

Appendix W

Septic Tank Closure Report

Septic Tank Closure Final Report

Former Niagara Falls – Buffalo Defense Nike Battery BU-34/35
Town of Aurora, New York

Contract No. W912WJ-16-C-0023

Prepared for:
USACE – New England District
696 Virginia Road
Concord, MA 01742-2751

Prepared by:



54 Mason Street
Worcester, Massachusetts 01610
508.752.5599 | www.TantaraCorp.com

September 9, 2019

SEPTIC TANK CLOSURE FINAL REPORT

Former Niagara Falls – Buffalo Defense Nike Battery BU-34/35 Town of Aurora, New York

1.0 Project Information

This Septic Tank Closure Final Report (Report) describes the work activities conducted to complete the decontamination and permanent closure of a septic tank at the former Niagara Falls-Buffalo Defense Nike Battery BU-34/35 site in the Town of Aurora, NY. This work was executed by TANTARA Corporation (TANTARA) on behalf of the U. S. Army Corps of Engineers (USACE), on a section of property about 500 feet west and contiguous to the area where six former Nike missile silos are being closed (see Figure 1).

The scope of this project was limited to the permanent closure of an abandoned septic tank that was part of the former sanitary sewage treatment facilities at the former facility. The USACE has been designated by the Department of Defense (DoD) and Department of the Army as the Agent charged with management and oversight of all investigation and remediation work at Formerly Used Defense Sites (FUDS) in accordance with USACE Engineer Regulation (ER) 200-3-1, FUDS Program Policy, dated 10 May 2004.

The procedures used to perform the abandonment and decommissioning of the septic tank followed the guidance included in the New York State Department of Health (NYSDOH), *Residential Onsite Wastewater Treatment Systems, Design Handbook* and TANTARA's June 25, 2019 Septic Tank Closure Plan. NYSDOH and New York State Department of Environmental Conservation (NYSDEC) reviewed and approved the Septic Tank Closure Plan in their July 10, 2019 letter (attached).

2.0 Background Information

The concrete septic tank, associated manhole and sand fields were sampled by TI2E Joint Venture (TI2E) in November 2018 and May 2019. The results of this sampling are presented in the June 2019 Septic Tank Location and Sampling Completion Report, which is summarized below.

Water and sediment/sludge samples were collected from the septic tank directly beneath the north and south access lids in November 2018 and analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), metals and polychlorinated biphenyls (PCBs). There were no exceedances of New York State Groundwater Effluent Limitations (Class GA) in water samples collected from the septic tank. The NYSDEC Unrestricted Use Soil Cleanup Objectives (SCOs) were exceeded for the following compounds in septic tank sediment and sludge: total xylenes, benzo(a)anthracene, benzo(b)fluoranthene, chrysene, indeno (1,2,3-cd) pyrene, copper, zinc, and mercury.

The dimensions of the septic tank are approximately 8 feet (ft) wide by 22 ft long by 8 ft deep. The depth of water in the septic tank is approximately 5.5 ft, with sludge covering approximately the bottom 3.5 ft.

The project team complied with Occupational Safety and Health Administration (OSHA) requirements applicable to the work to be performed. In addition, excavation activities were conducted in accordance with the USACE Safety and Health Manual EM-385-1-1, November 2014. An Accident Prevention Plan (APP), prepared by TANTARA November 21, 2016 was followed during septic tank closure activities.

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3.0 Septic Tank Closure and Soil Assessment Activities

This section provides a description of the general work activities performed at the site.

Notification of the closure of the septic tank was made to the property owner's representative, LCS, and the Town of Aurora prior to the start of work.

Employees and subcontractors utilized personal protective equipment (PPE) consistent with the levels of protection for this work as indicated in the APP. Site health and safety controls were fully established and in operation prior to beginning any contaminated material handling activity.

From July 16 through July 23, 2019, septic tank closure activities took place. A temporary access way to the septic tank was constructed that required limited tree and brush removal. TANTARA monitored the excavation during the septic tank and/or soil removal for any oil/hazardous release conditions. Monitoring was conducted by visual and olfactory evidence. No evidence of any oil/hazardous release conditions were noted.

From July 17 through July 19, 2019, the interior of the septic tank was cleaned by pumping both the water and sludge from the septic tank using a vacuum truck, owned and operated by Jazz Septic Tank, Corfu, NY, a NYSDEC-permitted waste transporter. Approximately 13,900 gallons of water and sludge were removed. Water was added to dilute the sludge to assist with pumping the thick solids from the bottom of the septic tank. Once the contents were evacuated, metal appurtenances including two pumps were removed. The empty septic tank was pressure washed with clean water and the resulting wash water was pumped and disposed of along with the septic water and sludge and is included in the total volume listed above. Septic water and sludge were hauled and disposed of at Buffalo Sewerage Authority, Unity Island, Buffalo, NY. Tank cleaning was accomplished without the need for personnel to enter the tank.

Native topsoil covering the septic tank was removed and temporarily stockpiled adjacent to the septic tank. The concrete roof of the septic tank was knocked in using a concrete breaker on an excavator and a hole was broken into the bottom of the septic tank to promote drainage. The septic tank was then backfilled to grade with washed pea stone. Pea stone was also used to fill Manhole MH-7, which did not contain water or sediment. The pea stone was covered using the stockpiled native soil, and disturbed areas of the site were seeded using a native grass seed mix (Eastern Native Habitat & CREP Mix).

This closure report will be included with the Final Engineering Report (FER) prepared for the closure of the missile silos. A site survey map showing the location of the former septic tank is provided as Figure 2.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 9

270 Michigan Avenue, Buffalo, NY 14203-2915

P: (716) 851-7220 | F: (716) 851-7226

www.dec.ny.gov

July 10, 2019

Mr. Gregory J. Goepfert
Department of the Army Corps of Engineers,
New York District
Jacob K. Javits Federal Building
New York, New York 10278-0090

Dear Mr. Goepfert:

Septic Tank Closure Plan
Nike Battery BU-34/35
Town of Aurora, New York
(NYSDEC I.D. # 915236)

The Septic Tank Closure Plan for the above referenced site, prepared by Tantara Corporation dated June 25, 2019 has been reviewed by NYSDOH and this Department.

The closure plan is acceptable.

Should there be any questions relative to this letter, please call me at (716) 851-7220.

Sincerely,



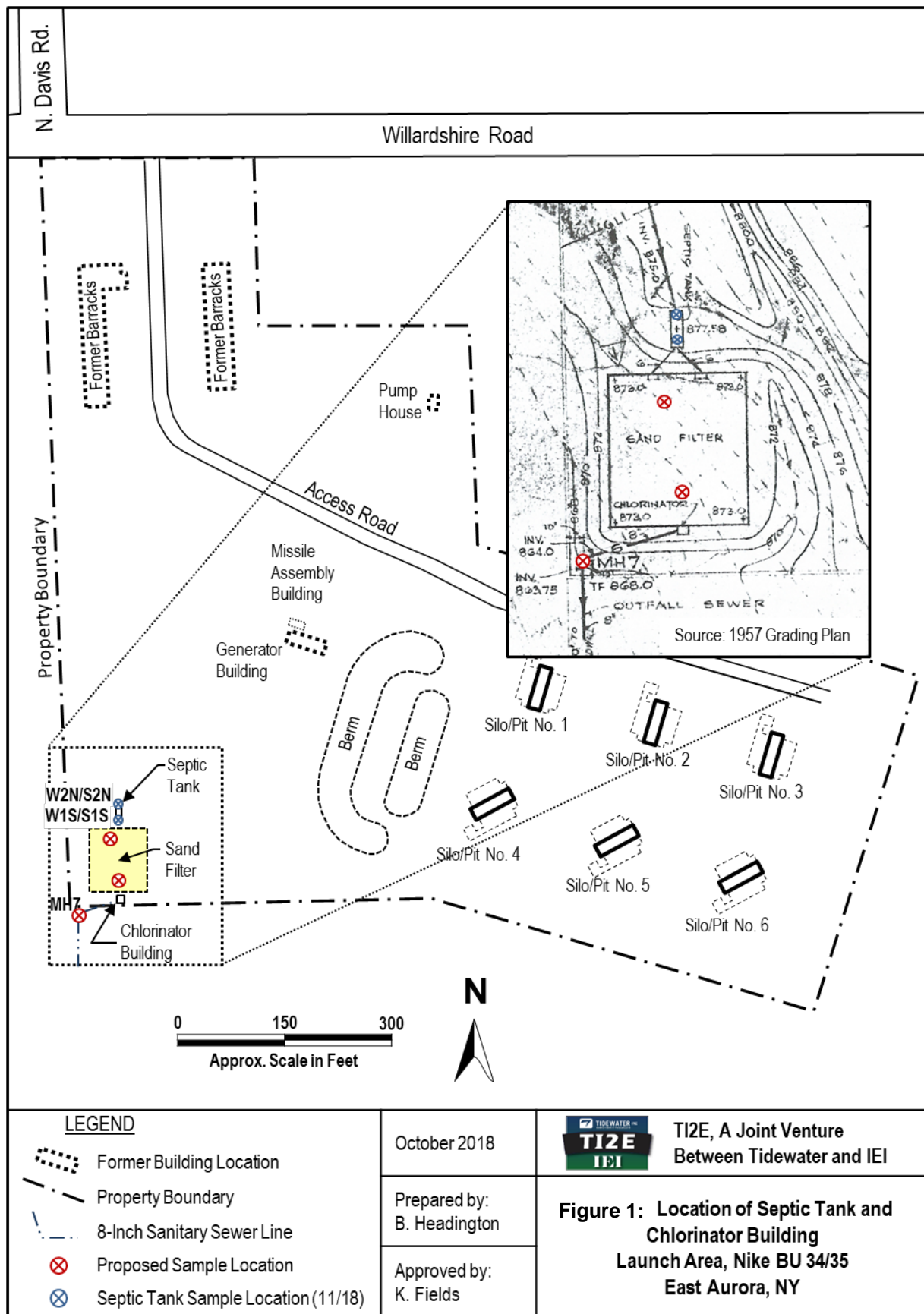
Jaspal S. Walia, P.E.
Project Manager

JSW/slr

ec: Mr. Stan Radon, NYSDEC
Mr. John Swartout, NYSDEC
Ms. Jacquelyn Nealon, NYSDOH



Department of
Environmental
Conservation





WILLARDSHIRE ROAD

SCALE

1" = 50'

GRAVEL DRIVE

W
MW9

W
MW2

W
MW5

W
MW1

FORMER
LOCATION OF
SEPTIC TANK

FORMER LOCATION OF
CHLORINATOR BUILDING

LOCATION OF
ABANDONED SEWER
MANHOLE MH7

W
MW8

W
MW3

W
MW6

FORMER LOCATIONS OF
NIKE MISSILE SILOS

W W
MW7 MW4

Feature	Northing	Easting	Latitude	Longitude
MW-1	1011532.62	1125818.04	42°46'34.4122"	78°40'01.3513"
MW-2	1011700.82	1125002.42	42°46'36.0652"	78°40'12.2899"
MW-3	1011364.09	1125203.51	42°46'32.7413"	78°40'09.5891"
MW-4	1011234.60	1125710.10	42°46'31.4672"	78°40'02.7946"
MW-5	1011639.41	1125023.47	42°46'35.4591"	78°40'12.0072"
MW-6	1011382.98	1125258.61	42°46'32.9284"	78°40'08.8506"
MW-7	1011233.65	1125695.09	42°46'31.4577"	78°40'02.9958"
MW-8	1011304.90	1124784.34	42°46'32.1513"	78°40'15.2072"
MW-9	1012053.33	1125088.06	42°46'39.5486"	78°40'11.1467"
Septic Tank	1011478.95	1124771.70	42°46'33.8715"	78°40'15.3808"
Chlorinator Building	1011372.58	1124769.04	42°46'32.8207"	78°40'15.4150"
Manhole MH7	1011352.17	1124720.56	42°46'32.6186"	78°40'16.0648"
MW = Monitoring Well				

HORIZONTAL REFERENCE DATUM - NAD 83
VERTICAL REFERENCE DATUM - NAVD 88

FIGURE 2

SITE MAP

Former Niagara Falls - Buffalo Defense Nike
Battery BU-34/35
Town of Aurora, New York
Contract No. W912WJ-16-C-0023

SITE PHOTOGRAPHS



Photograph 1: Pump out of septic tank (07/17/19).



Photograph 2: Breaking open septic tank roof (07/17/19).

SITE PHOTOGRAPHS



Photograph 3: Pumping out septic tank with roof removed (07/18/19).



Photograph 4: Filled in septic tank with pea stone (07/22/19).

SITE PHOTOGRAPHS



Photograph 5: Seeding septic tank area (07/23/19).