gate along these routes, including Wrightstown, Pemberton, Cookstown, and New Egypt. Major highways in the area include the NJ Turnpike and I-295 to the west and Route 70 to the south (see Figure 3-2).

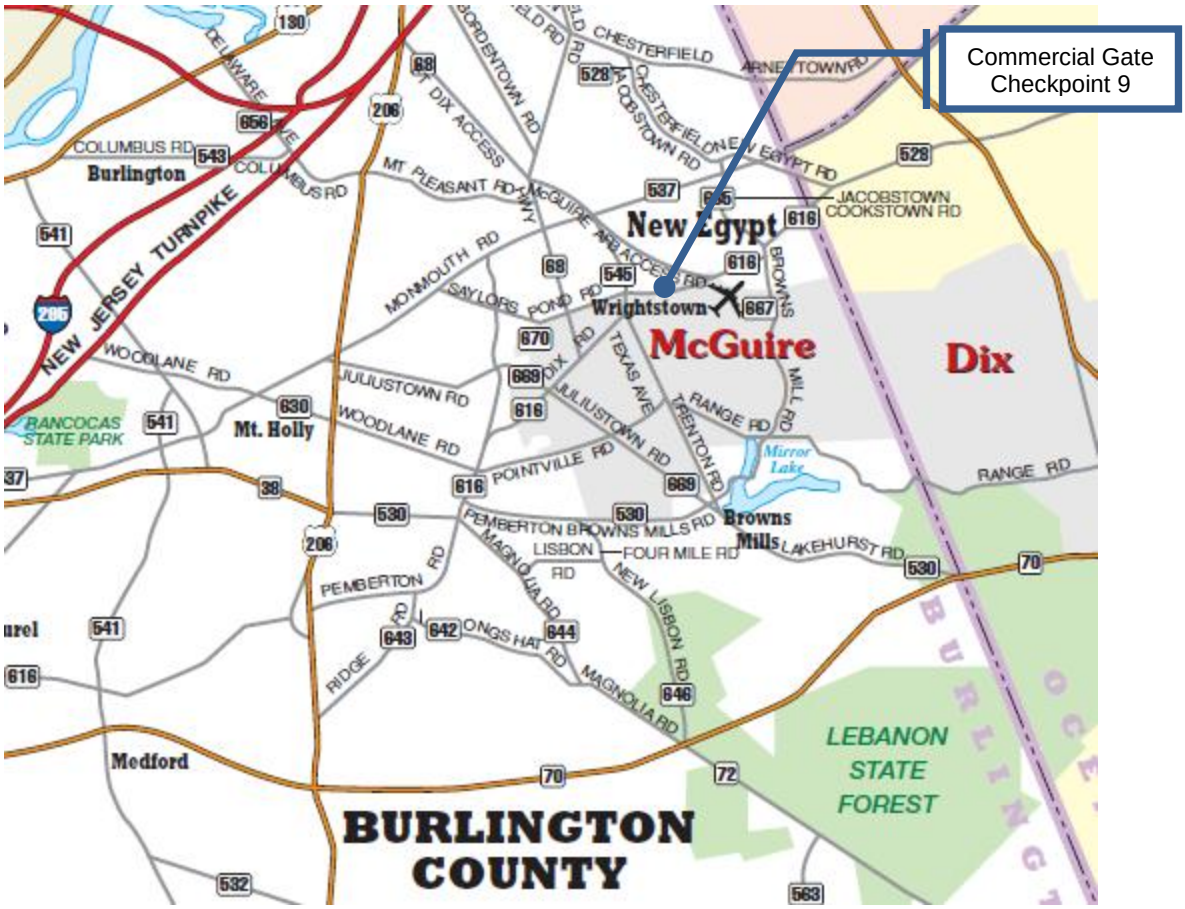

Figure 3-2. Road Network Surrounding Checkpoint 9.

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4. ENVIRONMENTAL CONSEQUENCES

4.1 General Overview

This section identifies potential direct and indirect effects of the alternatives for each resource area described in Section 0 and compares and contrasts the potential effects of those alternatives. The potential environmental, cultural, and socioeconomic effects of implementing each identified alternative, as well as any required mitigation associated with each alternative, are also presented.

4.2 Land Use

4.2.1 Effects of Alternative 1

No significant adverse land use impacts would be anticipated due to implementation of Alternative 1. After the demolition, the site would revert to an open grass area that could later be redeveloped for other mission uses. The Proposed Action would facilitate plans to change land use in the area from industrial to airfield operations.

Due to the proximity of the airfield, high noise levels from aircraft operations occur intermittently in the study area. While building occupants in the area are accustomed this aircraft noise, the Central Heat Plant demolition would produce more sustained, localized noise levels from equipment and heavy trucks over a 4 month period. This additional noise could result in minor short-term adverse impacts on adjacent building occupants, including the Child Development Center occupants located 550 feet to the northeast.

4.2.2 Effects of Alternative 2 (No Action Alternative)

No adverse land use impacts would result from Alternative 2.

4.3 Air Quality

4.3.1 Effects of Alternative 1

Fugitive dust from on-site construction activities and mobile source emissions from construction vehicles, equipment, and the motor vehicles of construction workers would occur. Project construction would involve wrecking, hauling, grading, possibly blasting, and other typical demolition and restoration activities. Exhaust emissions from construction vehicles, personal vehicles, soil erosion, and fugitive dust are all construction issues that would cause minor, short-term air quality impacts.

Overall, the dust during demolition could be reduced by enforcing a dust control plan in place that involves removing dust generating building materials, pre-wetting of the building and use of specialized dust control equipment.

Based on the analysis provided in Appendix B, temporary construction-related emissions would be approximately 4.47 tons of NOx and 0.83 tons of VOCs. These emissions, when added to the other emissions at McGuire, would fall within the McGuire SIP budgets; therefore, the Record of Non-Applicability (RONA) satisfies the General Conformity Rule. As such, the RONA documents JB MDL's decision not to prepare a written conformity determination for the Proposed Action. BMPs, as described in Section 2.2.3, would sufficiently minimize airborne particulate emissions to less than significant levels. Mobile source emissions during construction would result in direct, minor, short-term adverse air quality impacts.

4.3.2 Effects of Alternative 2 (No Action Alternative)

The No Action Alternative would not affect air quality.

4.4 Topography and Soils

4.4.1 Effects of Alternative 1

The site topography would not be noticeably altered under the Proposed Action. The Central Heat Plant is located on a fairly level location and the removal of the plant, associated buildings and pavement would retain the site in a nearly level condition when completed. Fill dirt would be placed in the basement area and former coal tunnel to create a level surface, and topsoil would be added prior to seeding.

The contractor would obtain certification of a soil erosion and sediment control plan by the Burlington County Soil Conservation District and obtain an authorization to discharge stormwater associated with a construction activity under the NJDEP general permit.

With the adherence to the BMPs described in Section 2.2.3, there would be minimal impact to topography and soils.

4.4.2 Effects of Alternative 2 (No Action Alternative)

No adverse impacts to topography and soils would result from implementation of Alternative 2, as the demolition would not occur.

4.5 Water Resources

4.5.1 Effects of Alternative 1

No adverse impacts to surface water resources would occur from the implementation of Alternative 1, provided that protective measures required by the Burlington County Soil Conservation District are followed. There are no wetlands or surface water features within the immediate project area, although a tributary to the South Run is located 55 feet from the edge of project disturbance. As this tributary is an ordinary wetland, there would be no freshwater wetlands permitting required per N.J.A.C. 7:7A (see Section 3.5.2). The project would use minor amounts of potable water for dust suppression.

As the Central Heat Plant was constructed before stormwater regulations were developed, a significant amount of runoff currently enter the storm system during rain events. The restored site would eliminate paving and other impervious surface. This would have a positive impact on reducing stormwater runoff (sheet flow) toward the tributary of South Run.

4.5.2 Effects of Alternative 2 (No Action Alternative)

No adverse impacts to water resources would occur from the implementation of the No Action Alternative.

4.6 Cultural Resources

4.6.1 Effects of Alternative 1

The demolition of the Central Heat Plant would not have an effect on cultural resources. The SHPO concurred on March 30, 2012 that the property is not eligible for listing on the National Register of Historic Places and that no historic properties would be affected by the Proposed Action. Furthermore, the site has been heavily disturbed from past military construction and archeological studies and the area of potential effect was not identified as having potential to contain archeological sites.

4.6.2 Effects of Alternative 2 (No Action Alternative)

The No Action Alternative would have no effect on cultural resources.

4.7 Socioeconomics

4.7.1 Effects of Alternative 1

Implementation of Alternative 1 would likely employ regional contractors for site preparation, demolition, material hauling, and site restoration. The project is anticipated to cost $4 Million, and could be accomplished within 4 months. The project would temporarily employ between 20 and 50 workers at a time, varying by project phase. The project would have a minor beneficial effect on socioeconomics in the region.

4.7.2 Effects of Alternative 2 (No Action Alternative)

There would be no impact to socioeconomics under the No Action Alternative, as the demolition would not occur.

4.8 Infrastructure

4.8.1 Effects of Alternative 1

The proposed action would reduce the amount of building infrastructure on JB MDL by 0.2 percent, helping the base meet the Air Force goal of reducing infrastructure.

A decommissioning plan would be followed by the contractor, outlining the steps necessary, (including coordination) for shutting off utilities serving the site and disconnecting them with the least service interruptions to adjacent buildings. The capping locations for water, natural gas, sewer and communications lines would be coordinated with the 87th Utility Shop and 87th Communications Squadron. With proper coordination, there would be minor short-term adverse effects on utilities.

Overall, the Proposed Action would have a positive impact on infrastructure by eliminating obsolete and deteriorated buildings.

4.8.2 Effects of Alternative 2 (No Action Alternative)

The Central Heat Plant and associated structures would remain in a deteriorated state with no repairs made. The further deterioration of the buildings would continue to make them undesirable for future reuse.

4.9 Materials and Wastes

4.9.1 Effects of Alternative 1

Primary demolition debris would consist of structural steel, concrete, and asphalt. Based on an EPA study, the estimated amount of demolition debris would be on average 158 pounds/square foot (USEPA, 2009). Using this value, the demolition would generate about 1,951 tons of building debris (see Table 4-1). Most of this waste would consist of concrete and metal, which would be source-separated and recycled to the maximum extent practicable. Assuming one truck can haul up to 12 tons, this amount of demolition waste would consist of up to 180 truckloads[3].

The site has approximately 18,930 square feet of concrete paving and 1,120 square feet of asphalt paving. According to the NJDEP list of Approved Class B[4] Recycling Facilities, there are 18 facilities in the local region (across Burlington, Ocean and Monmouth Counties) that recycle concrete. There are 16 qualified Class B asphalt recycling facilities in the local region (Burlington, Monmouth and Ocean Counties) that could accept this material.

[3] Truck numbers were increased by 10 percent assuming potential for less than maximum loads (see Table 4-1).

[4] Class B recyclable material" means a source separated recyclable material which is subject to Department approval prior to receipt, storage, processing or transfer at a recycling center in accordance with N.J.S.A. 13:1E-99.34b, and which includes source separated, non-putrescible, waste concrete, asphalt, brick, block, asphalt-based roofing, scrap and wood waste.

Once the steel fuel tanks are decontaminated, the steel would be recycled, generating approximately 77 tons of scrap material (Table 4-1). There are six qualified ferrous metal recyclers in Monmouth County (none in Ocean or Burlington). There are 25 additional ferrous metal recyclers in NJ. The secondary containment for the tanks would generate approximately 178 tons of concrete waste that would also be recycled.

Table 4-1. Estimates of Demolition Waste, Central Heat Plant

Item	Area (sf)	Estimated Depth (feet)	Volume (cubic yards [cy])	Conversion Factor	Weight (tons)	Trucks (+10%)
Central Heat Plant Building 2101	24,256	NA	NA	158 lbs/sf	1916.2	176
Heat Plant Storage Control Building 2122	440	NA	NA	158 lbs/sf	34.8	4
Secondary Containment - concrete	48,200	2	21,737.56	3.7 lbs/cy	178.5	17
Sidewalks - asphalt	1,120	1	3,570.37	1380 lbs/cy	28.6	4
Parking Areas – mostly concrete	18,930	1	41.48	3,7lbs/ cy	35.1	4
Item	**Size**	**Height (feet)**	**Diameter (feet)**	**Conversion Factor**	**Weight (tons)**	**Trucks (+10%)**
Fuel Tank 2120	150,000 gallon	19.7	36	4.41 lbs/sf	7.1	2
Fuel Tank 2121	150,000 gallon	19.7	36	4.41 lbs/sf	7.1	2
Fuel Tank 2123	850,000 gallon	29.5	70	4.41 lbs/sf	62.4	7
		Totals			**2,269.8**	**216**

Sources: (1) USEPA, 2009; (2) CalRecycle, 2010, Note: Truck numbers were increased by 10 percent assuming potential for less than maximum loads. Fuel tanks were assumed to be 12 gauge steel.

Fill dirt would be delivered to the site to fill the basement, and bring the site to a level condition. Additionally, top soil would be delivered, where needed, prior to seeding with grass. Approximately 12,822 cubic yards (or about 19,041 tons) of fill and topsoil would be needed for the project (Table 4-2).

Table 4-2. Estimate of Fill Dirt

Item	Area (sf)	depth (feet)	Volume (cy)	Conversion Factor	Weight (tons)	Trucks (+10%)
Fill Dirt for Basement	13,848	25	12,822.22	2970 lbs/cy	19041	1746

With the building demolition, removal of paving and the addition of fill dirt, the total number of truckloads for the project would be approximately 1,962 (Tables 4-1 and 4-2).

Whenever heavy equipment is operated, there is potential for inadvertent spills or leaks of fuel or hydraulic oil. The potential for spills or leaks would be minimized provided that the BMPs described in Section 2.2.3 are implemented. Overall, with recycling and hazardous material abatement, there would be no significant adverse impacts on materials and wastes.

4.9.2 Effects of Alternative 2 (No Action Alternative)

There would be no impact to material supplies or waste generation levels under Alternative 2, as the demolition would not occur.

4.10 Human Health and Safety

4.10.1 Effects of Alternative 1

A project-specific health and safety plan would be provided by the contractor, and approved by JB MDL, prior to the initiation of work on JB MDL (Section 2.2.3). Due to the extensive amount of potential friable asbestos in the heat plant, the asbestos abatement plan would address respiration protection and provide for containment of friable asbestos within abatement areas as prescribed by law. By adhering to applicable health and safety regulations, as well as disposal regulations, the asbestos in the building should not pose a significant adverse impact to construction workers, or the general public. All hazardous materials would be removed from the building prior to its demolition, eliminating health risks from the spread of hazardous chemicals.

All construction and demolition activities are inherently dangerous. Health and safety concerns include: the movement of heavy objects, including construction equipment; slips, trips and falls; the risk of fire or explosion from general construction activities; and spills and exposures related to the storage and handling of chemicals and disposal of hazardous waste. Statistically, the project could result in between 1 and 2 workplace injuries (assuming 50 employees) (see Section 3.11.1). However, the selected construction firm would be prequalified based on past experience. The contractor would develop a Worker Protection Plan/Accident Prevention Plan that would implement Occupational, Safety and Health Administration requirements (1910 and 1926) and define policies, procedures, and practices implemented during the demolition process to ensure the protection of the workforce, environment and the public.

Airborne dust from demolition activities could be a minor, short-term health hazard for site-workers and adjacent residents. The use of dust mitigation measures, such as wetting of materials and soil, would reduce health effects from dust to minor levels.

The area surrounding the Central Heat Plant is a site under the Defense Environmental Restoration Program and is being investigated for soil, sediment, and groundwater contamination due to past environmental releases. The contract for demolition of the plant would include requirements for the contractor to appropriately manage the disposal of excess soil generated from the demolition and protect worker safety from exposure to contaminated groundwater. Any necessary dewatering activity would be managed to ensure contaminated groundwater is not spread to non-contaminated areas. A site-specific health and safety plan would be developed by the contractor and reviewed by the Remedial Project Manager prior to beginning site work (see Best Management Practices in Section 2.2.3).

With the adherence to an approved project-specific Health and Safety Plan (including a Worker Protection Plan), there would be no significant adverse impacts to health and safety from Alternative 1.

4.10.2 Effects of Alternative 2 (No Action Alternative)

There would be no impact to human health and safety under Alternative 2, as the demolition would not occur.

4.11 Transportation and Traffic

4.11.1 Effects of Alternative 1

The project would require approximately 1,962 truck trips to mobilize equipment, haul debris, and deliver materials over a period of about 4 months. Because these trips would occur between different landfills, recycling facilities, and fill suppliers, the trips would not be concentrated on a single route. However, the addition of these trucks to local roads around the base could cause moderate, temporary traffic at local intersections, particularly in nearby towns. If all the truck trips occurred over only 15 work days out of the performance period, the average increase in daily traffic at Checkpoint 9 would be 4 percent.

As stated in Section 2.2.3, the contractor would prepare a plan for the transport of demolition debris that would aim to minimize impact to local communities and installation residents and employees. Nevertheless, there would be instances of temporary traffic delays when several trucks would convoy on single-lane secondary roads in the area, or in towns with several traffic lights. To address periods of the project where dozens of trucks would need to arrive or depart in a short period of time, the contractor would contact gate security to develop a plan to minimize gate delays and avoid peak traffic times. With these best management practices, the impacts of Alternative 1 on local traffic and transportation routes would be less than significant.

4.11.2 Effects of Alternative 2 (No Action Alternative)

There would be no impact to transportation or traffic under Alternative 2, as the demolition would not occur.

4.12 Cumulative Impacts

The CEQ regulations implementing NEPA requires the consideration of cumulative impacts as part of the process. “Cumulative impacts result from the incremental impact of the Proposed Action when added to other past, present and reasonably foreseeable future actions” (40 CFR 1508.7). Secondary impacts are those that are caused by the Proposed Action, but may occur later in time or farther removed in distance, relative to the primary impacts of the Proposed Action.

Relevant actions (those that could result in cumulative impacts) include regulations, policies, and trends related to land use and infrastructure. Relevant actions also include projects planned within 5 miles of the study area that could compete for resources or affect transportation systems, infrastructure, or land use.

4.12.1 Cumulative Impacts of Land Use and Infrastructure Projects, Policies, and Trends

4.12.1.1 Planned Demolition Projects, JB MDL

JB MDL has approximately 1200 buildings totaling 14,014,376 gsf of space. To reach the Air Force 20 percent infrastructure reduction goal, demolition projects have been slated for each of the three JB MDL areas.

McGuire

Between Fiscal Years (FYs) 2009 and 2011, 22 buildings totaling 245,500 sf were demolished. These consisted of all types of buildings, including dormitories, warehouses, administrative buildings, mechanical facilities, and mission buildings.

There are plans to demolish other buildings on McGuire in FY 2012. Building 1911 is a two-story base operations building constructed in 1957. The buildings past and current functions have been to support the day-to-day operations of the base. Building 2304 is a one-story base operations

building, built in 1955. Collectively, these two buildings would remove 19,281 sf of building footprint across JB MDL.

In out years (Fiscal Years 2013 through 2017), there are plans to demolish 14 additional buildings, most of them dormitories, totaling 187,000 sf.

Lakehurst

There are plans to demolish three test support buildings on Lakehurst (Building 395, 486, and 564) within the next 1-2 years. These buildings total 1,782 sf.

The proposed Aircraft Carrier Aviation Integrated Test Facility and Aircraft Launch and Recovery Equipment Testing and Evaluation Consolidated Facility would construct a new 52,500 sf facility north of the Test Runway, and afterward demolish 24 scattered and primarily small, antiquated buildings (built between 1956 and 1964) with a combined floor area of 87,284 sf. This would result in a net reduction of 34,784 sf of building space. This project is slated for Fiscal Year 2016.

Dix

There are 55 demolition projects programmed for the Dix area in FY12, totaling 30,600 sf. These consist primarily of small range support buildings, such as weapons racks, latrines, bleacher enclosures, and towers. There is also a plan to demolish the Walson Hospital Complex if funding becomes available. This would remove 391,920 square feet of building space.

4.12.1.2 JB MDL Master Plan

JB MDL is currently working on a new master plan that addresses long-term planning across all three portions of the base. The current land use zoning for the Central Heat Plant is Industrial. The proposed master plan would change the land use Airfield Operation. The demolition of the plant would provide a buildable area where new airfield operation facilities could be placed in the future.

4.12.2 Area Road Projects

According to the FY2012-2021 Statewide Transportation Improvement Program (NJDOT, 2012), there is a project slated for FY2012 to replace the Hanover Street Bridge over the Rancocas Creek, located 0.2 miles north of County Route (CR) 530. The new structure will retain two travel lanes, but add sidewalks and shoulders to accommodate bicycles and pedestrians. This bridge is a primary route from the southern gate on Dix towards Route 70.

There is also a project to reconstruct CR 530 from Route 206 to CR 644 to improve safety, reduce accidents, facilitate left-turn movements with a continuous center left-turn lane, and add shoulders. This is a multi-year project that will occur between FY12 and FY17.

Route 70, south of JB MDL, is slated for repaving in FY15 between Pemberton Township and Manchester Township, for about 6 miles. If this project is reprogrammed to occur earlier, it could coincide with the Central Heat Plant demolition project.

4.12.3 Cumulative Impacts Associated with the Proposed Action (Alternative 1)

Without the Central Heat Plant demolition project, JB MDL has plans to demolish 717,867 sf of buildings out of its current 14,014,376 gsf of space. If all the programmed demolitions and the Central Heat Plant project go forward, the JB MDL would eliminate approximately 742,563 sf of buildings, or 5.3 percent of its current inventory.

Because the demolition projects would be geographically separated by miles in most cases, the Central Heat Plant demolition would have little cumulative adverse impact on traffic, noise, and air quality. The planned road improvement projects, primarily to the south of Dix, are likely to cause periods of traffic congestion or detours. Because demolition project trips would occur between

different landfills, recycling facilities, and fill suppliers, they would not be concentrated on a single route. However, many of these trucks would travel to and from Checkpoint #9 on the north side of the base, and would not be likely to contribute to traffic delays in the areas of road construction described in Section 4.12.2.

4.12.4 Cumulative Impacts Associated with Alternative 2 (No Action Alternative)

Under the No Action Alternative the JB MDL would not undertake the action described under Alternative 1. No cumulative environmental, socioeconomic or cultural resources impacts would be anticipated.

4.13 Irreversible and Irretrievable Commitment of Resources

An irreversible commitment of resources is defined as the loss of future options. The term applies primarily to the effects of use of nonrenewable resources such as minerals or cultural resources, or to those factors such as soil productivity that are renewable only over long periods. It could also apply to the loss of an experience as an indirect effect of a "permanent" change in the nature or characters of the lands. An irretrievable commitment of resources is defined as the loss of production, harvest, or use of natural resources. The amount of production foregone is irretrievable, but the action is not irreversible. If the use changes, it is possible to resume production.

The proposed demolition would not have irreversible impacts because the site could be developed with buildings in the future.

The primary irretrievable impacts of the Proposed Action would involve the commitment of energy, labor, material, and funds, for the demolition of the complex.

4.14 The Relationship Between Local Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity

The Proposed Action would commit resources in the form of energy, labor, materials, and funds in the short-term. The justification for these commitments at this time is described in Chapter 1, Purpose and Need for the Proposed Action. Long-term productivity associated with the Proposed Action includes the ability of JB MDL to reduce its infrastructure costs that will in turn reduce federal deficits or allow more funding to be directed to the primary mission of supporting the Warfighter.

4.15 Unavoidable Adverse Impacts

During demolition there would be unavoidable, although temporary, increase in construction-related noise and air pollutant emissions at the sites. There would be increased truck traffic to and from the site to deliver equipment and remove debris. The proposed demolition would require large amounts of fill dirt and consume minor amounts of water dust suppression.

5. COMPARISON OF ALTERNATIVES AND CONCLUSIONS

As a result of the implementation of Alternative 1, the following impacts would be anticipated:

- Conversion of 2.8 acres of the Central Heat Plant buildings, structures, and pavement to contiguous open space;
- Minor, short-term adverse air quality impacts due to increased mobile emissions and demolition dust.
- Minor, short-term soil erosion from demolition and grading activities.
- Minor, positive socioeconomic impacts in the form of short-term jobs.
- Positive impact on water resources by reducing stormwater runoff at the site.

There would be no impacts associated with Alternative 2, the No Action Alternative. A summary of impacts for both alternatives, and the truck access routes under the Proposed Action is provided in Table 5-1.

Based on the analysis presented in this EA, Alternative 1 is the Preferred Alternative. The preferred truck access route is Option 2. The evaluation performed within the EA concludes that, with the adherence to BMPs in Section 2.2.3, no significant impacts would occur as a result of implementation of the Preferred Alternative. This analysis determines that an Environmental Impact Statement (EIS) is not necessary for the implementation of Alternative 1 and that a Finding of No Significant Impact (FONSI) is appropriate.

Table 5-1. Summary of Impacts

Resource Area	Alternative 1- Demolish the Central Heat Plant (Preferred)	Alternative 2 - No Action Alternative
Land Use	The action would facilitate plans to change land use from industrial to airfield operations. Would convert 2.8 acres to open space. No adverse impact.	No impact.
Air Quality	Construction activities would result in minor, short-term increases in air emissions. Construction dust would cause minor short-term adverse effects to air quality. The contractor would employ dust control strategies to minimize effects. Temporary NOx and VOC emissions, when added to the other emission sources at McGuire, would fall within the SIP budget.	No impact.
Topography and Soils	Site work would have a minor, short-term effect on soil erosion with the use of soil conservation BMPs.	No impact.
Water Resources	With the use of soil conservation BMPs, there would be no adverse impact to surface water resources. The elimination of impervious surface would have a positive effect by reducing stormwater runoff.	No impact.
Cultural Resources	The site has low potential for archeological or historical sites based past disturbance. On March 30, 2012, SHPO found that no historic properties would be affected by the Proposed Action.	No impact.
Socioeconomics	Between 20 and 50 short-term jobs would be created for the demolition project. There would be a positive short-term impact on the regional economy.	No impact.

Resource Area	Alternative 1- Demolish the Central Heat Plant (Preferred)	Alternative 2 - No Action Alternative
Infrastructure	The project would demolish approximately 0.2 percent of JB MDL infrastructure. Overall, the Proposed Action would have a positive impact on infrastructure by eliminating obsolete and deteriorated buildings. With proper coordination, there would be minimal adverse impacts on utility service.	No impact.
Materials and Waste	Demolition would result in 2,270 tons of construction waste, most of which would be source separated and recycled. All hazardous materials (including asbestos) would be removed or abated prior to the take down of the buildings. Overall, with recycling and hazardous material abatement, there would be no significant adverse impacts on materials and wastes.	No impact.
Human Health and Safety	The asbestos abatement plan would address respiratory protection and ensure containment of friable asbestos as prescribed by law. With proper planning and safety protocols, the demolition of the complex would not have significant adverse impacts on human health and safety.	No impact.
Transportation and Traffic	The demolition project would require approximately 1,962 truck trips to mobilize equipment, haul debris, and deliver materials over a period of about 4 months. The contractor would develop a transportation plan than would minimize the adverse effects of truck traffic on local communities and the base population. Nevertheless, there would be instances of temporary traffic delays when several trucks would convoy on single-lane secondary roads in the area, or in towns with several traffic lights. With proper planning and coordination, the project would have not have a significant adverse impact on transportation and traffic.	No impact.

1

6. REFERENCES

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7. LIST OF CONTRIBUTORS

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Mr. Joseph Schwartz, JB MDL NEPA Compliance
Mr. Joseph Rhyner, P.E., JB MDL Environmental Compliance
Mr. Curt Frye, P.E., Chief, JB MDL Environmental Restoration Program

EHS Technologies Preparers

Ms. Dorothy Peterson, P.E., Senior Environmental Engineer. Ms. Peterson holds a B.S. in engineering, a M.S. in engineering management, a PE license in environmental engineering, and is a Leadership in Energy and Environmental Design Green Associate. She has over 12 years of NEPA experience with additional years of experience conducting DoD master planning and facility management, Geographic Information Systems (GIS), site remediation, pollution prevention, and ISO 14001 implementation.

Mr. Gordon Mason, Lead and Asbestos Coordinator.

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APPENDIX A

Project Planning Correspondence

Summary of Correspondence Received

Date	Commenter	Description/Summary
March 30, 2012	NJ State Historic Preservation Office	Letter indicating concurrence with a No Adverse Effect determination for the demolition of the Central Heat Plant (Building 2101).
May 29, 2012`	JB MDL	Letter to NJ Pinelands Commission

HPO Project#: 12-0782-1, -2, -3, -4
HPO-C2012-193

State of New Jersey
MAIL CODE 501-04B
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NATURAL & HISTORIC RESOURCES
HISTORIC PRESERVATION OFFICE
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CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

March 30, 2012

Christopher A. Archer, GS-14, DAFC
Deputy Base Civil Engineer
87 CES/CD
Department of the Air Force
Headquarters Air Mobility Command
Joint Base McGuire-Dix-Lakehurst, NJ 08641

Dear Mr. Archer,

As Deputy State Historic Preservation Officer for New Jersey, in accordance with 36 CFR Part 800: Protection of Historic Properties, as published in the Federal Register on December 12, 2000 (65 FR 77725-77739) and amended on July 6, 2004 (69 FR 40553-40555), I am providing consultation comments on the following proposed undertaking:

Joint Base McGuire-Dix-Lakehurst
Proposed Demolition of Buildings 1911, 2101, 2304, 5250, 5251, and 5252

These comments were prepared in response to your letter of February 6, 2012 pertaining to the proposed demolition of buildings 1911, 2101, 2304, and 5250 at Joint Base McGuire-Dix-Lakehurst as well as additional supporting documentation. The additional documentation included a summary memo and New Jersey architectural survey forms for the four buildings prepared by architectural historians from the firm of Booz, Allen, and Hamilton.

The HPO is also in receipt of a subsequent letter from Kenneth D. Smith, Chief of Natural Resources/Environmental for Joint Base McGuire-Dix-Lakehurst. Mr. Smith's letter indicates that two additional buildings (ancillary buildings associated with Building 5250, the Walson Hospital facility, are also proposed for demolition. These two additional buildings are 5251 (Walson Refrigeration/Air Conditioning Facility) and 5252 (Walson Heating Plant Facility).

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800.4 Identification of Historic Properties

Buildings 2101 and 2304

In the submitted architectural survey data, the consultant concluded that Buildings 2101 (c1956 District Heating Plant for McGuire Air Force Base) and Building 2304 (c1955 Base Operations Building) are not eligible for listing in the New Jersey and National Registers of Historic Places. The buildings are not significant for their relationship to the base's mission, are not associated with persons significant in our past, and are not significant for their design and/or construction. The HPO concurs with these assessments.

Building 1911

The consultant concluded that Building 1911 is also not eligible for listing in the New Jersey and National Registers of Historic Places. Based upon the submitted documentation, Building 1911 is a generic base operations building with no distinguishing architectural elements and several alterations that have diminished the building's integrity. The survey information states that the building's historic and current functions have been to support day-to-day operations of the base and are unrelated to any mission-specific activities. Jonathan Kinney, of my staff, has discussed Building 1911 with Kenneth Smith and Adrienne Duryee of Joint Base McGuire-Dix-Lakehurst via telephone. The HPO's one outstanding concern regarding this building is that it may have been historically linked with the S.A.G.E. Building (Building 1907), which received a SHPO Opinion of Eligibility for the New Jersey and National Registers of Historic Places on 2/9/1994. Building 1911 was constructed concurrently with and directly adjacent to the S.A.G.E. complex, which is eligible as for its significance during the Cold War as part of the air defense command and control system and for its unique construction. A significant association with the historic S.A.G.E. complex could impact the eligibility evaluation for this building. Ms. Duryee advised Mr. Kinney, in a telephone conversation on 3/20/12 that she will attempt to gather additional information pertaining to Building 1911 and its historic use as it relates to S.A.G.E. and submit the information to HPO for further review. Upon receipt of this additional information, the HPO will be able to make a definitive eligibility determination for Building 1911.

Buildings 5250, 5251, 5252

Buildings 5250, 5251, and 5252 make up the Walson Hospital Complex, constructed between 1957 and 1960. The HPO staff has outstanding questions regarding the potential for eligibility of Walson under Criterion A (association with events that have made a significant contribution to the broad patterns of our history), specifically, questions regarding the historic social context of Walson Hospital. These questions include:

- How did the construction of Walson Hospital affect medical treatment for the military personnel at Fort Dix and the surrounding area? How did it compare with past practices?

- Walson represented an "ultra-modern" facility at the time of its construction and seems to represent a holistic, family-oriented approach to military medicine, offering many different types of medical services. Does this period of hospital construction represent

the first time that many of these services were made available to military personnel? Is this the first time that a military hospital was constructed with the families of military personnel and possibly the surrounding community in mind?

- Did other military hospitals constructed at this time offer the same services? How does Walson compare to civilian hospitals constructed around the same time?

HPO staff has relayed these questions to Adrienne Duryee of Joint Base via telephone and Ms. Duryee has indicated that the consultant is already preparing a follow-up submission containing additional contextual information, which will be submitted to the HPO for review. Upon receipt of this additional information, the HPO will be able to make a definitive eligibility determination for the Walson Hospital Complex.

As stated in the submitted documentation, architecturally, Walson is a typical example of a Cold War-era Army hospital, possibly a later example of the 1953 York & Sawyer plan. The survey states that Walson exhibits the features that typify a Cold War-era Army hospital (multistory, horizontal brise-soleil, metal windows, large parking lot), but that it is not a notable example of the type and was not the first constructed from this plan. In addition, the hospital is not associated with persons significant in our past. The HPO concurs with the consultant's conclusion that the Walson Hospital Complex does not appear to meet the National Register Criteria for Eligibility Criterion B, C, or D.

Thank you for providing the opportunity to review and comment on the submitted report. Please do not hesitate to contact Jonathan Kinney of my staff at (609) 984-0141 with any questions. If additional consultation with the HPO is needed for this undertaking, please reference the HPO project number 10-1180 in any future calls, emails, or written correspondence in order to expedite our review and response. Thank you.

Sincerely,

Daniel D. Saunders
Deputy State Historic
Preservation Officer

Cc:

Kenneth D. Smith, Joint Base McGuire-Dix-Lakehurst
Dennis Blazak, Joint Base McGuire-Dix-Lakehurst
Adrienne Duryee, Joint Base McGuire-Dix-Lakehurst
Ken Koschek, NJDEP-OPCER
Shelley Coltrain, NJDEP

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR MOBILITY COMMAND
JOINT BASE MCGUIRE-DIX-LAKEHURST

29 May 2012

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Nancy Wittenberg, Executive Director
The Pinelands Commission
Post Office Box 359
New Lisbon NJ 08064

Re: Central Heat Plant (CHP) Demolition Project at Joint Base McGuire-Dix-Lakehurst (JB MDL), McGuire Area

Dear Ms Wittenberg

JB MDL is proposing demolition of the CHP located on the McGuire Area of the base. The CHP is no longer in service and all facilities that formerly used the CHP for heating and hot water have been converted to individual heating and hot water systems. The proposed CHP demolition would decommission the plant, remove all debris for either disposal or recycling, as appropriate, and return the site to a more natural condition with the application of top soil and grass seed. The project would last approximately four months.

Based on the requirements to complete facility demolition in a timely manner, it has been determined that an application to the Pinelands Commission for approval of this project would be incompatible with national defense requirements. Because there is no waiver of sovereign immunity set forth in 16 USC §471i for the establishment and administration of the Pine Barrens Area, the Pinelands Commission review of this project is hereby waived.

Although an application for the Pinelands Commission will not be submitted, a Burlington County Soil Erosion and Sediment Control Plan will be submitted to the Soil Conservation District. An environmental assessment (EA) for the project, required by the National Environmental Policy Act, is being prepared and will undergo a 30-day public comment period. JB MDL will provide a copy of the draft EA to the Pinelands Commission at that time. Please contact Mr. Dennis Blazak, at (732) 323-7544, for any additional information regarding this project.

Sincerely

ALICE VENEZIANI, Chief
Environmental and Real Property Law

cc:
87 CES/CEAN

APPENDIX B

Conformity Rule Compliance
Record of Non-Applicability

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Conformity Rule Compliance
Record of Non-Applicability

Project/Action Name: **Demolition of the McGuire Central Heat Plant at Joint Base McGuire-Dix-Lakehurst**

Action Duration: **Temporary**

Conformity under Clean Air Act, Section 176, has been evaluated for the above-described project per 40 CFR Part 51. The requirements of this rule are not applicable to this action because:

Total direct and indirect emissions increases from the Proposed Action have been estimated at:

One time Construction Emissions
0.83 tons VOCs; and
4.47 tons of NOx.
Operational Emissions: negligible

The emission increases from the Proposed Action, when added to the other emissions sources on McGuire, would conform to the State Implementation Plan (SIP) emission budget for McGuire.

The supporting documentation and emissions estimates are attached.

Prepared by:

_____
Dorothy S. Peterson, P.E.
EHS Technologies, Inc.

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Record of Non-Applicability (RONA)
Supporting Documentation
Demolition of the McGuire Central Heat Plant at JB MDL

1. Overview of Considered Project Alternatives

The referenced EA considers two alternatives:

- Alternative 1 – the Proposed Action of demolishing the Central Heat Plant, including removal of pavement, walkways, utilities, former fuel tanks (structures 2120, 2121, and 2123), Heat Plant Storage Control Building 2122, and associated equipment. The work would include decommissioning the plant, asbestos removal, the removal of demolition debris, removal of the concrete foundation and slab, hauling, disposal, excavation and backfill, and removal and termination or capping of utility services. Construction debris (concrete, asphalt, metal and wood) would be recycled to the extent practicable. The site would be restored to a more natural condition, with the application of topsoil and grass seed.
- Alternative 2 – No Action Alternative. As required under NEPA and 32 CFR 989, the No Action Alternative (Alternative 2) is retained for comparative analysis. Under this alternative, the JB MDL would retain the buildings and structures in their current condition until a re-use could be found.

2. Purpose of the Record of Non-Applicability

In compliance with the General Conformity Rule (40 CFR Part 51, Subpart W) and the National Environmental Policy Act (NEPA; 42 USC 4321 et seq.), a Record of Non-Applicability be prepared in cases where the proposed increases in emissions are clearly *de minimis*.

The action would be located in the Burlington County NJ, which is designated a moderate non-attainment area for ozone according to the National Ambient Air Quality Standards (NAAQS) and EPA's green book.

de minimis is defined as "so small or minimal in difference that it does not matter or the law does not take it into consideration".

Atmospheric ozone occurs when nitrogen oxides (NOx), carbon monoxide (CO) and volatile organic compounds (VOCs) react in the atmosphere in the presence of sunlight, a photochemical reaction. NOx and VOCs are called ozone precursors. Motor vehicle exhaust, industrial emissions, and chemical solvents are the major anthropogenic sources of these chemicals. Although these precursors often originate in urban areas, winds can carry NOx hundreds of kilometers, causing ozone formation to occur in less populated regions as well.

Therefore, VOCs and NOx emissions are regulated as a means of controlling ozone production.

Burlington County is in attainment with the NAAQS for all other criteria pollutants. Both the Lakehurst and McGuire portions of JB MDL have State Implementation Plan (SIP) emission budgets. The Dix portion does not.

3. Methodology

This applicability analysis evaluates all stationary and mobile sources of VOCs and NOx emitted from commuter vehicles, and related construction equipment. Emission factors were obtained from EPA sources where possible. See Section 6 for a list of references.

Demolition Emissions

Tables 1 and 2 provide the assumptions and results for air emissions from equipment delivery, demolition, removal of debris, and site restoration at the Central Heat Plant. The number of trucks removing demolition debris from the site and number of trucks for fill dirt are based on the estimates in Section 4.9.1 in the Environmental Assessment.

Table 1. Road Vehicle Emissions – Alternative 1

Vehicle type	Vehicle Miles	NOx Emission Factor (g/mi)	Tons of NOx annually	VOC Emission Factor (g/mi)	Tons of VOCs annually
Light Duty Gasoline Vehicles	100,000	0.95	0.105	1.36	0.150
Light Duty Gasoline Trucks	100,000	1.22	0.134	1.61	0.177
Heavy Diesel Trucks - Mobilization/Demobilization	4,500	13.43	0.067	1.43	0.007
Heavy Diesel Trucks -Material Removal	137,340	13.43	2.033	1.43	0.216
Total	**341,840**		**2.339**		**0.551**

Source: USEPA, 2005. Notes: g=gram; mi = mile; Conversion factor 1 pound = 453.592 grams.

Table 2. Diesel Construction Equipment Emissions Worksheet – Alternative 1

Equipment Type (quantity)	Total hours of operation	Horse Power	Load Factor	Emission Factor – VOC (g/HP-hour)	Emission Factor – NOx(g/HP-hour)	VOC Emissions (tons)	NOx Emissions (tons)
Backhoe	240	77	55	1.4	10.1	0.016	0.113
Loader	960	158	54	0.84	10.3	0.076	0.930
Tractors	300	214	65	2.46	11.91	0.113	0.548
Crane	160	194	43	1.26	10.3	0.019	0.152
Jackhammer	1000	50	73	1.2	8	0.048	0.322
Gas Powered Generator	960	11	68	1.2	8	0.009	0.063
Total						**0.281**	**2.128**

Source: USEPA, 1991. Notes: HP = horsepower, Conversion factor 1 pound = 453.592 grams; 1 ton = 2000 pounds.

Project Emissions Summary

Table 3 provides a summary of construction emissions estimated for Alternative 1.

Table 3. Summary of Construction Emissions – Alternative 1

Source	Tons of NOx	Tons of VOCs
Road Vehicles	2.339	0.551
Construction Diesel Equipment	2.128	0.281
Total in Tons	**4.467**	**0.832**

4. McGuire SIP Budget Analysis

A full review of McGuire emissions sources comparable to the data submitted under the 2005 SIP budget calculation is not available. However, the base population, grounds maintenance, vehicle use, and paving work (e.g. vehicle and non-road sources) have not seemed to change from 2005 levels. Table 4 provides an estimate of McGuire NOx and VOC emissions for 2011.

Table 4. SIP Budget Analysis

Source	Tons of NOx	Tons of VOCs
Aircraft Operations (1)	830.7	555.17
Title V Sources (2)	59.19	78.82
Vehicle & Mobile Equipment Use (3)	27.2	2.75
Other Non-Road Sources (3)	65.45	8.91
Total in Tons	**982.5**	**645.7**
SIP Budget	**1534**	**703**
Difference	**551.5**	**57.3**

Notes: 1) Rough calculation based on 2011 annual air operations with emission levels proportional to 2005 SIP aircraft operations.
2) Emissions from the McGuire Calendar Year 2010 Emissions Statement.
3) Levels based on 2005 SIP, assuming little to no change in population, vehicle use, and non-road sources.

5. Results and Conclusions

Since the General Conformity Rule requires analysis only for emissions of criteria pollutants and their precursors for which an area is designated a “non-attainment” or maintenance area, emissions were calculated only for the precursors of ozone, VOCs and NOx, as part of this RONA documentation.

This analysis revealed Alternative 1 (under the highest emission truck haul route option) would emit 4.47 tons of NOx and 0.83 tons of VOCs during the project, assumed to occur in one calendar year. The temporary emission increases from the Proposed Action, when added to other emission sources, would fall well within the existing McGuire SIP budget. Therefore, this RONA satisfies the General Conformity Rule. As such, this RONA documents JB MDL’s decision not to prepare a written conformity determination for the Proposed Action.

6. References

United States Environmental Protection Agency (USEPA). 1991. EPA 460/3-91-02. “*Nonroad Engine and Vehicle Emission Study – Repor*t”. November 1991.

United States Environmental Protection Agency (USEPA). 2005. “*Emission Facts. Average Annual Emissions and Fuel Consumption for Gasoline-Fueled Passenger Cars and Light Trucks*”. EPA420-F-05-022. Office of Transportation and Air Quality. August 2005.

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APPENDIX C

Newspaper Public Notice Affidavits

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State of New Jersey
County of Burlington } **SS.**

EHS TECHNOLOGIES
1221 N CHURCH ST., SUITE 106
MOORESTOWN, NJ 080571245

7323234396
0006283135-01

Laurie Clark being duly sworn or affirmed according to law, deposes and says that she is the Legal Billing Coordinator of the BURLINGTON TIMES, INC. Publisher of the "Burlington County Times" and that a copy of a notice published in such paper on

June 01, 2012

appears hereto, exactly as published in said newspaper

Laurie Clark
LEGAL BILLING CO-ORDINATOR

Sworn and subscribed to before me this 1st day of June 2012 A.D.

Ad Content Proof

Notice of Availability
Draft EA and Draft FONSI for Proposed Demolition of the McGuire Central Heat Plant at Joint Base McGuire-Dix-Lakehurst, New Jersey

The JB MDL announces the availability of, and invites public comments on, the Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the proposed demolition of the Central Heat Plant on McGuire. Under the Proposed Action, the heat plant, related structures, and aboveground fuel storage tanks would be demolished. Parking lots and walkways would also be removed. The Draft EA was prepared in accordance with the National Environmental Policy Act. Copies are available for review at the Pemberton Library, 16 Broadway, Browns Mills, NJ 08015. Written comments should be submitted by July 6, 2012 to Mr. Dennis Blazak, 87 CES/CEA, JB

Adv. Fee: $38.88
BCT: June 1, 2012
Aff. Chg.: $20.00

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Affirmed and subscribed to me before me this 1st day of June 2012 A.D.

Ann Clark
My Commission expires on
May 04, 2015

Affidavit of Publication

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June 1, 2012 **Asbury Park Press**

A.D., 2012

Melanie Altz

Sworn and subscribed before me this **1** day of **June** **A.D., 2012**

Kathleen A Gibson

Notary Public of New Jersey

Kathleen A. Gibson
Notary Public State of New Jersey
My Commission Expires Dec. 18, 2014

Notice of Availability
Draft EA and Draft FONSI for Proposed Demolition of the McGuire Central Heat Plant at Joint Base McGuire-Dix-Lakehurst, New Jersey

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APPENDIX D

Public Comments and Responses on the Draft EA

United States Department of the Interior

FISH AND WILDLIFE SERVICE

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Ecological Services
927 North Main Street, Building D
Pleasantville, New Jersey 08232
Tel: 609/646 9310
Fax: 609/646 0352
http://www.fws.gov/northeast/njfieldoffice

In Reply Refer To:
12-CPA-0237

Dennis Blazak, Deputy Asset Manager
87th Civil Engineer Squadron
Highway 547, Building 5
Lakehurst, New Jersey 08733

OCT 24 2012

Dear Mr. Blazak:

The U.S. Fish and Wildlife Service (Service), New Jersey Field Office has received your May 31, 2012 letter regarding the *Draft Environmental Assessment for the Demolition of the McGuire Central Heat Plant at Joint Base McGuire-Dix-Lakehurst, New Jersey*. The Proposed Action would result in demolition of the heat plant and removal of impervious surfaces, and fuel tanks. The area would then be seeded with grasses.

AUTHORITY

The following comments on the proposed action are provided pursuant to Section 7 of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) and the Migratory Bird Treaty Act of 1918 (MBTA) (40 Stat. 755; 16 U.S.C. 703-712), as amended, to ensure the protection of federally listed endangered and threatened species, and migratory birds. Additional comments are provided as technical assistance for the draft Environmental Assessment and do not preclude further comment pursuant to the National Environmental Policy Act (NEPA) (83 Stat. 852; 42 U.S.C. 4321 *et seq.*).

FEDERALLY LISTED SPECIES

No federally listed or proposed threatened or endangered flora or fauna under Service jurisdiction are known to occur within the vicinity of the proposed project site. If additional information on federally listed species becomes available, or if project plans change, this determination may be reconsidered.

SERVICE COMMENTS

The Service has no objections to the project as proposed. We suggest planting the area or portion of the area with native trees. Thank you for the opportunity to provide comments. Please contact Carlo Popolizio at (609) 383-3938, extension 32, if you require further assistance.

Sincerely,

J. Eric Davis Jr.
Field Supervisor

Response: Thank you for your comments. JB MDL plans to replant the site with native grasses and to retain as many of the existing trees on site (where they would not interfere with the demolition process).

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF PERMIT COORDINATION AND ENVIRONMENTAL REVIEW
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CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

BOB MARTIN
Commissioner

June 29, 2012

Mr. Dennis Blazek
87th Civil Engineering Squadron
Highway 547/Building 5
Lakehurst, NJ 08733

RE: Demolition of the McGuire Central Heat Plant at Joint Base McGuire-Dix-Lakehurst, New Jersey Comments on the Environmental Assessment

Dear Mr. Blazek:

The New Jersey Department of Environmental Protection's (Department) Office of Permit Coordination and Environmental Review (PCER) distributed, for review and comment, the Environmental Assessment for the proposed demolition of the McGuire Central Heat Plant at Joint Base McGuire Dix Lakehurst. On behalf of the Department, we offer the following comments for your consideration.

Cultural Resources
Historic Preservation Office (HPO):
Based upon a review of the submitted documentation, the HPO has determined that there are no historic properties affected by the proposed undertaking. The Historic Preservation Office has no objection to permit issuance and recommends no permit conditions related to historic resources.

If additional consultation is required for this undertaking, please reference the HPO project # 12-1476 in any future calls, emails, or written correspondence to HPO in order to expedite our review and response.

Air Quality
Bureau of Air Quality Planning:

1) Conformity Rule compliance Record of Non-Applicability
The EA states, "The emission increases from the Proposed Action are below the de minimis threshold established at 40 CFR 51.853(b) of 50 tons per year (tpy) VOCs and 100 tpy NOx, and the Proposed Action is not considered "regionally significant" under 40 CFR 51.853(i)."

Comment #1:
The April 5, 2010 Revisions to the General conformity Regulation Final Rule, removed and reserved Sections 51.852 through 51.860. Please reference the appropriate sections in 40 CFR Section 93.150 and

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93.152 through 93.160. In addition, in the April 5, 2010 Revisions to the General Conformity Regulation Final Rule, the EPA deleted the definition of "regionally significant". Therefore, "regionally significant" is no longer a requirement of the Federal General Conformity regulation.

2) Purpose of the Record of Non-Applicability
The EA states, " In compliance with the General conformity Rule (40 CFR Part 51, Subpart W) and the National Environmental Policy Act (NEPA; 42 USC 4321 et seq.), a Record of Non-Applicability be prepared in cases where the proposed increases in emissions are clearly de minimis."

Comment #2
Comment #1 above also applies to this portion of the project.

3) Results and Conclusions
The EA states, "The emissions increases from the Proposed Action are below the de minimis threshold established at 40 CFR 51.853(b) of 50 tpy VOCs and 100 tpy NOx, and the Proposed Action is not considered "regionally significant" under 40 CFR 51.853(i). Therefore, this RONA satisfies the General Conformity Rule. As such, this RONA documents JB MDL's decision not to prepare a written conformity determination for the Proposed Action."

Comment #3
Comment #1 applies to this portion of the project. In addition, McGuire Air Force Base (McGuire) currently has an emission budget for VOCs and NOx that was established under the General Conformity Rule in order to ensure that any increases in activity at McGuire conforms to the State Implementation Plan. These budgets are in place and apply until new budgets are established. As a result, if the emissions associated with the draft EA for the demolition of the McGuire Central Heat Plant, when added to all other yearly emissions from the base, falls within the budget that is currently in place, then the project will meet conformity.

Comment # 4 (General)
Diesel exhaust contributes the highest cancer risk of all air toxics in New Jersey. Therefore, construction projects involving non-road diesel construction equipment operating in a small geographic area over an extended period of time should implement the following measures to minimize the impact of diesel exhaust.

1. All on-road vehicles and non-road construction equipment operating at, or visiting, the construction site shall comply with the three minute idling limit, pursuant to N.J.A.C. 7:27-14 and N.J.A.C. 7:27-15.

2. All diesel non-road construction equipment operating at the construction site shall use ultra-low sulfur diesel fuel (<15 ppm sulfur) in accordance with the federal Nonroad Diesel Rule, 40 CFR Parts 9, 69, 80, 86, 89, 94, 1039, 1051, 1065, 1068.

3. It is recommended that all non-road diesel construction equipment greater than 100 horsepower used on the project for more than ten days shall have engines that meet the USEPA Tier 4 non-road emission standards, or the best available emission control technology that is technologically feasible for that application and is verified by the USEPA or the CARB as a diesel emission control strategy for reducing particulate matter emissions, except that:

a. If there is no technologically feasible emission control technology verified by USEPA or CARB for specific diesel non-road construction equipment, the contractor may use the best available emission

control technology verified by the Mine Safety and Health Administration or the Switzerland BUWAL program (VERT Filter List) to reduce particulate matter emissions.

b. If there is no technologically feasible and appropriate emission control technology, or installation of a control technology would create a safety hazard, such as impaired visibility for the operator.

4. It is recommended that all on-road diesel vehicles used to haul materials or traveling to and from the construction site shall use designated truck routes that are designed to minimize impacts on residential areas and sensitive receptors such as hospitals, schools, daycare facilities, senior citizen housing, and convalescent facilities.

Site Remediation Program:

As per the Agreement between the Department and the Department of Defense, the Department's Site Remediation Program provides oversight of site remediation activities at federal facilities. The removal of the buildings is not considered site remediation. However, if during the demolition there are discharges of hazardous substances to the environment then under N.J.S.A. 58:10-23.11 "New Jersey Spill Compensation and Control Act," the US Air Force at McGuire must remediate the discharge."

Thank you for the opportunity to comment on the EA.

Sincerely,

Scott Brubaker

Scott Brubaker, Director

c: Jonathan Kinney, NJDEP - HPO
Ken Koschek, NJDEP – PCER
Donna Mahon, NJDEP- PCER
Shelley Coltrain, NJDEP - Natural & Historic Resources
Steve Maynard, NJDEP- SRP

Responses:

Thank you for your comments. Per comments #1-3 (Air Quality), the EA was revised to remove reference to the de minimis thresholds when discussing clean air act conformity. Text was added to describe how the emissions under the Proposed Action, when added to the other emissions on McGuire, would fall under the McGuire SIP budgets for NOx and VOCs. Appendix B was revised to include a section with a table showing the estimated McGuire emissions relative to the SIP budget.

In response to comment #4, the Best Management Practices in Section 2.2.3 were revised as follows (new text in bold):

- *All on-road vehicles and non-road construction equipment at the construction site shall comply with the three minute idling limit pursuant to N.J.A.C. 7:27-14 and N.J.A.C. 7:27-15. All non-road diesel equipment shall comply with the 2004 Federal Clean Air Nonroad Diesel Rule.*

- The contractor would prepare a plan for the transport of demolition debris from the site to various disposal and recycling facilities that considers the minimum impact on local communities, *particularly hospitals, schools, and other sensitive receptors,* and the installation's residents and employees.

Per the last comment (Site Remediation Program), the following Best Management Practice in Section 2.2.3 was revised to (new text in bold):

- A site-specific health and safety plan would be developed by the contractor to address measures to protect workers from contaminated groundwater at the site and prevent the spread of contaminated groundwater to non-contaminated areas. *If during demolition there are discharges of hazardous substances to the environment, under N.J.S.A. 58:10-23.11, the discharge shall be remediated.*