



U.S. Army Corps of Engineers
PROPOSED PLAN
Former Niagara Falls – Buffalo Defense Nike Battery Unit 34/35
Aurora and Orchard Park, New York

October 2019

INTRODUCTION

This Proposed Plan provides information to the public on the *United States Army Corps of Engineers (USACE)*¹, New York District's proposed plan for no further action at the Former Niagara Falls-Buffalo Defense Nike Battery Unit 34/35 (BU-34/35) Site in Orchard Park and Aurora, New York. This plan is intended to inform the community of the rationale for the determination that the Site requires no further action, and to encourage and facilitate community participation in that determination.

Applicable federal and state environmental laws govern characterization and response activities at federal facilities. The Department of Defense (DoD) has the responsibility for identifying, investigating, and determining cleanup activities related to former DoD facilities under the Formerly Used Defense Site (FUDS) Program. USACE is the lead agency responsible for managing investigation and cleanup activities at the Site.

The Site is being addressed under the FUDS program in accordance with the *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*, as amended by the Superfund Reauthorization Act (SARA). USACE is required to comply with CERCLA and the *National Oil and Hazardous Substances Pollution Contingency Plan (NCP)* for all FUDS program sites. In addition, certain actions were completed at the Site under the FUDS program that were not regulated under CERCLA but are relevant to USACE's determination for no further action. These activities were performed under State and local requirements for underground storage tank (UST) removal, building demolition, and septic tank closure.

The Site (FUDS Property Number C02NY007701) consists of two properties that were utilized by the U.S. Army between 1957 to 1963. The Control Area property is located in Orchard Park, New York and the Launch Area property is located in Aurora, New York (see Figure 1 on the next page). Both properties are located in Erie County and Congressional District NY-26. USACE worked closely with the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health to characterize the Site and implement appropriate actions

Public Comments are Requested

PUBLIC COMMENT PERIOD – October 28, 2019 through December 16, 2019

Written comments on this Proposed Plan can be submitted to USACE during this comment period. Comment letters must be postmarked no later than December 16, 2019 and can be sent to:

Mr. Gregory J. Goepfert, Project Manager
U.S. Army Corps of Engineers, New York District
26 Federal Plaza, 17th Floor – Station 17 401-2
New York, NY 10278.

PUBLIC MEETING – November 13, 2019

USACE and NYSDEC will host an information session followed by a formal public hearing from 6:30pm to 8:00pm at the Town of Aurora Senior Citizen Center, 101 King Street, Suite A, East Aurora, New York, 14052, to provide information and answer questions. This meeting will consist of a presentation by USACE and an opportunity for public comments to be submitted – either verbally or in writing.

necessary for site closure and the determination of no further action.

As the lead agency for implementing the environmental response program for the Site, USACE prepared this Proposed Plan in accordance with CERCLA Section 117(a) and Section 300.430(f)(2) of the NCP (40 Code of Federal Regulations [CFR] Section 300.430(f)(2)) to continue its community awareness efforts and to encourage public participation.

PURPOSE OF THE PROPOSED PLAN

The purpose of this Proposed Plan is to ensure the community understands the information compiled for the Site and understands the proposed determination for no further action. After the public has had the opportunity to review and comment on this Proposed Plan, USACE will summarize and respond to all comments received during the comment period and the public meeting in a document called the Responsiveness Summary. Refer to the **Public Comments are Requested** highlight box (top left of this page) for the meeting date and times.

USACE will carefully consider all comments received. The final decision for the Site will be documented in a *Decision Document*.

¹ Definitions of *italicized* words are in the Glossary of Terms on pages 7 and 8.



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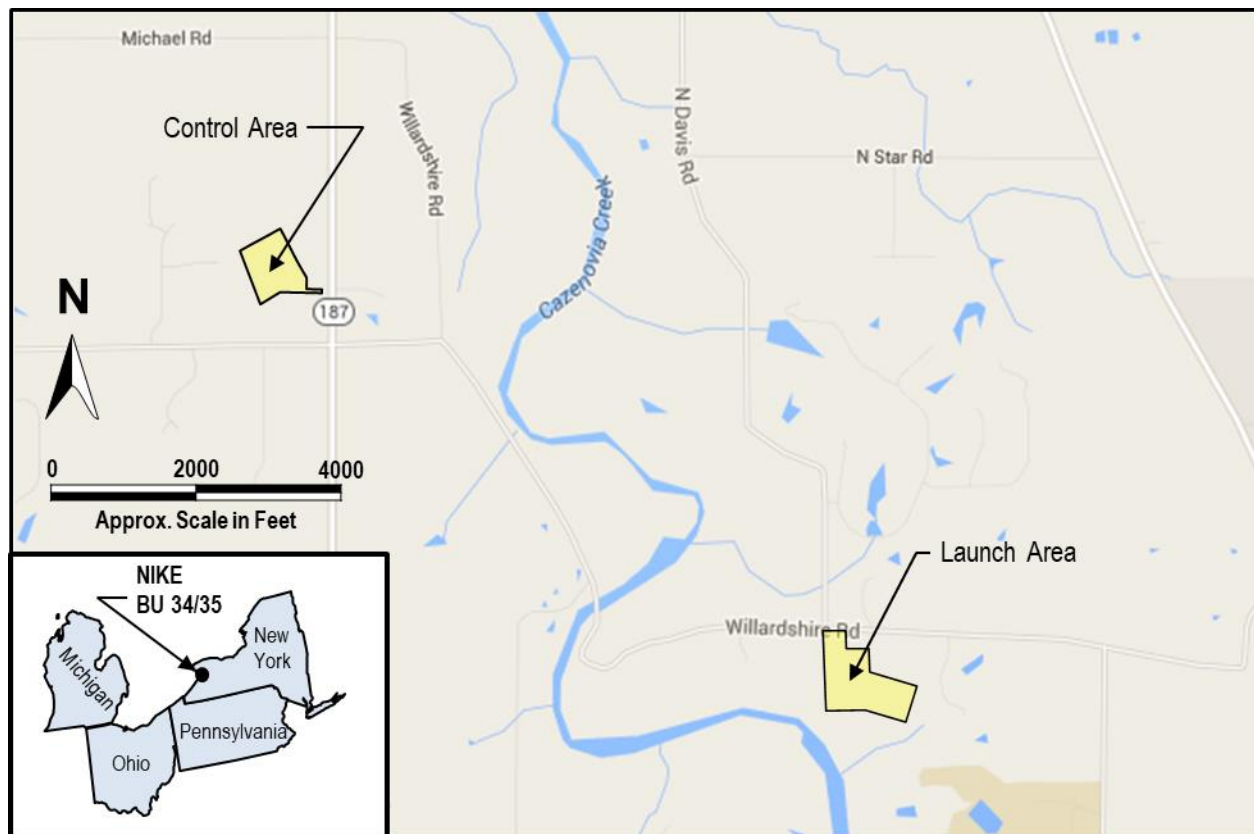


Figure 1. The Former Niagara Falls – Buffalo Defense Nike BU-34/35 Site consists of two properties near Buffalo, New York: the Control Area and the Launch Area.

This Proposed Plan highlights key information regarding site characterization presented in the *Remedial Investigation (RI) Report*. The RI Report, which includes a Screening Level Ecological Risk Assessment (SLERA) and a Human Health Risk Assessment (HHRA), presents the nature and extent of Site contamination. These and other documents that support this Proposed Plan are part of the *Administrative Record File*, which is available at the *Information Repositories* located at the Aurora Town Public Library, 550 Main Street, East Aurora, New York 14052 and the Orchard Park Library, 4570 South Buffalo Street, Orchard Park, New York 14127.

SITE BACKGROUND

The Niagara Falls-Buffalo Defense Nike BU-34/35 Site was acquired by the United States to serve as a surface-to-air missile launch site. The launch equipment and facilities were constructed by the U.S. Army between December 1955 and January 1957. The launch site was used by the United States Army between January 1957 and March 1963.

The type of missile stored at Nike BU-34/35 was the Nike Ajax Missile. This installation was used exclusively by the United States Army during the period of DoD ownership. The former Launch Area occupies approximately 19 acres and included the former barracks and six former underground missile storage and launching silos. The former Control Area occupies approximately 26 acres and consisted of radar systems and computer systems necessary for Nike Ajax Missile operations.

Following termination of the Nike Missile Program by DoD, the properties were excessed and transferred. The Control Area property was transferred to Health Research Incorporated (HRI), a public benefit corporation of the State of New York. HRI is still the owner of the Control Area property. The Launch Area property was transferred to the estate of Marjorie K.C. Klopp. The Launch Area is currently owned by Waterhill Evergreen Holdings, LLC.

At the Control Area, the current site owner, HRI, conducted environmental activities to investigate and remediate the property. The Control Area was not



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investigated directly by USACE because hazardous materials were not typically stored or used by DoD at Nike control sites. Studies, assessments, and site cleanup actions were conducted by HRI from 1991 to 2002. These activities were undertaken at the Control Area to address environmental issues related to HRI operations at the Control Area after the property was transferred.

In 1988, a preliminary evaluation was completed by USACE at the Launch Area to evaluate environmental conditions due to former DoD activities. The evaluation recommended that additional investigation be conducted. In 1995, a Limited RI was conducted at the site to further characterize *groundwater*, characterize any chemical impacts to the silo water, perform a qualitative assessment of risk to human health and the environment, and prepare a list of remedial action alternatives. The limited RI recommended extraction of water from the silos, grouting of the silo drainage system and walls, and backfilling of the silos. No further investigations or actions were conducted at the Site until the RI, UST closure, silo closure, and septic tank closure were performed by USACE from 2016 through 2019.

SITE CHARACTERISTICS

Control Area

The environmental activities conducted by the current site owner, HRI, from 1991 to 2002, and research performed by USACE support there are no remaining unacceptable risks to human health and environment at the Control Area. Previous investigations and cleanup actions determined that residual concentrations of metals in soil and groundwater were consistent with background conditions and *volatile organic compounds (VOCs)* were not detected in groundwater during the final sampling event performed in 2002. Therefore, additional environmental sampling was not conducted as part of the RI. The previous investigations and cleanup actions are summarized in the RI Report. Site visits were conducted as part of the RI and the Army Geospatial Center (AGC) performed archival research for the Control Area. The results of these additional activities support that there are no unacceptable risks to human health or the environment resulting from DoD activities at the Control Area.

Launch Area

During U.S. Army operations in the 1950s and 1960s, Nike missiles were typically assembled, serviced, maintained, and prepared for firing at the Launch Area. The missiles were stored in underground silos measuring approximately 60-feet by 60-feet. The tops of the silos were approximately 3 feet below surface, and the floors of the silos were approximately 16 feet below surface. Other structures formerly present at the Launch Area included barracks, a missile assembly building, and an acid mixing and wash rack area. Figure 2 shows the site layout and locations of former structures.

The Launch Area had its own electrical power generator and UST for diesel fuel storage. During RI fieldwork, a geophysical survey identified the presence of a UST remaining at the Launch Area associated with the former generator and located adjacent to the former Generator Building (see Figure 2). The UST was then removed by USACE in 2017 in accordance with NYSDEC requirements.

The Launch Area potable water facilities included a pump house, chlorinator, and potable water lines. Sanitary sewage treatment facilities included a chlorinator house, a sand filter, and a septic tank (see Figure 2). The septic tank was closed in accordance with local regulations in 2019. The facility was configured to direct storm water away from the underground missile silos.

The Launch Area was used by DoD between 1957 and 1963, and then the property was transferred. The only facilities utilized after DoD ownership and operation were the former enlisted men's barracks and bachelor officers' quarters building. These building structures have since been razed by the property owner.

An evaluation of historical information available for the Launch Area indicated that hazardous substances may have been released to the environment as a result of historical DoD activities. Therefore, a RI was performed at the Launch Area to collect data necessary to characterize the site and evaluate Site risk to human health and the environment.



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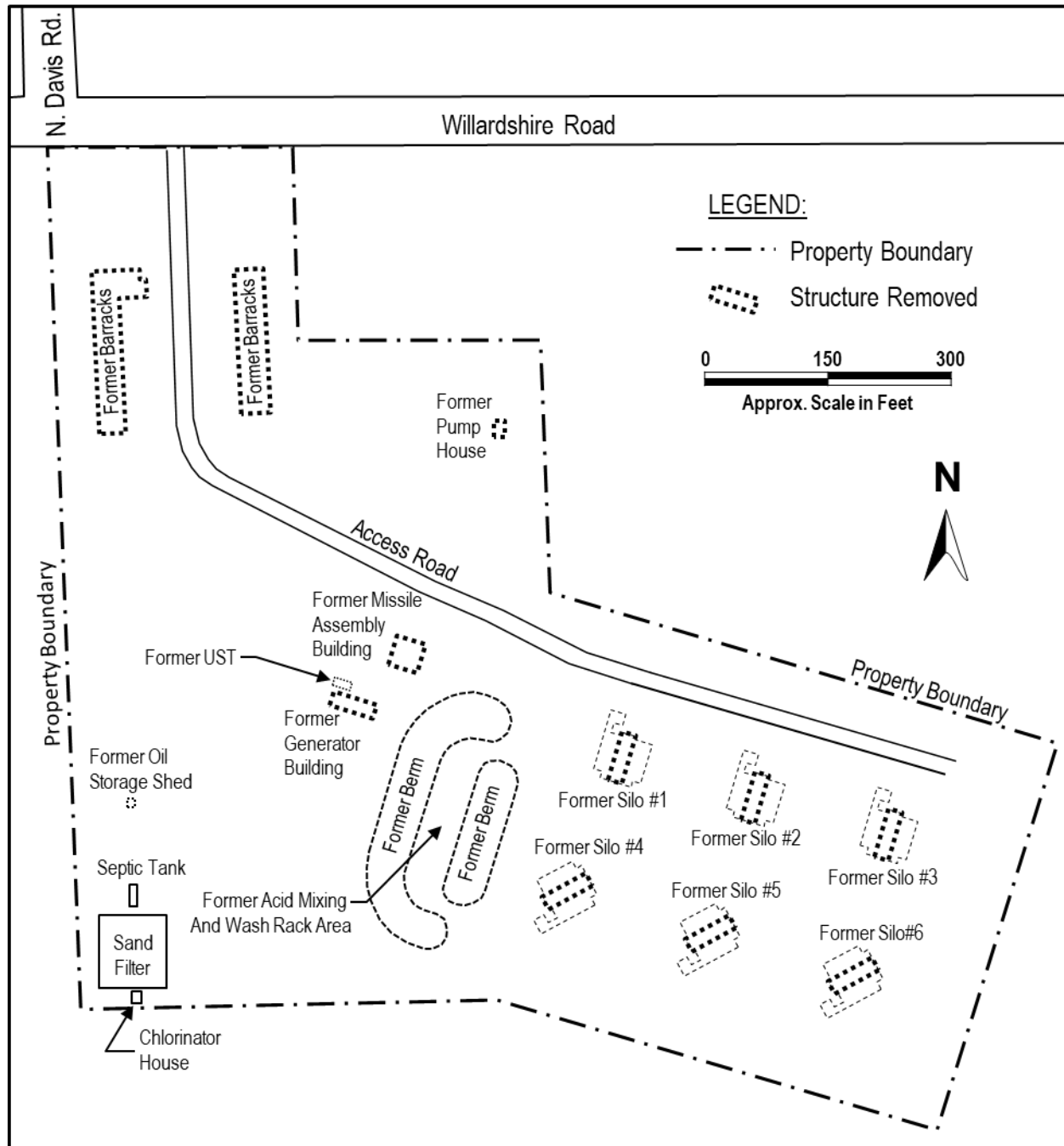


Figure 2. Launch Area Site Layout.

SUMMARY OF THE REMEDIAL INVESTIGATION AND SITE RISKS

The RI activities at the Launch Area were conducted in coordination with state regulatory agencies and were performed in a manner consistent with NYSDEC and New York State Department of Health (NYSDOH) guidance, where practicable. RI activities in the Launch Area involved the collection of water samples from five

silos, the collection of soil samples from soil borings and test pits, as well as groundwater samples from both existing and new monitoring wells installed during RI field activities in 2016. Overall, eighteen borings (SB1 through SB18) were advanced throughout the Launch Area property with 67 samples collected to assess surface and subsurface soil for VOCs, *semi-volatile organic compounds (SVOCs)*, metals, and



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polychlorinated biphenyls (PCBs); samples were collected from 10 borings (BACK1 through BACK10) located adjacent to the Launch Area to characterize background conditions in the surface and subsurface soil; three test pits were excavated at the Launch Area to evaluate subsurface soils near potential sources; silo

water samples were collected to evaluate impacts within the silos; and groundwater sampling was conducted at nine monitoring wells to evaluate site groundwater for VOCs, SVOCs, metals, and PCBs. Figure 3 shows the locations of monitoring wells, soil borings, background borings, and test pits.

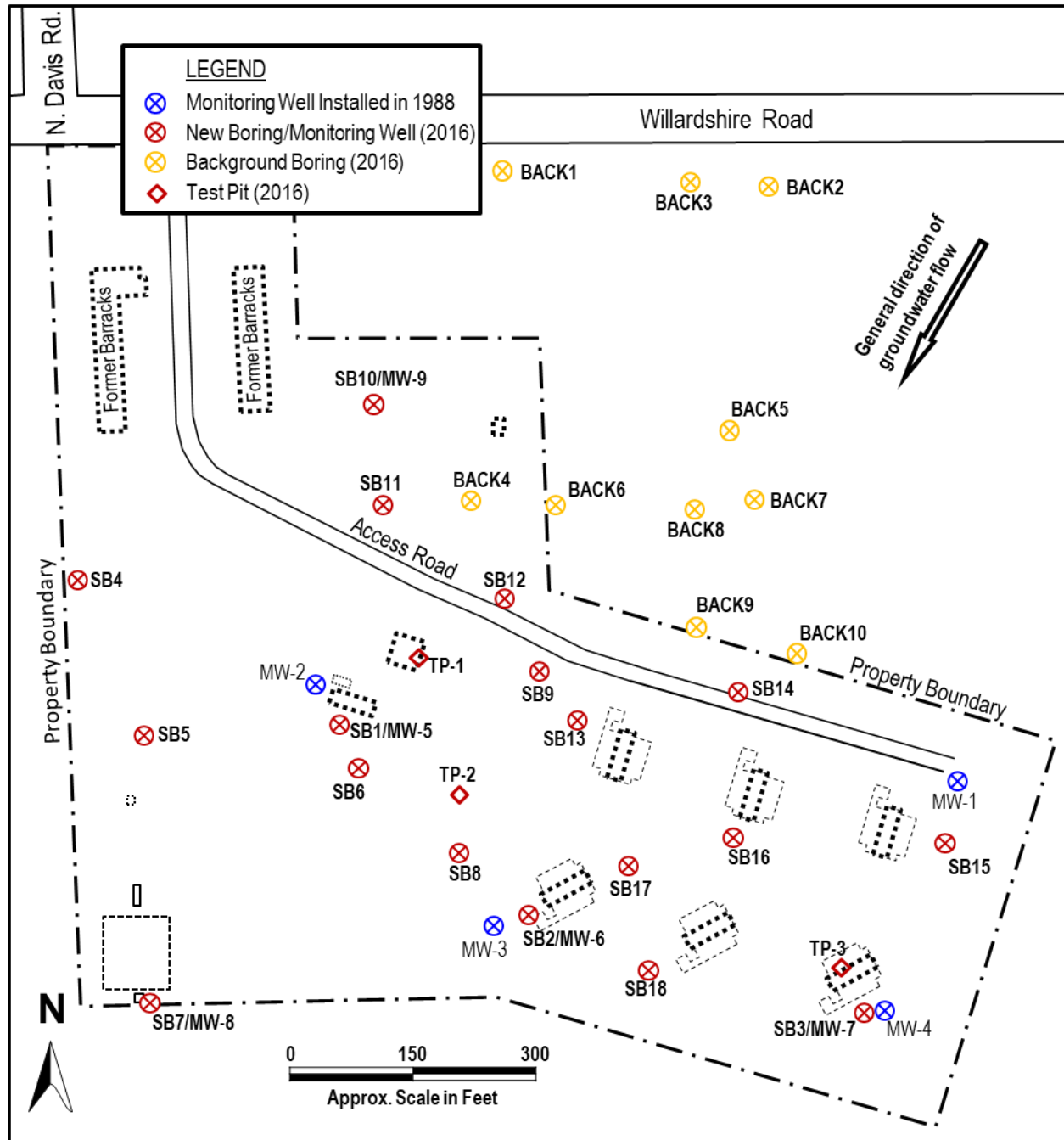


Figure 3. RI Sampling Locations.



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RI sampling results for the Launch Area indicated that concentrations of metals in soil at the site were consistent with background conditions, and that *acetone* (a VOC) and *polycyclic aromatic hydrocarbons* (PAHs; a subset of SVOCs) in soil were the only site-related chemicals that exceeded screening levels that are protective of human health and the environment. Acetone exceeded a screening level that is based on the protection of groundwater, but acetone was not detected in site groundwater. In addition, the concentrations of acetone in site soils are five orders of magnitude below the United States Environmental Protection Agency (EPA) residential Regional Screening Level (RSL) and, therefore, pose no risk to human health or the environment. PAH exceedances were limited to three sampling locations (SB3, SB14, and SB17) and the following specific compounds: benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, chrysene, benzo(b)fluoranthene, and benz(a)anthracene. All three locations exhibited similar trends, with the highest concentrations being observed in the surface and/or near-surface sample, which generally decreased to non-detect levels in deeper samples. Based on the limited mobility of PAHs, residual PAHs are expected to have a low potential for mobilization and/or impacts to other environmental media, which is supported by non-detect results for PAHs in all groundwater samples.

The human health risk assessment (HHRA) for the Launch Area evaluated risks to all potential current (site workers, adolescent trespassers, and youth recreational users) and future receptors (site workers, construction workers, adolescent trespassers, youth recreational users, and future resident). The HHRA determined that carcinogenic risk and non-carcinogenic hazards are below target levels. Overall, the HHRA results support that residual concentrations of chemicals in environmental media related to historical operations at the Former Nike BU-34/35 Launch Area pose no actionable risk to human health. The Screening Level Ecological Risk Assessment (SLERA) was performed to determine whether conditions at the Launch Area pose an unacceptable risk to ecological receptors from exposure to site soil. Site contaminants were detected infrequently and at low concentrations in surface soil at the Launch Area. As a result, the SLERA identified no unacceptable risk to ecological receptors.

The final Remedial Investigation (RI) Report, dated October 2019, is available for public review at the Aurora and Orchard Park Public Libraries.

Following RI sampling and risk assessment, the six silos were demolished and removed from the site, and clean topsoil was placed at the site. The silo closure activities were performed in accordance with State and local requirements.

In addition to the RI, USACE performed three separate actions under the FUDS program at the Launch Area site between 2017 and 2019 that were separate from the CERCLA investigation, but relevant to USACE's determination for no further action and site closure. These actions included removal of an 8,000-gallon UST, demolition and closure of six underground silos, and closure of the septic tank.

Collectively, the RI results support that residual concentrations of chemicals in environmental media potentially related to historical operations at the Control Area and Launch Area of Former Nike BU-34/35 pose no actionable risk to human health or the environment. Based on these results, no further action is required for the Control Area and Launch Area of Former Nike BU-34/35, and future use of the Control Area and Launch Area properties is unrestricted.

NEXT STEPS

Once the community has commented on this Proposed Plan, USACE will consider all comments received. An opportunity for the public to comment will be at the upcoming Public Meeting (see details under community participation). Alternatively, comments can be mailed directly to USACE (refer to page 1 highlight box for details). USACE will provide written responses to all formal comments, and will combine those responses into a Responsiveness Summary, which will be included in the Decision Document for the Site. The no further action determination presented in this document is based on current information and it could change in response to public comment or new information. The Public is encouraged to comment this document.

A responsiveness summary to comments received from the public on this no further action Proposed Plan will be prepared and included in the Decision Document for the Site. USACE anticipates that the Decision Document will be finalized and signed by approximately March 2020, at which time the document will be made available to the public at the Information Repositories



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located at the Aurora Town Public Library, 550 Main Street, East Aurora, New York 14052; and the Orchard Park Library, 4570 South Buffalo Street, Orchard Park, New York 14127.

Comments on this Proposed Plan may be submitted using the attached comment sheet.

COMMUNITY PARTICIPATION

The community is encouraged to review the documents supporting this Proposed Plan (including the RI report, dated October 2019), submit comments on the Proposed Plan, and attend the Public Meeting on November 13, 2019 from 6:30pm to 8:00pm at the Town of Aurora Senior Citizen Center, 101 King Street, Suite A, East Aurora, New York, 14052. Documents supporting the Proposed Plan are available at the information repositories identified below:

Aurora Town Public Library
550 Main Street
East Aurora, New York 14052

<i>Mon.-Thurs.</i>	<i>10AM – 8PM</i>
<i>Friday</i>	<i>10AM – 6PM</i>
<i>Saturday</i>	<i>10AM – 3PM</i>

Orchard Park Library
4570 South Buffalo Street
Orchard Park, New York 14127

<i>Mon., Tues., Thurs.</i>	<i>10AM – 9PM</i>
<i>Wednesday</i>	<i>1PM – 9PM</i>
<i>Fri. and Sat.</i>	<i>10AM – 5PM</i>

Contact Information

Mr. Gregory J. Goepfert
Project Manager
U.S. Army Corps of Engineers, New York District
26 Federal Plaza
17th Floor – Station 17 401-2
New York, NY 10278
917-790-8235
Gregory.J.Goepfert@usace.army.mil

Mr. Jaspal S. Walia
Remedial Case Manager
New York State Department of Environmental
Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2915
716-851-7220
jaspal.walia@dec.ny.gov



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GLOSSARY OF TERMS

Acetone: Acetone is used in industrial processes to manufacture other products, such as plastics, fibers, and pharmaceuticals and is also used as a solvent. Acetone occurs naturally in plants, trees, volcanic gases, and forest fires.

Administrative Record File: A collection of all documents used to select and justify remedial decisions at CERCLA site. These documents are available for public review.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A federal law passed in 1980 and amended in 1986 by the SARA. USACE FUDS Program characterization and remediation at sites is conducted in accordance with CERCLA/SARA, while funded by the Department of Defense under the Defense Environmental Restoration Program (DERP).

Decision Document: A legal, technical, and public document that explains the rationale and remedy decision for a given site. It also summarizes the public's involvement in the decision.

Groundwater: Groundwater is the water found beneath the ground surface that fills pores between such materials as sand, soil, gravel, and rock. In the case of the Site, groundwater is predominantly found in soil and sand beneath the ground surface.

Information Repository: A public file containing site/project information and documents of site investigation and remedial activities in either hard copy or electronic form.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP): Regulations issued by the EPA to implement the requirements of CERCLA.

Polycyclic Aromatic Hydrocarbons (PAHs): PAHs are a group of chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic substances like tobacco or charbroiled meat. There are more than 100 different PAHs. PAHs generally occur as mixtures, not as single compounds. PAHs are found in coal tar, crude oil, creosote, and roofing tar. They are found throughout the environment in the air, water, and soil.

Remedial Investigation (RI): The collection of data and information necessary to characterize the nature and extent of contamination at a site. The RI also includes information as to if the contamination poses a significant risk to human health or the environment.

Semi-Volatile Organic Compound (SVOC): A chemical compound that contains the element carbon and that does not readily evaporate into air at room temperature.

United States Army Corps of Engineers (USACE): Provides comprehensive environmental restoration services for the Army, DoD, EPA, and other federal agencies. The DoD has designated USACE to oversee the FUDS work at Former Niagara Falls – Buffalo Defense Nike BU-34/35.

Volatile Organic Compound (VOC): A chemical compound that contains the element carbon and that readily evaporates into air at room temperature.

