August 3, 2016

Mr. Randal Schneider
Project Manager
CENWO-PM-HB
1616 Capital Avenue
Omaha, NE 68102-4901

Re: Final Record of Decision
174th Attack Wing
New York Air National Guard
Hancock Field Air National Guard Base
Syracuse, New York

Dear Mr. Schneider:

Amec Foster Wheeler Environment & Infrastructure, Inc. is pleased to submit an electronic copy of the above referenced document for the Hancock Field Air National Guard Base for your records. This electronic submittal and associated hard copies will be forwarded to Mr. Robert Corcoran of the New York State Department of Environmental Conservation (NYSDEC); Ms. Jody Murata of the Air National Guard (ANG); and Lt. Brent Lynch at the Hancock Field ANG Base. Should you have any questions regarding this submittal, please do not hesitate to call me at 865-671-6774.

Sincerely,

Amec Foster Wheeler Environment & Infrastructure, Inc.

Jeremy S. Bennett, CHMM
Project Manager

Cc: Robert Corcoran – NYSDEC
Jody Murata – ANG Program Manager
2nd Lt Brent Lynch – Hancock Air National Guard Base Environmental Manager
AMEC Central Files (electronic copy)

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FINAL

RECORD OF DECISION

MUNITIONS RESPONSE SITE SR001

174TH WING

NEW YORK AIR NATIONAL GUARD

HANCOCK AIR NATIONAL GUARD BASE

SYRACUSE, NEW YORK

prepared for:

Air National Guard Readiness Center
Installations and Mission Support Directorate
Operations Division, Restoration Branch
Joint Base Andrews, Maryland

August 2016

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FIGURES

TABLES

ACRONYMS

amsl	above mean sea level
AR	Administrative Record
ANG	Air National Guard
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSE	Comprehensive Site Evaluation
DoD	Department of Defense
EE/CA	Engineering Evaluation / Cost Analysis
ft	feet
Hancock field	Hancock Field Air National Guard Base
HAT	Hazard Assessment Tool
IR	Information Repository
MEC	Munitions and Explosives of Concern
MC	munitions constituent
MD	Munitions Debris
mm	millimeter
MRA	Munitions Response Area
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
msl	mean sea level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	no further action
NTCRA	Non-Time Critical Removal Action
NYSDEC	New York State Department of Environment and Conservation
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act
SSFR	Site-Specific Final Report
U.S.	United States
USAF	United States Air Force
USEPA	United States Environmental Protection Agency

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1.0 DECLARATION FOR THE RECORD OF DECISION

1.1 Site Name and Location

Munitions Response Site (MRS) SR001
Hancock Field Air National Guard Base (Hancock Field)
Syracuse, New York

1.2 Statement of Basis and Purpose

This Record of Decision (ROD) presents the Air National Guard's (ANG) no further action (NFA) recommendation for MRS SR001, located at Hancock Field in Syracuse, New York. This recommendation is in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, 42 United States Code §9601 et seq., as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986, and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) 300, as amended.

As the lead agency for remedial activities, the ANG is responsible for environmental restoration at MRS SR001 under the Environmental Restoration Program, established by Section 211 of SARA. The supporting regulatory agency, New York State Department of Environmental Conservation (NYSDEC), provides regulatory oversight of environmental restoration actions. Funding is provided by the Defense Environmental Restoration Program, a funding source approved by Congress to clean up contaminated sites on United States (U.S.) Department of Defense (DoD) installations.

The NFA recommendation in this document is presented as requested by the ANG and in coordination with NYSDEC.

1.3 Description of Selected Remedy

The results of the Comprehensive Site Evaluation (CSE) Phase I/II indicated an unacceptable risk to human health and the environment at MRS SR001. Therefore, a Non-Time Critical Removal Action (NTCRA) was conducted at MRS SR001 to mitigate these risks. Soil samples collected during the NTCRA indicate metals-impacted soil has been removed and remaining soil is below the regulatory criteria, demonstrating that the potential human health risks no longer exist at the site. Therefore, the NFA recommendation is warranted at MRS SR001.

1.4 Statutory Determination

The NTCRA conducted at MRS SR001 was successful in eliminating potential risks to human health and the environment by:

- Excavating and removing 2,562.82 tons of metals-impacted soil from MRS SR001;

- Recovering and transporting approximately 500 pounds of recovered debris off-site for recycling;
- Demolishing and removing 8.56 tons of non-recyclable wooden debris;
- Confirming that groundwater has not been impacted by munitions-related metals;
- Confirming that remaining soil is below the NYSDEC Residential Soil Cleanup Objectives for copper and lead; and,
- Confirming no potential explosive hazard associated with the MRS exists by completing the Munitions and Explosives of Concern (MEC) Hazard Assessment Tool (HAT).

Analytical results from the NTCRA indicate that impacted soils have been removed from MRS SR001. Sampling and risk assessment results indicate that there are no residual human health or ecological risks associated with soil and groundwater at MRS SR001.

Upon completion of the NTCRA, the Munitions Response Site Prioritizations Protocol (MRSPP) was updated to reflect a decreased potential hazard related to MRS SR001. Specifically, the priority for MRS SR001 has been reduced from category 6 to 8.

1.5 Authorizing Signature

This signature sheet documents the ANG decision of NFA for MRS SR001 at the Hancock Field, located in Syracuse, New York.

Kevin Mattoch — 18 Oct 16

Kevin L. Mattoch, P.E. — Date
Chief, Operations Division
Logistics and Installations Directorate
Air National Guard

The regulatory signature block has been added to comply with U.S. Environmental Protection Agency Document 540-R-98-031 (July 1999), as adopted by the U.S. Air Force (USAF). Regulatory concurrence through a letter will be substituted for the regulatory signature on this Record of Decision (ROD).

2.0 DECISION SUMMARY

This ROD has been prepared using the guidance published by the United States Environmental Protection Agency (USEPA) on preparing remedy selection decision documents (USEPA, 1999) and in coordination with NYSDEC. The ANG, in coordination with NYSDEC, has conducted environmental investigations and a Removal Action at the Site and is the lead agency recommending NFA at MRS SR001.

2.1 Site Name, Location, and Description

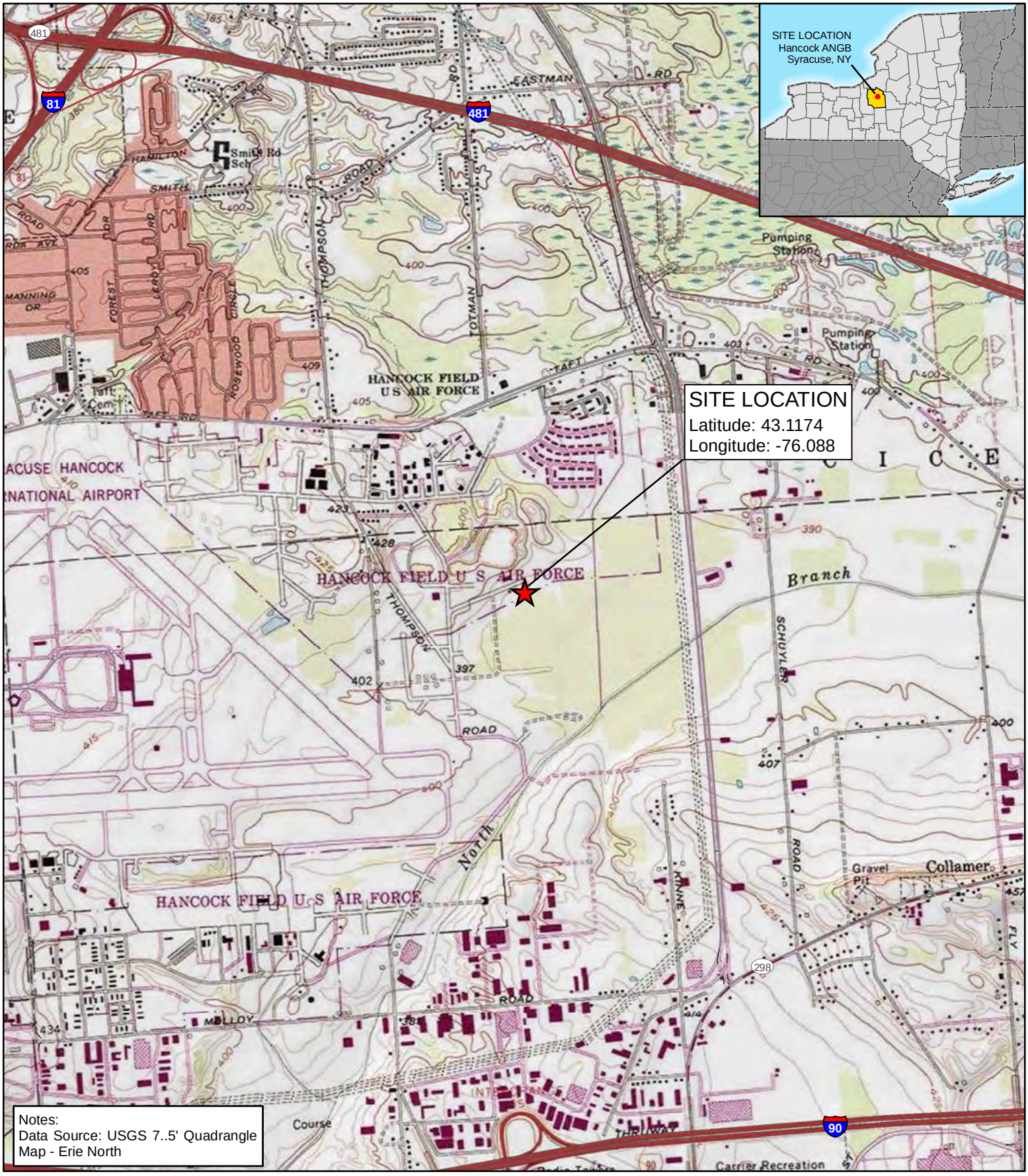
Hancock Field, as shown in **Figure 2-1**, is located at the Syracuse Hancock International Airport, approximately 5 miles north of the City of Syracuse in Onondaga County, New York. Hancock Field encompasses approximately 357 acres and consists of several buildings and operational facilities. The installation is divided into two tracts of land: Tract II and Tract III (**Figure 2-2**). Tract II encompasses approximately 87 acres including MRS SR001. Both tracts are owned by the USAF (fee-owned) with a license to New York State for ANG use. The City of Syracuse owns the land bordering Tract II and the land north of Tract III.

Historically, training activities were conducted within two areas located within Munitions Response Area (MRA) SR001, the Small Arms Range and Shooting-In Buttress (**Figure 2-3**). Based upon the results of the 2011 CSE Phase II, the MRA was split into two MRSs as detailed and described below.

- MRA SR001 (3.7 acres)
  - MRS SR001 (1.9 acres);
    - Small Arms Range and Shooting-In Buttress;
    - 40-millimeter (mm) Practice Grenade Area;
  - MRS SR001a (1.8 acres);

2.1.1 MRS SR001, Small Arms Range and Shooting-In Buttress

MRS SR001 encompasses approximately 1.9 acres of land located within MRA SR001, Small Arms Range and Shooting-In Buttress (**Figure 2-3**). The area defined as MRS SR001 was delineated within MRA SR001 based upon lead-impacted soil and the practice grenade debris area identified during the 2011 CSE Phase II. MRS SR001 consists of approximately 0.63 acres located within the former Small Arms Range and approximately 1.27 acres of land historically used as a practice grenade area (ANG, 2016a).



New York Air National Guard
Syracuse, New York

N

FIGURE 2-1
Installation Location Map
ROD - Record of Decision
174th Attack Wing, Hancock Field Air National Guard Base - Syracuse, NY

0 0.5 1 2 Kilometers
0 0.25 0.5 1 1.5 Miles

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PROJ: 912810001	Drawn: JBO	2-2

New York Air National Guard
Syracuse, New York

N

FIGURE 2-2
Site Location Map
Record of Decision
174th Attack Wing, Hancock Field Air National Guard Base - Syracuse, NY

0 0.5 1 2 Kilometers
0 0.25 0.5 1 1.5 Miles

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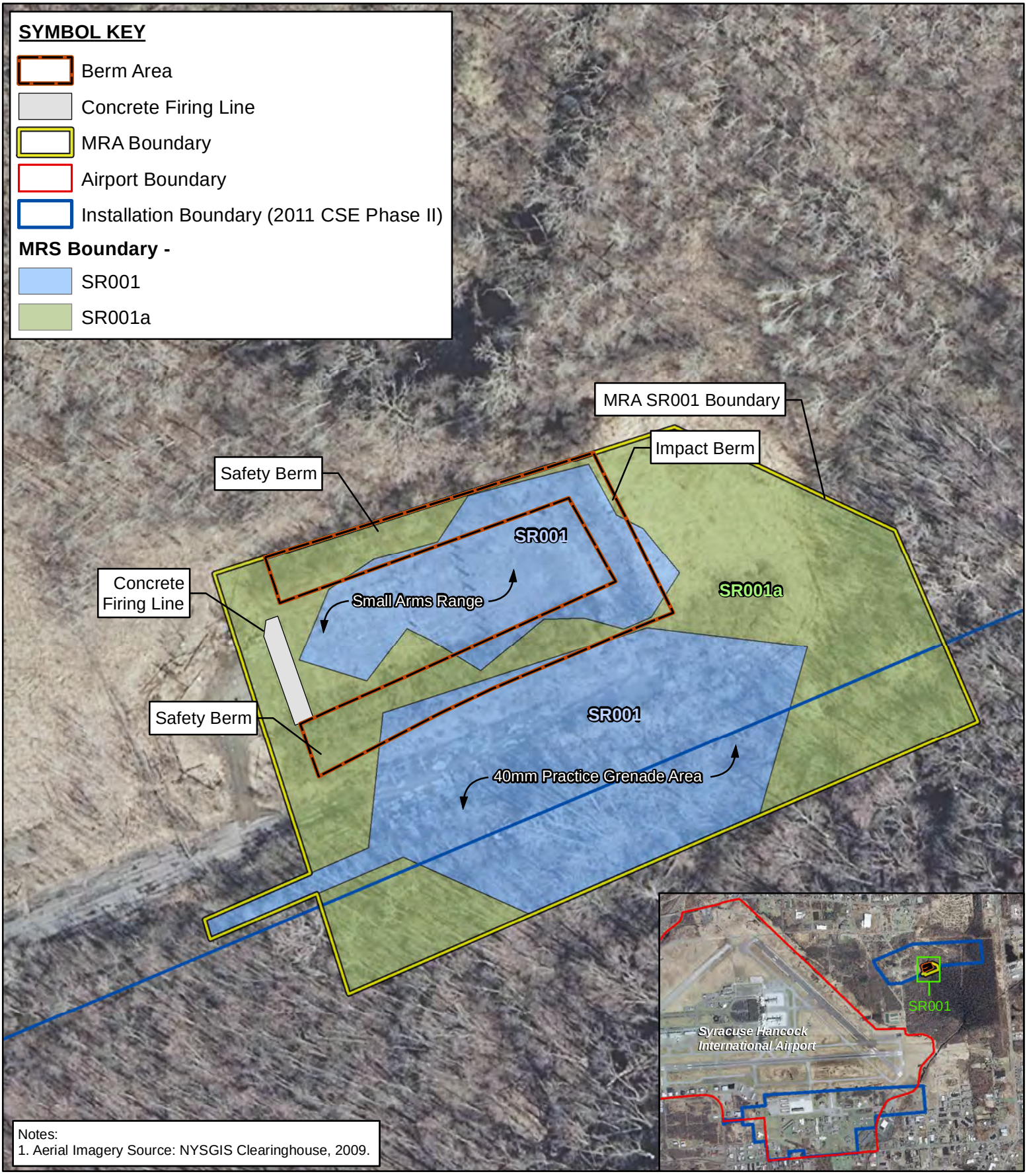

New York Air National Guard
Syracuse, New York

N

FIGURE 2-3
MRA SR001 - Site Map
ROD - Record of Decision
174th Attack Wing, Hancock Field Air National Guard Base - Syracuse, NY

0 50 100 200 300 400 Feet
0 25 50 100 Meters

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PROJ: 912810001	Drawn: JBO	2-4

The Shooting-In Buttress was constructed during the World War II era and may have been removed during construction of the Small Arms range. The Small Arms Range was constructed in the 1960s and used for training by Hancock Field personnel, the New York ANG, local reserve units, and local police. Ammunition potentially used prior to 1986 at the range included 7.62-mm, .38-caliber, .45-caliber, and .50-caliber munitions. Small arms use after 1986 consisted of 5.56-mm and 9-mm ball munitions. The use of the Small Arms Range was discontinued in 2002 (ITSI/Shaw, 2009).

During the CSE Phase II, a 40-mm practice grenade area was identified adjacent to the Small Arms Range and included in MRS SR001. The Practice Grenade Range was reportedly used for M203 grenade launcher training using M781 40-mm practice grenades. In addition, metal smoke canisters (non-high explosives) and non-lethal offensive grenade debris have been observed at the Practice Grenade Range (ANG, 2016a).

2.2 Site History and Enforcement Activities

There have been no CERCLA enforcement activities related to MRS SR001.

MRS SR001 was historically used by various groups including Hancock Field Personnel, the New York ANG, local reserve unites and local police. The use of the Small Arms Range was discontinued in 2002 (ITSI/Shaw, 2009).

2.3 Community Participation

NCP Section 300.430(f) (3) establishes a number of public participation activities that the lead agency must conduct following preparation of the Proposed Plan and review by the supporting regulatory agency.

Throughout the site's history, community concern and involvement has been low. In April 2013, the ANG announced public availability of the Engineering Evaluation/Cost Analysis (EE/CA), which identified, evaluated, and recommended technologies to mitigate impacted soil by placing an ad in the *Syracuse Post-Standard* newspaper. No written comments were received within the 30-day public comment period (April 21 through May 21, 2013).

Most recently, the Final NTCRA Site-Specific Final Report (SSFR) (March 2016) and No Further Action Proposed Plan (June 2016) were solicited for public comment in the Syracuse, *The Post-Standard* newspaper in June 2016. Because no written comments were received during the 30-day public comment period (June 28 through July 28, 2016), a public meeting was not held.

Historic information, including investigation plans, reports, and the NFA Proposed Plan, is available to the public through the Administrative Record (AR) and the Information Repository (IR). The AR is maintained at Hancock Field, located at 6001 East Molloy Road, Syracuse, New York 13211. The IR is located at the Onondaga County Public Library – Robert P. Kinchen Central Library, 447 S. Salina Street, Syracuse, New York 13202. If substantive

public comments had been received during the NFA Proposed Plan 30-day public comment period, they would have been provided in the Responsiveness Summary portion of this ROD (Section 3.0), along with NYSDEC and/or ANG responses. As is consistent with other public involvement opportunities, no written comments were received and community involvement remains low.

2.4 Scope and Role of Response Action

This ROD addresses MRS SR001 and the rationale for the NFA recommendation. The results of the CSE Phase I/II indicated an unacceptable risk to human health and the environment at MRS SR001. Therefore, a NTCRA was conducted at MRS SR001 to mitigate these risks. Confirmatory soil samples collected during the NTCRA indicated that impacted soil had been removed and unacceptable risks to human health and the environment are not present at MRS SR001. In addition, groundwater has been confirmed to have not been impacted by munitions-related metals. A post-remediation evaluation of ecological risk was conducted to evaluate potential risk from exposure to munitions-related metals at MRS SR001. Based upon the results of this evaluation, munitions-related metal concentrations are within acceptable levels for ecological exposure (ANG, 2016a).

The proposed final action for MRS SR001 is NFA with unrestricted use.

2.5 Site Characteristics

Site characteristics are summarized in the subsections below. More details regarding site characteristics can be found in historical reports prepared for the site, including the Modified CSE Phase I (ITSI/Shaw, 2009), CSE Phase II (Sky, 2012), EE/CA (ANG, 2013a), SSFR NTCRA (ANG, 2016a), which are available in the AR.

2.5.1 Topography

Hancock Field is located within the Ontario-Mohawk Lowland Region of the Central Lowland Physiographic Province, which extends to Buffalo, New York. This province has relatively flat topography created by glacial erosion and deposition during the Wisconsin Glaciation. The installation is part of an area of flat lowlands situated between Lake Ontario and the Onondaga Escarpment in Syracuse, New York. Topography across the installation rises gradually from approximately 385 feet (ft) above mean sea level (amsl) at the southeast end of the installation to approximately 425 ft amsl at the west-northwest part of the installation (ITSI/Shaw, 2009).

2.5.2 Surface Water Hydrology

Hancock Field and surrounding areas contain naturally-occurring swamps and poorly-drained areas. These natural lowlands and swamps have drastically been altered because of construction activities. The surface drainage in the area of the site is to the south and southeast toward the North Branch of Ley Creek. **(Figure 2-2)**.

There are no surface water bodies within or in the immediate vicinity of MRS SR001.

2.5.3 Wetlands

There are wetlands located in the southern and eastern portion of Hancock Field; however, no wetlands occur at MRS SR001 (ITSI/Shaw, 2009).

2.5.4 Critical Habitats and Endangered /Threatened Species

There are three animal species listed as endangered by the State of New York and are protected by the State; including, two reptiles, the Bog Turtle and Eastern Massasauga Rattlesnake, and one animal species, the Black Tern. Six plant species identified within 4 miles of Syracuse are listed by the State as rare, vulnerable, or threatened, according to the NYSDEC Wildlife Resources Center. The six plant species are the Weak Stellate Sedge, Large Twayblade, Southern Twayblade, Pod Grass, Calypso, and Marsh Valerian. It is unknown if any of the species are present at Hancock Field. However, no threatened or endangered species have been observed at MRS SR001. There are no archaeological or cultural sites present at MRS SR001 (ITSI/Shaw, 2009).

2.5.5 Geology/Hydrogeology

Hancock Field is located in an area of flat lowlands between Lake Ontario and the Onondaga Escarpment. Multiple layers underlie Hancock Field, including unconsolidated lake sediments from 0 to 50 ft below ground surface (bgs), glacial till from 50 to 100 ft bgs, and sedimentary bedrock beneath the till. The lake sediments are composed of silts with varying amounts of clay and fine to medium sand. The glacial till is composed of gravel and large cobbles in a silty clay matrix. The sedimentary bedrock consists of shale and siltstone of the Vernon Formation (ITSI/Shaw, 2009).

Hancock Field and its surrounding areas contain naturally occurring swamps and poorly drained areas. These natural lowlands and swamps have been drastically altered by development of this area into its current use as a transportation center and military facility. There are delineated wetlands located in the southern and eastern areas of the installation (ITSI/Shaw, 2009). In general, surface drainage near MRS SR001 is south and southeast toward the North Branch of Ley Creek (**Figure 2-2**).

2.5.6 Groundwater

The overburden contains an unconfined, non-sole source water table aquifer, which can be found at an average depth of 3 ft bgs (ITSI/Shaw, 2009). However, due to low yield resulting from low transmissivity, the aquifer is not a suitable source of potable water. A confined aquifer is found in the bedrock below the glacial till. The glacial till layer serves as a barrier to vertical groundwater migration between the overlying lake sediments and underlying sedimentary bedrock. There is a strong upward flow potential between the confined bedrock aquifer and the unconfined water table aquifer (ITSI/Shaw, 2009).

2.6 Summary of Previous Site Characterization Activities and Response Actions

Investigations conducted prior to the NTCRA at SR001 include:

- Modified CSE Phase I (ITSI/Shaw, 2009);
- CSE Phase II (Sky, 2012);
- EE/CA (ANG, 2013a);
- Action Memorandum (ANG, 2013b);
- NTCRA SSFR (ANG, 2016a); and,
- Proposed Plan (ANG, 2016b).

2.6.1 Modified Comprehensive Site Evaluation Phase I

In 2009, a CSE Phase I was performed to identify potential MRAs, evaluate actual or potential releases of Munitions Constituent (MC) to the environment, and evaluate associated targets of concern. The CSE Phase I investigated ten potential MRAs at Hancock Field including MRA SR001. Based on the findings of the CSE Phase I, it was determined that there was no evidence of MC releases that would warrant immediate action. However, a potential for environmental impacts from MCs was identified at MRA SR001. NFA or transfer to the Formerly Used Defense Sites Program was recommended for the remaining eight MRAs. The CSE Phase I identified lead, copper, and iron as the primary MCs of concern at MRA SR001. It was recommended that a CSE Phase II be conducted at MRA SR001 to assess the potential for environmental release of MC (ITSI/Shaw, 2009).

2.6.2 Comprehensive Site Evaluation Phase II

Between September 8 and 17, 2010, a CSE Phase II was conducted for MRA SR001. The objectives of the CSE Phase II were to determine whether releases of MCs to the environment had occurred, determine if there was a need for an emergency response, and/or whether other munitions response actions were necessary. CSE Phase II activities included visual surveys, ex-situ x-ray fluorescence sampling of surface and subsurface soil, a human health risk assessment, and an ecological risk assessment (Sky, 2012). While the CSE Phase I identified copper, lead, and iron as primary MCs of concern, MC sampling conducted during the CSE Phase II did not include the analysis of copper and iron. Based upon experience at other small arms ranges, lead is the most pervasive of these constituents. Therefore, lead soil concentrations were used as the basis to delineate the extent of contamination within MRA SR001.

Based on the results of the CSE Phase II, MRA SR001 was divided into two MRSs. Further munitions response was recommended for approximately 1.9 acres, designated as MRS SR001. The CSE Phase II also recommended NFA for approximately 1.8 acres, designated as MRS SR001a (Sky, 2012). On 15 March 2013, NFA was approved for MRS SR001a in a memorandum from the DoD Explosives Safety Board (DoD Explosives Safety Board, 2013).

A collective, tabular summary of historic site use, findings, profiles, and recommendations is provided on **Table 2-1** (see page 2-10). The table includes information regarding CSE Phase I and II investigation findings and recommendations prior to the NTCRA and MRSPP.

2.6.3 Engineering Evaluation / Cost Analysis (EE/CA)

In 2013, an EE/CA was performed to evaluate removal action alternatives and associated costs to mitigate soil impacts from range-related activities. The removal action objectives established for the response action were to protect human health and the environment by conducting a removal action to reduce MCs in soil to levels at or below the clean-up criteria established for the project, as shown in **Table 2-2**.

Table 2-1. Clean-up Criteria

Parameter	Method	Soil Cleanup Objectives Residential Soil (mg/kg)
Copper	6010B	270
Lead	6010B	400

Notes:
mg/kg – milligrams per kilogram

During the EE/CA, three response action alternatives were evaluated in terms of their effectiveness, implementability, and cost: No Action; Institutional Controls; and Excavation and Off-site Disposal. The results of the EE/CA identified the preferred alternative as Excavation and Off-site Disposal in the form of a NTCRA. Excavation and Off-site Disposal received high ratings for protection of human health and the environment; compliance with appropriate, relevant, and applicable requirements; long-term effectiveness and permanence; short-term effectiveness; implementability; and state agency acceptance. These high ratings were due to this alternative permanently removing the contamination, and thus reducing the risk associated with the site.

As part of the CERCLA process, a public notice was distributed in *The Post Standard*, a Syracuse, New York newspaper publication, to inform the Public that the EE/CA was available for review at the Information Repository (Onondaga County Public Library) and that there was a 30-day public comment period from 28 April to 21 May, 2013. No comments were received during the 30-day comment period.

2.6.4 Action Memorandum

An Action Memorandum was prepared to request approval from the ANG to conduct a NTCRA of MC-impacted soil at MRS SR001. The purpose of the Action Memorandum was to request and document approval of the selected NTCRA (Excavation and Off-site Disposal) for MRS SR001. The Action Memorandum concluded that the conditions at Hancock Field meet the NCP criteria for a Removal Action and requested concurrence from the National Guard Bureau to proceed with the NTCRA at MRS SR001 (ANG, 2013b).

Table 2-2. Summary of CSE Phase I and II Findings and Recommendations for MRS SR001

MRS/ Site ID	Range Type	Historical Range Use	Munitions Used/Expected	Previous Investigation Findings	Recommendations
MRS SR001 (1.9 acres)	Small Arms Range and Shooting-In Buttress	Small Arms Range was constructed in 1960s and used for training by Hancock field personnel, local reserve units and local police. Use of small arms range was discontinued in 2002. Shooting-In Buttress was constructed during WWII era and removed during small arms range construction.	Prior to 1986; 7.62-mm, .38 caliber, and .50 caliber munitions. After 1986; 5.56-mm and 9-mm ball munitions	**CSE Phase I (2009)**: identified lead, copper, and iron as the primary munitions of concern. **CSE Phase II (2010)**: No evidence of MEC identified. There were 40 XRF samples collected and analyzed. Lead contents ranged from 25 mg/kg to 5,217 milligrams per kilogram (mg/kg). **Human Health Risk Screening Results:** There were 16 samples that exhibited lead concentrations exceeding regulatory criteria **Ecological Risk Screening Results:** Results indicated that lead was present at concentrations that may present a human health risk under a residential land use scenario. Additionally, lead exceeded ecological risk screening criterion intended to be protective of soil invertebrates, plants, and wildlife **MRSPP Priority Score**: 5	**MRS SR001**: Further Response Action - Remove impacted soil to concentrations below the cleanup criteria established for the project - (Non Time Critical Removal Action)
	40-mm Practice Grenade Area	M203 grenade launcher training using M781 40-mm practice grenades.	M781 40-mm practice grenade grenades. Metal smoke canisters and non-lethal offensive grenade debris		
MRS SR001a (1.8 acres)	Portions of Safety Berm, Concrete Firing Line, and Support Areas	Not Applicable	None	**MEC Results:** No evidence of MEC identified. There were 14 XRF samples collected and analyzed. Lead contents ranged from 22 mg/kg to 199 mg/kg. **Human Health Risk Screening Results:** None of the samples exhibited lead concentrations exceeding regulatory criteria. **Ecological Risk Screening Results:** Lead was at concentrations above the ecological screening level of 11 mg/kg. The mean lead concentration is above the 95th percentile of background for eastern United States soil. **MRSPP Priority Score: 6**	**MRS SR001a**: No Further Response Action

Notes:
MRS - Munitions Response Sites
XRF - X-Ray Florescence
MEC - Munitions and Explosives of Concern
MRSPP - Munitions Response Site Prioritization Protocol
CSE - Comprehensive Site Evaluation
mm - millimeter
mg/kg - milligrams per kilogram

2.6.5 Non-Time Critical Removal Action

Based on the results of the previous investigations conducted at the site and the evaluation of remediation alternatives conducted in the EE/CA, a NTCRA was conducted at MRS SR001 to mitigate the risks associated with impacted soils. The NTCRA was conducted between the June 16 and August 22, 2014, and included the following:

- A total of 2,562.82 tons (approximately 2,480 cubic yards) of soil impacted by munitions-related metals (i.e., copper and lead) were excavated from MRS SR001. All soils were characterized, stabilized, and disposed off-site as non-hazardous waste.
- Approximately 500 pounds of recovered debris was certified to be free of explosive hazards. The recovered metallic debris was transported off-site for recycling.
- Demolition and disposal of a total of 8.56 tons of wooden debris was containerized and shipped off-site as hazardous waste.
- A total of four groundwater samples were collected at MRS SR001 and analyzed for munitions-related metals. Analytical results indicated that groundwater had not been impacted by munitions-related metals.
- A total of four confirmatory incremental soil samples were collected within the excavation area at MRS SR001. Analytical results for final confirmatory samples were below the NYSDEC Residential Soil Cleanup Objectives for copper and lead, indicating no unacceptable risk to potential future human receptors. Based upon analytical results, the excavation area was rough graded and restored.
- A post-remediation evaluation of ecological risk was conducted to evaluate potential risk from exposure to munitions-related metals at MRS SR001. Based upon the results of this evaluation, munitions-related metal concentrations are within acceptable levels for ecological exposure.
- The MEC HAT was completed for MRS SR001 to assess the potential exposure hazard to MEC. Since no MEC was identified during the NTCRA, confirming historical conclusions that only Munitions Debris (MD) was used at the MRS, there is no potential explosive hazard associated with MEC.

Analytical results from the NTCRA indicate that impacted soils have been removed from MRS SR001. Sampling and risk assessment results indicate that there are no residual human health or ecological risks associated with soil and groundwater at MRS SR001.

Upon the completion of the NTCRA, the MRSPP was updated to reflect a decreased potential hazard related to MRS SR001. Specifically, the priorities for MRS SR001 has been reduced from category 6 to 8.

The information above supports the request for unrestricted reuse of MRS SR001.

2.7 Current and Potential Future Site and Resource Uses

2.7.1 Land Use

Hancock Field is a restricted ANG facility surrounded by public roadways as well as airport and commercial properties. Future land use of Hancock Field is anticipated to remain the same. However, unforeseen future land use designations for the MRAs at Hancock Field ANG Base may conceivably include residential, commercial, and light industrial.

2.7.2 Groundwater/Surface Water Use

Groundwater is generally encountered within the silty clay at depths of 5 to 11 ft bgs during the spring season and at depths of 9 to 15 ft bgs during the fall season. Unconsolidated lake sediments occur from 0 to 50 ft bgs, glacial till from 50 to 100 ft bgs, and sedimentary bedrock beneath the till. The lake sediments contain an unconfined, non-sole source water table aquifer, which occurs several ft bgs. Due to low transmissivity, the aquifer is not a suitable source of potable water. A confined aquifer is found in the bedrock below the glacial till. The glacial till layer serves as a barrier to vertical groundwater migration between the overlying lake sediments and underlying sedimentary bedrock.

Human and ecological receptors may come in contact with shallow, unconfined groundwater during ground intrusive activities.

There are no identified surface water bodies near MRS SR001; therefore, surface water impacts are not applicable for the site.

2.8 Summary of Site Risks

2.8.1 Groundwater

Groundwater was not evaluated during the CSE Phase I and Phase II. The groundwater pathway was determined to be potentially complete in the CSE Phase II (Sky, 2012). Therefore, groundwater sampling was conducted at MRS SR001 to determine the presence or absence of MCs above the applicable groundwater quality standards. Four temporary groundwater monitoring wells were installed and sampled at MRS SR001, three wells within the range floor and pre-berm area at locations that exhibited the highest lead concentrations during the CSE Phase II, and one well north of MRS SR001 at a presumed background location. Copper and lead were detected within samples collected from each of the four wells at concentrations below their respective regulatory standards of 200 and 15 µg/L, respectively. Total copper was detected at concentrations ranging from 2.5 to 13 µg/L while total lead was detected at concentrations ranging from 0.62 to 4.9 µg/L.

Analytical results indicated that groundwater had not been impacted by munitions-related metals. With this collective information, groundwater was recommended for NFA for MRS SR001.

2.8.2 Surface Water and Sediment

There are no surface water bodies near MRS SR001; therefore, sediment and surface water impacts are not applicable for MRS SR001.

2.8.3 Soil

MRS SR001 consists of vacant land with remnants of berms and small arms facilities. On-site berms consist of safety berms located on the north and south and an impact berm to the east of the site. The berms range in height from 12 to 15 ft and are densely vegetated. A concrete firing pad remains on the western side of the range. Based upon the data collected in the CSE investigations, soil was the primary exposure route for ANG personnel. The primary constituent of concern driving the excavation was lead; however, copper was a secondary driver and was evaluated in confirmatory soil samples.

A total of four confirmatory incremental soil samples were collected within the excavation areas at MRS SR001. Analytical results for final confirmatory samples were below the NYSDEC Residential Soil Cleanup Objectives for copper and lead, indicating no unacceptable risk to potential future human receptors. Based upon analytical results, the excavation areas were rough graded and restored.

2.8.4 Ecological

A post-remediation evaluation of ecological risk was conducted during the CSE Phase II (Sky, 2012) to evaluate potential risk from exposure to munitions-related metals at MRS SR001. Based upon the results of this evaluation, munitions-related metal concentrations are within acceptable levels for ecological exposure.

2.8.5 MEC

The MEC HAT was completed for MRS SR001 to assess the potential exposure hazard to MEC. Since no MEC was identified during the NTCRA, confirming historical conclusions that only MD was used at MRS SR001, there is no potential explosive hazard associated with MRS SR001.

2.9 Documentation of Significant Changes

To fulfill CERCLA and NCP, the ROD must document and discuss the reasons for any significant changes made to the selected remedy. Changes include those reasonably anticipated by the public from the time the Proposed Plan was released for public comment to the final selection of the remedy. The Proposed Plan for MRS SR001 was advertised for public availability in June 2016. The Proposed Plan identified NFA as the response action for MRS SR001. No written comments were received during the 30-day public comment period (June 28 through July 28, 2016). The ANG and NYSDEC determined that no changes to the remedy were necessary or appropriate.

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3.0 RESPONSIVENESS SUMMARY

The Proposed Plan identified the 30-day public comment period and the potential follow-on Public Meeting. Instructions were given on how to obtain and review information pertaining to MRS SR001 as well as how to submit formal comments. A notice of the availability of the Proposed Plan and historical documents, as well as the notice of a potential Public Meeting, was published in *The Post-Standard*. However, since no comments were received during the 30-day public comment period, a public meeting was not held.

3.1 Stakeholder Comments and Lead Agency Responses

No substantive stakeholder comments were received on the Proposed Plan.

3.2 Technical and Legal Issues

There are no technical or legal issues that require additional discussion.

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4.0 REFERENCES

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