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1.0 Introduction

This **Proposed Plan** identifies the **Preferred Remedial Alternative** for the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area **Formerly Used Defense Site (FUDS)** located in Hamburg, Erie County, New York, and provides the rationale for this recommendation. The **U.S. Army Corps of Engineers (USACE)** proposes **No Action** is necessary to protect human health and the environment as they relate to former **U.S. Department of Defense (DoD)** operations at the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS.

USACE is issuing this Proposed Plan as part of its public participation responsibilities under the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** and Section 300.430 (f)(3) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 Code of Federal Regulations Part 300). This Proposed Plan summarizes information that can be found in greater detail in the Final **Remedial Investigation (RI)** Report (dated May 2022) and other documents contained in the **Administrative Record file** for this Site. This plan summarizes the following:

- Site Background (Section 2)
- Site Characteristics (Section 3)
- Previous Investigations (Section 4)
- 2020 – 2022 Remedial Investigation (Section 5)
- Scope and Role of Response (Section 6)
- Preferred Alternative (Section 7)
- Community Participation (Section 8).

A glossary defining terms (identified by bold text at first mention) used in this document, as well as an acronym list and a document reference page, are included at the end of this Proposed Plan.

This document is issued by USACE for the DoD with the concurrence of the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH). USACE has made the final decision on the Preferred Alternative for the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS based upon the information generated as part of the site investigations and after reviewing and considering all information submitted during the **public comment period**.

The Administrative Record file and other documents that support this Proposed Plan are available for review at the information repository or through the USACE New England District website for the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS:

<https://www.nae.usace.army.mil/Missions/Projects-Topics/Former-NIKE-Site-Hamburg-New-York/>

Information Repository:

Hamburg Public Library
102 Buffalo Street
Hamburg, NY 14075



2 Site Background

Site Location

The Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS is located on Lakeview Road in Erie County, Hamburg, New York, approximately 5 miles southeast of Lake Erie (**Figure 1**). The site is bound on the north by Interstate 90; on the west by the town of Hamburg Recreation Area; on the east by residential areas; and on the south by residential areas, Lakeview Road, and Eighteen Mile Creek. A closed and capped landfill, formerly operated by the town, is located north of and adjacent to the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS.

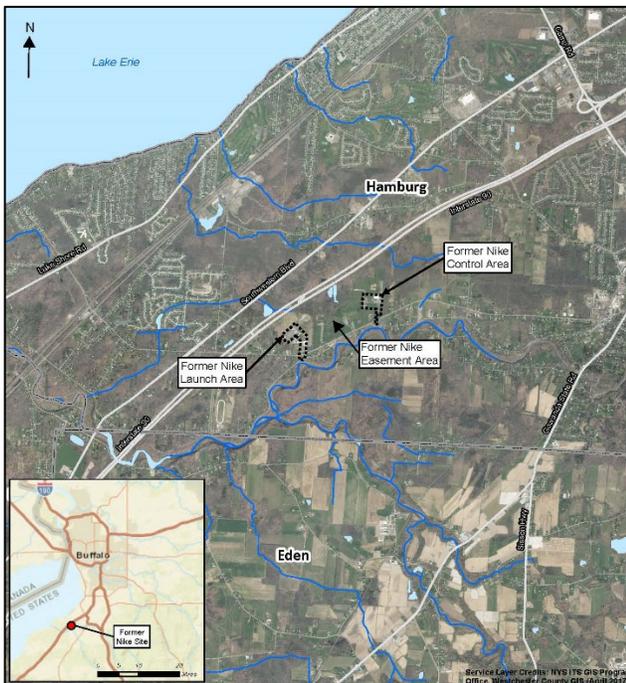


Figure 1 - Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS location.

The Nike Anti-Aircraft Missile Battery BU-51/52 facility consisted of the Launch Area, a Control Area located to northeast, and an Easement Area located between the Launch Area and Control Area. The Launch Area contained the facilities and equipment required to assemble, test, and maintain the missiles and launchers. The town of Hamburg is the current owner of the Nike Anti-Aircraft Missile

Battery BU-51/52 Launch Area FUDS and currently uses the site for office space, truck garage space, storage of gravel piles and road salt, and as an accumulation of household hazardous waste (e.g., paint cans), electronic waste (e.g., televisions), and scrap metal. Neither the Control Area nor the Easement Area are included in the FUDS program as operations in these areas did not include activities or facilities that could have resulted in releases of hazardous materials to the environment. The former Control and Easement Areas are currently used as the town of Hamburg’s Lakeview Recreational Area, which includes a playground, sledding hill, ball fields, and a BMX (bicycle off-road racing and trick riding) track.

Site History

During the Cold War, the U.S. Army developed the Nike anti-aircraft missile to protect population centers and important industrial and military installations. Between December 1955 and May 1956, the DoD acquired approximately 57 acres by various deeds and condemnation proceedings and 95 acres in easements to develop the Nike Anti-Aircraft Missile Battery BU-51/52 site, which operated from 1956 until its closure in 1961. The Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area contained a total of 60 Nike Ajax supersonic missiles, which were stored horizontally in six underground silos. The aboveground components of the silos have been demolished, and the subsurface elements of the silos were filled with asphalt road millings by the town at some point after 2015.

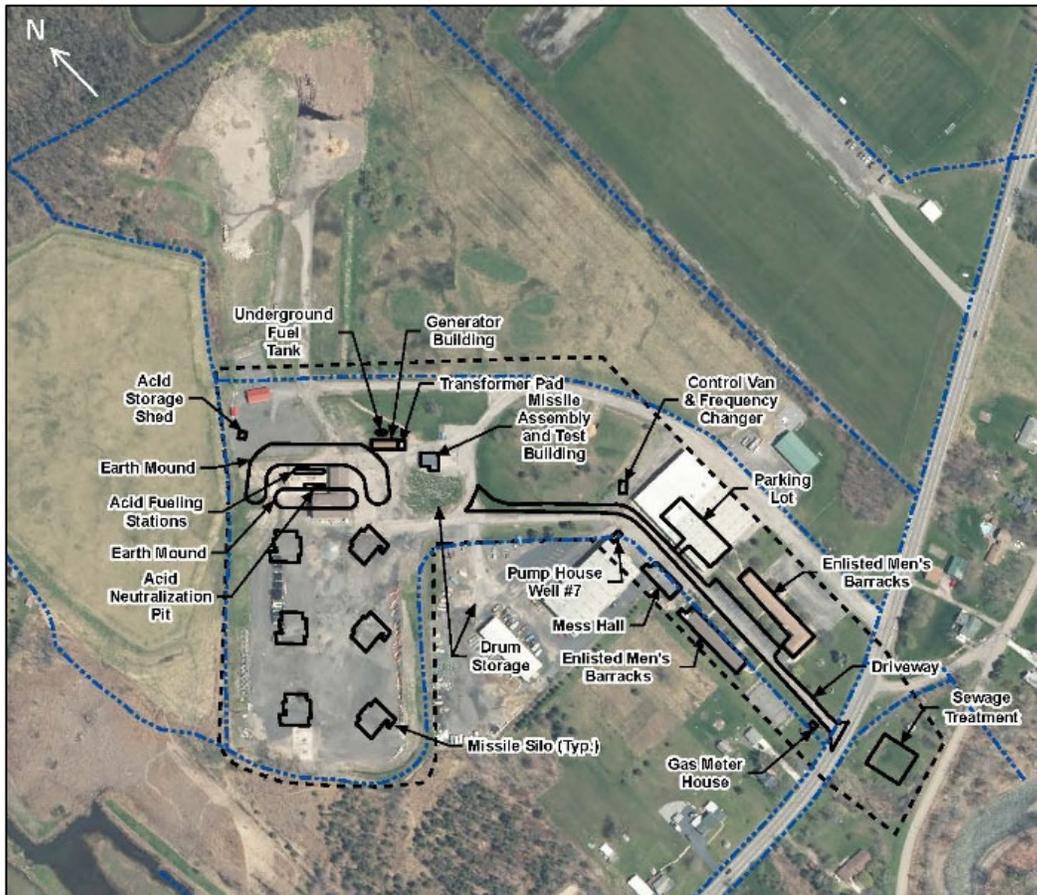


Figure 2 - Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS historical features.

On June 1, 1965, the DoD transferred the Nike Anti-Aircraft Missile Battery BU-51/52 property to the **General Services Administration (GSA)**. In 1968, GSA conveyed the property to the town of Hamburg, New York. **Figure 2** provides historical site features of the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS from the period of DoD ownership. As shown on **Figure 2**, the Launch Area contained several support facilities in addition to the silos. These included facilities for missile assembly, nitric acid oxidizer (part of the fuel mixture) storage and handling, on-site power generation, and drum storage. Barracks and a mess hall for site personnel were also present. Sanitary wastes from the facility were conveyed to a sewage treatment facility located across Lakeview Road to the east of the silo area. The sewage

treatment facility consisted of septic tanks, a chlorination facility, and a sand filter leaching area.

3.0 Site Characteristics and Land Use

Site Characteristics

Figure 3 provides current features of the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS. The Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS is approximately 5 miles southeast of Lake Erie. The surrounding area is characterized by a relatively flat land surface that slopes gently toward Lake Erie. Surface elevation at the site ranges from approximately 770 to 755 feet above mean sea level. Native overburden materials in the area are composed of interlaminated silt and clay derived from lake deposits; however, the



majority of the overburden at the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS is composed primarily of fill materials (i.e., gravel, cinders, millings) combined with reworked native overburden materials. The overburden is generally 12 to 20 feet thick and is underlain by bedrock consisting of gray to brown shale with frequent horizontal bedding plane fractures (locally) that decrease with depth. The shale is characterized by petroleum odors, which are associated with naturally occurring regional natural gas deposits. There is a former natural gas production well present at the site. Based on information contained in the NYSDEC Oil and Gas Well Database, this well was drilled in 1989 and is 1,660 feet deep.

Groundwater in the overburden and bedrock flows to the south and east toward Eighteen Mile Creek. Surface water runoff associated with precipitation or snowmelt at the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS flows into a manmade drainage ditch that drains the perimeter of the former town landfill, then traces the southwest and southeast sides of the silo area. This manmade ditch drains east to a second ditch that discharges to Eighteen Mile Creek, located 200 feet south of the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS boundary. Eighteen Mile Creek flows westward approximately 6 miles to Lake Erie. Natural surface water drainage at the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS emanates from an area northeast of the landfill and flows along the western landfill boundary. Other surface water drainage is controlled by manmade ditches.

Current Land Use

The ground surface at the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS has historically been reworked and has little native vegetation. The below-ground portions of the former missile silos are in an area currently used by the town of Hamburg Highway Department for staging of materials. The silos have been backfilled with asphalt millings; however, the concrete pads are

still visible in some areas and the ground surface around some of the silos has collapsed/settled over time.

A closed and capped landfill, constructed and formerly operated by the town, is located adjacent to the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS (see **Figure 3**). The town of Hamburg began operating the Town of Hamburg Landfill in 1970. The landfill is not part of the FUDS program because it was constructed and operated by the town of Hamburg after the Nike Anti-Aircraft Missile Battery BU-51/52 site closure. The Town of Hamburg Landfill is identified as site 915097 in the state of New York's Inactive Hazardous Waste Disposal Site ('State Superfund') Program. The landfill was closed in 1984 and covered with approximately 2 feet of soil.

The town of Hamburg Police Department uses the area formerly occupied by the enlisted men's barracks along the northwestern property boundary for the special weapons and tactics (SWAT) team activities, and as a firearm training center. This includes a small arms range with an earthen backstop berm. Based on information provided by the town of Hamburg, sanitary wastes from the Highway Department and Police Department facilities are still conveyed to the sewage treatment facility located across Lakeview Road.

Groundwater at the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS is not currently used as a drinking water source and is unlikely to be used in the future. Potable water is supplied to the site and nearby residents by the Erie County Water Authority, which receives surface water from Lake Erie and the Niagara River.

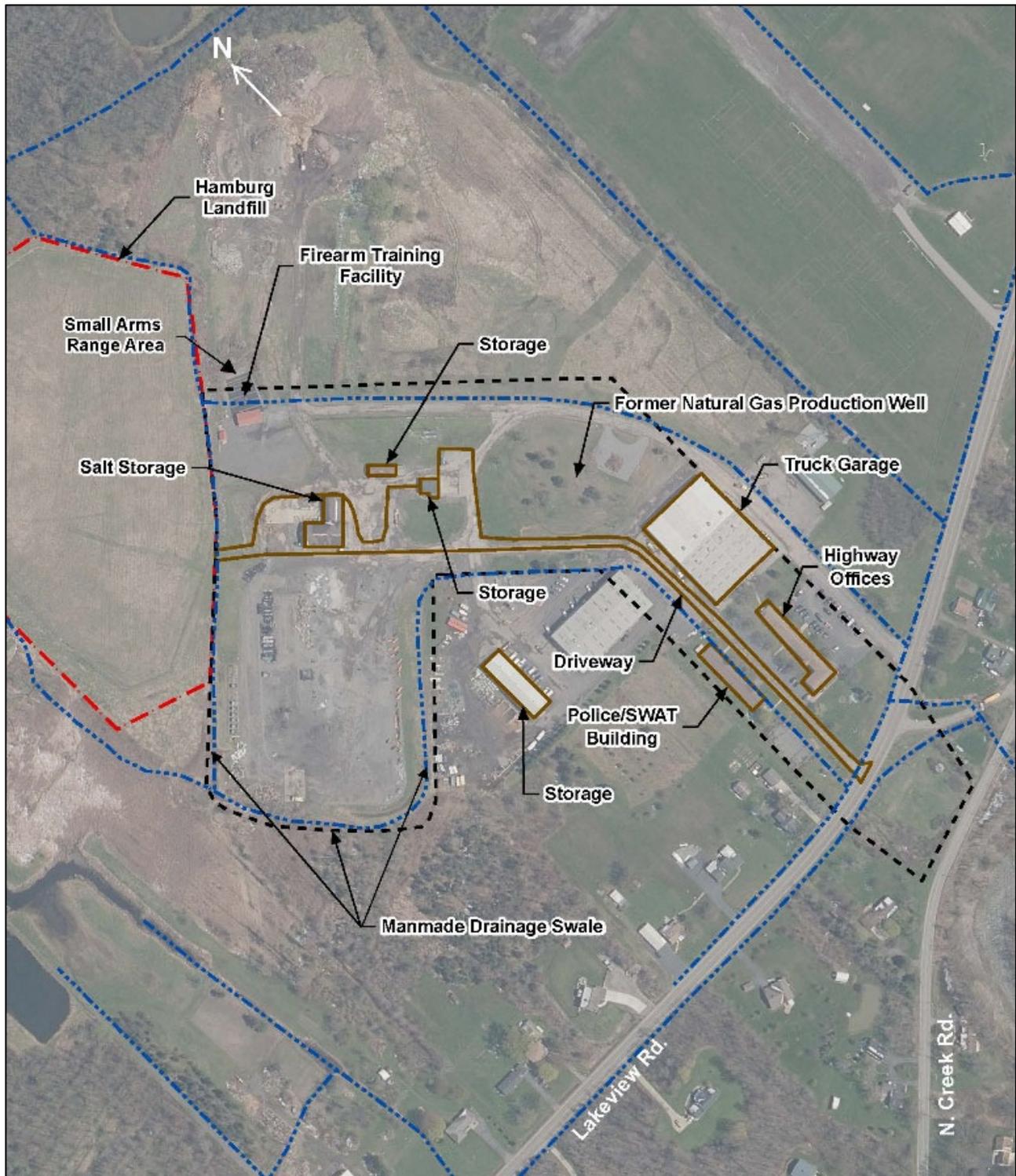


Figure 3 - Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS current features.



4.0 Previous Investigations

Several previous investigations have been conducted at the former Launch Area and nearby residences along Lakeview Road.

1989 Confirmation Study and Contamination Evaluation

– An environmental contractor conducted an Inventory Phase Investigation for USACE Kansas City District at the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS. The investigation included: a site visit to collect background information and to determine sampling locations; installation of four monitoring wells; sampling and analysis of groundwater, soil, silo water, and tank oil to evaluate the potential for contamination; and evaluation of physical and analytical data. The Contamination Evaluation found that arsenic, cadmium, and lead were the only potential contaminants detected in groundwater at concentrations greater than the applicable standards.

1991 Inventory Project Report – In 1991, USACE New York District conducted a survey of the former Launch Area to assess the presence of unsafe debris, hazardous waste impacts, and unexploded ordnance and completed an **Inventory Project Report (INPR)**. The INPR recommended that: an underground storage tank (UST) located at the former Launch Area be properly abandoned, with soil excavation as necessary under New York State Petroleum Bulk Storage Regulations; monitoring wells previously installed by USACE be resampled to confirm the presence of metals in groundwater; and a risk assessment be performed. Specifically, the INPR Findings and Determination of Eligibility sheet proposed a public health assessment to determine the risk to public health from contamination at the former Launch Area resulting from DoD activity.

1999 NYSDEC UST Removal – In 1999, the NYSDEC opened spill number 9875480 due to a sheen observed in soil during excavation of two USTs from the former Launch Area by the town of Hamburg. The town removed a 550-gallon UST

from the former Launch Area and an 8,000- to 9,000-gallon UST from the former Control Area. Both USTs historically contained petroleum products, and petroleum-impacted soil removed from the excavation area was disposed off site. The NYSDEC spill number was closed on April 28, 1999.

1999 Environmental Study, Nike Base/Hamburg Landfill

– In 1999, the town of Hamburg hired an environmental contractor to conduct a records search and media sampling at the former Nike Anti-Aircraft Missile Battery BU-51/52 Launch, Control, and Easement Areas and the Town of Hamburg Landfill. The results of their records search indicated areas of concern at the former Launch Area, including the acid neutralizing pit; aboveground storage tanks (ASTs); USTs; septic system and leach field; and potential contamination in former missile silos.

The environmental contractor collected 36 surface soil, 18 subsurface soil, and 11 groundwater samples from the areas of concern in two sampling rounds. In addition, surface water and sediment samples were collected from 14 locations and air samples from three locations. Consistent with the 1989 results, arsenic and chromium in surface soil samples exceeded United States Environmental Protection Agency (USEPA) Industrial Regional Screening Levels (RSLs), but were below the concentrations of metals reported in the **NYSDEC Statewide Rural Surface Soil Survey**. Thallium was detected in one surface soil sample collected downgradient of the former Launch Area at a concentration that exceeds the current (2019) USEPA Industrial RSL. Concentrations of benzene and ethylbenzene were noted in a groundwater sample collected from a monitoring well located downgradient of a suspected fuel tank. Concentrations of cadmium, manganese, and total cyanide were also noted in former Launch Area groundwater samples.



1999 Results of Groundwater Sampling of Neighboring Wells

– In 1999, the NYSDOH sampled groundwater at nine residential properties in the vicinity of the former Launch Area. The samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compound (SVOCs), and metals. VOCs related to petroleum compounds and metals were detected at two Lakeview Road residences located adjacent to the former Launch Area, but at concentrations less than NYSDEC drinking water standards.

1999 Soil and Groundwater Quality

Investigations of Lakeview Properties – Based on the NYSDOH sampling results, two residents retained a consultant to investigate soil and water quality on their Lakeview Road properties. Results of the groundwater analysis indicated the presence of ethylbenzene and xylenes, 2-butanone, and acetone at concentrations above NYSDEC drinking water criteria for groundwater. Metals detected in groundwater at concentrations above NYSDEC criteria included arsenic, beryllium, cadmium, chromium, lead, nickel, and zinc. The two surface soil samples exhibited arsenic, beryllium, cadmium, chromium, lead, nickel, and zinc concentrations above the NYSDEC criteria for soil.

2000 Site Investigation, Former Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area

– In 2000, an environmental contractor conducted a **site investigation (SI)** at the former Launch Area for USACE to determine the presence and magnitude of subsurface contamination and to look for evidence of southward migration of contaminants from the site. The contractor installed and sampled three soil borings at the former Launch Area and four monitoring wells at nearby residences on Lakeview Road. Samples were analyzed for metals, VOCs, and SVOCs. Concentrations of arsenic, chromium, and thallium exceeded USEPA Industrial RSLs. Thallium concentrations in groundwater exceeded the current (2019) USEPA Tapwater RSL but were less than the USEPA Maximum Contaminant Level (MCL). Barium was present at concentrations that

exceeded the USEPA MCL in one groundwater sample from MW-4. Benzene was the only VOC present in groundwater at concentrations that exceeded the MCL. The contractor concluded that the levels of contamination of subsurface soil and groundwater were low at the perimeter of the former Launch Area. They also concluded that hydrazine (a component of rocket fuel) was detected only in soil samples collected near the perimeter of the former Launch Area and not in residential soil. The contractor also recommended completion of a screening level **human health risk assessment (HHRA)** to confirm the low likelihood of adverse impacts.

2000 Screening Level Human Health Risk Assessment

– An environmental contractor performed a screening level HHRA to evaluate potential risks to Lakeview Road residents south of the former Launch Area from exposure to potential DoD-related chemicals in soil, groundwater, and sump water. Results of five independent investigations previously conducted by the state of New York and independent entities were used for the public health risk assessment. Constituents of potential concern (COPCs) in soil included cadmium, nickel, thallium, zinc, hydrazine, and VOCs. All volatile chemicals detected in soil, groundwater, and sump water were retained as COPCs for the vapor migration to indoor air evaluation; only the adult indoor air exposure through vapor intrusion was evaluated (e.g., inhalation of indoor air for children and shower inhalation were not evaluated). Total cancer risks for residential exposures to soil (dermal contact, incidental ingestion, and vegetable consumption) based on the maximum and average detected concentrations were less than the USEPA's acceptable risk range. Non-cancer risks, as well as inhalation risks and hazards for adult residential vapor intrusion exposure to volatile constituents in soil, groundwater, and sump water, were also less than the USEPA threshold values. The assessment concluded that the risks and hazards were within acceptable ranges, indicating that adverse health



effects to residents near the former Launch Area were unlikely.

2003 NYSDEC UST Removal – In 2003, four additional USTs were removed from the former Control Area under NYSDEC spill number 0375052. Petroleum-impacted soils removed from the excavation area and the USTs were disposed off site. The NYSDEC spill number was closed on November, 24, 2003.

2018 Records Review and Site Visit – In June 2018, USACE and their contractors conducted a site visit at the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS to collect information for development of a sampling/investigation plan for potential contamination. The team visited the former Launch Area as well as a wetland mitigation pond, the former Control Area, and the Twin Ponds Area as part the site review.

5 2020 to 2022 Remedial Investigation

The RI field activities at the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS were conducted from May 2020 to March 2021. The methods and results of the RI activities are included in the Final RI Report, dated May 2022.

Habitat Assessment

A habitat assessment was conducted to document ecological habitat, identify potential ecological **receptors**, and evaluate the potential for ecological exposure to constituents in soil. The results from the habitat assessment indicate that only small areas (approximately ½-acre) of successional old field at the site perimeter provide potential habitat at the site. The former Launch Area is actively used by the town and is largely covered with gravel, asphalt, or buildings; and ecological exposure to soil in these areas is not likely. Similarly, other areas of the former Launch Area are maintained lawn. Lawn areas are not a natural cover type and provide limited wildlife habitat. Site habitat does not support abundant and diverse populations of wildlife, and potential exposure for populations of ecological

receptors (plants, soil invertebrates, birds, and mammals) is limited.

Soil

Soil sampling locations are shown on **Figure 4**. Surface and subsurface soil samples were collected during installation of 16 overburden wells. Subsurface soil samples were collected from the top of native material to the water table and analyzed for metals (including hexavalent chromium), VOCs, SVOCs (including polycyclic aromatic hydrocarbons (PAHs)), hydrazines, and total organic carbon (TOC). As many as three soil samples were collected from each boring, depending on the total depth. At each location, one sample was collected from the 1-foot interval immediately below the ground surface/fill layer, and one sample was collected from the 2-foot interval directly above the water table. A third sample was collected if there were indications of contamination based on field observations in the intervals between the other two soil samples. Surface soil samples (0 to 1-foot below ground surface) were collected from eight locations associated with historical and current use of the former Launch Area (e.g., drum storage areas, generator building/transformer pad, acid storage shed, former missile silos). Surface soil samples were analyzed for metals, VOCs, SVOCs (including PAHs), and hydrazines to evaluate the potential risks associated with surface soil exposure to site users. Three of the surface soil samples collected in the vicinity of the former transformer pad were analyzed for polychlorinated biphenyls (PCBs) in addition to metals, VOCs, SVOCs, PAHs, and hydrazines. Surface soil samples were not collected from soils that were identified as fill material.

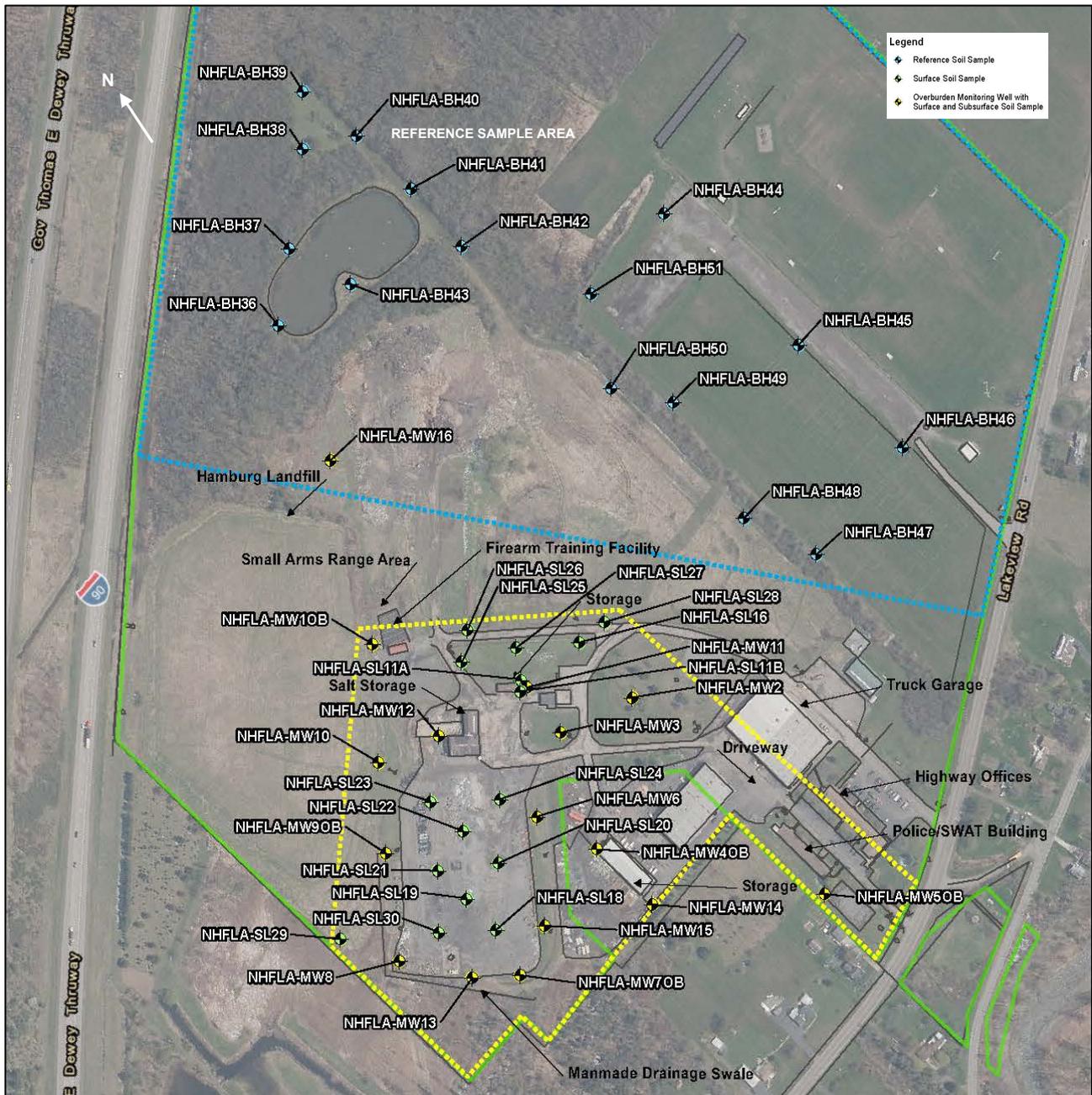


Figure 4 - Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS RI soil sampling locations.

Reference samples were collected in the former Easement Area, which is directly adjacent to, and northeast of, the former Launch Area. Reference soil samples were only collected from subsurface soils that, based on their lithology, represented naturally occurring soils similar to those

encountered at the former Launch Area. Reference soil samples were analyzed for metals and PAHs to gather site-specific information on naturally occurring and/or anthropogenic background conditions. The reference sample data were compared to concentrations in samples from the



June 2023

former Launch Area. The reference sampling area was immediately northeast of the former Launch Area and is currently used by the town for recreational purposes (**Figure 4**).

Only metals and PAHs were present in the soil samples at concentrations exceeding the USEPA Industrial RSLs. However, these compounds were ubiquitous throughout the investigation area and they were also detected in the reference soil samples at comparable concentration levels. These data, combined with the fact that there are no localized areas of relatively elevated concentrations, indicate that the metals and PAHs reported in site soils represent naturally occurring or anthropogenic conditions, not DoD-related activities.

Groundwater

Groundwater sampling locations are shown on **Figure 5**. Sixteen new overburden and five new bedrock monitoring wells were installed during the RI to evaluate the nature and extent of groundwater impacts (if present) and for evaluation of vertical and horizontal groundwater flow patterns. Two rounds of groundwater sampling were conducted (September 2020 and December 2020) after the completion of well installation and development. During each sampling event, water levels were measured, and groundwater samples were collected for analysis of metals, VOCs, SVOCs, and hardness. Hydraulic conductivity tests were also conducted in overburden wells and the results were used to evaluate groundwater flow rates. Based on water level measurements, the direction of groundwater flow at the site in both the overburden and bedrock is to the south/southeast toward Eighteen Mile Creek. A groundwater flow map showing groundwater elevation contours from the December 2020 sampling event is shown on **Figure 6**.

Groundwater sample results were compared to USEPA Tapwater RSLs as a conservative screening level even though groundwater from the former Launch Area is not used for drinking water.

VOCs, composed primarily of benzene and ethylbenzene, were detected at concentrations exceeding the USEPA Tapwater RSLs at only three locations. Concentrations of SVOCs in groundwater exceeding the USEPA Tapwater RSLs were detected at five locations. However, the compounds detected were primarily PAHs, which are commonly found in commercial and industrial settings, and in common manmade materials such as asphalt. Based on their isolated nature and location/distance from former DoD activity areas, the concentrations of VOCs and SVOCs in groundwater are not indicative of a release to the environment associated with past DoD activities.

Numerous metals were detected in groundwater at concentrations greater than the USEPA Tapwater RSLs in both the total and dissolved samples. However, the same metals were detected at comparable concentration levels in locations upgradient from the DoD activity areas as well as downgradient from those locations. Many of these metals (i.e., iron, manganese, aluminum) are ubiquitous in groundwater throughout the region. In addition, storage, handling, and use of highly soluble road salts by the town of Hamburg's Highway Department on and adjacent to the former Launch Area appears to have impacted groundwater, resulting in elevated concentrations of sodium, potassium, calcium, and magnesium in groundwater that are characteristic of typical road salts. These road salts, when introduced into the soil at high concentrations, will displace other metals attached to the soil. The result is elevated levels of some metals in groundwater. For example, sodium, the most common element of the road salt used, is present in the groundwater at levels as much as 100 times higher than is typically expected for groundwater in this area. Based on the distribution of metals throughout the site, and given the use of the former Launch Area as a town maintenance facility for more than 50 years, the metals detected in groundwater are not indicative of a release to the environment associated with past DoD activities.

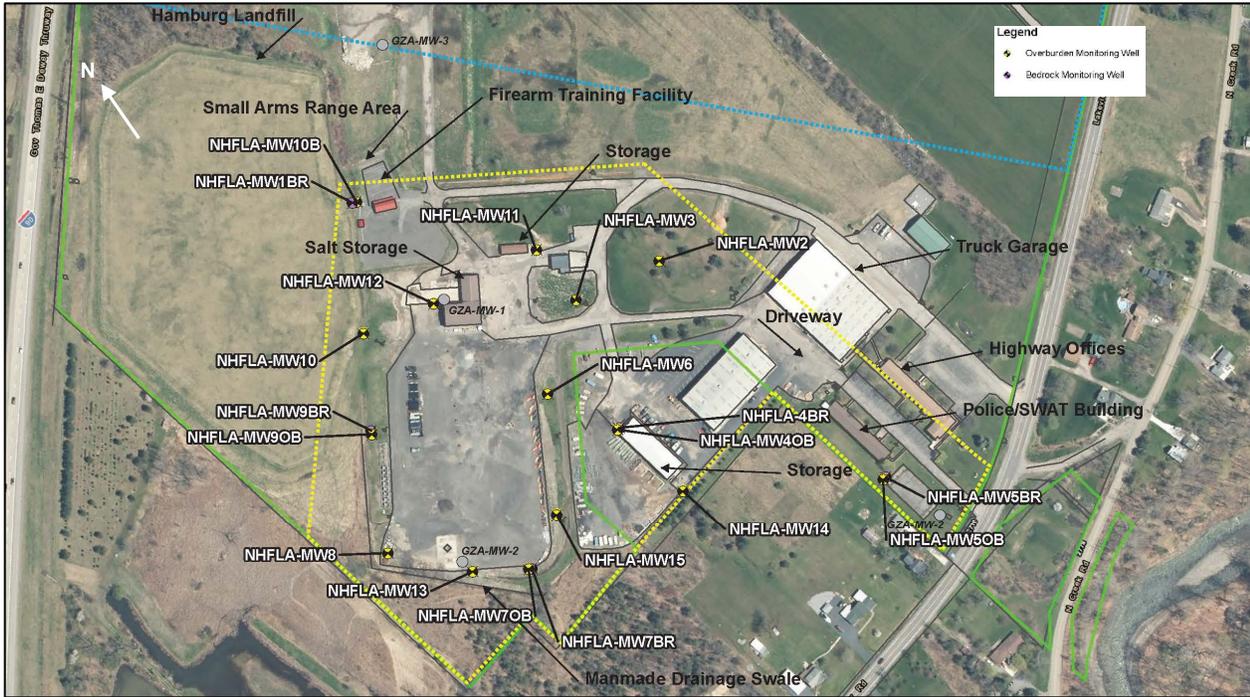


Figure 5 - Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS RI groundwater sampling locations.

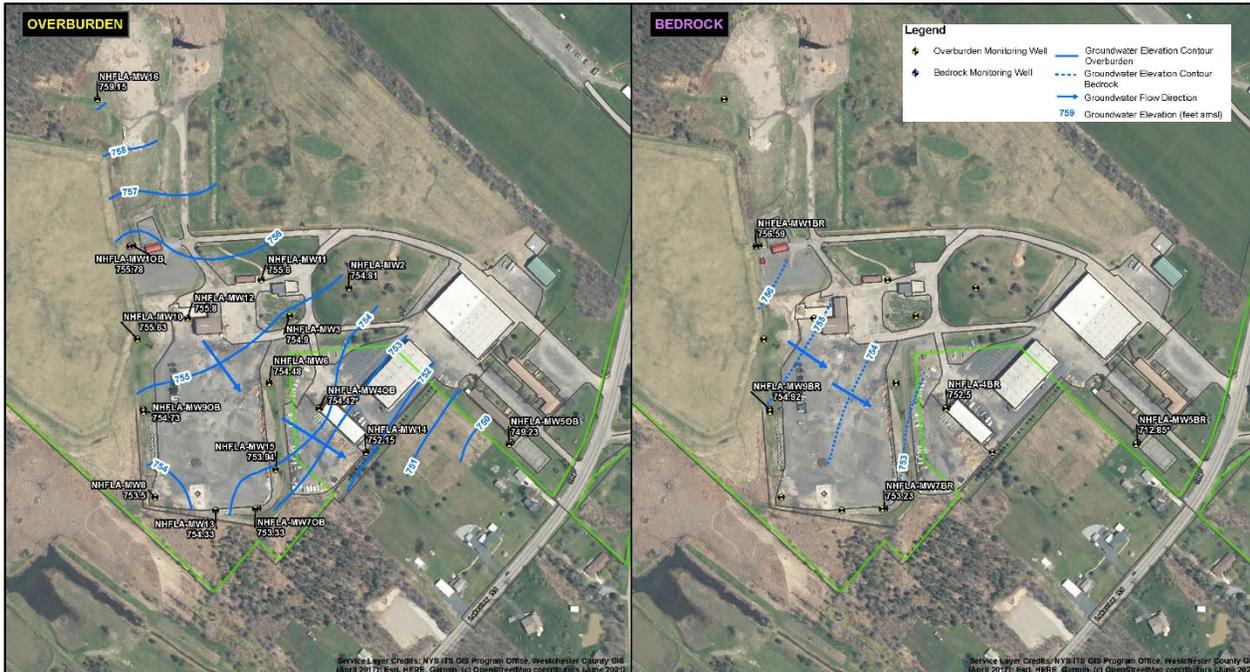


Figure 6 - Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS RI December 2020 groundwater flow map.



Residential Well Survey

A desktop database and windshield survey were conducted within a 1-mile radius of the site to evaluate the potential presence of water supply wells at the adjacent residences. The survey did not identify residential wells within the survey area and the area is supplied with potable water by Erie County; therefore, current and future residential use of groundwater in the area is unlikely.

Baseline Risk Assessment

A **baseline risk assessment (BRA)** was conducted for the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS. The BRA included both an HHRA and a **screening level ecological risk assessment (SLERA)** and was performed using the soil and groundwater data collected during the RI. The risk assessments followed appropriate guidelines from the USEPA and USACE.

The objectives of the HHRA were to evaluate potential human health risks and provide a basis for deciding if **remedial action** is necessary to protect human health. The following exposure scenarios were evaluated as part of the HHRA:

- **On Site**

- Current/most likely future on-site indoor commercial/industrial worker exposure to COPCs in indoor dust derived from surface soil via incidental ingestion and inhalation of wind-blown fugitive dust and volatiles.
- Current/most likely future on-site indoor commercial/industrial worker exposure to volatile COPCs present in underlying groundwater that could potentially migrate from shallow groundwater to indoor air of on-site buildings.
- Hypothetical future scenario for on-site indoor commercial/industrial worker exposed to COPCs in groundwater via ingestion of groundwater used as potable

water, dermal contact while washing hands, and inhalation of volatiles released to indoor air during potable use of groundwater, although no water on site is used as potable water or for any other purpose.

- Current/most likely future on-site outdoor maintenance worker exposure to COPCs in surface soil via incidental ingestion, dermal contact, and inhalation of wind-blown fugitive dust and volatiles.
 - Current/most likely future on-site construction/utility worker exposure to COPCs in combined surface and subsurface soil via incidental ingestion, dermal contact, and inhalation of volatiles and dust during excavation.
 - Current/most likely future on-site construction/utility worker exposure to COPCs in groundwater via incidental ingestion, dermal contact, and inhalation of volatiles in shallow groundwater that could infiltrate the bottom of an excavation.
- **Off Site**
 - Current/most likely future off-site resident exposure to volatile COPCs that could migrate from shallow groundwater to indoor air of nearby residences.
 - Hypothetical future scenario, off-site resident exposure to COPCs in groundwater via ingestion of groundwater used as potable water, dermal contact while washing hands and showering, and inhalation of volatile compounds released to indoor air during household use of groundwater (e.g., clothes washing), although surrounding residences do not use groundwater for potable purposes and are supplied by the Erie County Water Authority, which receives surface water from Lake Erie and the Niagara River.



The HHRA results indicated that for all current/most likely future on-site exposure scenarios, both cancer risk and non-cancer hazards are less than their USEPA threshold values of 1×10^{-4} to 1×10^{-6} and 1, respectively, and are therefore considered acceptable under CERCLA. For the unlikely hypothetical future use scenario where groundwater from the site was used as a potable water source, the only non-cancer hazards greater than 1 were for thallium (on site and off site) and benzene and bis(2-ethylhexyl)phthalate (off site). However, the presence of these compounds are either not indicative of a release and/or can't be attributed to DoD use of the site and are, therefore, not eligible for action under the FUDS program. In addition, the hypothetical use of site groundwater as a potable water source is unlikely as the area is supplied with potable water by Erie County.

Although the habitat characterization identified the former Launch Area as having been historically reworked with marginal habitat, a SLERA was performed to evaluate the likelihood of adverse ecological effects occurring as a result of exposure to constituents associated with the former Launch Area. Potential risks to ecological receptors were evaluated by comparing soil data from areas of the site with potential habitat to conservative ecotoxicological benchmarks. The SLERA results indicate that on-site habitat does not support abundant and diverse populations of wildlife, and potential risk for populations of ecological receptors (plants, soil invertebrates, birds, and mammals) is limited.

RI Recommendations

The results from the HHRA indicate that no response action is required to be protective of human health. Similarly, the results from the SLERA indicate that the habitat at the former Launch Area is limited, and the potential for ecological exposure is expected to be low. Therefore, the findings of the RI support the conclusion that no further investigative or remedial

actions are required for the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS.

6 Scope and Role of the Response

Based on the results of the RI, no remedial action is proposed for the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS. Therefore, no **remedial action objectives** were developed nor remedial alternatives considered.

Based on the results of the RI for the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS, there are no unacceptable risks related to human health or ecological receptors at the site.

7 Preferred Alternative

Therefore, the Proposed Plan for the FUDS recommended by USACE is No Action.

8 Community Participation

One of the purposes of this Proposed Plan is to solicit comments from members of the public. USACE encourages the public to gain a more comprehensive understanding of the site and the activities that have been conducted there. USACE maintains the information repository (e.g., current information, technical reports) and Administrative Record file (information directly related to remedial action decisions) for the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS. Detailed information about the previous studies and restoration activities can be found in the reports and documents contained in the information repository located at the address below.

Information Repository

The Information Repository can be found at:

Hamburg Public Library
102 Buffalo Street
Hamburg, NY 14075
(716) 649-4415



Hours of Operation:

Sunday	12 PM - 5 PM
Monday	9 AM - 8 PM
Tuesday	12 PM - 8 PM
Wednesday	9 AM - 8 PM
Thursday	12 PM - 8 PM
Friday	9 AM - 5 PM
Saturday	9 AM - 5 PM

Administrative Record

The Administrative Record can be found at:

USACE New England District Office
696 Virginia Road
Concord, MA 01742

The Administrative Record can also be found through the USACE, New England District website for the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS:

<https://www.nae.usace.army.mil/Missions/Projects-Topics/Former-NIKE-Site-Hamburg-New-York/>

Computers to access the website are located at:

Hamburg Public Library
102 Buffalo Street
Hamburg, NY 14075

This Proposed Plan fulfills the public participation requirements of CERCLA Section 117(a), which specifies that the lead agency (i.e., USACE) must publish a plan outlining any remedial alternatives evaluated for the site and identifying the proposed decision.

The public comment period for this Proposed Plan provided an opportunity to provide input regarding the proposed No Action recommendation for the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS. See below for details on the public comment period and the public meeting. All interested parties were encouraged to attend the meeting to learn more about the Nike Anti-Aircraft Missile Battery BU-51/52 Launch Area FUDS from the project team members. The public meeting also

provided an additional opportunity to submit comments to USACE on the Proposed Plan.

USACE will summarize and respond to comments in a responsiveness summary, which will become part of the official **Decision Document (DD)**.

Public Notice

Notice of the availability of the Proposed Plan was provided to the project mailing list and published in The Buffalo News on February 8, 2023 and in The Hamburg Sun on February 10, 2023. The public notice can be found on the USACE project website: <https://www.nae.usace.army.mil/Portals/74/nike%20bu%205152%20proposed%20plan%20public%20notice.pdf>

Public Comment Period

The Public Comment Period was open from February 15, 2023 – March 15, 2023. USACE accepted written comments on the Proposed Plan during the public comment period.

Virtual Public Meeting

USACE held a virtual public meeting to discuss the PP on February 22, 2023, starting at 6:00 PM. Interested members of the public were invited to participate in the virtual meeting via WebEx or by phone.



**For further information on the Proposed Plan for Nike Anti-Aircraft Missile Battery BU-51/52
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Glossary

Administrative Record file: The body of documents that “forms the basis” for the selection of a particular response at a site. Documents that are included are relevant documents that were relied upon in selecting the response action as well as relevant documents that were considered but were ultimately rejected. Until the Administrative Record is certified, it will be referred to as the “Administrative Record file.”

Baseline Risk Assessment: An analysis of the potential adverse health effects (current or future) caused by hazardous substance releases from a site in the absence of any actions to control or mitigate these releases.

Comprehensive Environmental Response, Compensation, and Liability Act: A federal law enacted in 1980 and amended in 1986 by the Superfund Amendments and Reauthorization Act, which concerns investigation and response actions regarding hazardous substances, pollutants, and contaminants.

Decision Document: The Department of Defense has adopted the term Decision Document for the documentation of remedial action decisions at non-National Priorities List FUDS properties. The Decision Document shall address the following: Purpose, Site Risk, Remedial Alternatives, Public/Community Involvement, Declaration, and Approval and Signature. A Decision Document for sites not covered by an interagency agreement or Federal facility agreement is still required to follow the CERCLA process. All Decision Documents will be maintained in the Formerly Used Defense Sites Property/Project Administrative Record file.

Ecological Risk Assessment: An evaluation of the risk posed to the environment should remedial activities not be implemented.

Formerly Used Defense Site: Properties that were formerly owned by, leased to, or otherwise

possessed by, the United States under the jurisdiction of the Secretary of Defense prior to October 1986.

General Services Administration: A branch of the U.S. federal government that manages federal property and provides products and services to other government agencies.

Human Health Risk Assessment: An evaluation of the risk posed to human health should remedial activities not be implemented.

Inventory Project Report: A report required by the DoD that outlines information collected to determine both property and project eligibility for the FUDS program. A property is considered eligible if it was formerly owned or used by the DoD and is within the 50 states. An eligible project is one where there is potential contamination on the eligible property where DoD has (or shares) potential responsibility.

No Action: The lead agency has determined that no action is necessary to protect public health or welfare or the environment because the site poses no unacceptable risks to human health or the environment.

NYSDEC Statewide Rural Surface Soil Survey: A survey conducted jointly by the NYSDEC and NYSDOH to determine concentration ranges for selected analytes in surface soils of rural New York State. These values are used to evaluate whether analytes found in non-rural sites are similar to the “background” concentrations from the survey.

Preferred Remedial Alternative: The site cleanup option that best satisfies the statutory requirements for remedy selection under CERCLA.

Proposed Plan: In the first step in the remedy selection process, the lead agency identifies the alternative that best meets the requirements in CERCLA 300.430(f)(1) and presents that alternative to the public in a Proposed Plan. The purpose of the Proposed Plan is to supplement the RI and



provide the public with a reasonable opportunity to comment on the proposed remedial action, and to participate in the selection of remedial action at a site.

Public Comment Period: The time allowed for the members of an affected community to express views and concerns regarding an action proposed to be taken by USACE.

Receptors: Humans, animals, plants, or other lifeforms that may be exposed to risks from contaminants related to a site.

Remedial Action: An action that addresses a contaminant, hazard, receptor, or the connection between the receptor and the hazard, which is taken to produce site conditions that present no significant risk to human health and the environment.

Remedial Action Objective: Objectives of remedial actions that are developed based on contaminated media, contaminants of concern, potential receptors and exposure scenarios, human health and ecological risk assessment, and attainment of regulatory cleanup levels, if any exist.

Remedial Investigation (RI): A study of a facility that supports the selection of a remedy where hazardous substances have been disposed of or released. The RI identifies the nature and extent of contamination at the facility.

Screening Level Ecological Risk Assessment: A study that provides a general indication of the potential for ecological risk (or lack thereof) associated with COPCs identified during an SI. The SLERA is used to estimate the likelihood that a particular ecological risk exists and whether additional assessment is required based on the evaluation.

Site Investigation: An investigation to determine whether there is a release or potential release and the nature of the associated threats. The purpose is to augment the data collected in the preliminary assessment and to generate, if necessary, sampling and other field data to determine if further action or investigation is appropriate.

U.S. Army Corps of Engineers: A branch of the DoD with special expertise in carrying out CERCLA/NCP investigations and response actions at former DoD sites.

U.S. Department of Defense: An executive branch department of the federal government of the United States charged with coordinating and supervising all agencies and functions of the government concerned directly with national security and the United States Armed Forces.



Acronyms

AST	aboveground storage tank
BRA	baseline risk assessment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COPC	constituent of potential concern
DD	Decision Document
DoD	U.S. Department of Defense
FUDS	Formerly Used Defense Site
GSA	General Services Administration
HHRA	human health risk assessment
INPR	Inventory Project Report
MCL	maximum contaminant level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
RI	remedial investigation
RSL	Regional Screening Level
SI	site investigation
SLERA	screening level ecological risk assessment
SVOC	semi-volatile organic compound
SWAT	special weapons and tactics
TOC	total organic carbon
USACE	U.S. Army Corps of Engineers
USEPA	United States Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound



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