FINAL

No Further Response Action Planned Decision Document

Sites ZZ007, TU008, and TU009 at Schenectady Air National Guard Base Scotia, New York

National Guard Bureau,
Logistics and Installations Directorate, Operations Division,
Restoration Branch
NGB/A4OR

Compliance Restoration Program
Project No. ANG2015NEWENGLAND

Contract No. W9133L-14-D-0008, DO 0005

February 2018

(This page intentionally left blank)

FINAL

No Further Response Action Planned Decision Document

Sites ZZ007, TU008, and TU009

Schenectady Air National Guard Base
Schenectady County Airport
Scotia, New York

Prepared For

National Guard Bureau,
Logistics and Installations Directorate, Operations Division,
Restoration Branch
NGB/A4OR

February 2018

(This page intentionally left blank)

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

ATTACHMENTS

FIGURES

TABLES

LIST OF ACRONYMS

ºC	degrees Celsius
ºF	degrees Fahrenheit
%	percent
109th AW	109th Airlift Wing
AMSL	above mean sea level
Aneptek	Corporation
ANG	Air National Guard
ANGB	Air National Guard Base
AR	Administrative Record
ARAR	Applicable or Relevant and Appropriate Requirement
BEM Systems	Balanced Environmental Management Systems
bgs	below ground surface
BHHRA	baseline human health risk assessment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
COC	chemical of concern
COPC	chemical of potential concern
CP	Commissioner Policy
CRP	Compliance Restoration Program
DD	Decision Document
DERP	Defense Environmental Restoration Program
DGM	Digital geophysical mapping
DoD	Department of Defense
ECATS	Environmental Consulting and Training Services
EOS	Edible Oil Substrate
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
ft	foot or feet
HI	hazard index
IRA	Interim Remedial Action
IRP	Installation Restoration Program
MCL	Maximum Contaminant Level
MW	monitoring well
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NFA	No Further Action
NFRAP	No Further Response Action Planned
NGB	National Guard Bureau
NGB/A4OR	National Guard Bureau Logistics and Installations Directorate, Operations Division, Restoration Branch
NRCS	Natural Resources Conservation Service
NYANG	New York Air National Guard
NYCRR	New York Codes, Rules, and Regulations

LIST OF ACRONYMS (CONTINUED)

NYSDEC	New York State Department of Environmental Conservation
PA	Preliminary Assessment
PAL	project action limit
PID	photoionization detector
ppm	part per million
RACR	Remedial Action Completion Report
RI	Remedial Investigation
RSL	Regional Screening Level
SARA	Superfund Amendments and Reauthorization Act
SCEDPD	Schenectady County Economic Development and Planning Department
SCO	Soil Cleanup Objective
SI	Site Inspection
SSCO	Supplemental Soil Cleanup Objective
SVOC	semivolatile organic compound
TAGM	Technical and Administrative Guidance Memorandum
TEC-Weston JV	TEC-Weston Joint Venture
THQ	target hazard quotient
TR	target risk level
USDA	U.S. Department of Agriculture
USEPA	United States Environmental Protection Agency
UST	underground storage tank
UU/UE	unlimited use and unrestricted exposure
VOC	volatile organic compound
WWTP	Waste Water Treatment Plant

DECLARATION

NAME OF INSTALLATION

Facility Name: Schenectady Air National Guard Base
(Also referred to as Stratton Air National Guard Base)

SITE NAME AND LOCATION

Site Location: Schenectady County Airport
Scotia, New York
CERCLIS ID Number: Not Applicable
NYSDEC Site ID: 447022
Operable Unit/Sites: Former Building 13 Area (Site ZZ007),
Former Heating Oil Underground Storage Tank (UST) #41 at Former Building 4 (Site TU008), and
Waste Water Treatment Plant (WWTP) Bypass UST near Installation Restoration Program (IRP) Site 6 (Site TU009).

STATEMENT OF BASIS AND PURPOSE

This No Further Response Action Planned (NFRAP) Decision Document (DD) presents the basis for the no further response action decision for Sites ZZ007, TU008, and TU009, located at the Schenectady Air National Guard Base (ANGB), Schenectady County Airport, Scotia, New York. This document was developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, 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). This decision is based on the Administrative Record (AR) for Sites ZZ007, TU008, and TU009.

This document is issued by the National Guard Bureau, Logistics and Installations Directorate, Operations Division, Restoration Branch (NGB/A4OR), as the lead agency. National Guard Bureau (NGB) is managing remediation of contamination at the following Sites in accordance with CERCLA, as required by the Defense Environmental Restoration Program (DERP):

- Site ZZ007 Former Building 13 Area
- Site TU008 Former Heating Oil UST #41 at Former Building 4
- Site TU009 WWTP Bypass UST near IRP Site 6

As the lead agency, NGB/A4OR has selected NFRAP for the above-listed Sites. NGB coordinates environmental matters with the New York State Department of Environmental Conservation (NYSDEC), who is the relevant regulatory agency in this matter. NYSDEC confers with the United States Environmental Protection Agency (USEPA), as necessary.

DESCRIPTION OF THE SELECTED REMEDY

On the basis of the current conditions at Sites ZZ007, TU008, and TU009, site-related contaminants were not identified in soil or groundwater resulting from release from potential

sources. Site-related contaminant levels at Sites ZZ007, TU008, and TU009 do not pose a significant risk to human health and the environment; therefore, NFRAP is appropriate for these Sites.

DECLARATION STATEMENT

This NFRAP DD represents the selected action for Sites ZZ007, TU008, and TU009. This NFRAP DD has been prepared in accordance with the general guidelines of CERCLA. The NFRAP decision is also in accordance with NYSDEC codes and regulations.

AUTHORIZING SIGNATURES

This signature sheet documents NGB approval of NFRAP in this DD for Sites ZZ007, TU008 and TU009.

Kevin Mattoch

Kevin L. Mattoch, P.E., GS-15
Chief, Operations Division
Installations and Mission Support Directorate

15 Feb 18
Date

(This page intentionally left blank)

CONCURRENCE RECORD

No Further Response Action Planned Concurrence Letter from New York State Department of Environmental Conservation - Sites ZZ007, TU008, and TU009.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau A
625 Broadway, 12th Floor, Albany, NY 12233-7015
P: (518) 402-9625 I F: (518) 402-9627
www.dec.ny.gov

Jody Ann C. Murata, GS-13
Restoration Branch
NGB/A7OR
Shepperd Hall
3501 Fetchet Avenue
Joint Base Andrews, MD 20762-5157

SEP 2 7 2017

Re: Air National Guard Stratton
Site No.: 447022

Dear Ms. Murata,

The New York State Department of Environmental Conservation (Department) reviewed the Final No Further Response Action Planned (NFRAP) Decision Document, dated September 2017. The Department concurs with the NFRAP in the Decision Document for sites ZZ007, TU008 and TU009. If you have any questions please contact me at 518-402-9626.

Regards,

Brian Jankauskas, P.E.
Project Manager
Remedial Bureau A, Section C

cc: J. Swartwout, DEC
S. Karpinski steven.karpinski@health.ny.gov
J. Murata jody.murata@ang.af.mil
J. Gross joseph.gross@westonsolutions.com

1.0 INTRODUCTION

1.1 SITE NAME, LOCATION, AND DESCRIPTION

1.1.1 Site Description

Schenectady ANGB, also referred to as Stratton ANGB, is located at the Schenectady County Airport in Scotia, Schenectady County, New York, approximately 2 miles northeast of the Village of Scotia and 3 miles north of the City of Schenectady, New York (**Figure 1-1**). The ANGB occupies 124 acres in the southeast portion of the 750-acre airport and is separated into two sections: New York Air National Guard (NYANG) Main Parcel and NYANG South Parcel (ANG, 2006). The County of Schenectady leases the ANGB to the U.S. Government who, in turn, licenses the property to Air National Guard (ANG). ANG is a tenant (by lease agreement) and is responsible only for the operation and maintenance of the ANGB.

The airport is currently home to the 109th Airlift Wing (109th AW) of NYANG and various businesses and enterprises, including Richmor Aviation Flight School, an Armed Forces Reserve Center, the Schenectady County Airport Business Park, Schenectady County Community College's aviation and air traffic controller program, and the Empire State Aeroscience Museum. ANG has no plans to vacate the property or change the land use in the near future.

During its operational history, Schenectady ANGB personnel have engaged in various activities, including aircraft and ground vehicle maintenance. These operations generate varying quantities of waste oils, recovered fuels, corrosion inhibitors, spent cleaners, and solvents. As part of the Department of Defense (DoD) IRP; NGB/A4OR initiated activities to identify, evaluate, and remediate former disposal or spill sites containing hazardous substances. NGB/A4OR is publishing this DD to document selection of NFRAP under CERCLA for the following three Sites at the ANGB:

- Site ZZ007 Former Building 13 Area
- Site TU008 Former Heating Oil UST #41 at Former Building 4
- Site TU009 WWTP Bypass UST near IRP Site 6

Site ZZ007 includes the area of Former Building 13 where hazardous materials were used and hazardous waste was generated (**Figure 1-2**). Former Building 13 was utilized as a maintenance facility at times with drum storage. Building 13 was demolished in the mid-1990s, and no building has been constructed in its place (AECOM, 2015). Preliminary plans to construct a building within the Former Building 13 footprint are in progress. Closure sampling documentation is not available for Former Building 13 (BB&E, 2011). Former Building 13 was located near the current Building 12. Site ZZ007 is located adjacent to IRP Site 2. IRP Site 2 was a former drum storage area located outside the southeast wall of Building 2, between Buildings 2 and 12. Former Building 13 was located between Buildings 2 and 12. Drums containing new and used solvents were stored on an earthen area at this location in the 1950s. The entire surface area of Site 2 was paved in 1958 and is currently paved with asphalt.

Site TU008 includes Former Building 4, which was a vehicle maintenance facility, and the associated UST #41, which was a 6,000-gallon heating oil tank (**Figure 1-3**). Building 4 was

demolished in 1995. UST #41 was likely removed at the time of building demolition; however, records of removal and/or sampling of the tank pit during removal are not available (AECOM, 2015).

Site TU009 includes a 7,000-gallon UST used by the WWTP as a bypass during 1982 and 1983 (**Figure 1-4**). The WWTP was demolished in 2002, but the UST remains in place and is reported to be partially filled with sand (AECOM, 2015). IRP Site 6 (Suspected Spill Site), an active remediation site, is located immediately adjacent to Site TU009 and consists of an area of contaminated soil and groundwater located northwest of the former WWTP and sand filter. Soil and groundwater have been impacted at IRP Site 6 by past releases from aircraft fueling, maintenance, operation activities, and training exercises. Investigations and remedial actions have occurred since 1999 and are ongoing at IRP Site 6. Contaminated soils on the western portion of Site 6 and along the eastern bank of the drainage ditch were removed in 2013.

1.1.2 Topography

Topographic features in the area include the foothills of the Adirondack Mountains to the north and the Helderberg Escarpment, the northern extreme of the Allegheny Plateau, to the south. Area landforms are relatively flat adjacent to the Mohawk River, where elevations are approximately 210 feet (ft) above mean sea level (AMSL) along the riverbanks. The elevations at Schenectady ANGB range from approximately 300 to 390 ft AMSL. The land on the Base has been predominantly cleared, leveled with little topographic relief, and developed (ANG, 2006).

1.1.3 Critical Environments

Site ZZ007 is paved and a building is planned for the footprint of Former Building 13. Vegetation at Sites TU008 and TU009 is limited to landscaped areas with grass. An unnamed drainage ditch located directly west of IRP Site 6 and to the west of TU009, which eventually discharges into the Mohawk River, is a designated trout water body according to the NYSDEC.

1.1.4 Adjacent Land Uses and Nearby Populations

In general, Schenectady County Airport is bordered to the north by Glenbridge Road (Route 914V), to the west by Saratoga Road (Route 50), to the south by a railroad track right-of-way, and to the east by Maple Avenue (Route 29) and a railroad track right-of-way. A residential neighborhood borders much of the airport to the east. The Mohawk River is located 0.25 miles southeast of the ANGB.

The zoning map for the Town of Glenville shows that the land encompassing the airport is classified as a mixture of general business and suburban residential to the north; a mixture of general business, professional/residential, suburban residential, and multi-family residential to the west; a mixture of general business and professional/residential to the south; and suburban residential to the east (Schenectady County Economic Development and Planning Department [SCEDPD], 2015).

1.1.5 General Surface Water and Groundwater Resources

Schenectady ANGB is located north of the Mohawk River in the Mohawk River Valley. The Mohawk River runs in a general northwest to southeast direction through the area. The Mohawk

River drains approximately 65 percent (%) of Schenectady County. Runoff from Schenectady ANGB is channeled through a drainage system of culverts, ditches, and pipes that run southerly via an unnamed tributary to the Mohawk River, also referred to as a drainage ditch (ANG, 2006). The unnamed tributary discharges into the Mohawk River at a point approximately 0.5 miles south of the ANGB. The river's flow is regulated during the navigational season by a series of locks, as part of the New York State Barge Canal System.

No known or suspected public groundwater drinking water supply wells are located in the vicinity of Schenectady ANGB. Nearby municipalities, including Glenville and Scotia, obtain drinking water from groundwater as discussed below in Section 2.3. Private drinking water wells are located in Schenectady County. Several private wells are located within 0.25 mile of the ANGB to the north, east, west, and southwest.

1.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES

1.2.1 Site History

Schenectady ANGB began operating at the Schenectady County Airport in 1948 as the 109th Fighter Squadron. The organization was converted to a transport group during 1958 and was activated to full-time status in 1961, flying regular missions to Southeast Asia in support of active duty forces in Vietnam. The 109th Airlift Group received its first C-130s during 1971 and began supporting scientific research programs in 1975. In 1988, they began augmenting the U.S. Navy's support of the U.S. Antarctic Program by supporting operations at the McMurdo and Palmer stations, Antarctica, as well as at other research stations located in Antarctica and Greenland (ECATS, 2003; Hueber et al., 1997, as cited in AECOM, 2015). In 1996, the 109th Airlift Group was re-assigned as an Airlift Wing (ECATS, 2003, as cited in AECOM, 2015).

The main purpose of Schenectady ANGB is to provide organizational and maintenance support to the 109th AW, which flies C-130H and ski-equipped LC-130H aircraft to support the Air Mobility Command and polar airlift missions. The major support operations include aircraft fueling, aircraft deicing, aircraft maintenance, aerospace ground equipment maintenance, ground vehicle maintenance, fueling of ground vehicles, and facilities maintenance (ANG, 2006).

The facility also provides general airlift support throughout the ANGB and Air Mobility Command passenger/cargo systems. The unit services other polar customers, such as the North American Aerospace Defense and the Navy, in addition to polar rescue operations. The unit also has a mission to assist the state of New York in the event of disaster emergencies and civil disturbances. Currently, there are approximately 468 full-time personnel at Schenectady ANGB and approximately 703 part-time personnel (ANG, 2014).

1.2.2 Regulatory Agency Involvement

In 2012, ANG began an environmental Compliance Restoration Program (CRP) that initiated revisiting ANG installations, and evaluating records for areas that were previously excluded from the original Environmental Restoration Program to ensure that all potential environmental sites at the facility had been properly addressed. Preliminary Assessment (PA) activities were conducted at Schenectady ANGB on November 12, 2013 at six areas of concern. Based on recommendations from previous investigations and the PA, additional Site Inspection (SI)

activities were not warranted for one area of concern, and SI activities, including soil and groundwater sampling, were conducted in 2014 for the five remaining areas of concern (AECOM, 2015). The SI project objective was to determine the presence or absence of contamination and either (1) obtain a No Further Action (NFA) decision for the areas of concern at Schenectady ANGB with regulatory concurrence from the NYSDEC or (2) identify the data quality objectives required for conducting a follow-on remedial investigation (RI) at the areas of concern that did not meet the criteria for NFA. The SI determined that no further investigation was warranted at two areas of concern (Building 19 Drains [DD011] and Building 35 Drains [DD012]). These two areas of concern were approved for NFA under the CRP based on NYSDEC concurrence on 16 September 2015 (AECOM, 2015 and NYSDEC, 2015b). Based on the results of the SI, Sites ZZ007, TU008, and TU009 were recommended for further action (AECOM, 2015).

As the lead agency for remedial activities, NGB/A4OR has conducted RI activities at Sites ZZ007, TU008, and TU009, in accordance with CERCLA under DERP, which was established by Section 211 of SARA of 1986. As the regulatory review agency, NYSDEC provides primary oversight of the environmental restoration actions.

1.3 COMMUNITY PARTICIPATION

This DD was prepared in accordance with the DoD DERP Management Manual (DoD, 2012) requirement to identify community involvement in the proposed decision. The community participation component of this DD includes consideration of comments by the public on the proposed decision. A public notice was published in a local newspaper, the *Daily Gazette*, on December 13, 2017 to provide the public the opportunity to comment on the proposed decision during a 30-day public comment period (December 13, 2017 through January 11, 2018). The affidavit of publication and a copy of the printed public notice is included in **Attachment A**. A hard copy and electronic copy (on CD) of the Draft DD and an electronic copy of the RI Report (on CD) were made available to the public for review and comment at the Reference Desk at the Schenectady Public Library – Central Library Branch at 99 Clinton Street, Schenectady, New York. No written or verbal comments were received from the public during the 30-day comment period; therefore, community acceptance of this NFRAP DD is inferred.

In addition, documents relevant to the environmental studies performed at Sites ZZ007, TU008, and TU009 have been made available to the public in the AR, which is maintained by the NGB/A4OR/ANGB. The AR was established to make documents and information, such as technical reports, data, and regulatory correspondence, accessible to the public. The documents are available online at http://afcec.publicadmin-record.us.af.mil/Search.aspx.

1.4 SCOPE OF RESPONSE ACTION

On the basis of the current conditions at Sites ZZ007, TU008, and TU009, site-related contaminants were not identified in soil or groundwater resulting from a release from potential sources. Site-related contaminant levels at Sites ZZ007, TU008, and TU009 do not pose a significant risk to human health and the environment; therefore, NFRAP is appropriate for these Sites.

2.0 SUMMARY OF SITE CHARACTERISTICS

2.1 PHYSIOGRAPHY, GEOLOGIC SETTING, AND CLIMATOLOGY

Schenectady ANGB is located in east-central New York within the Mohawk Valley section of the Hudson Mohawk Lowlands physiographic province. The Mohawk River and its tributaries are entrenched within their valleys, providing significant relief in the Schenectady area. This lowland region is formed between the metamorphic rocks of the Adirondack Mountains to the north, the erosion-resistant limestones of the Helderberg escarpment defining the Catskill Mountains to the south, and the slate-schist belt of the Rensselaer-Taconic upland to the east (Aneptek, 2000).

Bedrock units beneath Schenectady ANGB are encountered as shallow as 7.5 ft below ground surface (bgs). The ANGB is underlain by the Ordovician Schenectady Formation and Canajoharie Shale, which is shale interbedded with siltstones and sandstones. There are several linear bedrock ridges, aligned in a northeast-southwest direction, located in the vicinity of the ANGB (ANG, 2006).

The unconsolidated deposits in eastern Schenectady County are not uniform in character; rather they consist of interbedded strata or lenses of different types of materials (Aneptek, 2000). The majority of the unconsolidated deposits are glacial till which covers bedrock over much of the ANGB and the surrounding area, and consists of gray to dark gray, compact, tough, stony, silty to sandy clay with some cobbles and boulders. There are limited areas of thin sand and gravel lenses scattered within the till unit. The overall thickness of the till deposits over the ANGB ranges between approximately 10 and 30 ft where the thickest areas correspond to the depressions in the bedrock surface. Lake Albany sands and silts, ranging between approximately 45 and 130 ft thick, overlie the till deposits on the southern and southwestern portion of the ANGB (ANG, 2006).

The climate in Schenectady County is classified as “Moist Continental Mid-Latitude Climate” and is characterized by warm to cool summers and cold winters. Winters are potentially severe with snow storms, strong winds, and extreme cold from Continental Polar or Arctic air masses. Average minimum temperatures range from 13 degrees Fahrenheit (°F) (-9 degrees Celsius [°C]) in January to 60 °F (15 °C) in July; average maximum temperatures range from 31°F (-1 °C) in January to 83°F (28 °C) in July. Average annual precipitation is approximately 36 inches and is dispersed throughout the year (ANG, 2006).

The number of days with any measurable precipitation averages 125 a year. On average, there are 177 sunny days per year in Schenectady, New York.

2.2 SOIL CHARACTERISTICS

Most of the naturally occurring soils at and around Schenectady ANGB have been disturbed and/or removed, making soil classification difficult because of the variable characteristics and alteration from natural conditions. According to the U.S. Department of Agriculture (USDA) Soil Conservation Service, the majority of the soils at Schenectady ANGB are composed of cut and fill material and Urban land-Colonie complex. This soil type consists of 70% urban land (e.g., soils under structures or pavements) and 30% Colonie soils. These soils are predominately

underlain by sandy material with variable permeability. The Colonie soils are deep, well drained to excessively drained, sandy soils. The other mapped soils beneath the ANGB consist of the following soils (USDA, 2015):

- *Lordstown Gravelly Silt Loam* A moderately deep, well drained, medium textured soil on hilltops with slopes of 3 to 8%.
- *Hornells Silt Loam* A moderately deep, moderately well drained, medium textured soil on bedrock controlled uplands with slopes of 3 to 8%.
- *Tuller-Brockport Complex* Consists of 60% Tuller soils and 40% Brockport soils. The Tuller soils are shallow and somewhat poorly drained to poorly drained with a moderate permeability. The Brockport soils are moderately deep and somewhat poorly drained.
- *Burdette-Scriba Soils* Consists of 65% Burdette soils and 35% Scriba soils. The Burdette soils are moderately deep, somewhat poorly drained, and medium texture. The Scriba soils are deep, somewhat poorly drained, and medium textured.
- *Nunda Soils* These soils are deep, moderately well drained, sloping, medium textured, and extremely stony on calcareous glacial till plains.

2.3 HYDROGEOLOGIC SETTING

Schenectady ANGB does not have high potential for availability of large groundwater resources, although it lies close to the recharge zone of the Schenectady-Niskayuna Aquifer System (also known as the Great Flats Aquifer, the Schenectady Sole-Source Aquifer, and by other names). The Schenectady Aquifer consists of a complex and extensive bed of stratified drift and glacial outwash gravel deposits underlying the Mohawk River channel. These aquifer deposits are underlain by glacial till. Bedrock formations in the Schenectady area have a low permeability. The groundwater in the bedrock primarily flows within the fractures and joints in the rock and in the weathered or fractured zone within the upper few feet of the bedrock surface.

The Schenectady Aquifer supplies potable water to approximately 84% of the population of Schenectady County through municipal and private wells. Groundwater depths reported in monitoring wells (MWs) screened at the soil/bedrock interface range between 6 and 11 ft bgs. Hydraulic conductivity tests conducted in MWs at the Base reported groundwater flow velocities estimated between 2 and 25 ft per year, which is consistent with typical groundwater flow velocities found in fractured bedrock (BEM Systems, 2012) or a silt/clayey fine sand. Groundwater underlying the Base is perched and intermittent and is not a viable aquifer. The water table in the Schenectady area generally mimics the topography of the land surface; therefore, groundwater moves in the direction of land-surface slope. Regional groundwater flow at the ANGB is south and southeast toward the Mohawk River (ANG, 2006).

2.4 SURFACE WATER SETTING

An unnamed tributary to the Mohawk River is located south of the Base's aircraft parking apron. The tributary, which receives stormwater runoff from most of the ANGB, is equipped with a weir to retain the water prior to discharge (BB&E, 2016). The unnamed tributary discharges into the Mohawk River at a point approximately 0.5 miles south of the ANGB. Although the unnamed tributary is located in an area with a 0.1% annual chance of flooding, the ANGB

facilities, including all buildings and the parking apron, are outside the flood zone (Federal Emergency Management Agency [FEMA], 2014).

2.5 RECEPTORS

There is no expected change in current land use, and the current receptors include base workers and visitors. Therefore, commercial/industrial workers were evaluated in the risk assessment for Sites ZZ007, TU008, and TU009. Because potential future land use may include unlimited use and unrestricted exposure (UU/UE); hypothetical residential receptors were also evaluated in the risk assessment (TEC-Weston JV, 2017).

(This page intentionally left blank)

3.0 DATA ANALYSIS/RISK ASSESSMENT

This section includes summaries of the data analysis completed at Sites ZZ007, TU008, and TU009, including any human health or ecological risks that remain, which are the basis for the selected remedy of NFRAP at each Site.

3.1 SITE ZZ007 – FORMER BUILDING 13 AREA

A PA was conducted at Site ZZ007 by AECOM in November 2013. During the PA, closure sampling documentation for Former Building 13 was not identified. Soil and groundwater sampling was recommended to assess potential contamination at Site ZZ007 (AECOM, 2015).

An SI was conducted in November 2014. During the SI, five soil borings (ZZ07SB01 through ZZ07SB05) were advanced at Site ZZ007 in the area of Former Building 13. The borings were advanced to refusal, which occurred between 7.5 and 9 ft bgs. The groundwater table was encountered in two borings only (ZZ07SB02 and ZZ07SB05), at a depth of between 2 and 3 ft bgs, indicating that site groundwater is perched and intermittent. One soil sample was collected from vadose zone soils in borings ZZ07SB02 and ZZ07SB05. Two soil samples were collected from the remaining three borings; one from the upper portion of the borehole and one from the bottom of each boring. A groundwater sample was collected from temporary MWs installed in borings ZZ07SB02 and ZZ07SB05. No visual, olfactory, or photoionization detector (PID) evidence of contamination was identified in any of the borings. All soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and total metals. Groundwater samples were also analyzed for dissolved metals (AECOM, 2015).

An RI was conducted at Site ZZ007 in June 2016 to evaluate the impact of chemicals in soil and groundwater on human health and the environment based on recommendations from the SI. During the RI, seven soil samples were collected from three boreholes (SC-ZZ007-MW001 through SC-ZZ007-MW003) and analyzed for metals. In addition, the three borings were completed as temporary groundwater MWs. Groundwater samples were collected from the three MWs and analyzed for metals during one sampling event (TEC-Weston JV, 2017).

SI and RI sampling locations are presented on **Figure 3-1**.

3.1.1 Soil

Soil analytical results were compared to regulatory screening levels. Soil project action limits (PALs) for the RI were selected as the minimum value (i.e., most stringent) of the following:

- Unrestricted Use Soil Cleanup Objectives (SCOs) as specified in 6 New York Codes, Rules, and Regulations (NYCRR) Part 375 (NYSDEC, 2006).
- NYSDEC Commissioner Policy (CP)-51 Residential Supplemental SCOs (SSCO) (NYSDEC, 2006 and 2010).

- USEPA May 2016 Residential Regional Screening Levels (RSLs) based on target hazard quotient (THQ) of 1 and target risk (TR) of 1E-06 (USEPA, 2016a) were used as the PAL for analytes that do not have a published SCO.

In soil collected at Site ZZ007 during the 2014 SI and 2016 RI, five metals (arsenic, iron, nickel, thallium, and zinc) were detected at concentrations exceeding PALs. SI and RI soil analytical results are presented in **Table 3-1** and **Table 3-2**, respectively. Iron concentrations are within Eastern United States background levels (NYSDEC, 1994; updated 2000). Arsenic, nickel, and zinc concentrations exceeded the NYSDEC Unrestricted Use SCOs based on ecological resources but did not exceed Residential Use SCOs. Because of the limited size and quality of vegetation, and the absence of surface soil samples at the sites, a complete exposure pathway does not exist to ecological receptors. Metals present in the soil at Site ZZ007 are likely naturally occurring because there is no evidence of a source area or release (TEC-Weston JV, 2017).

According to the results of the baseline human health risk assessment (BHHRA), Site ZZ007 soils are suitable for UU/UE and do not pose an unacceptable risk to current or future residents or commercial/industrial workers (TEC-Weston JV, 2017).

3.1.2 Groundwater

Groundwater analytical results were compared to regulatory screening levels. Groundwater PALs for the RI were selected as the minimum value (i.e., most stringent) of the following:

- NYSDEC Class GA (source of drinking water, groundwater) Water Quality Standards as specified in 6 NYCRR Part 703 (NYSDEC, 1998).

- USEPA National Primary Drinking Water Regulations (i.e., maximum contaminant levels [MCLs]) (USEPA, 2016b).

- USEPA May 2016 tap water RSLs based on THQ of 1 and TR of 1E-06 (USEPA, 2016a) were used as the PAL for analytes that do not have a published NYSDEC Water Quality Standard or MCL.

Nine VOCs and eight SVOCs were detected in grab groundwater samples collected during the SI; however, none exceeded their respective NYSDEC Water Quality Standards (**Table 3-3**). Sixteen metals in both total and dissolved forms (arsenic, barium, beryllium, cadmium, chromium, copper, iron, lead, magnesium, manganese, mercury, nickel, selenium, sodium, thallium, and zinc) exceeded NYSDEC Water Quality Standards in one or more samples during the SI. Turbidity in the groundwater samples were high because the samples were not collected from developed monitoring wells. It was concluded that groundwater samples from permanent MWs may have lower concentrations of metals (AECOM, 2015).

During the RI, total metals (aluminum, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, sodium, thallium, and vanadium) and dissolved metals (cobalt, magnesium, manganese, and sodium) were detected in groundwater samples collected from temporary MWs at concentrations exceeding PALs (**Table 3-4**) (TEC-Weston JV, 2017).

The results of the BHHRA indicate that noncancer health effects for groundwater at Site ZZ007 yielded risks above USEPA's THQ threshold (1.0) for the residential and commercial/industrial worker scenarios. The hazard index (HI) from groundwater for the residential and industrial scenarios are 14 and 2, respectively, mainly from dissolved manganese and, to a lesser extent, dissolved cobalt (TEC-Weston JV, 2017). However, the presence of metals in groundwater is not likely to be a result of a release from the Former Building 13 Area. Soil samples indicate that a source area of contamination is not present at the Former Building 13 Area. Cobalt and manganese are present in upgradient MW SC-ZZ007-MW001. Former IRP Site 2 was located in the same area as Site ZZ007 and metals were detected at similar concentrations in groundwater during the Site 2 RI (Aneptek, 2000). The Site 2 RI concluded that the high levels of inorganic constituents in groundwater were likely attributed to residual fines deposited in the annular space of the sand pack during installation of the wells, resultant of the drilling assembly within the weathered shale bedrock, and were not indicative of the actual condition of the aquifer in the area of Site 2 (Aneptek, 2000). The Site 2 RI conclusion was supported by the dramatic reduction in the concentration of total inorganics detected in the less turbid groundwater collected during the second sampling event. Because permanent MWs would interfere with the construction of a new building planned for installation within the footprint of the Former Building 13, no permanent MWs were installed at site ZZ007; therefore it was not possible to conduct a second sampling event.

3.1.3 Summary

Site-related chemicals of potential concern (COPCs) were not identified in soil or groundwater at Site ZZ007 resulting from releases from former Site ZZ007 potential sources (TEC-Weston JV, 2017). NFRAP is recommended at Site ZZ007 based on the following:

- The absence of significant chemicals of concern (COCs).
- Groundwater underlying Site ZZ007 is perched and not a source of drinking water.

3.2 SITE TU008 - FORMER HEATING OIL UST #41 AT FORMER BUILDING 4

A PA was conducted at Site TU008 by AECOM in November 2013. During the PA, sampling and closure information for Site TU008 was not identified. Former Building 4 was utilized as a vehicle maintenance facility before its removal in early 1995. UST #41 was a 6,000-gallon heating oil tank associated with the building. Records of removal and/or sampling of the tank pit during removal are not available. Soil and groundwater sampling was recommended to assess potential contamination (AECOM, 2015).

An SI was conducted in November 2014. Digital geophysical mapping (DGM) was used to confirm the absence of the former heating oil UST prior to field sampling. Five borings (TU08SB06 through TU08SB10) were advanced surrounding the former UST area until refusal, which occurred between 7 and 9 ft bgs in each boring. There was no visual, olfactory, or PID evidence of contamination in three of the borings. Odors and elevated PID measurements were detected in borings TU08SB08 (peak of 178 parts per million [ppm] at 5 ft bgs) and TU08SB09 (peak of 97.1 ppm at 4 ft bgs). Measurements decreased with depth in each boring. One soil sample was collected from each boring in the dry soils above the water table interface. One

groundwater sample was collected from temporary MWs installed in each boring from 5 to 10 ft bgs. Soil and groundwater samples were analyzed for VOCs and SVOCs (AECOM, 2015).

An RI was conducted at Site TU008 in June and November 2016 to evaluate the impact of chemicals in soil and groundwater on human health and the environment based on recommendations from the SI. During the RI, nine soil samples were collected from four boreholes (SC-TU008-MW001 through SC-TU008-MW004) and analyzed for VOCs and SVOCs. During the first sampling event in June 2016, three borings were completed as permanent groundwater MWs (SC-TU008-MW001, SC-TU008-MW002, and SC-TU008-MW004) and one borehole (SC-TU008-MW003) was completed as a temporary groundwater MW. Two borings (SC-TU008-MW005 and SC-TU008-MW006) were completed as permanent groundwater MWs during the second sampling event (November 2016). Groundwater samples were collected from three permanent MWs and one temporary MW during the first sampling event and analyzed for VOCs and SVOCs. Groundwater samples were collected from four permanent MWs during the second sampling event and analyzed for VOCs and SVOCs (TEC-Weston JV, 2017).

SI and RI sampling locations are presented on **Figure 3-2.**

3.2.1 Soil

Soil analytical results were compared to regulatory screening levels as detailed above in Section 3.1.1.

In soil collected at Site TU008 during the 2014 SI and 2016 RI, one VOC (acetone) was detected at a concentration exceeding its PAL. SI and RI soil analytical results are presented in **Table 3-5** and **Table 3-6**, respectively. The acetone concentration exceeds the NYSDEC Unrestricted Use SCO based on protection of groundwater but does not exceed the Residential Use SCO. Acetone was not detected above the PAL in the deeper soil sample collected from the same boring (SC-TU008-MW004), nor was it detected above PALs in any of the other soil samples collected from borings advanced closer to and downgradient of the footprint of the former UST (TEC-Weston JV, 2017). Acetone was not detected in groundwater at SC-TU008-MW004 above the groundwater PAL, thus indicating that acetone in soil is not impacting groundwater.

The results of the BHHRA indicate Site TU008 soils are suitable for UU/UE and do not pose an unacceptable risk to current or future residents or commercial/industrial worker (TEC-Weston JV, 2017).

3.2.2 Groundwater

Groundwater analytical results were compared to regulatory screening levels as detailed above in Section 3.1.2.

Four VOCs (naphthalene, n-butylbenzene, sec-butylbenzene, and tert-butylbenzene) and two SVOCs [bis(2-ethylhexyl)phthalate and naphthalene] exceeded NYSDEC Water Quality Standards in one or more SI groundwater samples (**Table 3-7**) (AECOM, 2015). Groundwater samples collected during the 2014 SI were collected as grab samples from open boreholes. The

SI groundwater investigation results were used to evaluate the placement of permanent MWs during the RI.

Two VOCs (2-butanone and acetone) and three SVOCs (1,2,4-trichlorobenzene, 1,2-dichlorobenzene, and 2,4,6-trichlorophenol) were detected at concentrations exceeding PALs in RI groundwater samples (**Table 3-8**). The chemicals 2-butanone and acetone were only detected above PALs at SC-TU008-MW003. SC-TU008-MW003 was a temporary MW that was not developed. The well had only a few inches of water in the column and the sample was very turbid. A second MW (SC-TU008-MW005) was installed during the second field event to obtain another groundwater sample in this area. A saturated zone was not identified, indicating that very little groundwater is present. As a result of the poor quality of the sample, and because both 2-butanone and acetone are common laboratory contaminants, these chemicals were not identified as COPCs (TEC-Weston JV, 2017).

The chemicals 1,2,4-trichlorobenzene and 1,2-dichlorobenzene were only detected in the upgradient MW (SC-TU008-MW001) during the June 2016 sampling event. The chemicals 1,2,4 trichlorobenzene and 1,2 dichlorobenzene are chemicals analyzed as part of the VOC and SVOC lists and were only detected as SVOCs at SC-TU008-MW001 at estimated concentrations. These chemicals were not detected in groundwater during the subsequent sampling event in November 2016. The chemical 2,4,6-trichlorophenol was detected at two MWs during the June 2016 event, but was not detected during the subsequent event conducted in November 2016 (TEC-Weston JV, 2017).

The results of the BHHRA indicate cancer risks and noncancer health effects for Site TU008 groundwater are below or within the USEPA risk management range (1E-04 to 1E-06) for cancer and below the USEPA THQ threshold (1.0) for noncancer effects. Groundwater at Site TU008 does not pose a risk to current or future residents or commercial/industrial workers, and is suitable for UU/UE (TEC-Weston JV, 2017).

3.2.3 Summary

There are no unacceptable risks remaining in soil or groundwater at Site TU008 to current or future receptors including permanent residents. NFRAP is recommended at Site TU008 based on the absence of evidence of a release from the former UST based on the following:

- COPCs were not identified in soil.
- COPCs detected in groundwater during the first sampling event were not detected during the second sampling event.
- The BHHRA did not identify unacceptable risks to residential or commercial/industrial worker receptors.

3.3 TU009 - WWTP BYPASS UST NEAR IRP SITE 6

A PA was conducted at Site TU009 by AECOM in November 2013. During the PA, sampling and closure information for TU009 was not identified. A 7,000-gallon UST was utilized by the WWTP for bypass during 1982 and 1983 when the lagoons were being emptied for cleaning. The tank had one inlet pipe and was pumped out daily. The WWTP was demolished in 2002. According to Schenectady ANG personnel, the UST is still in place and partially filled with sand (AECOM, 2015).

An SI was conducted in November 2014. DGM was used to locate the outline of the WWTP Bypass UST at Site TU009 prior to field sampling. The geophysical survey concluded that a single location of a large metal object of representative size of the WWTP Bypass UST was identified, along with two manholes associated with the structure (Appendix C of AECOM, 2015). Four borings (TU09SB11 through TU09SB14) were advanced until refusal was met, which occurred between 7.5 and 8.5 ft bgs. There were no visual, olfactory, or PID evidence of contamination in any of the borings. The groundwater table was encountered between 5 and 5.5 ft bgs in two borings only (TU09SB12 and TU09SB13). One soil sample was collected from the dry soils above the water table interface in borings where groundwater was encountered. Two soil samples were collected from the remaining two dry borings (TU09SB11 and TU09SB14), one from the upper portion of the borehole and one from the bottom of each boring. Groundwater samples were collected from the two borings where water was encountered. Soil and groundwater samples were analyzed for VOCs, SVOCs, and metals (AECOM, 2015).

An RI was conducted at Site TU009 in June and November 2016 to evaluate the impact of chemicals in soil and groundwater on human health and the environment based on recommendations from the SI. During the RI, seven soil samples were collected from three boreholes (SC-TU009-MW001 through SC-TU009-MW003) and analyzed for SVOCs and metals. In addition, one boring (SC-TU009-MW003) was completed as a permanent groundwater MW. Four groundwater samples were collected from the one new MW (SC-TU009-MW009) and two existing IRP Site 6 MWs (6MW22 and 6MW24) and analyzed for SVOCs during the first sampling event (June 2016). One additional sample was collected from the one new MW during a second sampling event (November 2016) and analyzed for metals.

SI and RI sampling locations are presented on **Figure 3-3.** Additionally, an Interim Remedial Action (IRA) was conducted at adjacent IRP Site 6 between May and September 2007 (Earth Tech Northeast, 2007). Soils that were previously identified as being in the chlorinated VOC groundwater plume at IRP Site 6 were excavated. The Site 6 excavation areas are shown on **Figure 3-3**. The excavation areas include the area up to the edge of the WWTP Bypass UST. The soil adjacent to and downgradient of Site TU009 WWTP Bypass UST area has been removed and replaced with soil from the larger excavation area. During the soil removal activities at Site 6, a horizontal infusion gallery was constructed to perform in injections. An enhanced bioremediation pilot test was conducted at Site 6 in 2007 in which Edible Oil Substrate (EOS) and Vitamin B12 supplement were gravity-fed sequentially into the infusion gallery. The overall conclusions were that the injection of EOS and the Vitamin B12 Supplement had a beneficial effect on decreasing the concentration of chlorinated VOCs in the groundwater at Site 6.

Additional investigations and remedial actions were completed at Site 6 (BEM Systems, 2012, 2013, 2014, 2016a). Soils contaminated with chlorinated VOCs on the western portion of Site 6 and along the eastern bank of the drainage ditch were removed in 2013. This excavation area was to the west of the 2007 excavation area. ANG requested NFA for site soil in March 2015 and NYSDEC concurred with this decision in April 2015 (NYSDEC, 2015a). The remediation action for IRP Site 6 groundwater included chemical injection of sodium permanganate and groundwater monitoring. The first injection event took place in June 2013 consisting of sodium permanganate injection into the infusion gallery and via direct push. The second injection event occurred in May 2014 consisting of sodium permanganate injection into the infusion gallery. The January 2015 groundwater sampling event showed some evidence of rebound in VOC concentrations (BEM Systems, 2016a). A Site Management Plan has been prepared to address the remaining contamination (BEM Systems, 2016b). Additional remedial activities in 2016 included installation of permanent injection wells and an interceptor trench, a pilot study, and groundwater treatment using biostimulation and bioaugmentation injections. Emulsified vegetable oil mixed with water was injected at each of the new injection wells in July 2016 to encourage growth of bacteria, increasing the likelihood of complete degradation of the chlorinated solvents in groundwater.

Based on the results of the remedial action and groundwater monitoring samples collected to date at IRP Site 6, VOCs are still present in groundwater at IRP Site 6 above NYSDEC Groundwater Criteria for Unrestricted Use levels. Iron and manganese were also present at high concentrations in the MWs sampled as part of the Site 6 remedial activities, which demonstrates that abiotic transformation may be occurring as the dechlorination reactions would be enhanced in the presence of metal amendments, especially iron (BEM Systems, 2016a). In accordance with the Remedial Action Completion Report (RACR), IRP Site 6 groundwater will continue to be monitored, with additional bioaccumulation or bioaugmentation injections performed as recommended in subsequent reports (Leidos, 2017).

3.3.1 Soil

Soil analytical results were compared to regulatory screening levels as detailed above in Section 3.1.1.

In soil collected at Site TU009 during the 2014 SI and 2016 RI, six metals (arsenic, copper, iron, nickel, thallium, and zinc) were detected at concentrations above the PALs. SI and RI soil analytical results are presented in **Table 3-9** and **Table 3-10**, respectively. Concentrations of iron are within the Eastern United States background levels for iron (NYSDEC, 1994; updated 2000), suggesting that iron is naturally occurring in the soils at Site TU009. Arsenic, copper, nickel, and zinc were detected at concentrations exceeding Unrestricted Use SCOs based on ecological protection, but do not exceed Residential Use SCOs. Because of the limited size and quality of vegetation, limited exposure to ecological receptors exists at Site TU009.

The results of the BHHRA indicate cancer risks and noncancer health effects for Site TU009 soils are below the USEPA risk management range (1E-04 to 1E-06) for cancer and the USEPA THQ threshold (1.0) for noncancer effects for the commercial/industrial worker scenario (TEC-Weston JV, 2017). Although the cancer risks for the residential scenario were below the USEPA risk management range (1E-04 to 1E-06), noncancer health effects exceeded the USEPA THQ

threshold of 1. Thallium was the only COC in soil to exceed the HI of 1. Thallium was detected at only one soil sampling location, SC-TU009-MW001 at a depth of 3 to 5 ft bgs, which is located to the west (crossgradient) of the WWTP Bypass UST area. Thallium was not detected in the deeper sample (6 to 8 ft bgs) collected at this location. Because the presence of thallium is isolated to this one sampling location, it is not likely attributed to a release from the WWTP Bypass UST.

3.3.2 Groundwater

Groundwater analytical results were compared to regulatory screening levels as detailed above in Section 3.1.2.

During the 2014 SI, six SVOCs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, and chrysene], four metals in both total and dissolved forms (iron, magnesium, manganese, and sodium), and nine metals in total form only (arsenic, barium, beryllium, chromium, copper, lead, nickel, thallium, and mercury) exceeded NYSDEC Water Quality Standards in one or more groundwater samples (**Table 3-11**) (AECOM, 2015). Groundwater samples collected during the SI were collected as grab samples from open boreholes.

Analytical results of RI groundwater samples for total metals revealed cobalt, iron, magnesium, manganese, nickel, sodium, and thallium at concentrations above the PALs. Dissolved metals sample results revealed arsenic, cobalt, iron, magnesium, manganese, nickel, and sodium at concentrations exceeding PALs (**Table 3-12**) (TEC-Weston JV, 2017). PALs for iron and manganese are based on aesthetics (NYSDEC, 2006 and 2010). Magnesium and sodium are essential human nutrients. The presence of cobalt and nickel was not confirmed above the PALs during the second round of groundwater sampling; both total and dissolved sample results for cobalt were non-detect; and total and dissolved concentrations of nickel were detected below PALs. Arsenic (dissolved) and thallium (total) were also detected at SC-TU009-MW003 at concentrations above PALs. Arsenic and thallium were not detected at IRP Site 6 well 6MW22 located downgradient of SC-TU009-MW003. Arsenic concentrations are less than the NYSDEC Class GA (source of drinking water, groundwater) Water Quality Standards as specified in 6 NYCRR Part 703.

A BHHRA was conducted to provide a quantitative evaluation of the potential adverse health effects for current or future human receptors. Those individual COPCs determined to contribute a THQ above the USEPA threshold (1.0) or above USEPA's risk management range (1E-04 to 1E-06) for cancer are identified as human health COCs. The results of the BHHRA for Site TU009 indicate that noncancer health effects for manganese in groundwater yielded risks above the USEPA THQ threshold (1.0) for the residential and commercial/industrial worker scenarios. Groundwater risks are mainly attributed to manganese at SC-TU009-MW003. Manganese concentrations decreased further downgradient. Metals have been monitored as part of the Site 6 performance groundwater monitoring. Manganese has been detected in groundwater at Site 6 at concentrations exceeding NYSDEC Water Quality Standards (BEM Systems, 2016a). The presence of manganese in groundwater is not a result of a release from the WWTP Bypass UST area. Further, the Site 6 Site Management Plan indicates that use of groundwater underlying the property is prohibited without treatment rending it safe for intended use (BEM Systems, 2016b).

3.3.3 Summary

Site-related COPCs were not identified in soil or groundwater at Site TU009 resulting from releases from Site TU009 potential sources (TEC-Weston JV, 2017). NFRAP is recommended at Site TU009 based on absence of evidence of a release from the WWTP Bypass UST as follows:

- The only COC identified in soil based on the BHHRA is thallium, located crossgradient to the UST area in an isolated area.

- The only COC identified in groundwater is manganese. The presence of manganese in groundwater is not a result of a release from the WWTP Bypass UST.

- The perched groundwater underlying Site TU009 is not a source of drinking water.

(This page intentionally left blank)

4.0 SELECTED ACTION: NO FURTHER RESPONSE ACTION PLANNED

On the basis of the current conditions at Sites ZZ007, TU008, and TU009, site-related contaminants were not identified in soil or groundwater resulting from a release from potential sources. Site-related contaminant levels at Sites ZZ007, TU008, and TU009 do not pose a significant risk to human health and the environment; therefore, NFRAP is appropriate for these Sites. NYSDEC has concurred with this selected action (NYSDEC, 2017; **Attachment B**).

(This page intentionally left blank)

5.0 RESPONSIVENESS SUMMARY

NGB/A4OR has determined that Site-related contaminants were not identified in soil or groundwater resulting from a release from potential sources at Sites ZZ007, TU008, and TU009 and that Site-related contaminants do not pose a significant risk to human health and the environment.

5.1 STAKEHOLDER COMMENTS AND LEAD AGENCY RESPONSES

The Final RI Report for the Sites referenced in this DD was accepted by the NYSDEC (NYSDEC, 2017; **Attachment B**). The document states that the Sites require NFRAP because no spill or release had occurred, and the RI screening sample results were below applicable or relevant and appropriate requirement (ARAR) levels. Conditions at Sites ZZ007, TU008, and TU009 do not present an unacceptable risk to current or future receptors because the RI concluded that there are no site-related COPCs in soil or groundwater. This document serves as the NFRAP DD for Sites ZZ007, TU008, and TU009.

A public notice was published in a local newspaper, the *Daily Gazette*, on December 13, 2017 to provide the public the opportunity to comment on the proposed decision during a 30-day public comment period (December 13, 2017 through January 11, 2018). The affidavit of publication and a copy of the printed public notice is included in **Attachment A**. No written or verbal comments were received from the public during the 30-day comment period; therefore, community acceptance of this NFRAP DD is inferred.

5.2 TECHNICAL AND LEGAL ISSUES

Review of site history and historical analytical results have shown that no site-related contamination exists from Sites ZZ007, TU008, and TU009 that poses an unacceptable risk to human health or the environment. Because no site-related contaminants above unrestricted regulatory limits exist, CERCLA five-year reviews and land use restrictions are not necessary.

(This page intentionally left blank)

6.0 REFERENCES

AECOM. 2015. *Final Regional Compliance Restoration Program Preliminary Assessment/Site Inspection, Schenectady Air National Guard Base, Scotia, New York.* August 2015.

ANG (Air National Guard). 2006. *Phase 1 Environmental Baseline Survey at the 109th Airlift Wing, New York Air National Guard, Stratton Air National Guard Base, Schenectady County, Scotia, New York*. October 2006.

ANG. 2014. About the 109th Airlift Wing fact sheet 1/7/2014. http://www.109aw.ang.af.mil/resources/factsheets/factsheet.asp?id=12587. Accessed December 2015.

Aneptek (Aneptek Corporation). 2000. *Final Remedial Investigation Report, Site 2 – Site 3 – Site 6, 109th Airlift Wing, New York Air National Guard, Stratton Air National Guard Base, Scotia, New York (Volumes I and II)*. September 2000.

BB&E. 2011. *Memorandum: PA/SI Trip Report – 109th Airlift Wing, New York Air National Guard, Stratton Air National Guard Base, Schenectady, New York.* 27 May 2011.

BB&E. 2016. *Final Perfluorinated Compounds Preliminary Assessment Site Visit Report, New York Air National Guard, Schenectady Air National Guard Base, Scotia, New York*. March 2016.

BEM Systems (Balanced Environmental Management Systems). 2012. *Data Gap Investigation Technical Memorandum for Sites 3 and 6 for the 109th Airlift Wing, Schenectady Air National Guard Base (SANGB), Scotia, New York.* February 2012.

BEM Systems. 2013. *Final Remedial Action Work Plan, Sites 3 and 6, 109th Airlift Wing, Schenectady Air National Guard Base, Scotia, NY,* Site No. 447022. April 2013.

BEM Systems. 2014. *Second Injection Plan Final Remedial Action Work Plan, Sites 3 and 6, 109th Airlift Wing, Schenectady Air National Guard Base, Scotia, NY,* Site No. 447022. April 2014.

BEM Systems. 2016a. *Final Remedial Action Completion/Final Engineering Report for Groundwater at Site 6, Schenectady Air National Guard Base.* February 2016.

BEM Systems. 2016b. *Final Site Management Plan, Report for Groundwater at Site 6, Schenectady Air National Guard Base.* March 2016.

DoD (Department of Defense). 2012. Defense Environmental Restoration Program (DERP) Management Manual. Number 4715.20. March 2012.

Earth Tech Northeast, Inc. 2007. *Final Interim Removal Action Completion Report Site 3 & Site 6, New York Air National Guard, Schenectady Air National Guard Base, Scotia, New York*. December 2007.

ECATS (Environmental Consulting and Training Services). 2003. Final Environmental Assessment for Proposed Short-Term. 2003.

FEMA (Federal Emergency Management Agency). 2014. Flood Insurance Rate Map (FIRM) for Schenectady County, New York. Map Number 36093C0156D. Effective January 8, 2014.

Hueber Hares Glavin, Architects/Landscape Architects/Engineers. 1997. Master Plan. 109th Airlift Wing. New York Air National Guard. Scotia, New York. Schenectady County Airport. August 1997.

Leidos. 2017. *Final Remedial Action Completion Report for Installation Restoration Program Site 6 (Suspected Spill Area), 109th Airlift Wing, Stratton Air National Guard Base (SANGB), Scotia, New York.* March 2017.

NYSDEC (New York State Department of Environmental Conservation). 1994. *Technical and Administrative Guidance Memorandum (TAGM) 4046; Determination of Soil Cleanup Objectives and Cleanup Levels*. January 1994 updated 2000.

NYSDEC. 1998. NYSDEC Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (http://www.dec.ny.gov/docs/water_pdf/togs111.pdf). 1998.

NYSDEC. 2006. 6 NYCRR Part 375. (http://www.dec.ny.gov/docs/remediation_hudson_pdf/part375.pdf). December 2006.

NYSDEC. 2010. CP-51 Soil Cleanup Guidance. (http://www.dec.ny.gov/docs/remediation_hudson_pdf/cpsoil.pdf). October 2010.

NYSDEC. 2015a. Regarding Air National Guard Stratton, Site No.: 447022, Concurrence letter for the Remedial Action Completion Report for Soil at Sites 3 and 6, dated March 2015.

NYSDEC. 2015b. Regarding Air National Guard Stratton, Site No.: 447022, Concurrence letter for the Compliance Restoration Program Preliminary Assessment/Site Inspection, August 2015. September 16, 2105.

NYSDEC. 2017. Concurrence Letter for the Final Remedial Investigation Report, Sites ZZ007, TU008, TU009 at Schenectady Air National Guard Base, Site #447022, June 2017. Letter dated August 17, 2017.

SCEDPD (Schenectady County Economic Development and Planning Department). 2015. Town of Glenville, Schenectady County, New York Zoning Map. May. Available from: http://townofglenville.org/ Public_Documents/GlenvilleNY_Planning/index. 2015.

USDA (U.S. Department of Agriculture), Natural Resources Conservation Service (NRCS). 2015. Web Soil Service. *http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.* Accessed December 2015.

TEC-Weston Joint Venture (TEC-Weston JV). 2017. *Final Remedial Investigation Report, ZZ007, TU008, and TU009 at Schenectady Air National Guard Base, Scotia, New York.* June 2017.

USEPA. 2016a. Regional Screening Levels (RSLs) – Generic Tables (May 2016). https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2016. May 2016.

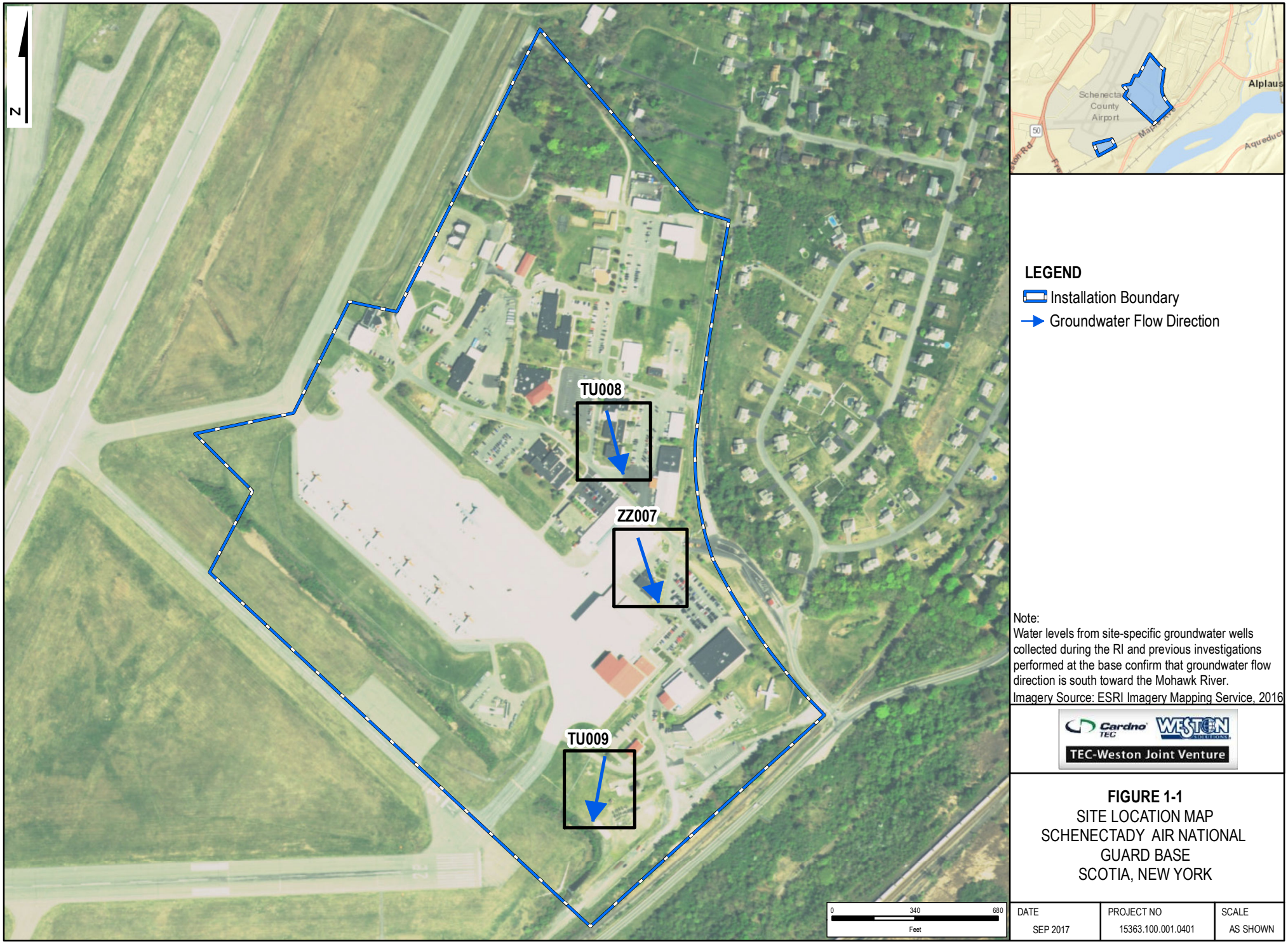
USEPA. 2016b. National Primary Drinking Water Regulations (NPDWR). (https://www.epa.gov/ground-water-and-drinking-water/table-regulated-drinking-water-contaminants). 2016.

Note:
AR records can be accessed at http://afcec.publicadmin-record.us.af.mil/.

(This page intentionally left blank)

FIGURES

(This page intentionally left blank)



LEGEND

- Installation Boundary
- Groundwater Flow Direction

Note:
Water levels from site-specific groundwater wells collected during the RI and previous investigations performed at the base confirm that groundwater flow direction is south toward the Mohawk River.

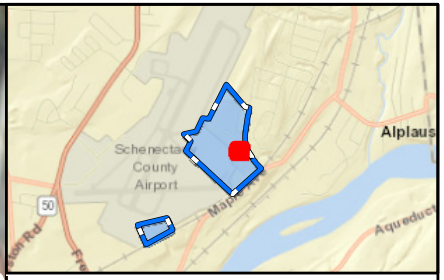
Imagery Source: ESRI Imagery Mapping Service, 2016

TEC-Weston Joint Venture

FIGURE 1-1
SITE LOCATION MAP
SCHENECTADY AIR NATIONAL GUARD BASE
SCOTIA, NEW YORK

DATE	PROJECT NO	SCALE
SEP 2017	15363.100.001.0401	AS SHOWN

FILE: Y:\ANG_NE_Sites\Schenectady_ANG\MXD\Decision_Document\SiteLocation_DD.mxd 11:25:48 AM 9/26/2017 ricksc



LEGEND

- Demolished Building
- Installation Boundary
- Groundwater Flow Direction

Note:
Water levels from site-specific groundwater wells collected during the RI and previous investigations performed at the base confirm that groundwater flow direction is south toward the Mohawk River.

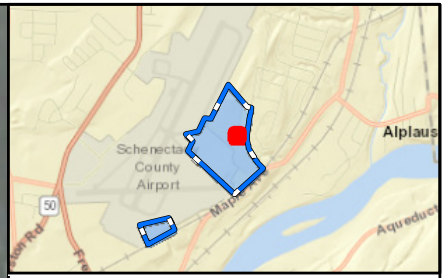
Imagery Source: ESRI Imagery Mapping Service, 2016

Cardno TEC | WESTON SOLUTIONS
TEC-Weston Joint Venture

FIGURE 1-2
SITE LAYOUT MAP
SITE ZZ007 - FORMER BUILDING 13 AREA
SCHENECTADY AIR NATIONAL GUARD BASE
SCOTIA, NEW YORK

DATE	PROJECT NO	SCALE
SEP 2017	15363.100.001.0401	AS SHOWN

FILE: Y:\ANG_NE_Sites\Schenectady_ANG\MXD\Decision_Document\SiteLayout_ZZ007_DD.mxd 3:09:46 PM 9/27/2017 johna



LEGEND

- Former Heating Oil UST #41 Area
- Demolished Building
- Installation Boundary
- Groundwater Flow Direction

Note:
Water levels from site-specific groundwater wells collected during the RI and previous investigations performed at the base confirm that groundwater flow direction is south toward the Mohawk River

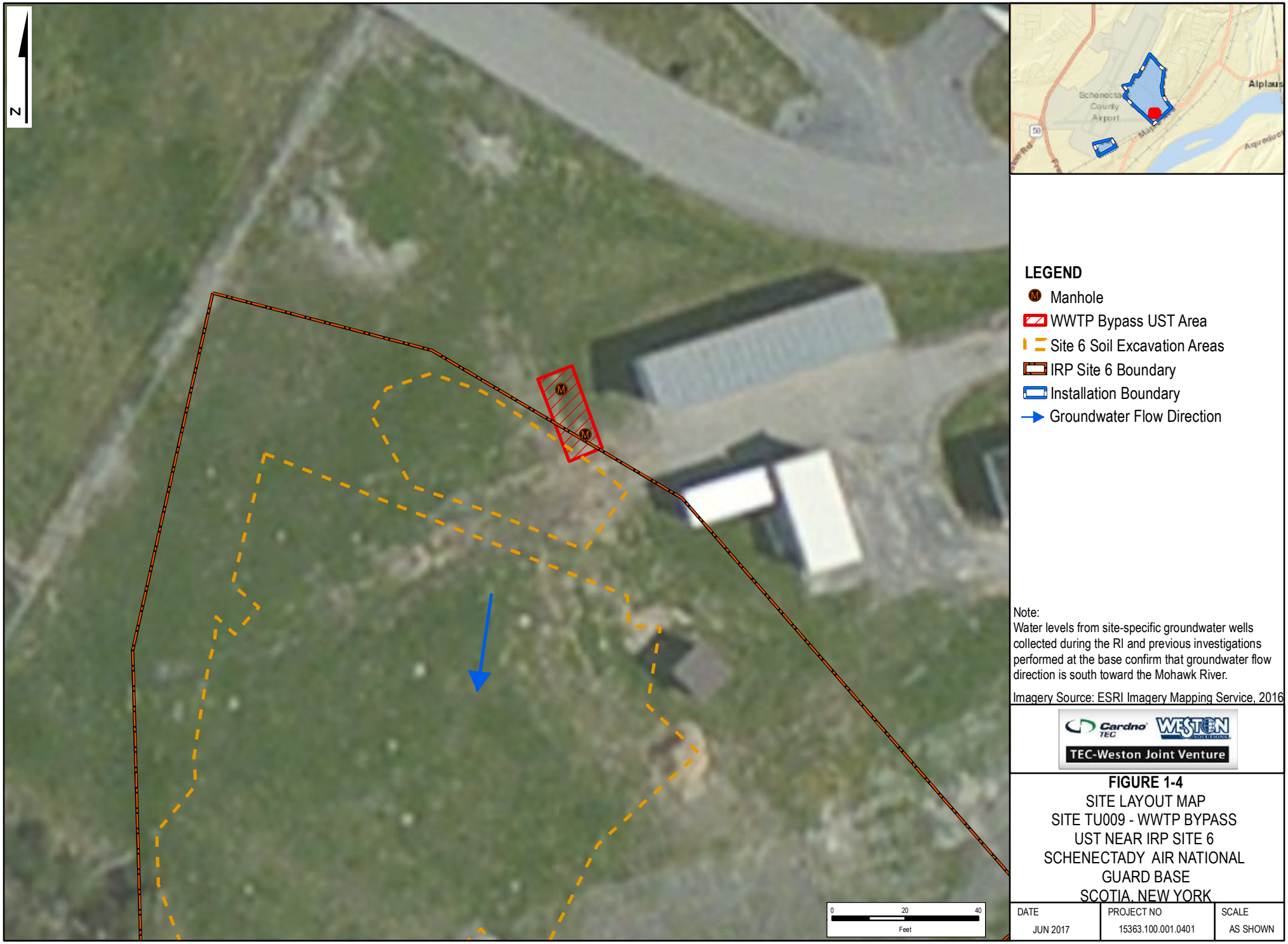
Imagery Source: ESRI Imagery Mapping Service, 2016

Cardno TEC | WESTON SOLUTIONS
TEC-Weston Joint Venture

FIGURE 1-3
SITE LAYOUT MAP
SITE TU008 - FORMER HEATING OIL UST #41 AT FORMER BUILDING 4
SCHENECTADY AIR NATIONAL GUARD BASE
SCOTIA, NEW YORK

DATE	PROJECT NO	SCALE
SEP 2017	15363.100.001.0401	AS SHOWN

FILE: Y:\ANG_NE_Sites\Schenectady_ANG\MXD\Decision_Document\SiteLayout_TU008_DD.mxd 3:07:47 PM 9/27/2017 johna



Note:
Water levels from site-specific groundwater wells collected during the RI and previous investigations performed at the base confirm that groundwater flow direction is south toward the Mohawk River.

Imagery Source: ESRI Imagery Mapping Service, 2016

Cardno TEC | WESTON SOLUTIONS
TEC-Weston Joint Venture

FIGURE 1-4
SITE LAYOUT MAP
SITE TU009 - WWTP BYPASS UST NEAR IRP SITE 6
SCHENECTADY AIR NATIONAL GUARD BASE
SCOTIA, NEW YORK

DATE	PROJECT NO	SCALE
JUN 2017	15363.100.001.0401	AS SHOWN

FILE: Y:\ANG_NE_Sites\Schenectady_ANG\MXD\Decision_Document\SiteLayout_TU009_DD.mxd 10:13:59 AM 6/16/2017 johna

Note:
- Water levels from site-specific groundwater wells collected during the RI and previous investigations performed at the base confirm that groundwater flow direction is south toward the Mohawk River.
- PA/SI sampling locations provided by others, survey control is not available.
- Inset box background appears greyed out because resolution of the aerial image displaying asphalt pavement where samples are located is reduced at the zoom level used.

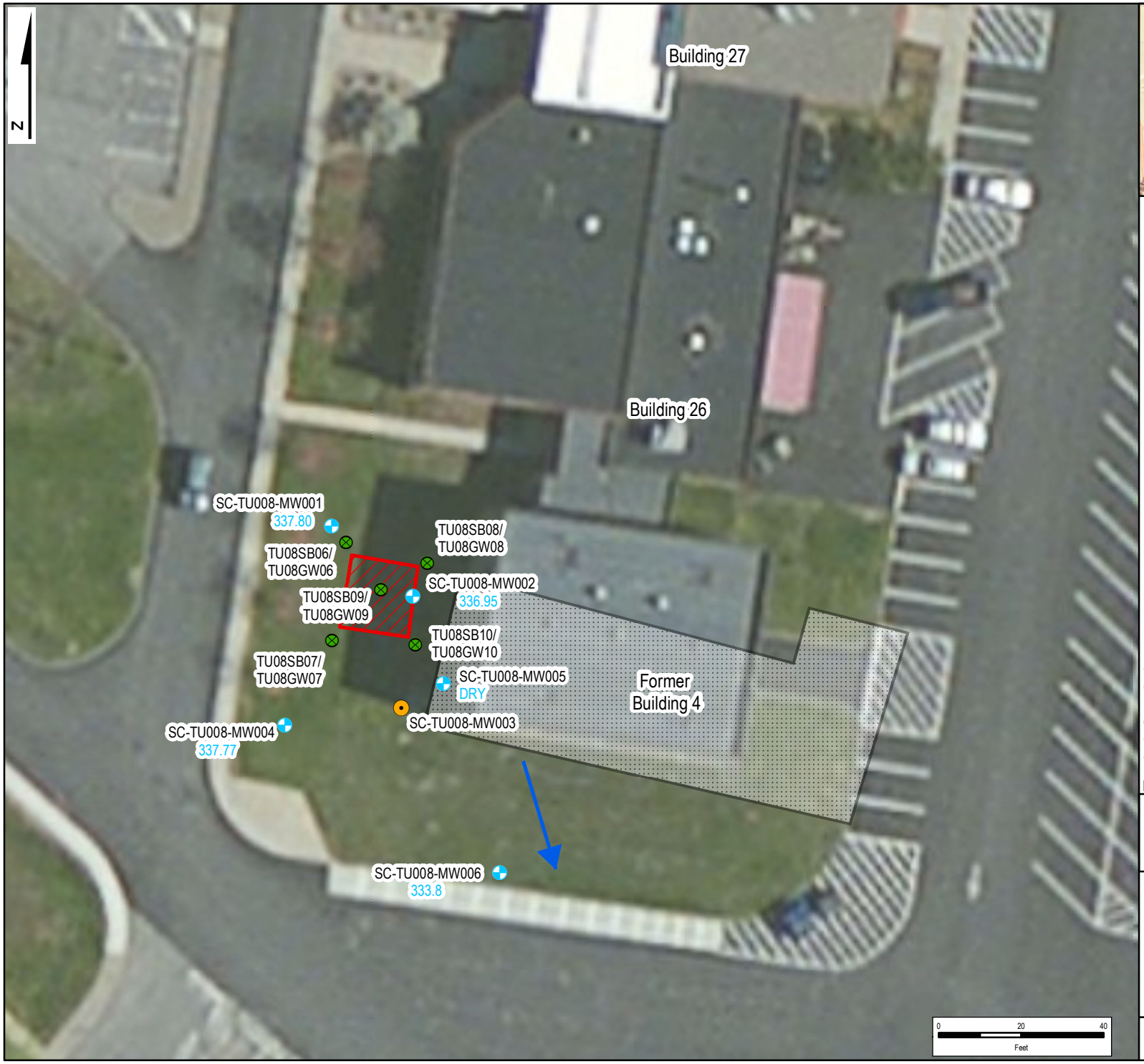
Imagery Source: ESRI Imagery Mapping Service, 2016

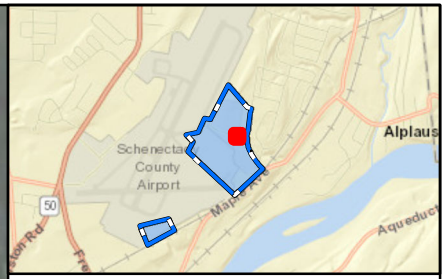
Cardno TEC | WESTON SOLUTIONS
TEC-Weston Joint Venture

FIGURE 3-1
SAMPLE LOCATION MAP
SITE ZZ007 - FORMER
BUILDING 13 AREA
SCHENECTADY AIR NATIONAL
GUARD BASE
SCOTIA, NEW YORK

DATE	PROJECT NO	SCALE
SEP 2017	15363.100.001.0401	AS SHOWN

FILE: Y:\ANG_NE_Sites\Schenectady_ANG\MXD\Decision_Document\SurveyedLocs_ZZ007_DD.mxd 11:33:29 AM 9/26/2017 ricksc





LEGEND

- 2016 RI Soil Boring Location (Monitoring Well not installed due to poor groundwater yield)
- 2016 RI Soil and Permanent Monitoring Well Location
- 2014 PA/SI Sampling Locations
- Former Heating Oil UST #41 Area
- Demolished Building
- Installation Boundary
- 337.77 November 2016 Groundwater Elevation (ft AMSL)
- Groundwater Flow Direction

Note:
- Water levels from site-specific groundwater wells collected during the RI and previous investigations performed at the base confirm that groundwater flow direction is south toward the Mohawk River.
- PA/SI sampling locations provided by others, survey control is not available.

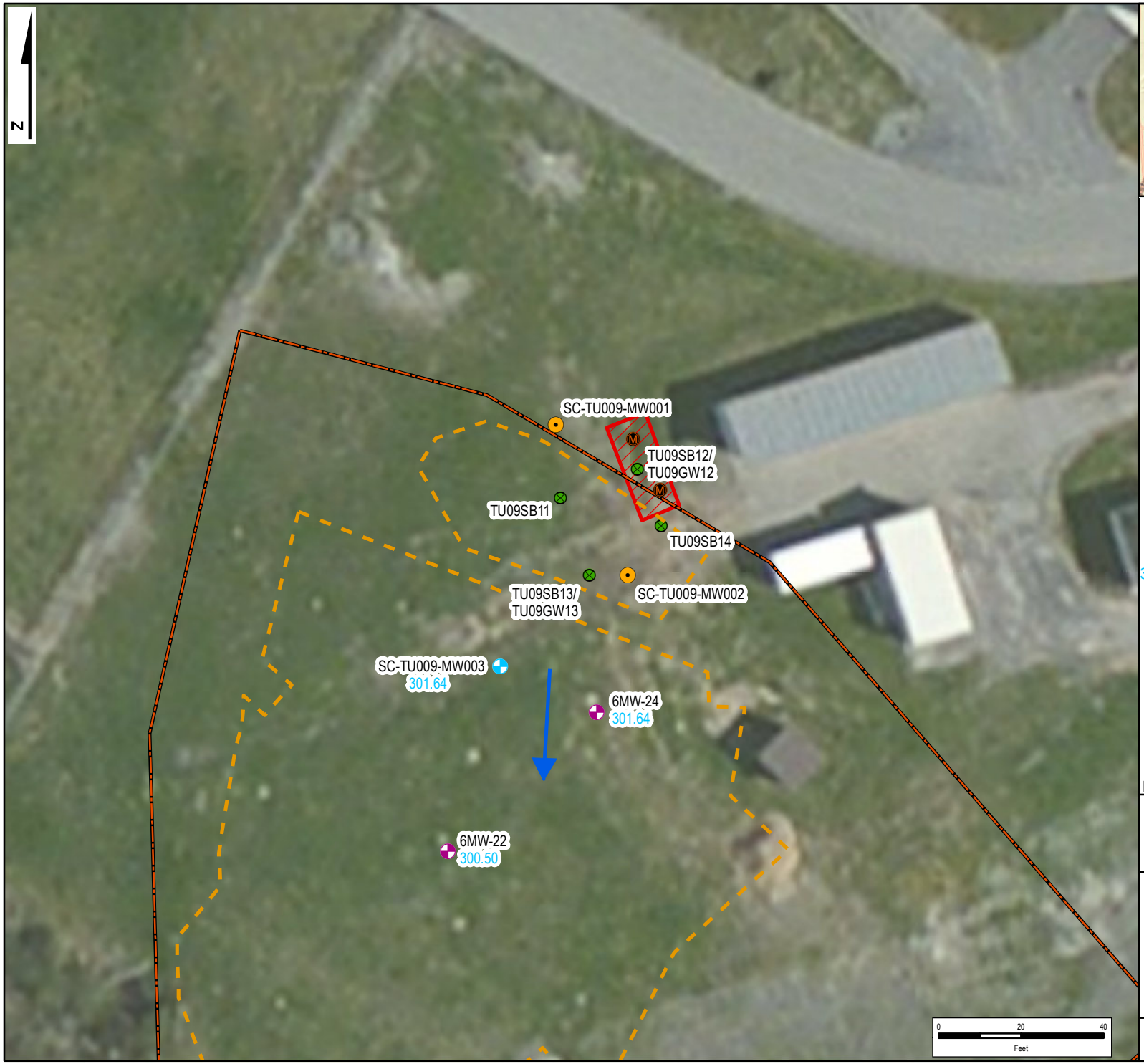
Imagery Source: ESRI Imagery Mapping Service, 2016

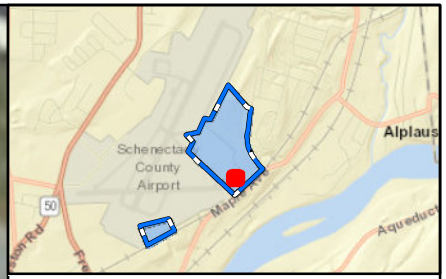
Cardno TEC WESTON SOLUTIONS
TEC-Weston Joint Venture

FIGURE 3-2
SAMPLE LOCATION MAP
SITE TU008 - FORMER HEATING OIL UST #41 AT FORMER BUILDING 4
SCHENECTADY AIR NATIONAL GUARD BASE
SCOTIA, NEW YORK

DATE	PROJECT NO	SCALE
SEP 2017	15363.100.001.0401	AS SHOWN

FILE: Y:\ANG_NE_Sites\Schenectady_ANG\MXD\Decision_Document\SurveyedLocs_TU008_DD.mxd 12:35:13 PM 9/26/2017 ricksc





LEGEND

- Site 6 Monitoring Well Location
- 2016 RI Soil Boring Location (Monitoring Well not installed due to poor groundwater yield)
- 2016 RI Soil Boring and Permanent Monitoring Well Location
- Manhole
- 2014 PA/SI Sampling Locations
- WWTP Bypass UST Area
- Site 6 Soil Excavation Areas
- IRP Site 6 Boundary
- Installation Boundary
- 330.83 June 2016 Groundwater Elevation (ft AMSL)
- Groundwater Flow Direction

Note:
- Water levels from site-specific groundwater wells collected during the RI and previous investigations performed at the base confirm that groundwater flow direction is south toward the Mohawk River.
- PA/SI sampling locations provided by others, survey control is not available.

Imagery Source: ESRI Imagery Mapping Service, 2016

Cardno TEC WESTON SOLUTIONS
TEC-Weston Joint Venture

FIGURE 3-3
SAMPLE LOCATION MAP
SITE TU009 - WWTP BYPASS
UST NEAR IRP SITE 6
SCHENECTADY AIR NATIONAL
GUARD BASE
SCOTIA, NEW YORK

DATE	PROJECT NO	SCALE
JUN 2017	15363.100.001.0401	AS SHOWN

FILE: Y:\ANG_NE_Sites\Schenectady_ANG\MXD\Decision_Document\SurveyedLocs_TU009_DD.mxd 10:11:48 AM 6/20/2017 johna

TABLES

(This page intentionally left blank)

Table 3-1
Soil Sample Analytical Results, Site Inspection
Site ZZ007 - Former Building 13 Area
Schenectady Air National Guard Base
Scotia, New York

Location	NYSDEC 375-6 Soil Cleanup Objectives (Unrestricted)	ZZ007							
Sample ID		ZZ07SB01	ZZ07SB01	ZZ07SB02	ZZ07SB03	ZZ07SB03	ZZ07SB04	ZZ07SB04	ZZ07SB05
Sample Date		11/13/2014	11/13/2014	11/13/2014	11/13/2014	11/13/2014	11/13/2014	11/13/2014	11/13/2014
Sample Depth (ft bgs)		2 - 6	6 - 8	2 -4	2 -4	6 - 9	2 - 4	6 - 8	1 - 3
Media		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
VOCs (µg/kg)									
1,2,4-Trimethylbenzene	**3600**	**2.1**	28 U	0.48 U	**0.26 J**	0.49 U	0.53 U	**0.16 J**	0.55 U
1,3,5-Trimethylbenzene	**8400**	**0.95 J**	28 U	0.48 U	0.49 U	0.49 U	0.53 U	0.48 U	0.55 U
1,4-Dichlorobenzene	**9800**	0.2 U	28 U	0.19 U	**0.17 J**	**0.2 J**	0.21 U	**0.17 J**	0.22 U
2-Butanone (MEK)	**120**	**4.6 J**	280 U	4.8 U	**2.6 J**	4.9 U	**2.2 J**	**2.7 J**	**2.2 J**
4-Isopropyltoluene	**10000**	**0.47 J**	28 U	0.48 U	0.49 U	0.49 U	0.53 U	0.48 U	0.55 U
Acetone	**50**	**36**	280 U	**18**	**27**	**4.7 J**	**26**	**46**	**35**
Benzene	**60**	**3.1**	28 U	**0.2 J**	**0.21 J**	**0.16 J**	**0.3 J**	**0.18 J**	**0.2 J**
Carbon Disulfide	NS	**3.4**	28 U	**0.51 J**	**2.2**	**0.6 J**	**0.76 J**	**0.68 J**	**1.5**
cis-1,2-Dichloroethene	**5900**	**1.2**	28 U	0.48 U	0.49 U	0.49 U	0.53 U	0.48 U	0.55 U
Dichlorodifluoromethane	NS	**0.46 J**	28 U	0.48 U	0.49 U	0.49 U	0.53 U	0.48 U	0.71 J
Ethylbenzene	**1000**	**0.99**	28 U	**0.55 J**	**0.63 J**	**0.48 J**	**0.83 J**	**0.71 J**	**0.6 J**
Isopropylbenzene	**2300**	**0.99**	28 U	0.19 U	0.19 U	0.2 U	0.21 U	0.19 U	0.22 U
Methylene Chloride	**50**	0.98 U	31 UJ	0.96 U	0.97 UJ	0.98 U	1.1 U	5.8 UJ	**10**
n-Butylbenzene	**12000**	**5**	210 UJ	0.48 U	0.49 U	0.49 U	0.53 U	0.48 U	0.55 U
n-Propylbenzene	**3900**	**1.3**	28 U	0.48 U	0.49 U	0.49 U	0.53 U	0.48 U	0.55 U
sec-Butylbenzene	**11000**	**4.1**	28 U	0.48 U	0.49 U	0.49 U	0.53 U	0.48 U	0.55 U
tert-Butylbenzene	**5900**	**1.7**	28 U	0.48 U	0.49 U	0.49 U	0.53 U	0.48 U	0.55 U
Toluene	**700**	**4.5**	28 U	**2.4**	**2.6**	**2**	**3.2**	**2.4**	**2.2**
Vinyl Chloride	**20**	**0.64 J**	28 U	0.48 U	0.49 U	0.49 U	**0.4 J**	0.48 U	0.55 U
Xylene, Meta + Para	**260**	**3.2**	57 U	**2.3**	**2.5**	**1.9 J**	**3.3**	**2.7**	**2.2 J**
Xylene, Ortho	**260**	**0.84 J**	28 U	**0.51 J**	**0.51 J**	**0.5 J**	**0.94 J**	**0.62 J**	**0.54 J**
SVOCs (µg/kg)									
Benzo(b)fluoranthene	**1700**	10 U	8.9 U	11 U	**2.6 J**	8.9 U	11 U	9.4 U	11 U
Bis(2-ethylhexyl) Phthalate	NS	**24 J**	**18 U**	**22 J**	**24 J**	**14 J**	**17 J**	19 U	**24 J**
Metals (mg/kg)									
Aluminum, Total	NS	**16000**	**16000**	**19000**	**22000**	**16000**	**17000**	**17000**	**21000**
Calcium, Total	NS	**6200**	**1500**	**1600**	**1200**	**1400**	**1700**	**1600**	**1100**
Iron, Total	NS	**31000**	**45000**	**43000**	**41000**	**46000**	**32000**	**47000**	**42000**
Magnesium, Total	NS	**5300**	**7700**	**6000**	**4000**	**7400**	**3800**	**7500**	**4500**
Potassium, Total	NS	**2100**	**3000**	**2400**	**2300**	**2700**	**1600**	**2900**	**1900**
Sodium, Total	NS	**85**	**67**	**88**	**83**	**65**	**110**	**92**	**180**
Antimony, Total	NS	**0.35**	**0.65**	**0.53**	**0.55**	**0.66**	**0.39**	**0.83**	**0.63**
Arsenic, Total	**13**	**7.3**	**13**	**8.9**	**8.3**	**12**	**7.9**	**14**	**9.1**
Barium, Total	**350**	**110**	**150**	**100**	**120**	**120**	**84**	**120**	**110**
Beryllium, Total	**7.2**	**0.56**	**0.67**	**0.72**	**0.69**	**0.72**	**0.69**	**0.77**	**0.56**
Cadmium, Total	**2.5**	**0.15**	**0.27**	**0.14**	**0.078**	**0.21**	**0.11**	**0.4**	**0.033 J**
Chromium, Total	**30**	**20**	**24**	**25**	**25**	**24**	**20**	**24**	**27**
Cobalt, Total	NS	**12**	**22**	**12**	**9.5**	**22**	**11**	**23**	**8.1**
Copper, Total	**50**	**32**	**46**	**36**	**37**	**44**	**25**	**44**	**37**
Lead, Total	**63**	**15**	**21**	**16**	**18**	**21**	**16**	**24**	**18**
Manganese, Total	**1600**	**530**	**980**	**350**	**510**	**900**	**750**	**990**	**280**
Nickel, Total	**30**	**29**	**56**	**37**	**20**	**48**	**21**	**64**	**24**
Selenium, Total	**3.9**	**0.39**	**0.75**	**0.5**	**0.31**	**0.9**	**0.26**	**0.61**	**0.2**
Silver, Total	**2**	**0.042 J**	**0.066 J**	**0.06 J**	**0.042 J**	**0.074 J**	**0.071**	**0.085 J**	**0.04 J**
Thallium, Total	NS	**0.2**	**0.26**	**0.23 J**	**0.27**	**0.22 J**	**0.17**	**0.27**	**0.26**
Vanadium, Total	NS	**24**	**23**	**28**	**29**	**22**	**27**	**22**	**29**
Zinc, Total	**109**	**78 B**	**130 B**	**88 B**	**74 B**	**110 B**	**68 B**	**120 B**	**70 B**
Mercury, Total	**0.18**	**0.051**	**0.069**	**0.067**	**0.094**	**0.074**	**0.039 J**	**0.09**	**0.089**

Table 3-1
Soil Sample Analytical Results, Site Inspection
Site ZZ007 - Former Building 13 Area
Schenectady Air National Guard Base
Scotia, New York

Notes:	Only compounds detected one or more times are presented in table
	Bold indicates value above laboratory detection limit.
	Shading indicates value above screening criteria.
	µg/kg = micrograms/kilogram
	mg/kg = milligrams/kilogram
	NS = No screening criteria available
Data Qualifiers:	J = Estimated concentration
	U = Not detected at concentration shown, the associated number indicates the analyte LOD
	UJ = Not detected at estimated concentration shown, the quantitation is an estimated value below the LOQ
	B = Analyte in the method blank

Table and notes taken directly from AECOM. 2015. Final Regional Compliance Restoration Program Preliminary Assessment/Site Inspection, Schenectady Air National Guard Base, Scotia, New York. August 2015.

Table 3-2
Soil Sample Analytical Results, Remedial Investigation
Site ZZ007 - Former Building 13 Area
Schenectady Air National Guard Base
Scotia, New York

Analyte	CAS Number	2016 USEPA Residential RSL[a]	6 NYCRR Part 375 Unrestricted Use SCO[b]	6 NYCRR Part 375 Residential Use SCO/ NYSDEC CP-51 Residential SSCO[b,c]	PAL		Location ID:	SC-ZZ007-MW001		SC-ZZ007-MW001		SC-ZZ007-MW002		SC-ZZ007-MW002		SC-ZZ007-MW003		SC-ZZ007-MW003		SC-ZZ007-MW003	
							Field Sample ID:	SC-ZZ007-MW001-S0103		SC-ZZ007-MW001-S0506		SC-ZZ007-MW002-S0102		SC-ZZ007-MW002-S0607		SC-ZZ007-MW003-S0002		SC-ZZ007-MW003-S0204		SC-ZZ007-MW003-S0204-D	
							Date:	6/1/2016		6/1/2016		6/1/2016		6/1/2016		6/2/2016		6/2/2016		6/2/2016	
							Lab Sample ID:	280-84062-1		280-84062-2		280-84062-3		280-84062-4		280-84062-5		280-84062-6		280-84062-7	
							Depth (ft bgs):	1 - 3		5 - 6		1 - 2		6 - 7		0 - 2		2 - 4		2 - 4	
Metals by 6010C/7471A																					
Aluminum	7429-90-5	77000	NP	NP	77000	mg/kg		**17000**		**15000**		**15000**		**14000**		**11000**		**10000**		**13000**	
Antimony	7440-36-0	31	NP	NP	31	mg/kg		1.4	U	1.3	U	1.4	U	1.7	U	1.4	U	1.3	U	1.5	U
Arsenic	7440-38-2	0.68	13	16	13	mg/kg		**6.3**		**9.2**		**6.5**		**8.2**		**6.8**		**11**		**8.2**	
Barium	7440-39-3	15000	350	350	350	mg/kg		**83**		**110**		**58**		**96**		**65**		**64**		**70**	
Beryllium	7440-41-7	160	7.2	14	7.2	mg/kg		**0.96**		**0.91**		**0.7**		**0.75**		**0.63**		**0.67**		**0.86**	
Cadmium	7440-43-9	71	2.5	2.5	2.5	mg/kg		**0.14**	J	**0.29**	J	**0.081**	J	**0.16**	J	**0.38**	J	**0.33**	J	**0.25**	J
Calcium	7440-70-2	NP	NP	NP	NP	mg/kg		**1100**		**1800**		**1600**		**2100**		**3900**		**36000**	J	**8000**	J
Chromium	7440-47-3	120000	30	36	30	mg/kg		**20**		**24**		**19**		**19**		**18**		**17**		**21**	
Cobalt	7440-48-4	23	NP	30 (SSCO)	30	mg/kg		**12**		**17**		**12**		**12**		**11**		**14**		**13**	
Copper	7440-50-8	3100	50	NP	50	mg/kg		**18**		**41**		**35**		**33**		**29**		**33**		**40**	
Iron	7439-89-6	55000	NP	2000 (SSCO)	2000	mg/kg		**26000**		**35000**		**25000**		**30000**		**24000**		**26000**		**35000**	
Lead	7439-92-1	400	63	400	63	mg/kg		**21**		**15**		**11**		**12**		**23**		**28**		**26**	
Magnesium	7439-95-4	NP	NP	NP	NP	mg/kg		**3200**		**6500**		**3800**		**4900**		**4600**		**20000**	J	**7300**	J
Manganese	7439-96-5	1800	1600	2000	1600	mg/kg		**640**		**710**		**350**		**410**		**460**		**680**		**550**	
Nickel	7440-02-0	1500	30	140	30	mg/kg		**18**		**47**		**26**		**34**		**23**		**33**		**33**	
Potassium	7440-09-7	NP	NP	NP	NP	mg/kg		**1600**		**2900**		**1700**		**2000**		**1700**		**1800**		**1900**	
Selenium	7782-49-2	390	3.9	36	3.9	mg/kg		2.8	U	2.6	U	2.8	U	3.4	U	2.9	U	2.7	U	2.9	U
Silver	7440-22-4	390	2	36	2	mg/kg		0.56	U	0.52	U	0.56	U	0.69	U	0.57	U	0.54	U	0.58	U
Sodium	7440-23-5	NP	NP	NP	NP	mg/kg		**61**	J	**72**	J	**110**	J	**74**	J	**89**	J	**140**	J	**130**	J
Thallium	7440-28-0	0.78	NP	NP	0.78	mg/kg		**0.78**	J	**0.66**	J	**0.78**	J	**1.3**	J	**0.82**	J	2.2	U	**0.87**	J
Vanadium	7440-62-2	390	NP	100 (SSCO)	100	mg/kg		**34**		**26**		**22**		**25**		**21**		**19**		**24**	
Zinc	7440-66-6	23000	109	2200	109	mg/kg		**59**		**80**		**63**		**73**		**88**		**76**		**90**	
Mercury	7439-97-6	9.4	0.18	0.81	0.18	mg/kg		**0.05**		**0.059**		**0.059**		**0.066**		**0.062**		**0.14**	J	**0.078**	J

Notes:
Bold indicates value above laboratory detection limit.
Shading indicates value above PAL.

PAL References:
a - USEPA May 2016 Residential RSL (THQ=1, TR-1E-06) (http://www2.epa.gov/risk/risk-based-screening-table-generic-tables)
b - 6 NYCRR Part 375, December 2006 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/part375.pdf)
c - NYSDEC CP-51 Soil Cleanup Guidance, October 2010 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/cpsoil.pdf)

Data Flags:
J – Result is estimated.
U – Analyte is not detected at or above the Limit of Detection.

CAS	Chemical Abstracts Service
CP	Commissioner Policy
D	Duplicate sample
ft bgs	Feet below ground surface
ID	Identification
mg/kg	Milligram per kilogram
MW	Monitoring well
NP	Not published
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
PAL	Project action limit
RSL	Regional Screening Level
SC	Schenectady Air National Guard Base
SCO	Soil Cleanup Objective
SSCO	Supplemental Soil Cleanup Objective
USEPA	U.S. Environmental Protection Agency
ZZ007	Former Building 13 Area

Table 3-3
Groundwater Sample Analytical Results, Site Inspection
Site ZZ007 - Former Building 13 Area
Schenectady Air National Guard Base
Scotia, New York

Location	NYSDEC TOGS Ambient Water Quality Standards and Guidance Values	ZZ007		
Sample ID		MWUNK	ZZ07GW02	ZZ07GW05
Sample Date		11/18/2014	11/13/2014	11/13/2014
Media		Groundwater	Groundwater	Groundwater
VOCs (µg/L)				
2-Butanone (MEK)	**50**	1 U	**1.2 J**	**4.5 J**
2-Hexanone	**50**	1 U	1 U	**1.3 J**
Carbon Disulfide	NS	0.2 U	0.2 U	**2.8 J**
cis-1,2-Dichloroethene	**5**	0.5 U	**0.19 J**	**0.25 J**
Ethylbenzene	**5**	0.2 U	0.2 U	**0.4 J**
Methylene Chloride	**5**	**0.73 J**	1 U	1 U
Naphthalene	**10***	0.5 U	0.5 U	**0.25 J**
Xylene, Meta + Para	**5**	0.4 U	0.4 U	**1.8 J**
Xylene, Ortho	**5**	0.5 U	0.5 U	**0.9 J**
SVOCs (µg/L)				
Benzyl Alcohol	NS	**0.05 J**	0.2 U	1 U
Bis(2-ethylhexyl) Phthalate	**5**	**0.71**	**0.86 J**	**1.7 J**
Butyl Benzyl Phthalate	**50**	**0.07 J**	0.4 U	2 U
Diethyl Phthalate	**50**	**0.2 J**	0.5 U	2.5 U
Dimethyl Phthalate	**50**	**0.1 J**	0.2 U	1 U
Di-n-butyl Phthalate	**50**	**0.28 J**	**0.29 J**	10 U
Naphthalene	**10***	0.1 U	**0.063 J**	1 U
Phenanthrene	**50**	0.1 U	**0.17 J**	1 U
Metals (µg/L)				
Aluminum, Dissolved	NS	50 U	**130000**	**160000**
Aluminum, Total	NS	**92 J**	**240000**	**310000**
Calcium, Dissolved	NS	**92000**	**650000**	**1300000**
Calcium, Total	NS	**89000**	**2000000**	**3100000**
Iron, Dissolved	**300***	**80**	**310000**	**490000**
Iron, Total	**300***	**730**	**660000**	**1000000**
Magnesium, Dissolved	**35000**	**36000**	**120000**	**210000**
Magnesium, Total	**35000**	**35000**	**310000**	**440000**
Potassium, Dissolved	NS	**2300**	**23000**	**27000**
Potassium, Total	NS	**2200**	**32000**	**38000**
Sodium, Dissolved	**20000**	**43000**	**11000**	**8900**
Sodium, Total	**20000**	**40000**	**14000**	**12000**
Antimony, Dissolved	**3**	0.21 J	2.5 U	**1.3 J**
Antimony, Total	**3**	0.5 U	**2.5 J**	**1.6 J**
Arsenic, Dissolved	**25**	**0.41 J**	**140**	**240**
Arsenic, Total	**25**	**0.78 J**	**220**	**340**
Barium, Dissolved	**1000**	**61**	**1500**	**1200**
Barium, Total	**1000**	**77**	**2900**	**2500**
Beryllium, Dissolved	**3**	0.4 U	**11**	**12**
Beryllium, Total	**3**	0.4 U	**22**	**22**
Cadmium, Dissolved	**5**	**0.091 J**	**2.9**	**5.5**
Cadmium, Total	**5**	**0.28 J**	**9.9 J**	**13 J**
Chromium, Dissolved	**50**	**0.2 J**	**460**	**320**
Chromium, Total	**50**	**0.82 J**	**1200**	**610**

Table 3-3
Groundwater Sample Analytical Results, Site Inspection
Site ZZ007 - Former Building 13 Area
Schenectady Air National Guard Base
Scotia, New York

Location	NYSDEC TOGS Ambient Water Quality Standards and Guidance Values	ZZ007		
Sample ID		MWUNK	ZZ07GW02	ZZ07GW05
Sample Date		11/18/2014	11/13/2014	11/13/2014
Media		Groundwater	Groundwater	Groundwater
Cobalt, Dissolved	NS	**0.12 J**	**230**	**220**
Cobalt, Total	NS	**0.6 J**	**490**	**430**
Copper, Dissolved	**200**	**1.4**	**580**	**1000**
Copper, Total	**200**	**2.4**	**1500**	**1900**
Lead, Dissolved	**25**	0.5 U	**220**	**310**
Lead, Total	**25**	**0.31 J**	**570**	**640**
Manganese, Dissolved	**300***	**140**	**11000**	**7200**
Manganese, Total	**300***	**910**	**34000**	**46000**
Nickel, Dissolved	**100**	**3.2**	**520**	**490**
Nickel, Total	**100**	**13**	**1100**	**1000**
Selenium, Dissolved	**10**	**0.37 J**	**24**	**34**
Selenium, Total	**10**	**0.37 J**	**9.3 J**	**15 J**
Silver, Dissolved	**50**	0.1 U	**1.1**	**1.7**
Silver, Total	**50**	0.1 U	**2.1**	**2.8**
Thallium, Dissolved	**0.5**	**0.047 J**	**2.4**	**3.9**
Thallium, Total	**0.5**	**0.056 J**	**6**	**6.7**
Vanadium, Dissolved	NS	**0.14 J**	**330**	**440**
Vanadium, Total	NS	**0.61 J**	**810**	**840**
Zinc, Dissolved	**2000**	**58**	**1300**	**2300**
Zinc, Total	**2000**	**120**	**3400**	**4600**
Mercury, Dissolved	**0.7**	0.1 U	**1**	**1.7**
Mercury, Total	**0.7**	0.1 U	**2.6**	**4.5**

Notes:
Only compounds detected one or more times are shown
Bold indicates value above laboratory detection limit.
Shading indicates value above screening criteria.
µg/L = micrograms/liter
*Values exist solely for aesthetic considerations

Data Qualifiers:
J = Estimated concentration
U = Not detected at concentration shown
UJ = Not detected at estimated concentration shown
NS = No screening criteria available
NA = Not applicable

Table and notes taken directly from AECOM. 2015. Final Regional Compliance Restoration Program Preliminary Assessment/Site Inspection, Schenectady Air National Guard Base, Scotia, New York. August 2015.

Table 3-4
Groundwater Sample Analytical Results, Remedial Investigation
Site ZZ007 - Former Building 13 Area
Schenectady Air National Guard Base
Scotia, New York

	CAS Number	2016 USEPA Tapwater RSL[a]	MCL[b]	6 NYCRR Part 703 Drinking Water[c]	PAL		Location ID:	SC-ZZ007-MW001		SC-ZZ007-MW002		SC-ZZ007-MWUNK		SC-ZZ007-MWUNK	
							Field Sample ID:	SC-ZZ007-MW001-G-1		SC-ZZ007-MW002-G-1		SC-ZZ007-MWUNK-G-1		SC-ZZ007-MWUNK-G-1-D	
							Lab Sample ID:	280-84351-1		280-84351-2		280-84351-3		280-84351-4	
							Date:	6/7/2016		6/7/2016		6/7/2016		6/7/2016	
							Screened interval:	1.5-6.5 ft bgs		2-7 ft bgs		5-15.55 ft bgs		5-15.55 ft bgs	
Total Metals by 6010C/7470A															
Aluminum	7429-90-5	20000	NP	NP	20000	µg/L		**130000**		**4200**		**32**	J	**30**	J
Antimony	7440-36-0	7.8	6	3	3	µg/L		12	U	12	U	12	U	12	U
Arsenic	7440-38-2	0.052	10	25	10	µg/L		**94**		15	U	15	U	15	U
Barium	7440-39-3	3800	2000	1000	1000	µg/L		**1600**		**88**		**83**		**86**	
Beryllium	7440-41-7	25	4	3	3	µg/L		**7.8**		1.2	U	1.2	U	1.2	U
Cadmium	7440-43-9	9.2	5	5	5	µg/L		**5.7**		**1.1**	J	**0.47**	J	1.8	U
Calcium	7440-70-2	NP	NP	NP	NP	µg/L		**64000**		**170000**		**79000**		**79000**	
Chromium	7440-47-3	NP	100	50	50	µg/L		**280**		**23**		2.6	U	2.6	U
Cobalt	7440-48-4	6	NP	NP	6	µg/L		**180**		**24**		4.5	U	4.5	U
Copper	7440-50-8	800	1300	200	200	µg/L		**450**		**17**		10	U	10	U
Iron	7439-89-6	14000	NP	300	300	µg/L		**360000**		**12000**		**110**		**130**	
Lead	7439-92-1	15	15	25	15	µg/L		**160**		**5.6**	J	10	U	10	U
Magnesium	7439-95-4	NP	NP	35000	35000	µg/L		**86000**		**75000**		**28000**		**27000**	
Manganese	7439-96-5	430	NP	300	300	µg/L		**7700**		**4800**		**85**		**95**	
Nickel	7440-02-0	390	NP	100	100	µg/L		**530**		**56**		**1.9**	J	**1.9**	J
Potassium	7440-09-7	NP	NP	NP	NP	µg/L		**20000**		**13000**		940	U	940	U
Selenium	7782-49-2	100	50	10	10	µg/L		19	U	19	U	19	U	19	U
Silver	7440-22-4	94	NP	50	50	µg/L		3.5	U	3.5	U	3.5	U	3.5	U
Sodium	7440-23-5	NP	NP	20000	20000	µg/L		**16000**		**42000**		**40000**		**40000**	
Thallium	7440-28-0	0.2	2	0.5	0.5	µg/L		19	U	19	U	**10**	J	19	U
Vanadium	7440-62-2	86	NP	NP	86	µg/L		**220**		**11**	J	4	U	4	U
Zinc	7440-66-6	6000	NP	2000	2000	µg/L		**850**		**40**	J	**13**	J	**15**	J
Mercury	7439-97-6	0.63	2	0.7	0.7	µg/L		**0.26**		0.08	U	0.08	U	0.08	U
Dissolved Metals by 6010C/7470A															
Aluminum, Dissolved	7429-90-5	20000	NP	NP	20000	µg/L		70	U	70	U	70	U	70	U
Antimony, Dissolved	7440-36-0	7.8	6	3	3	µg/L		12	U	12	U	12	U	12	U
Arsenic, dissolved	7440-38-2	0.052	10	25	10	µg/L		15	U	15	U	15	U	15	U
Barium, Dissolved	7440-39-3	3800	2000	1000	1000	µg/L		**59**		**49**		**78**		**79**	
Beryllium, Dissolved	7440-41-7	25	4	3	3	µg/L		1.2	U	1.2	U	1.2	U	1.2	U
Cadmium, Dissolved	7440-43-9	9.2	5	5	5	µg/L		**0.7**	J	**0.84**	J	1.8	U	**0.47**	J
Calcium, Dissolved	7440-70-2	NP	NP	NP	NP	µg/L		**42000**		**170000**		**85000**		**85000**	
Chromium, Dissolved	7440-47-3	NP	100	50	50	µg/L		**0.68**	J	2.6	U	2.6	U	2.6	U
Cobalt, Dissolved	7440-48-4	6	NP	NP	6	µg/L		**17**		**19**		4.5	U	4.5	U
Copper, Dissolved	7440-50-8	800	1300	200	200	µg/L		10	U	10	U	10	U	10	U
Iron, dissolved	7439-89-6	14000	NP	300	300	µg/L		**120**		**230**		85	U	85	U
Lead, dissolved	7439-92-1	15	15	25	15	µg/L		10	U	10	U	10	U	10	U
Magnesium, Dissolved	7439-95-4	NP	NP	35000	35000	µg/L		**27000**		**72000**		**28000**		**29000**	
Manganese, Dissolved	7439-96-5	430	NP	300	300	µg/L		**3800**		**4700**		**18**		**18**	
Nickel, Dissolved	7440-02-0	390	NP	100	100	µg/L		**46**		**42**		5	U	5	U
Potassium, Dissolved	7440-09-7	NP	NP	NP	NP	µg/L		**4900**		**11000**		**2400**	J	**2500**	J
Selenium, dissolved	7782-49-2	100	50	10	10	µg/L		19	U	19	U	19	U	19	U
Silver, Dissolved	7440-22-4	94	NP	50	50	µg/L		3.5	U	3.5	U	3.5	U	3.5	U
Sodium, Dissolved	7440-23-5	NP	NP	20000	20000	µg/L		**17000**		**39000**		**39000**		**39000**	

Table 3-4
Groundwater Sample Analytical Results, Remedial Investigation
Site ZZ007 - Former Building 13 Area
Schenectady Air National Guard Base
Scotia, New York

	CAS Number	2016 USEPA Tapwater RSL[a]	MCL[b]	6 NYCRR Part 703 Drinking Water[c]	PAL	Location ID:	SC-ZZ007-MW001		SC-ZZ007-MW002		SC-ZZ007-MWUNK		SC-ZZ007-MWUNK	
						Field Sample ID:	SC-ZZ007-MW001-G-1		SC-ZZ007-MW002-G-1		SC-ZZ007-MWUNK-G-1		SC-ZZ007-MWUNK-G-1-D	
						Lab Sample ID:	280-84351-1		280-84351-2		280-84351-3		280-84351-4	
						Date:	6/7/2016		6/7/2016		6/7/2016		6/7/2016	
						Screened interval:	1.5-6.5 ft bgs		2-7 ft bgs		5-15.55 ft bgs		5-15.55 ft bgs	
Thallium, Dissolved	7440-28-0	0.2	2	0.5	0.5	µg/L	19	U	19	U	19	U	19	U
Vanadium, Dissolved	7440-62-2	86	NP	NP	86	µg/L	4	U	4	U	4	U	4	U
Zinc, Dissolved	7440-66-6	6000	NP	2000	2000	µg/L	15	U	**12**	J	**11**	J	**9.4**	J
Mercury, Dissolved	7439-97-6	0.63	2	0.7	0.7	µg/L	0.08	U	0.08	U	0.08	U	0.08	U

Notes:
Bold indicates value above laboratory detection limit.
Shading indicates value above PAL.

PAL References:
a - USEPA May 2016 Tapwater RSL (http://www2.epa.gov/risk/risk-based-screening-table-generic-tables)
b - USEPA National Primary Drinking Water Regulations (http://water.epa.gov/drink/contaminants/)
c - 6 NYCRR Part 703 Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (http://www.dec.ny.gov/chemical/23853.html)

Data Flags:
J – Result is estimated.
U – Analyte is not detected at or above the Limit of Detection.

µg/L	Microgram per liter
CAS	Chemical Abstracts Service
D	Duplicate sample
ft bgs	Feet below ground surface
ID	Identification
MCL	Maximum contaminant level
MW	Monitoring well
NP	Not published
NYCRR	New York Codes, Rules, and Regulations
PAL	Project action limit
RSL	Regional Screening Level
USEPA	U.S. Environmental Protection Agency
ZZ007	Former Building 13 Area

Table 3-5
Soil Sample Analytical Results, Site Inspection
Site TU008 - Former Heating Oil UST #41 at Former Building 4
Schenectady Air National Guard Base
Scotia, New York

Location	NYSDEC 375-6 Soil Cleanup Objectives (Unrestricted)	TU008					
Sample ID		TU08SB06	TU08SB07	TU08SB08	TU08SB08DUP	TU08SB09	TU08SB10
Sample Date		11/14/2014	11/14/2014	11/14/2014	11/14/2014	11/14/2014	11/14/2014
Sample Depth (ft bgs)		2 - 6	2 - 6	2 - 6	2 - 6	4 - 6	2 - 5
Media		Soil	Soil	Soil	Soil	Soil	Soil
VOCs (µg/kg)							
1,2,4-Trimethylbenzene	**3600**	0.54 U	0.47 U	**15 J**	**0.93 J**	**55**	**0.32 J**
1,3,5-Trimethylbenzene	**8400**	0.54 U	0.47 U	28 U	0.41 U	**21 J**	0.52 U
2-Butanone (MEK)	**120**	**6.9**	**6.5**	280 U	**5.8**	250 U	**5.3**
4-Isopropyltoluene	**10000**	0.54 U	0.47 U	28 U	**0.3 J**	**9 J**	0.52 U
Acetone	**50**	**77**	**47**	280 U	**49**	250 U	**73**
Benzene	**60**	**0.33 J**	**0.29 J**	28 U	**0.34 J**	**15 J**	**0.23 J**
Bromochloromethane	NS	0.54 U	0.47 U	11 U	**0.34 J**	10 U	0.52 U
Carbon Disulfide	**NS**	**0.34 J**	**1.8**	28 U	**1**	25 U	**1.1**
Chloroform	NS	0.54 U	0.47 U	11 U	**0.21 J**	10 U	0.52 U
Dichlorodifluoromethane	NS	0.54 UJ	0.47 UJ	28 U	0.41 UJ	25 U	**0.48 J**
Ethylbenzene	**1000**	0.54 U	0.47 U	28 U	**0.29 J**	25 U	0.52 U
Isopropylbenzene	**2300**	0.21 U	0.19 U	28 U	**0.88**	**47 J**	0.21 U
Naphthalene	**12000**	0.54 U	0.47 U	**810 J**	**46 J**	**730**	1.9 UJ
n-Butylbenzene	**12000**	0.54 U	0.47 U	320 UJ	**26 J**	1100 UJ	**1.3**
n-Propylbenzene	**3900**	0.54 U	0.47 U	28 U	**1.1**	**97**	0.52 U
sec-Butylbenzene	**11000**	0.54 U	0.47 U	**62 J**	**11 J**	**600**	**0.41 J**
tert-Butylbenzene	**5900**	0.54 U	0.47 U	**15 J**	**4.3 J**	**390**	**0.92 J**
Toluene	**700**	**0.37 J**	0.19 U	28 U	**1**	**17 J**	0.21 U
Trichlorofluoromethane	NS	0.54 U	0.47 U	28 U	**0.72 J**	**32 J**	0.52 U
Xylene, Meta + Para	**260**	**0.22 J**	**0.19 J**	56 U	**0.57 J**	**25 J**	0.41 U
Xylene, Ortho	**260**	0.21 U	0.19 U	28 U	0.16 U	**23 J**	0.21 U
SVOCs (µg/kg)							
2-Methylnaphthalene	**410**	72 U	94 U	**360**	**310**	470 U	76 U
Acenaphthene	**20000**	72 U	94 U	**88 J**	**140 J**	**620**	76 U
Acenaphthylene	**100000**	72 U	94 U	**59 J**	**61 J**	**370 J**	76 U
Anthracene	**100000**	72 U	94 U	190 U	**53 J**	**230 J**	76 U
Benzo(a)anthracene	**1000**	**33 J**	**25 J**	94 U	92 U	230 U	38 U
Benzo(a)pyrene	**1000**	**40 J**	**35 J**	94 U	92 U	230 U	**11 J**
Benzo(b)fluoranthene	**1000**	**49 J**	**45 J**	94 U	92 U	230 U	**11 J**
Benzo(g,h,i)perylene	**100000**	**30 J**	**25 J**	94 U	92 U	230 U	38 U
Benzo(k)fluoranthene	**800**	**33 J**	**33 J**	94 U	92 U	230 U	**9.4 J**
Bis(2-ethylhexyl) Phthalate	NS	72 U	94 U	190 U	180 U	470 U	**1400**
Chrysene	**1000**	**34 J**	**33 J**	190 U	180 U	470 U	76 U
Fluoranthene	**100000**	**67 J**	**43 J**	190 U	180 U	470 U	76 U
Fluorene	**30000**	72 U	94 U	**96 J**	**170 J**	**1100**	76 U
Indeno(1,2,3-cd)pyrene	**500**	**24 J**	**20 J**	94 U	92 U	230 U	38 U
Naphthalene	**12000**	72 U	94 U	**200**	**150 J**	**340 J**	76 U
Phenanthrene	**100000**	**20 J**	94 U	**210**	**330**	**1800**	76 U
Pyrene	**100000**	**60 J**	**43 J**	190 U	180 U	**150 J**	76 U

Notes:
Only compounds detected one or more times are presented in table
Bold indicates value above laboratory detection limit.
Shading indicates value above screening criteria.
µg/kg = micrograms/kilogram
NS = No screening criteria available
DUP = Duplicate sample

Data Qualifiers:
J = Estimated concentration
U = Not detected at concentration shown, the associated number indicates the analyte LOD
UJ = Not detected at estimated concentration shown, the quantitation is an estimated value below the LOQ

Table and notes taken directly from AECOM. 2015. Final Regional Compliance Restoration Program Preliminary Assessment/Site Inspection, Schenectady Air National Guard Base, Scotia, New York. August 2015.

Table 3-6
Soil Sample Analytical Results, Remedial Investigation
Site TU008 - Former Heating Oil UST #41 at Former Building 4
Schenectady Air National Guard Base
Scotia, New York

Analyte	CAS Number	2016 USEPA Residential RSL[a]	6 NYCRR Part 375 Unrestricted Use SCO[b]	6 NYCRR Part 375 Residential Use SCO/ NYSDEC CP-51 Residential SSCO[b,c]	PAL	Location ID:	SC-TU008-MW001		SC-TU008-MW001		SC-TU008-MW002		SC-TU008-MW002		SC-TU008-MW002		SC-TU008-MW003		SC-TU008-MW003		SC-TU008-MW004		SC-TU008-MW004	
						Field Sample ID:	SC-TU008-MW001-S0002		SC-TU008-MW001-S1012		SC-TU008-MW002-S0002		SC-TU008-MW002-S0406		SC-TU008-MW002-S0406-D		SC-TU008-MW003-S0204		SC-TU008-MW003-S0405		SC-TU008-MW004-S0305		SC-TU008-MW004-S0507	
						Date:	6/3/2016		6/3/2016		6/2/2016		6/2/2016		6/2/2016		6/2/2016		6/2/2016		6/2/2016		6/2/2016	
						Lab Sample ID:	280-84064-1		280-84064-2		280-84064-5		280-84064-3		280-84064-4		280-84064-6		280-84064-7		280-84064-9		280-84064-8	
						Depth (ft bgs):	0 - 2		10 - 12		0 - 2		4 - 6		4 - 6		2 - 4		4 - 5		3 - 5		5 - 7	
VOCs by 8260C																								
1,1,1-Trichloroethane	71-55-6	8100	0.68	100	0.68	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,1,2,2-Tetrachloroethane	79-34-5	0.6	NP	35 (SSCO)	35	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	40000	NP	100 (SSCO)	100	mg/kg	0.0049	U	0.0045	U	0.0053	U	0.0047	U	0.0039	U	0.0044	U	0.004	U	0.0053	U	0.004	U
1,1,2-Trichloroethane	79-00-5	1.1	NP	NP	1.1	mg/kg	0.00097	U	0.00091	U	0.0011	U	**0.16**	J	0.00079	UJ	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,1-Dichloroethane	75-34-3	3.6	0.27	19	0.27	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,1-Dichloroethene	75-35-4	230	0.33	100	0.33	mg/kg	0.0049	U	0.0045	U	0.0053	U	0.0047	U	0.0039	U	0.0044	U	0.004	U	0.0053	U	0.004	U
1,2,3-Trichlorobenzene	87-61-6	63	NP	80 (SSCO)	80	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,2,4-Trichlorobenzene	120-82-1	24	NP	NP	24	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,2,4-Trimethylbenzene	95-63-6	58	3.6	47	3.6	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.0053	NP	NP	0.0053	mg/kg	0.0049	U	0.0045	U	0.0053	U	0.0047	U	**0.0048**	J+	0.0044	U	0.004	U	0.0053	U	0.004	U
1,2-Dibromoethane	106-93-4	0.036	NP	NP	0.036	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,2-Dichlorobenzene	95-50-1	1800	1.1	100	1.1	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,2-Dichloroethane	107-06-2	0.46	0.02	2.3	0.02	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,2-Dichloroethene, Total	540-59-0	NP	NP	NP	NP	mg/kg	0.0019	U	0.0018	U	0.0021	U	0.0019	U	0.0016	U	0.0018	U	0.0016	U	0.0021	U	0.0016	U
1,2-Dichloropropane	78-87-5	1	NP	NP	1	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,3,5-Trimethylbenzene	108-67-8	780	8.4	47	8.4	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,3-Dichlorobenzene	541-73-1	NP	2.4	17	2.4	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
1,4-Dichlorobenzene	106-46-7	2.6	1.8	9.8	1.8	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
2-Butanone (MEK)	78-93-3	27000	0.12	100 (SSCO)	0.12	mg/kg	0.0049	U	0.0045	U	0.0053	U	0.0047	U	0.0039	U	0.0044	U	0.004	U	0.0053	U	0.004	U
2-Hexanone	591-78-6	200	NP	NP	200	mg/kg	**0.0058**	J+	0.0045	U	**0.005**	J+	0.0047	U	0.0039	U	0.0044	U	0.004	U	0.0053	U	0.004	U
4-Methyl-2-pentanone (MIBK)	108-10-1	33000	NP	NP	33000	mg/kg	0.0049	U	0.0045	U	0.0053	U	0.0047	UJ	**0.14**	J	0.0044	U	0.004	U	0.0053	U	0.004	U
Acetone	67-64-1	61000	0.05	100	0.05	mg/kg	**0.034**	J+	0.0091	U	**0.039**	J+	**0.023**	J+	**0.019**	J+	**0.018**	J+	0.008	U	**0.093**	J+	**0.01**	J+
Benzene	71-43-2	1.2	0.06	2.9	0.06	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Bromobenzene	108-86-1	290	NP	NP	290	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Bromodichloromethane	75-27-4	0.29	NP	NP	0.29	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Bromoform	75-25-2	19	NP	NP	19	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Bromomethane	74-83-9	6.8	NP	NP	6.8	mg/kg	0.0049	UJ	0.0045	UJ	0.0053	UJ	0.0047	UJ	0.0039	UJ	0.0044	UJ	0.004	UJ	0.0053	UJ	0.004	UJ
Carbon disulfide	75-15-0	770	NP	100 (SSCO)	100	mg/kg	0.00097	U	0.00091	U	**0.0038**	J+	0.00094	U	**0.00097**	J+	0.00088	U	**0.0013**	J+	0.0011	U	0.00079	U
Carbon tetrachloride	56-23-5	0.65	0.76	1.4	0.76	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Chlorobenzene	108-90-7	280	1.1	100	1.1	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Chloroethane	75-00-3	14000	NP	NP	14000	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Chloroform	67-66-3	0.32	0.37	10	0.37	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Chloromethane	74-87-3	110	NP	NP	110	mg/kg	0.0049	U	0.0045	U	0.0053	U	0.0047	U	0.0039	U	0.0044	U	0.004	U	0.0053	U	0.004	U
cis-1,2-Dichloroethene	156-59-2	160	0.25	59	0.25	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
cis-1,3-Dichloropropene	10061-01-5	1.8	NP	NP	1.8	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Cyclohexane	110-82-7	6500	NP	NP	6500	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Dibromochloromethane	124-48-1	8.3	NP	NP	8.3	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Dichlorodifluoromethane	75-71-8	87	NP	NP	87	mg/kg	0.0049	UJ	0.0045	UJ	0.0053	UJ	0.0047	UJ	0.0039	UJ	0.0044	UJ	0.004	UJ	0.0053	UJ	0.004	UJ
Ethylbenzene	100-41-4	5.8	1	30	1	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	**0.00058**	J+	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Isopropylbenzene	98-82-8	1900	NP	100 (SSCO)	100	mg/kg	0.00097	U	0.00091	U	0.0011	U	**0.011**	J	**0.019**	J	0.00088	U	0.0008	U	0.0011	U	0.00079	U
m,p-Xylene	179601-23-1	550	0.26	100	0.26	mg/kg	0.0019	U	0.0018	U	0.0021	U	0.0019	U	**0.00053**	J+	0.0018	U	0.0016	U	0.0021	U	0.0016	U
Methyl acetate	79-20-9	78000	NP	NP	78000	mg/kg	0.0049	U	0.0045	U	0.0053	U	0.0047	U	0.0039	U	0.0044	U	0.004	U	0.0053	U	0.004	U
Methyl tert-butyl ether	1634-04-4	47	0.93	62	0.93	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Methylcyclohexane	108-87-2	NP	NP	NP	NP	mg/kg	0.00097	U	0.00091	U	0.0011	U	**0.0056**	J+	**0.004**	J+	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Methylene Chloride	75-09-2	57	0.05	51	0.05	mg/kg	0.0049	U	0.0045	U	0.0053	U	0.0047	U	0.0039	U	0.0044	U	0.004	U	0.0053	U	0.004	U
Naphthalene	91-20-3	3.8	12	100	12	mg/kg	0.00097	U	0.00091	U	**0.0011**	J+	**0.026**	J+	**0.016**	J+	0.00088	U	0.0008	U	0.0011	U	0.00079	U
n-Butylbenzene	104-51-8	3900	12	100	12	mg/kg	0.00097	U	0.00091	U	0.0011	U	**0.12**	J+	**0.1**	J+	0.00088	U	0.0008	U	0.0011	U	0.00079	U
N-Propylbenzene	103-65-1	3800	3.9	100	3.9	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	**0.0091**	J+	0.00088	U	0.0008	U	0.0011	U	0.00079	U
o-Xylene	95-47-6	650	0.26	100	0.26	mg/kg	0.00097	U	0.00091	U	0.0011	U	**0.00066**	J+	**0.00095**	J+	0.00088	U	0.0008	U	0.0011	U	0.00079	U
sec-Butylbenzene	135-98-8	7800	11	100	11	mg/kg	0.00097	U	0.00091	U	**0.00036**	J+	**0.1**	J+	**0.14**	J+	0.00088	U	**0.0028**	J+	0.0011	U	0.00079	U
Styrene	100-42-5	6000	NP	NP	6000	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
tert-Butylbenzene	98-06-6	7800	5.9	100	5.9	mg/kg	0.00097	U	0.00091	U	0.0011	U	**0.02**	J	**0.038**	J	0.00088	U	**0.0022**	J+	0.0011	U	0.00079	U
Tetrachloroethene	127-18-4	24	1.3	5.5	1.3	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Toluene	108-88-3	4900	0.7	100	0.7	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
trans-1,2-Dichloroethene	156-60-5	1600	0.19	100	0.19	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
trans-1,3-Dichloropropene	10061-02-6	1.8	NP	NP	1.8	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Trichloroethene	79-01-6	0.94	0.47	10	0.47	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Trichlorofluoromethane	75-69-4	23000	NP	NP	23000	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Vinyl chloride	75-01-4	0.059	0.02	0.21	0.02	mg/kg	0.00097	U	0.00091	U	0.0011	U	0.00094	U	0.00079	U	0.00088	U	0.0008	U	0.0011	U	0.00079	U
Xylenes, Total	1330-20-7	580	0.26	100	0.26	mg/kg	0.0049	U	0.0045	U	0.0053	U	0.0047	U	**0.0015**	J+	0.0044	U	0.004	U	0.0053	U	0.004	U

Table 3-6
Soil Sample Analytical Results, Remedial Investigation
Site TU008 - Former Heating Oil UST #41 at Former Building 4
Schenectady Air National Guard Base
Scotia, New York

Analyte	CAS Number	2016 USEPA Residential RSL[a]	6 NYCRR Part 375 Unrestricted Use SCO[b]	6 NYCRR Part 375 Residential Use SCO/ NYSDEC CP-51 Residential SSCO[b,c]	PAL																			
						Location ID:	SC-TU008-MW001		SC-TU008-MW001		SC-TU008-MW002		SC-TU008-MW002		SC-TU008-MW002		SC-TU008-MW003		SC-TU008-MW003		SC-TU008-MW004		SC-TU008-MW004	
						Field Sample ID:	SC-TU008-MW001-S0002		SC-TU008-MW001-S1012		SC-TU008-MW002-S0002		SC-TU008-MW002-S0406		SC-TU008-MW002-S0406-D		SC-TU008-MW003-S0204		SC-TU008-MW003-S0405		SC-TU008-MW004-S0305		SC-TU008-MW004-S0507	
						Date:	6/3/2016		6/3/2016		6/2/2016		6/2/2016		6/2/2016		6/2/2016		6/2/2016		6/2/2016		6/2/2016	
						Lab Sample ID:	280-84064-1		280-84064-2		280-84064-5		280-84064-3		280-84064-4		280-84064-6		280-84064-7		280-84064-9		280-84064-8	
						Depth (ft bgs):	0 - 2		10 - 12		0 - 2		4 - 6		4 - 6		2 - 4		4 - 5		3 - 5		5 - 7	
SVOCs by 8270D																								
1,2,4,5-Tetrachlorobenzene	95-94-3	23	NP	NP	23	mg/kg	0.14	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U
1,2,4-Trichlorobenzene	120-82-1	24	NP	NP	24	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
1,2-Dichlorobenzene	95-50-1	1800	1.1	100	1.1	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
1,2-Diphenylhydrazine	122-66-7	0.68	NP	NP	0.68	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
1,3-Dichlorobenzene	541-73-1	NP	2.4	17	2.4	mg/kg	0.036	U	0.038	U	0.034	U	0.035	U	0.034	U	0.038	U	0.037	U	0.035	U	0.034	U
1,4-Dichlorobenzene	106-46-7	2.6	1.8	9.8	1.8	mg/kg	0.036	U	0.038	U	0.034	U	0.035	U	0.034	U	0.038	U	0.037	U	0.035	U	0.034	U
2,2'-oxybis[1-chloropropane]	108-60-1	3100	NP	NP	3100	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
2,4,5-Trichlorophenol	95-95-4	6300	NP	100 (SSCO)	100	mg/kg	0.036	U	0.038	U	0.034	U	0.035	U	0.034	U	0.038	U	0.037	U	0.035	U	0.034	U
2,4,6-Trichlorophenol	88-06-2	49	NP	NP	49	mg/kg	0.036	U	0.038	U	0.034	U	0.035	U	0.034	U	0.038	U	0.037	U	0.035	U	0.034	U
2,4-Dichlorophenol	120-83-2	190	NP	100 (SSCO)	100	mg/kg	0.036	U	0.038	U	0.034	U	0.035	U	0.034	U	0.038	U	0.037	U	0.035	U	0.034	U
2,4-Dimethylphenol	105-67-9	1300	NP	NP	1300	mg/kg	0.14	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U
2,4-Dinitrophenol	51-28-5	130	NP	100 (SSCO)	100	mg/kg	1.1	U	1.2	U	1	U	1	U	1	U	1.1	U	1.1	U	1.1	U	1	U
2,4-Dinitrotoluene	121-14-2	1.7	NP	NP	1.7	mg/kg	0.14	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U
2,6-Dichlorophenol	87-65-0	NP	NP	NP	NP	mg/kg	0.18	U	0.19	U	0.17	U	0.17	U	0.17	U	0.19	U	0.19	U	0.18	U	0.17	U
2,6-Dinitrotoluene	606-20-2	0.36	NP	1.03 (SSCO)	1.03	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
2-Chloronaphthalene	91-58-7	4800	NP	NP	4800	mg/kg	0.036	U	0.038	U	0.034	U	0.035	U	0.034	U	0.038	U	0.037	U	0.035	U	0.034	U
2-Chlorophenol	95-57-8	390	100	100	100	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
2-Methylnaphthalene	91-57-6	240	NP	0.41 (SSCO)	0.41	mg/kg	0.072	U	0.078	U	**0.019**	J	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
2-Methylphenol	95-48-7	3200	0.33	100	0.33	mg/kg	0.036	U	0.038	U	0.034	U	0.035	U	0.034	U	0.038	U	0.037	U	0.035	U	0.034	U
3 & 4 Methylphenol	782-60-0	NP	0.33	100	0.33	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
3,3'-Dichlorobenzidine	91-94-1	1.2	NP	NP	1.2	mg/kg	0.29	U	0.31	U	0.27	U	0.28	U	0.27	U	0.31	U	0.3	U	0.28	U	0.27	U
3-Nitroaniline	99-09-2	NP	NP	NP	NP	mg/kg	0.29	U	0.31	U	0.27	U	0.28	U	0.27	U	0.31	U	0.3	U	0.28	U	0.27	U
4,6-Dinitro-2-methylphenol	534-52-1	5.1	NP	NP	5.1	mg/kg	1.1	U	1.2	U	1	U	1	U	1	U	1.1	U	1.1	U	1.1	U	1	U
4-Chloroaniline	106-47-8	2.7	NP	100 (SSCO)	100	mg/kg	0.29	U	0.31	U	0.27	U	0.28	U	0.27	U	0.31	U	0.3	U	0.28	U	0.27	U
4-Chlorophenyl phenyl ether	7005-72-3	NP	NP	NP	NP	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
4-Nitroaniline	100-01-6	27	NP	NP	27	mg/kg	0.29	U	0.31	U	0.27	U	0.28	U	0.27	U	0.31	U	0.3	U	0.28	U	0.27	U
4-Nitrophenol	100-02-7	NP	NP	NP	NP	mg/kg	0.29	U	0.31	U	0.27	U	0.28	U	0.27	U	0.31	U	0.3	U	0.28	U	0.27	U
Acenaphthene	83-32-9	3600	20	100	20	mg/kg	0.036	U	0.038	U	**0.093**	J	**0.5**		**0.48**		0.038	U	**0.037**	J	0.035	U	0.034	U
Acenaphthylene	208-96-8	NP	100	100	100	mg/kg	0.072	U	0.078	U	**0.025**	J	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Anthracene	120-12-7	18000	100	100	100	mg/kg	0.072	U	0.078	U	**0.26**	J	0.07	U	0.068	U	0.077	U	**0.039**	J	0.071	U	0.069	U
Benzidine	92-87-5	0.00053	NP	NP	0.00053	mg/kg		R		R		R		R		R		R		R		R		R
Benzo[a]anthracene	56-55-3	0.16	1	1	1	mg/kg	**0.04**	J	0.078	U	**0.6**		0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Benzo[a]pyrene	50-32-8	0.016	1	1	1	mg/kg	**0.039**	J	0.078	U	**0.51**		0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Benzo[b]fluoranthene	205-99-2	0.16	1	1	1	mg/kg	**0.061**	J	0.078	U	**0.64**		0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Benzo[g,h,i]perylene	191-24-2	NP	100	100	100	mg/kg	**0.034**	J	0.038	U	**0.27**	J	0.035	U	0.034	U	0.038	U	0.037	U	0.035	U	0.034	U
Benzo[k]fluoranthene	207-08-9	1.6	0.8	1	0.8	mg/kg	0.14	U	0.15	U	**0.32**	J	0.14	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U
Benzoic acid	65-85-0	250000	NP	100 (SSCO)	100	mg/kg	1.1	U	1.2	U	1	U	1	U	1	U	1.1	U	1.1	U	1.1	U	1	U
Benzyl alcohol	100-51-6	6300	NP	NP	6300	mg/kg	0.036	U	0.038	U	0.034	U	0.035	U	0.034	U	0.038	U	0.037	U	0.035	U	0.034	U
Bis(2-chloroethoxy)methane	111-91-1	190	NP	NP	190	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Bis(2-chloroethyl)ether	111-44-4	0.23	NP	NP	0.23	mg/kg	0.036	U	0.038	U	0.034	U	0.035	U	0.034	U	0.038	U	0.037	U	0.035	U	0.034	U
Bis(2-ethylhexyl) phthalate	117-81-7	39	NP	50 (SSCO)	50	mg/kg	0.14	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U
Butyl benzyl phthalate	85-68-7	290	NP	100 (SSCO)	100	mg/kg	0.14	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U
Carbazole	86-74-8	NP	NP	NP	NP	mg/kg	0.14	U	0.15	U	**0.098**	J	0.14	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U
Chrysene	218-01-9	16	1	1	1	mg/kg	**0.048**	J	0.078	U	**0.6**		0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Dibenz(a,h)anthracene	53-70-3	0.016	0.33	0.33	0.33	mg/kg	0.072	U	0.078	U	**0.062**	J	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Dibenzofuran	132-64-9	73	NP	NP	73	mg/kg	0.072	U	0.078	U	**0.047**	J	**0.5**		0.068	U	0.077	U	**0.11**	J	0.071	U	0.069	U
Diethyl phthalate	84-66-2	51000	NP	100 (SSCO)	100	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Dimethyl phthalate	131-11-3	NP	NP	100 (SSCO)	100	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Di-n-butyl phthalate	84-74-2	6300	NP	100 (SSCO)	100	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Di-n-octyl phthalate	117-84-0	630	NP	100 (SSCO)	100	mg/kg	0.071	U	0.076	U	0.067	U	0.069	U	0.067	U	0.075	U	0.073	U	0.07	U	0.068	U
Fluoranthene	206-44-0	2400	100	100	100	mg/kg	**0.08**	J	0.15	U	**1.2**		**0.057**	J	**0.043**	J	0.15	U	0.15	U	0.14	U	0.14	U
Fluorene	86-73-7	2400	30	100	30	mg/kg	0.072	U	0.078	U	**0.097**	J	**0.73**		**0.7**		0.077	U	**0.054**	J	0.071	U	0.069	U
Hexachlorobenzene	118-74-1	0.21	0.33	0.41 (SSCO)	0.33	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Hexachlorobutadiene	87-68-3	1.2	NP	NP	1.2	mg/kg	0.036	U	0.038	U	0.034	U	0.035	U	0.034	U	0.038	U	0.037	U	0.035	U	0.034	U
Hexachlorocyclopentadiene	77-47-4	1.8	NP	NP	1.8	mg/kg	0.14	U		R	0.14	U	0.14	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U
Hexachloroethane	67-72-1	1.8	NP	NP	1.8	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Indeno[1,2,3-cd]pyrene	193-39-5	0.16	0.5	0.5	0.5	mg/kg	**0.025**	J	0.078	U	**0.34**		0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Isophorone	78-59-1	570	NP	100 (SSCO)	100	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Naphthalene	91-20-3	3.8	12	100	12	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Nitrobenzene	98-95-3	5.1	NP	3.7 (SSCO)	3.7	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
N-Nitrosodimethylamine	62-75-9	0.002	NP	NP	0.002	mg/kg	0.14	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U	0.15	U	0.14	U	0.14	U
N-Nitrosodi-n-propylamine	621-64-7	0.078	NP	NP	0.078	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
N-Nitrosodiphenylamine	86-30-6	110	NP	NP	110	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
N-Nitrosopyrrolidine	930-55-2	0.26	NP	NP	0.26	mg/kg		R		R		R		R		R		R		R		R		R
Pentachlorophenol	87-86-5	1	0.8	2.4	0.8	mg/kg	1.1	U	1.2	U	1	U	1	U	1	U	1.1	U	1.1	U	1.1	U	1	U
Phenanthrene	85-01-8	NP	100	100	100	mg/kg	**0.037**	J	0.078	U	**0.88**		**1.6**		**1.5**		0.077	U	**0.033**	J	0.071	U	0.069	U
Phenol	108-95-2	19000	0.33	100	0.33	mg/kg	0.072	U	0.078	U	0.068	U	0.07	U	0.068	U	0.077	U	0.074	U	0.071	U	0.069	U
Pyrene	129-00-0	1800	100	100	100	mg/kg	**0.063**	J	0.038	U	**1**		**0.065**	J	**0.054**	J	0.038	U	**0.015**	J	0.035	U	0.034	U

Table 3-6
Soil Sample Analytical Results, Remedial Investigation
Site TU008 - Former Heating Oil UST #41 at Former Building 4
Schenectady Air National Guard Base
Scotia, New York

Notes:
Bold indicates value above laboratory detection limit.
Shading indicates value above PAL.

PAL References:
a - USEPA May 2016 Residential RSL (THQ=1, TR-1E-06) (http://www2.epa.gov/risk/risk-based-screening-table-generic-tables)
b - 6 NYCRR Part 375, December 2006 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/part375.pdf)
c - NYSDEC CP-51 Soil Cleanup Guidance, October 2010 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/cpsoil.pdf)

Data Flags:
J – Result is estimated.
J+ – Result is estimated, High Bias.
R – Rejected.
U – Analyte is not detected at or above the Limit of Detection.
UJ – Analyte is not detected, but there is uncertainty concerning the reported value.

CAS	Chemical Abstracts Service
CP	Commissioner Policy
D	Duplicate sample
ft bgs	Feet below ground surface
ID	Identification
mg/kg	Milligram per kilogram
MW	Monitoring well
NP	Not published
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
PAL	project action limit
RSL	Regional Screening Level
SC	Schenectady Air National Guard Base
SCO	Soil Cleanup Objective
SSCO	Supplemental Soil Cleanup Objective
SVOC	Semivolatile organic compound
TU008	Former Heating Oil Underground Storage Tank (UST) #41, Former Building 4
USEPA	U.S. Environmental Protection Agency
VOC	Volatile organic compound

Table 3-7
Groundwater Sample Analytical Results, Site Inspection
Site TU008 - Former Heating Oil UST #41 at Former Building 4
Schenectady Air National Guard Base
Scotia, New York

Location	NYSDEC TOGS Ambient Water Quality Standards	TU008					
Sample ID		TU08GW06	TU08GW07	TU08GW07DUP	TU08GW08	TU08GW09	TU08GW10
Sample Date		11/14/2014	11/14/2014	11/14/2014	11/14/2014	11/14/2014	11/14/2014
Media		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
VOCs (µg/L)							
1,2,4-Trimethylbenzene	**5**	0.5 U	0.5 U	0.5 U	**0.26 J**	0.5 U	0.5 U
2-Butanone (MEK)	**50**	1 U	1 U	1 U	**1.5 J**	1 U	1 U
cis-1,2-Dichloroethene	**5**	0.5 U	0.5 U	0.5 U	0.5 U	**0.28 J**	0.58 UJ
Isopropylbenzene	**5**	0.5 U	0.5 U	0.5 U	**0.98 J**	**0.36 J**	0.5 U
Naphthalene	**10***	0.5 U	0.5 U	0.5 U	**71**	0.5 U	0.5 U
n-Butylbenzene	**5**	0.2 U	0.2 U	0.2 U	**5.1**	**8**	0.2 U
n-Propylbenzene	**5**	0.5 U	0.5 U	0.5 U	**0.36 J**	**0.27 J**	0.5 U
sec-Butylbenzene	**5**	0.5 U	0.5 U	0.5 U	**4.4**	**8**	0.5 U
tert-Butylbenzene	**5**	0.5 U	0.5 U	0.5 U	**1.4**	**9.3**	0.5 U
Toluene	**5**	0.2 U	0.2 U	0.2 U	**0.31 J**	0.2 U	**0.26 J**
Xylene, Meta + Para	**5**	0.4 U	0.4 U	0.4 U	**0.25 J**	0.4 U	0.4 U
SVOCs (µg/L)							
2-Methylnaphthalene	NS	0.068 UJ	0.064 U	0.1 U	**110**	**2.3 J**	NA
Acenaphthene	**20***	0.14 UJ	0.13 U	0.2 U	**11**	**8.1 J**	NA
Acenaphthylene	NS	0.068 UJ	0.064 U	0.1 U	**4.2 J**	1.2 U	NA
Anthracene	**50**	0.27 UJ	0.26 U	0.4 U	**3.9 J**	4.7 U	NA
Benzoic Acid	NS	**1.1 J**	2.6 U	4 U	24 U	47 U	NA
Benzyl Alcohol	NS	**0.082 J**	**0.14 J**	0.2 U	1.2 U	2.3 U	NA
Bis(2-ethylhexyl) Phthalate	**5**	**67 J**	0.44 UJ	0.51 UJ	5.9 U	12 U	NA
Dibenzofuran	NS	0.14 UJ	0.13 U	0.2 U	**6**	2.3 U	NA
Diethyl Phthalate	**50**	**0.14 J**	0.19 UJ	0.5 U	2.9 U	5.8 U	NA
Di-n-butyl Phthalate	**50**	**2.6 J**	0.36 UJ	0.34 UJ	12 U	23 U	NA
Di-n-octyl Phthalate	**50**	**0.18 J**	0.26 U	0.4 U	2.4 U	4.7 U	NA
Fluorene	**50**	0.14 UJ	0.13 U	0.2 U	**11**	2.3 U	NA
Naphthalene	**10***	0.14 UJ	0.13 U	0.2 U	**63**	2.3 U	NA
Phenanthrene	**50**	0.14 UJ	0.13 U	0.2 U	**20**	**12**	NA
Phenol	**2***	**0.068 J**	**0.064 J**	0.2 U	1.2 U	2.3 U	NA

Table 3-7
Groundwater Sample Analytical Results, Site Inspection
Site TU008 - Former Heating Oil UST #41 at Former Building 4
Schenectady Air National Guard Base
Scotia, New York

Notes:	Only compounds detected one or more times are shown
	Bold indicates value above laboratory detection limit.
	Shading indicates value above screening criteria.
	TU08GW10 was not collected for SVOCs
	µg/L = micrograms/liter
	*Values exist solely for aesthetic considerations
	NS = No screening criteria available
	DUP = Duplicate sample
	NA = Not applicable
	J = Estimated concentration
Data Qualifiers:	U = Not detected at concentration shown
	UJ = Not detected at estimated concentration shown

Table and notes taken directly from AECOM. 2015. Final Regional Compliance Restoration Program Preliminary Assessment/Site Inspection, Schenectady Air National Guard Base, Scotia, New York. August 2015.

Table 3-8
Groundwater Sample Analytical Results, Remedial Investigation
Site TU008 - Former Heating Oil UST #41 at Former Building 4
Schenectady Air National Guard Base
Scotia, New York

	CAS Number	2016 USEPA Tapwater RSL[a]	MCL[b]	6 NYCRR Part 703 Drinking Water[c]	PAL	Location ID:	SC-TU008-MW001		SC-TU008-MW001		SC-TU008-MW002		SC-TU008-MW002		SC-TU008-MW002		SC-TU008-MW002		SC-TU008-MW003		SC-TU008-MW004		SC-TU008-MW004		SC-TU008-MW006	
						Field Sample ID:	SC-TU008-MW001-G-1		SC-TU008-MW001-G-2		SC-TU008-MW002-G-1		SC-TU008-MW002-G-1-D		SC-TU008-MW002-G-2		SC-TU008-MW002-G-2-D		SC-TU008-MW003-G-1		SC-TU008-MW004-G-1		SC-TU008-MW004-G-2		SC-TU008-MW006-G-1	
						Lab Sample ID:	280-84354-1		280-90734-5		280-84354-2		280-84354-3		280-90734-1		280-90734-2		280-84354-6		280-84354-4		280-90734-4		280-90936-1	
						Date:	6/8/2016		11/7/2016		6/8/2016		6/8/2016		11/7/2016		11/7/2016		6/8/2016		6/8/2016		11/7/2016		11/10/2016	
						Screened interval:	1.42-11.42 ft bgs		1.42-11.42 ft bgs		2-9 ft bgs		2-9 ft bgs		2-9 ft bgs		2-9 ft bgs		2-7 ft bgs		2-9 ft bgs		2-9 ft bgs		3.5-8.5 ft bgs	
VOCs by 8260C																										
1,1,1-Trichloroethane	71-55-6	8000	200	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2,2-Tetrachloroethane	79-34-5	0.076	NP	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	55000	NP	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,1,2-Trichloroethane	79-00-5	0.28	5	1	1	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethane	75-34-3	2.8	NP	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	75-35-4	280	7	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2,3-Trichlorobenzene	87-61-6	7	NP	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2,4-Trichlorobenzene	120-82-1	1.2	70	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2,4-Trimethylbenzene	95-63-6	15	NP	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2-Dibromo-3-Chloropropane	96-12-8	0.00033	0.2	0.04	0.04	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2-Dibromoethane	106-93-4	0.0075	0.05	0.0006	0.0006	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,2-Dichlorobenzene	95-50-1	300	600	3	3	µg/L	2	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U
1,2-Dichloroethane	107-06-2	0.17	5	0.6	0.6	µg/L	1	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U
1,2-Dichloroethene, Total	540-59-0	NP	NP	5	5	µg/L	2	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U
1,2-Dichloropropane	78-87-5	0.44	5	1	1	µg/L	1	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U
1,3,5-Trimethylbenzene	108-67-8	120	NP	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,3-Dichlorobenzene	541-73-1	NP	NP	3	3	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
1,4-Dichlorobenzene	106-46-7	0.48	75	3	3	µg/L	2	U	5	U	2	U	2	U	5	U	5	U	2	U	2	U	5	U	5	U
2-Butanone (MEK)	78-93-3	5600	NP	50	50	µg/L	5	U	2	U	5	U	5	U	2	U	2	U	**130**	J+	5	U	2	U	2	U
2-Hexanone	591-78-6	38	NP	50	50	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
4-Methyl-2-pentanone (MIBK)	108-10-1	6300	NP	NP	6300	µg/L	2	U	10	U	2	U	2	U	10	U	10	U	2	U	2	U	10	U	10	U
Acetone	67-64-1	14000	NP	50	50	µg/L	**10**	J+	1	U	**14**	J+	**13**	J+	1	U	1	U	**110**	J+	**9.5**	J+	1	U	1	U
Benzene	71-43-2	0.46	5	1	1	µg/L	1	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U
Bromobenzene	108-86-1	62	NP	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Bromodichloromethane	75-27-4	0.13	80	50	50	µg/L	2	U	1	U	**0.36**	J+	**0.41**	J+	1	U	1	U	2	U	**0.34**	J+	1	U	1	U
Bromoform	75-25-2	3.3	80	50	50	µg/L	1	U	2	UJ	1	U	1	U	2	UJ	2	UJ	1	U	1	U	2	UJ	2	U
Bromomethane	74-83-9	7.5	NP	5	5	µg/L	2	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U
Carbon disulfide	75-15-0	810	NP	NP	810	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Carbon tetrachloride	56-23-5	0.46	5	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chlorobenzene	108-90-7	78	100	5	5	µg/L	1	U	1	UJ	1	U	1	U	1	UJ	1	UJ	1	U	1	U	1	UJ	1	U
Chloroethane	75-00-3	21000	NP	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	67-66-3	0.22	80	7	7	µg/L	**1.4**	J+	2	U	**1.7**	J+	**1.9**	J+	2	U	2	U	1	U	**1.4**	J+	2	U	2	U
Chloromethane	74-87-3	190	NP	5	5	µg/L	2	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U
cis-1,2-Dichloroethene	156-59-2	36	70	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
cis-1,3-Dichloropropene	10061-01-5	0.47	NP	0.4	0.4	µg/L	1	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U
Cyclohexane	110-82-7	13000	NP	NP	13000	µg/L	2	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U
Dibromochloromethane	124-48-1	0.87	80	50	50	µg/L	1	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U
Dichlorodifluoromethane	75-71-8	200	NP	5	5	µg/L	2	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U
Ethylbenzene	100-41-4	1.5	700	5	5	µg/L	1	U	2	U	1	U	1	U	2	U	2	U	1	U	1	U	2	U	2	U
Isopropylbenzene	98-82-8	450	NP	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
m,p-Xylene	179601-23-1	190	10000	5	5	µg/L	1	U	5	U	1	U	1	U	5	U	5	U	1	U	1	U	5	U	5	U
Methyl acetate	79-20-9	20000	NP	NP	20000	µg/L	5	U	2	U	5	U	5	U	2	U	2	U	5	U	5	U	2	U	2	U
Methyl tert-butyl ether	1634-04-4	14	NP	NP	14	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Methylcyclohexane	108-87-2	NP	NP	NP	NP	µg/L	2	U	5	U	2	U	2	U	5	U	5	U	2	U	2	U	5	U	5	U
Methylene Chloride	75-09-2	11	5	5	5	µg/L	5	U	1	U	5	U	5	U	1	U	1	U	5	U	5	U	1	U	1	U
Naphthalene	91-20-3	0.17	NP	10	10	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
n-Butylbenzene	104-51-8	1000	NP	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Propylbenzene	103-65-1	660	NP	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
o-Xylene	95-47-6	190	10000	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
sec-Butylbenzene	135-98-8	2000	NP	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Styrene	100-42-5	1200	100	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
tert-Butylbenzene	98-06-6	690	NP	5	5	µg/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Tetrachloroethene	127-18-4	11	5	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Toluene	108-88-3	1100	1000	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	156-60-5	360	100	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
trans-1,3-Dichloropropene	10061-02-6	0.47	NP	0.4	0.4	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	79-01-6	0.49	5	5	5	µg/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	75-69-4	5200	NP	5	5	µg/L	2	U	2	UJ	2	U	2	U	2	UJ	2	UJ	2	U	2	U	2	UJ	2	U
Vinyl chloride	75-01-4	0.019	2	2	2	µg/L	1	U	1	UJ	1	U	1	U	1	UJ	1	UJ	1	U	1	U	1	UJ	1	U
Xylenes, Total	1330-20-7	190	10000	5	5	µg/L	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U

Table 3-8
Groundwater Sample Analytical Results, Remedial Investigation
Site TU008 - Former Heating Oil UST #41 at Former Building 4
Schenectady Air National Guard Base
Scotia, New York

	CAS Number	2016 USEPA Tapwater RSL[a]	MCL[b]	6 NYCRR Part 703 Drinking Water[c]	PAL	Location ID:	SC-TU008-MW001		SC-TU008-MW001		SC-TU008-MW002		SC-TU008-MW002		SC-TU008-MW002		SC-TU008-MW002		SC-TU008-MW003		SC-TU008-MW004		SC-TU008-MW004		SC-TU008-MW006	
						Field Sample ID:	SC-TU008-MW001-G-1		SC-TU008-MW001-G-2		SC-TU008-MW002-G-1		SC-TU008-MW002-G-1-D		SC-TU008-MW002-G-2		SC-TU008-MW002-G-2-D		SC-TU008-MW003-G-1		SC-TU008-MW004-G-1		SC-TU008-MW004-G-2		SC-TU008-MW006-G-1	
						Lab Sample ID:	280-84354-1		280-90734-5		280-84354-2		280-84354-3		280-90734-1		280-90734-2		280-84354-6		280-84354-4		280-90734-4		280-90936-1	
						Date:	6/8/2016		11/7/2016		6/8/2016		6/8/2016		11/7/2016		11/7/2016		6/8/2016		6/8/2016		11/7/2016		11/10/2016	
						Screened interval:	1.42-11.42 ft bgs		1.42-11.42 ft bgs		2-9 ft bgs		2-9 ft bgs		2-9 ft bgs		2-9 ft bgs		2-7 ft bgs		2-9 ft bgs		2-9 ft bgs		3.5-8.5 ft bgs	
SVOCs by 8270D																										
1,2,4,5-Tetrachlorobenzene	95-94-3	1.7	NP	5	5	µg/L	420	U	4.4	U	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
1,2,4-Trichlorobenzene	120-82-1	1.2	70	5	5	µg/L	**130**	J	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
1,2-Dichlorobenzene	95-50-1	300	600	3	3	µg/L	**25**	J	0.5	U	0.5	U	0.5	U	0.51	U	0.5	U	NA		0.51	U	0.5	U	0.5	UJ
1,2-Diphenylhydrazine	122-66-7	0.078	NP	ND	0.078	µg/L	49	U	0.51	U	0.5	U	0.51	U	0.51	U	0.5	U	NA		0.51	U	0.5	U	0.51	UJ
1,3-Dichlorobenzene	541-73-1	NP	NP	3	3	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
1,4-Dichlorobenzene	106-46-7	0.48	75	3	3	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
2,2'-oxybis[1-chloropropane]	108-60-1	710	NP	5	5	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
2,4,5-Trichlorophenol	95-95-4	1200	NP	NP	1200	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
2,4,6-Trichlorophenol	88-06-2	4.1	NP	NP	4.1	µg/L	96	U	1	U	**14**	J	**11**	J	1	U	0.99	U	NA		**23**		0.99	U	1	UJ
2,4-Dichlorophenol	120-83-2	46	NP	NP	46	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
2,4-Dimethylphenol	105-67-9	360	NP	50	50	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
2,4-Dinitrophenol	51-28-5	39	NP	10	10	µg/L	2900	U	30	U	30	U	30	U	31	U	30	U	NA		31	U	30	U	30	UJ
2,4-Dinitrotoluene	121-14-2	0.24	NP	5	5	µg/L	420	U	4.4	U	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
2,6-Dichlorophenol	87-65-0	NP	NP	NP	NP	µg/L	380	U	4	U	**1.6**	J	4	U	4.1	U	4	U	NA		**2.3**	J	4	U	4	UJ
2,6-Dinitrotoluene	606-20-2	0.048	NP	5	5	µg/L	420	U	4.4	U	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
2-Chloronaphthalene	91-58-7	750	NP	10	10	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
2-Chlorophenol	95-57-8	91	NP	NP	91	µg/L	420	U	4.4	U	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
2-Methylnaphthalene	91-57-6	36	NP	NP	36	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
2-Methylphenol	95-48-7	930	NP	NP	930	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
3 & 4 Methylphenol	782-60-0	NP	NP	NP	NP	µg/L	48	U	**2.7**	J	0.5	U	0.5	U	0.51	U	0.5	U	NA		0.51	U	0.5	U	0.5	UJ
3,3'-Dichlorobenzidine	91-94-1	0.13	NP	5	5	µg/L	420	U	4.4	U	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
3-Nitroaniline	99-09-2	NP	NP	5	5	µg/L	420	U	4.4	U	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
4,6-Dinitro-2-methylphenol	534-52-1	1.5	NP	NP	1.5	µg/L	850	U	8.8	U	8.8	U	8.9	U	8.9	U	8.7	U	NA		9	U	8.7	U	8.8	UJ
4-Chloroaniline	106-47-8	0.37	NP	5	5	µg/L	420	U	4.4	U	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
4-Chlorophenyl phenyl ether	7005-72-3	NP	NP	NP	NP	µg/L	420	U	4.4	U	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
4-Nitroaniline	100-01-6	3.8	NP	5	5	µg/L	420	U	4.4	U	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
4-Nitrophenol	100-02-7	NP	NP	NP	NP	µg/L	380	U	4	U	4	U	4	U	4.1	U	4	U	NA		4.1	U	4	U	4	UJ
Acenaphthene	83-32-9	530	NP	20	20	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Acenaphthylene	208-96-8	NP	NP	NP	NP	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Anthracene	120-12-7	1800	NP	50	50	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Benzidine	92-87-5	0.00011	NP	5	5	µg/L		R		R		R		R		R		R	NA			R		R		R
Benzo[a]anthracene	56-55-3	0.012	NP	0.002	0.002	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Benzo[a]pyrene	50-32-8	0.0034	0.2	ND	0.2	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Benzo[b]fluoranthene	205-99-2	0.034	NP	0.002	0.002	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
Benzo[g,h,i]perylene	191-24-2	NP	NP	NP	NP	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Benzo[k]fluoranthene	207-08-9	0.34	NP	0.002	0.002	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Benzoic acid	65-85-0	75000	NP	NP	75000	µg/L	2900	U	**19**	J	30	U	30	U	31	U	30	U	NA		31	U	30	U	30	UJ
Benzyl alcohol	100-51-6	2000	NP	NP	2000	µg/L	48	U	0.5	U	0.5	U	0.5	U	0.51	U	0.5	U	NA		0.51	U	0.5	U	0.5	UJ
Bis(2-chloroethoxy)methane	111-91-1	59	NP	5	5	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
Bis(2-chloroethyl)ether	111-44-4	0.014	NP	1	1	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Bis(2-ethylhexyl) phthalate	117-81-7	5.6	6	5	5	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
Butyl benzyl phthalate	85-68-7	16	NP	50	50	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
Carbazole	86-74-8	NP	NP	NP	NP	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Chrysene	218-01-9	3.4	NP	0.002	0.002	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
Dibenz(a,h)anthracene	53-70-3	0.0034	NP	NP	0.0034	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
Dibenzofuran	132-64-9	7.9	NP	NP	7.9	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Diethyl phthalate	84-66-2	15000	NP	50	50	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Dimethyl phthalate	131-11-3	NP	NP	50	50	µg/L	48	U	0.5	U	0.5	U	0.5	U	0.51	U	0.5	U	NA		0.51	U	0.5	U	0.5	UJ
Di-n-butyl phthalate	84-74-2	900	NP	50	50	µg/L	420	U	4.4	U	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
Di-n-octyl phthalate	117-84-0	200	NP	50	50	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Fluoranthene	206-44-0	800	NP	50	50	µg/L	48	U	0.5	U	0.5	U	0.5	U	0.51	U	0.5	U	NA		0.51	U	0.5	U	0.5	UJ
Fluorene	86-73-7	290	NP	50	50	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Hexachlorobenzene	118-74-1	0.0098	1	0.04	0.04	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
Hexachlorobutadiene	87-68-3	0.14	NP	0.5	0.5	µg/L	960	U	10	U	10	U	10	U	10	U	9.9	U	NA		10	U	9.9	U	10	UJ
Hexachlorocyclopentadiene	77-47-4	0.41	50	5	5	µg/L	2900	U	30	U	30	U	30	U	31	U	30	U	NA		31	U	30	U	30	UJ
Hexachloroethane	67-72-1	0.33	NP	5	5	µg/L	420	U	4.4	U	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
Indeno[1,2,3-cd]pyrene	193-39-5	0.034	NP	0.002	0.002	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
Isophorone	78-59-1	78	NP	50	50	µg/L	48	U	0.5	U	0.5	U	0.5	U	0.51	U	0.5	U	NA		0.51	U	0.5	U	0.5	UJ
Naphthalene	91-20-3	0.17	NP	10	10	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Nitrobenzene	98-95-3	0.14	NP	0.4	0.4	µg/L	190	U	2	U	2	U	2	U	2	U	2	U	NA		2	U	2	U	2	UJ
N-Nitrosodimethylamine	62-75-9	0.00011	NP	NP	0.00011	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
N-Nitrosodi-n-propylamine	621-64-7	0.011	NP	NP	0.011	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
N-Nitrosodiphenylamine	86-30-6	12	NP	50	50	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
N-Nitrosopyrrolidine	930-55-2	0.037	NP	NP	0.037	µg/L		R	2	U		R		R	2	U	2	U	NA			R	2	U	2	UJ
Pentachlorophenol	87-86-5	0.04	1	NP	1	µg/L	5800	U	60	U	60	U	60	U	61	U	60	U	NA		61	U	59	U	60	UJ
Phenanthrene	85-01-8	NP	NP	50	50	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ
Phenol	108-95-2	5800	NP	NP	5800	µg/L	420	U	**24**	J	4.4	U	4.4	U	4.5	U	4.4	U	NA		4.5	U	4.4	U	4.4	UJ
Pyrene	129-00-0	120	NP	50	50	µg/L	96	U	1	U	1	U	1	U	1	U	0.99	U	NA		1	U	0.99	U	1	UJ

Table 3-8
Groundwater Sample Analytical Results, Remedial Investigation
Site TU008 - Former Heating Oil UST #41 at Former Building 4
Schenectady Air National Guard Base
Scotia, New York

Notes:
Bold indicates value above laboratory detection limit.
Shading indicates value above PAL.

PAL References:
a - USEPA May 2016 Tapwater RSL (http://www2.epa.gov/risk/risk-based-screening-table-generic-tables)
b - USEPA National Primary Drinking Water Regulations (http://water.epa.gov/drink/contaminants/)
c - 6 NYCRR Part 703 Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (http://www.dec.ny.gov/chemical/23853.html)

Data Flags:
J – Result is estimated.
J+ - Result is estimated, High Bias.
R - Rejected.
U – Analyte is not detected at or above the Limit of Detection.

µg/L	Microgram per liter
CAS	Chemical Abstracts Service
D	Duplicate sample
ft bgs	Feet below ground surface
ID	Identification
MCL	Maximum contaminant level
MW	Monitoring well
NA	Not analyzed due to insufficient volume
NP	Not published
NYCRR	New York Codes, Rules, and Regulations
PAL	Project action limit
RSL	Regional Screening Level
SVOC	Semivolatile organic compound
TU008	Former Heating Oil Underground Storage Tank (UST) #41, Former Building 4
USEPA	U.S. Environmental Protection Agency
VOC	Volatile organic compound

Table 3-9
Soil Sample Analytical Results, Site Inspection
Site TU009 - WWTP Bypass UST Near IRP Site 6
Schenectady Air National Guard Base
Scotia, New York

Location	NYSDEC 375-6 Soil Cleanup Objectives (Unrestricted)	TU009						
Sample ID		TU09SB11	TU09SB11	TU09SB12	TU09SB12 DUP	TU09SB13	TU09SB14	TU09SB14
Sample Date		11/13/2014	11/13/2014	11/13/2014	11/13/2014	11/14/2014	11/14/2014	11/14/2014
Sample Depth (ft bgs)		0 - 3	7 - 8	0 - 2	0 - 2	0 - 5	4 - 6	7 - 8
Media		Soil	Soil	Soil	Soil	Soil	Soil	Soil
VOCs (µg/kg)								
1,2,4-Trimethylbenzene	**3600**	0.51 U	0.52 U	0.55 U	0.49 U	**0.47 J**	0.43 U	27 U
2-Butanone (MEK)	**120**	**12**	5.2 U	**7.2**	**5.9**	**4.8 J**	**8.6**	270 U
2-Hexanone	NS	0.51 U	0.52 U	0.55 U	0.49 U	0.56 U	**1.1 J**	54 U
4-Chlorotoluene	NS	0.2 U	0.21 U	0.22 U	0.2 U	**0.24 J**	0.17 U	27 U
Acetone	**100000**	**140**	**46**	**110**	**100**	**74 J**	**110**	270 U
Benzene	**60**	**0.19 J**	**0.24 J**	0.55 U	**0.24 J**	**0.7 J**	**0.18 J**	27 U
Carbon Disulfide	NS	**0.63 J**	**0.33 J**	**1.7 J**	**3.2 J**	**2.1**	**0.58 J**	27 U
cis-1,2-Dichloroethene	**5900**	0.51 U	0.52 U	0.55 U	0.49 U	**0.53 J**	0.43 U	27 U
Dichlorodifluoromethane	NS	0.51 U	0.52 U	0.55 U	**0.58 J**	**0.71 J**	0.43 UJ	27 U
Ethylbenzene	**1000**	**2**	**4**	**1.8 J**	**0.71 J**	0.56 U	0.43 U	27 U
n-Butylbenzene	**12000**	0.51 U	0.52 U	0.55 U	0.49 U	**0.31 J**	0.43 U	27 U
Toluene	**700**	**3**	**4.5**	**2.4**	**2.8**	**0.54 J**	0.17 U	27 U
Trichloroethene	**470**	0.51 U	0.52 U	0.55 U	0.49 U	**1.1 J**	0.43 U	27 U
Xylene, Meta + Para	**260**	**7.2**	**17**	**7.8 J**	**2.8 J**	**0.88 J**	0.35 U	54 U
Xylene, Ortho	**260**	**1.6**	**4.1**	**2.5 J**	**0.63 J**	0.22 U	0.17 U	27 U
SVOCs (µg/kg)								
Benzo(a)anthracene	**1000**	**5.1 J**	9.6 U	**48 J**	**44 J**	**30 J**	**63 J**	72 U
Benzo(a)pyrene	**1000**	**4.3 J**	9.6 U	**37 J**	**51 J**	**30 J**	**56 J**	72 U
Benzo(b)fluoranthene	**1000**	**7.4 J**	9.6 U	**66 J**	**53 J**	**45 J**	**45 J**	72 U
Benzo(g,h,i)perylene	**100000**	9.8 U	9.6 U	**26 J**	**22 J**	**30 J**	**45 J**	72 U
Benzo(k)fluoranthene	**800**	**3.9 J**	9.6 U	**33 J**	47 J	**32 J**	**60 J**	72 U
Bis(2-ethylhexyl) Phthalate	NS	**17 J**	**16 J**	180 U	90 U	**2100 J**	180 U	140 U
Chrysene	**1000**	**5.1 J**	19 U	180 U	**47 J**	**35 J**	**52 J**	140 U
Di-n-butyl Phthalate	NS	39 U	39 U	370 U	180 U	**77 J**	370 U	290 U
Fluoranthene	**100000**	**7.4 J**	19 U	**51 J**	**67 J**	**49 J**	**63 J**	140 U
Indeno(1,2,3-cd)pyrene	**500**	9.8 U	9.6 U	92 U	**26 J**	**24 J**	**30 J**	72 U
Phenanthrene	**100000**	**5.4 J**	19 U	180 U	90 U	94 U	180 U	140 U
Pyrene	**100000**	**8.2 J**	19 U	**55 J**	**71 J**	**47 J**	**67 J**	140 U
Metals (mg/kg)								
Aluminum, Total	NS	**14000**	**17000**	**13000**	**12000**	**20000 J**	**14000**	**17000**
Calcium, Total	NS	**1900**	**1300**	**12000**	**14000**	**8400 J**	**6900**	**2100**
Iron, Total	NS	**24000**	**55000**	**26000**	**25000**	**42000 J**	**29000**	**48000**
Magnesium, Total	NS	**3300**	**7100**	**7200**	**8000**	**6800**	**6400**	**7600**
Potassium, Total	NS	**1100**	**2700**	**1700**	**1700**	**2000**	**1900**	**2900**
Sodium, Total	NS	**55**	**73**	**48**	**57**	**72**	**45 J**	**54**
Antimony, Total	NS	**0.21**	**0.69**	**0.55**	**0.4**	**0.43**	**0.4**	**0.78**
Arsenic, Total	**13**	**4.4**	**13**	**7**	**6.6**	**9.1**	**7.1**	**15**
Barium, Total	**350**	**80**	**94**	**76**	**74**	**110 J**	**66**	**130**
Beryllium, Total	**7.2**	**0.56**	**0.74**	**0.52**	**0.53**	**0.64**	**0.56**	**0.73**
Cadmium, Total	**2.5**	**0.11**	**0.15**	**1.2**	**1.4**	**0.26**	**0.11**	**0.23**
Chromium, Total	**30**	**15**	**24**	**19**	**17**	**19 J**	**22**	**24**
Cobalt, Total	NS	**8.2**	**22**	**12**	**13**	**15**	**12**	**25**
Copper, Total	**50**	**14**	**40**	**25**	**23**	**30 J**	**26**	**52**
Lead, Total	**63**	**12**	**22**	**34 J**	**21 J**	**22 J**	**14**	**25**
Manganese, Total	**1600**	**660**	**830**	**670 J**	**920 J**	**750 J**	**350**	**1200**

Table 3-9
Soil Sample Analytical Results, Site Inspection
Site TU009 - WWTP Bypass UST Near IRP Site 6
Schenectady Air National Guard Base
Scotia, New York

Location	NYSDEC 375-6 Soil Cleanup Objectives (Unrestricted)	TU009						
Sample ID		TU09SB11	TU09SB11	TU09SB12	TU09SB12 DUP	TU09SB13	TU09SB14	TU09SB14
Sample Date		11/13/2014	11/13/2014	11/13/2014	11/13/2014	11/14/2014	11/14/2014	11/14/2014
Sample Depth (ft bgs)		0 - 3	7 - 8	0 - 2	0 - 2	0 - 5	4 - 6	7 - 8
Media		Soil	Soil	Soil	Soil	Soil	Soil	Soil
Nickel, Total	**30**	**18**	**39**	**25**	**24**	**31 J**	**28**	**62**
Selenium, Total	**3.9**	**0.2**	**0.42**	**0.44**	**0.45**	**0.64**	**0.55**	**0.91**
Silver, Total	**2**	**0.06**	**0.03 J**	**0.27 J**	**0.073 J**	**0.13 J**	**0.035 J**	**0.043 J**
Thallium, Total	NS	**0.16**	**0.18 J**	**0.15 J**	**0.16 J**	**0.21 J**	**0.13 J**	**0.28**
Vanadium, Total	NS	**23**	**23**	**21**	**21**	**25 J**	**23**	**24**
Zinc, Total	**109**	**59 B**	**100 B**	**89 J**	**110 J**	**98 J**	**81 B**	**130 B**
Mercury, Total	**0.18**	**0.035 J**	**0.11**	**0.047**	**0.034 J**	**0.047 J**	**0.046 J**	**0.078**

Notes:
Only compounds detected one or more times are presented in table
Bold indicates value above laboratory detection limit.
Shading indicates value above screening criteria.
µg/kg = micrograms/kilogram
mg/kg = milligrams/kilogram
* = CP-51 Guidance Value
NS = No screening criteria available
DUP = Duplicate sample

Data Qualifiers:
J = Estimated concentration
U = Not detected at concentration shown, the associated number indicates the analyte LOD
UJ = Not detected at estimated concentration shown, the quantitation is an estimated value below the LOQ
B = Analyte in the method blank

Table and notes taken directly from AECOM. 2015. Final Regional Compliance Restoration Program Preliminary Assessment/Site Inspection, Schenectady Air National Guard Base, Scotia, New York. August 2015.

Table 3-10
Soil Sample Analytical Results, Remedial Investigation
Site TU009 - WWTP Bypass UST Near IRP Site 6
Schenectady Air National Guard Base
Scotia, New York

Analyte	CAS Number	2016 USEPA Residential RSL[a]	6 NYCRR Part 375 Unrestricted Use SCO[b]	6 NYCRR Part 375 Residential Use SCO/ NYSDEC CP-51 Residential SSCO[b,c]	PAL		Location ID:	SC-TU009-MW001		SC-TU009-MW001		SC-TU009-MW002		SC-TU009-MW002		SC-TU009-MW002		SC-TU009-MW003		SC-TU009-MW003	
							Field Sample ID:	SC-TU009-MW001-S0305		SC-TU009-MW001-S0608		SC-TU009-MW002-S0305		SC-TU009-MW002-S0507		SC-TU009-MW002-S0507-D		SC-TU009-MW003-S0305		SC-TU009-MW003-S0507	
							Date:	6/6/2016		6/6/2016		6/6/2016		6/6/2016		6/6/2016		6/6/2016		6/6/2016	
							Lab Sample ID:	280-84353-1		280-84353-2		280-84353-4		280-84353-3		280-84353-5		280-84353-7		280-84353-6	
							Depth (ft bgs):	3 - 5		6 - 8		3 - 5		5 - 7		5 - 7		3 - 5		5 - 7	
Metals by 6010C/7471A																					
Aluminum	7429-90-5	77000	NP	NP	77000	mg/kg		**24000**	J	**16000**		**15000**		**15000**		**15000**		**16000**		**14000**	
Antimony	7440-36-0	31	NP	NP	31	mg/kg		7.1	UJ	6.1	U	6.4	U	6.5	U	8.3	U	6.3	U	7.1	U
Arsenic	7440-38-2	0.68	13	16	13	mg/kg		**10**	J	**11**		**7.1**	J	**8**	J	**13**	J	**11**		**7**	J
Barium	7440-39-3	15000	350	350	350	mg/kg		**190**	J	**90**		**95**		**83**		**72**		**100**		**100**	
Beryllium	7440-41-7	160	7.2	14	7.2	mg/kg		**1.4**	J	**1.1**	J	**0.87**	J	**0.88**	J	**0.83**	J	**0.91**	J	**0.86**	J
Cadmium	7440-43-9	71	2.5	2.5	2.5	mg/kg		0.71	UJ	**0.29**	J	**0.35**	J	**0.22**	J	0.83	U	**0.29**	J	**0.23**	J
Calcium	7440-70-2	NP	NP	NP	NP	mg/kg		**3000**		**1300**		**11000**		**3700**		**2600**		**5400**		**4700**	
Chromium	7440-47-3	120000	30	36	30	mg/kg		**27**	J	**24**		**20**		**21**		**22**		**23**		**21**	
Cobalt	7440-48-4	23	NP	30 (SSCO)	30	mg/kg		**14**	J	**23**		**14**		**15**		**18**		**16**		**17**	
Copper	7440-50-8	3100	50	NP	50	mg/kg		**32**	J	**52**		**32**		**35**		**41**		**40**		**41**	
Iron	7439-89-6	55000	NP	2000 (SSCO)	2000	mg/kg		**38000**	J	**39000**		**30000**		**31000**		**35000**		**37000**		**34000**	
Lead	7439-92-1	400	63	400	63	mg/kg		**13**	J	**22**		**17**		**16**		**19**		**20**		**19**	
Magnesium	7439-95-4	NP	NP	NP	NP	mg/kg		**5600**	J	**6600**		**8100**		**5300**		**5800**		**6800**		**6100**	
Manganese	7439-96-5	1800	1600	2000	1600	mg/kg		**530**	J	**810**		**540**		**480**		**440**		**510**		**780**	
Nickel	7440-02-0	1500	30	140	30	mg/kg		**33**	J	**46**		**29**		**31**		**37**		**38**		**40**	
Potassium	9/7/7440	NP	NP	NP	NP	mg/kg		**2400**	J	**2400**		**1900**		**2100**		**2200**		**2000**		**2100**	
Selenium	7782-49-2	390	3.9	36	3.9	mg/kg		14	UJ	12	U	13	U	13	U	17	U	13	U	14	U
Silver	7440-22-4	390	2	36	2	mg/kg		2.8	UJ	2.5	U	2.6	U	2.6	U	3.3	U	2.5	U	2.8	U
Sodium	7440-23-5	NP	NP	NP	NP	mg/kg		940	UJ	820	U	850	U	870	U	1100	U	840	U	940	U
Thallium	7440-28-0	0.78	NP	NP	0.78	mg/kg		**3.7**	J	10	U	11	U	11	U	14	U	11	U	12	U
Vanadium	7440-62-2	390	NP	100 (SSCO)	100	mg/kg		**43**	J	**23**		**26**		**26**		**23**		**25**		**23**	
Zinc	7440-66-6	23000	109	2200	109	mg/kg		**80**		**100**		**81**		**76**		**87**		**81**		**85**	
Mercury	7439-97-6	9.4	0.18	0.81	0.18	mg/kg		**0.042**		**0.064**		**0.057**		**0.06**		**0.057**		**0.056**		**0.047**	
SVOCs by 8270D																					
1,2,4,5-Tetrachlorobenzene	95-94-3	23	NP	NP	23	mg/kg		0.17	U	0.13	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U
1,2,4-Trichlorobenzene	120-82-1	24	NP	NP	24	mg/kg		0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
1,2-Dichlorobenzene	95-50-1	1800	1.1	100	1.1	mg/kg		0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
1,2-Diphenylhydrazine	122-66-7	0.68	NP	NP	0.68	mg/kg		0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
1,3-Dichlorobenzene	541-73-1	NP	2.4	17	2.4	mg/kg		0.043	U	0.033	U	0.038	U	0.035	U	0.035	U	0.036	U	0.037	U
1,4-Dichlorobenzene	106-46-7	2.6	1.8	9.8	1.8	mg/kg		0.043	U	0.033	U	0.038	U	0.035	U	0.035	U	0.036	U	0.037	U
2,2'-oxybis[1-chloropropane]	108-60-1	3100	NP	NP	3100	mg/kg		0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
2,4,5-Trichlorophenol	95-95-4	6300	NP	100 (SSCO)	100	mg/kg		0.043	U	0.033	U	0.038	U	0.035	U	0.035	U	0.036	U	0.037	U
2,4,6-Trichlorophenol	88-06-2	49	NP	NP	49	mg/kg		0.043	U	0.033	U	0.038	U	0.035	U	0.035	U	0.036	U	0.037	U
2,4-Dichlorophenol	120-83-2	190	NP	100 (SSCO)	100	mg/kg		0.043	U	0.033	U	0.038	U	0.035	U	0.035	U	0.036	U	0.037	U
2,4-Dimethylphenol	105-67-9	1300	NP	NP	1300	mg/kg		0.17	U	0.13	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U
2,4-Dinitrophenol	51-28-5	130	NP	100 (SSCO)	100	mg/kg		1.3	U	0.99	U	1.2	U	1.1	U	1.1	U	1.1	U	1.1	U
2,4-Dinitrotoluene	121-14-2	1.7	NP	NP	1.7	mg/kg		0.17	U	0.13	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U
2,6-Dichlorophenol	87-65-0	NP	NP	NP	NP	mg/kg		0.22	U	0.17	U	0.19	U	0.18	U	0.18	U	0.18	U	0.19	U
2,6-Dinitrotoluene	606-20-2	0.36	NP	1.03 (SSCO)	1.03	mg/kg		0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
2-Chloronaphthalene	91-58-7	4800	NP	NP	4800	mg/kg		0.043	U	0.033	U	0.038	U	0.035	U	0.035	U	0.036	U	0.037	U
2-Chlorophenol	95-57-8	390	100	100	100	mg/kg		0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
2-Methylnaphthalene	91-57-6	240	NP	0.41 (SSCO)	0.41	mg/kg		0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
2-Methylphenol	95-48-7	3200	0.33	100	0.33	mg/kg		0.043	U	0.033	U	0.038	U	0.035	U	0.035	U	0.036	U	0.037	U
3 & 4 Methylphenol	782-60-0	NP	0.33	100	0.33	mg/kg		0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
3,3'-Dichlorobenzidine	91-94-1	1.2	NP	NP	1.2	mg/kg		0.35	U	0.26	U	0.31	U	0.28	U	0.29	U	0.29	U	0.3	U
3-Nitroaniline	99-09-2	NP	NP	NP	NP	mg/kg		0.35	U	0.26	U	0.31	U	0.28	U	0.29	U	0.29	U	0.3	U
4,6-Dinitro-2-methylphenol	534-52-1	5.1	NP	NP	5.1	mg/kg		1.3	U	0.99	U	1.2	U	1.1	U	1.1	U	1.1	U	1.1	U
4-Chloroaniline	106-47-8	2.7	NP	100 (SSCO)	100	mg/kg		0.35	U	0.26	U	0.31	U	0.28	U	0.29	U	0.29	U	0.3	U

Table 3-10
Soil Sample Analytical Results, Remedial Investigation
Site TU009 - WWTP Bypass UST Near IRP Site 6
Schenectady Air National Guard Base
Scotia, New York

Analyte	CAS Number	2016 USEPA Residential RSL[a]	6 NYCRR Part 375 Unrestricted Use SCO[b]	6 NYCRR Part 375 Residential Use SCO/ NYSDEC CP-51 Residential SSCO[b,c]	PAL	Location ID:	SC-TU009-MW001		SC-TU009-MW001		SC-TU009-MW002		SC-TU009-MW002		SC-TU009-MW002		SC-TU009-MW003		SC-TU009-MW003	
						Field Sample ID:	SC-TU009-MW001-S0305		SC-TU009-MW001-S0608		SC-TU009-MW002-S0305		SC-TU009-MW002-S0507		SC-TU009-MW002-S0507-D		SC-TU009-MW003-S0305		SC-TU009-MW003-S0507	
						Date:	6/6/2016		6/6/2016		6/6/2016		6/6/2016		6/6/2016		6/6/2016		6/6/2016	
						Lab Sample ID:	280-84353-1		280-84353-2		280-84353-4		280-84353-3		280-84353-5		280-84353-7		280-84353-6	
						Depth (ft bgs):	3 - 5		6 - 8		3 - 5		5 - 7		5 - 7		3 - 5		5 - 7	
4-Chlorophenyl phenyl ether	7005-72-3	NP	NP	NP	NP	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
4-Nitroaniline	100-01-6	27	NP	NP	27	mg/kg	0.35	U	0.26	U	0.31	U	0.28	U	0.29	U	0.29	U	0.3	U
4-Nitrophenol	100-02-7	NP	NP	NP	NP	mg/kg	0.35	U	0.26	U	0.31	U	0.28	U	0.29	U	0.29	U	0.3	U
Acenaphthene	83-32-9	3600	20	100	20	mg/kg	0.043	U	0.033	U	0.038	U	0.035	U	0.035	U	0.036	U	0.037	U
Acenaphthylene	208-96-8	NP	100	100	100	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Anthracene	120-12-7	18000	100	100	100	mg/kg	0.087	U	0.066	U	**0.03**	J	0.071	U	0.072	U	0.072	U	0.075	U
Benzidine	92-87-5	0.00053	NP	NP	0.00053	mg/kg		R		R		R		R		R		R		R
Benzo[a]anthracene	56-55-3	0.16	1	1	1	mg/kg	0.087	U	0.066	U	**0.1**	J	0.071	U	0.072	U	0.072	U	0.075	U
Benzo[a]pyrene	50-32-8	0.016	1	1	1	mg/kg	0.087	U	0.066	U	**0.089**	J	0.071	U	0.072	U	0.072	U	0.075	U
Benzo[b]fluoranthene	205-99-2	0.16	1	1	1	mg/kg	0.087	U	0.066	U	**0.13**	J	0.071	U	0.072	U	0.072	U	0.075	U
Benzo[g,h,i]perylene	191-24-2	NP	100	100	100	mg/kg	0.043	U	0.033	U	**0.052**	J	**0.021**	J	**0.017**	J	0.036	U	0.037	U
Benzo[k]fluoranthene	207-08-9	1.6	0.8	1	0.8	mg/kg	0.17	U	0.13	U	**0.052**	J	0.14	U	0.14	U	0.14	U	0.15	U
Benzoic acid	65-85-0	250000	NP	100 (SSCO)	100	mg/kg	1.3	U	0.99	U	1.2	U	1.1	U	1.1	U	1.1	U	1.1	U
Benzyl alcohol	100-51-6	6300	NP	NP	6300	mg/kg	0.043	U	0.033	U	0.038	U	0.035	U	0.035	U	0.036	U	0.037	U
Bis(2-chloroethoxy)methane	111-91-1	190	NP	NP	190	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Bis(2-chloroethyl)ether	111-44-4	0.23	NP	NP	0.23	mg/kg	0.043	U	0.033	U	0.038	U	0.035	U	0.035	U	0.036	U	0.037	U
Bis(2-ethylhexyl) phthalate	117-81-7	39	NP	50 (SSCO)	50	mg/kg	0.17	U	0.13	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U
Butyl benzyl phthalate	85-68-7	290	NP	100 (SSCO)	100	mg/kg	0.17	U	0.13	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U
Carbazole	86-74-8	NP	NP	NP	NP	mg/kg	0.17	U	0.13	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U
Chrysene	218-01-9	16	1	1	1	mg/kg	0.087	U	0.066	U	**0.12**	J	0.071	U	0.072	U	0.072	U	0.075	U
Dibenz(a,h)anthracene	53-70-3	0.016	0.33	0.33	0.33	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Dibenzofuran	132-64-9	73	NP	NP	73	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Diethyl phthalate	84-66-2	51000	NP	100 (SSCO)	100	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Dimethyl phthalate	131-11-3	NP	NP	100 (SSCO)	100	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Di-n-butyl phthalate	84-74-2	6300	NP	100 (SSCO)	100	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Di-n-octyl phthalate	117-84-0	630	NP	100 (SSCO)	100	mg/kg	0.086	U	0.065	U	0.076	U	0.07	U	0.071	U	0.071	U	0.074	U
Fluoranthene	206-44-0	2400	100	100	100	mg/kg	0.17	U	0.13	U	**0.29**	J	0.14	U	0.14	U	0.14	U	0.15	U
Fluorene	86-73-7	2400	30	100	30	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Hexachlorobenzene	118-74-1	0.21	0.33	0.41 (SSCO)	0.33	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Hexachlorobutadiene	87-68-3	1.2	NP	NP	1.2	mg/kg	0.043	U	0.033	U	0.038	U	0.035	U	0.035	U	0.036	U	0.037	U
Hexachlorocyclopentadiene	77-47-4	1.8	NP	NP	1.8	mg/kg	0.17	U	0.13	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U
Hexachloroethane	67-72-1	1.8	NP	NP	1.8	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Indeno[1,2,3-cd]pyrene	193-39-5	0.16	0.5	0.5	0.5	mg/kg	0.087	U	0.066	U	**0.06**	J	0.071	U	0.072	U	0.072	U	0.075	U
Isophorone	78-59-1	570	NP	100 (SSCO)	100	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Naphthalene	91-20-3	3.8	12	100	12	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Nitrobenzene	98-95-3	5.1	NP	3.7 (SSCO)	3.7	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
N-Nitrosodimethylamine	62-75-9	0.002	NP	NP	0.002	mg/kg	0.17	U	0.13	U	0.15	U	0.14	U	0.14	U	0.14	U	0.15	U
N-Nitrosodi-n-propylamine	621-64-7	0.078	NP	NP	0.078	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
N-Nitrosodiphenylamine	86-30-6	110	NP	NP	110	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
N-Nitrosopyrrolidine	930-55-2	0.26	NP	NP	0.26	mg/kg		R		R		R		R		R		R		R
Pentachlorophenol	87-86-5	1	0.8	2.4	0.8	mg/kg	1.3	U	0.99	U	1.2	U	1.1	U	1.1	U	1.1	U	1.1	U
Phenanthrene	85-01-8	NP	100	100	100	mg/kg	0.087	U	0.066	U	**0.19**	J	0.071	U	0.072	U	0.072	U	0.075	U
Phenol	108-95-2	19000	0.33	100	0.33	mg/kg	0.087	U	0.066	U	0.077	U	0.071	U	0.072	U	0.072	U	0.075	U
Pyrene	129-00-0	1800	100	100	100	mg/kg	0.043	U	0.033	U	**0.23**	J	**0.013**	J	**0.015**	J	**0.015**	J	**0.014**	J

Table 3-10
Soil Sample Analytical Results, Remedial Investigation
Site TU009 - WWTP Bypass UST Near IRP Site 6
Schenectady Air National Guard Base
Scotia, New York

Notes:
Bold indicates value above laboratory detection limit.
Shading indicates value above PAL.

PAL References:
a - USEPA May 2016 Residential RSL (THQ=1, TR-1E-06) (http://www2.epa.gov/risk/risk-based-screening-table-generic-tables)
b - 6 NYCRR Part 375, December 2006 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/part375.pdf)
c - NYSDEC CP-51 Soil Cleanup Guidance, October 2010 (http://www.dec.ny.gov/docs/remediation_hudson_pdf/cpsoil.pdf)

Data Flags:
J – Result is estimated.
R – Rejected.
U – Analyte is not detected at or above the Limit of Detection.
UJ – Analyte is not detected, but there is uncertainty concerning the reported value.

CAS	Chemical Abstracts Service
CP	Commissioner Policy
D	Duplicate sample
ft bgs	Feet below ground surface
ID	Identification
mg/kg	Milligram per kilogram
MW	Monitoring well
NP	Not published
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
PAL	Project action limit
RSL	Regional Screening Level
SC	Schenectady Air National Guard Base
SCO	Soil Cleanup Objective
SSCO	Supplemental Soil Cleanup Objective
SVOC	Semivolatile organic compound
THQ	Target hazard quotient
TU009	Waste Water Treatment Plan Bypass UST near Installation Restoration Program Site 6
USEPA	U.S. Environmental Protection Agency

Table 3-11
Groundwater Sample Analytical Results, Site Inspection
Site TU009 - WWTP Bypass UST Near IRP Site 6
Schenectady Air National Guard Base
Scotia, New York

Location	NYSDEC TOGS Ambient Water Quality Standards	TU009	
Sample ID		TU09GW12	TU09GW13
Sample Date		11/14/2014	11/14/2014
Media		Groundwater	Groundwater
VOCs (µg/L)			
cis-1,2-Dichloroethene	**5**	0.5 U	**0.21 J**
Ethylbenzene	**5**	0.2 U	**0.57 J**
Xylene, Meta + Para	**5**	0.4 U	**2.7**
Xylene, Ortho	**5**	0.5 U	**0.9 J**
SVOCs (µg/L)			
Benzo(a)anthracene	**0.002**	0.23 U	**0.12 J**
Benzo(a)pyrene	ND	0.23 U	**0.15 J**
Benzo(b)fluoranthene	**0.002**	0.45 U	**0.15 J**
Benzo(g,h,i)perylene	NS	0.45 U	**0.11 J**
Benzo(k)fluoranthene	**0.002**	0.45 U	**0.12 J**
Bis(2-ethylhexyl) Phthalate	**5**	**7**	**0.44 UJ**
Carbazole	NS	0.45 U	**0.11 J**
Chrysene	**0.002**	0.23 U	**0.11 J**
Di-n-butyl Phthalate	**50**	**2.3**	**2.6**
Fluoranthene	**50**	0.45 U	**0.2 J**
Phenanthrene	**50**	0.23 U	**0.1 J**
Phenol	**2***	0.23 U	**0.045 J**
Pyrene	**50**	0.45 U	**0.21 J**
Metals (µg/L)			
Aluminum, Dissolved	NS	**8800**	**2400**
Aluminum, Total	NS	**76000**	**180000 J**
Calcium, Dissolved	NS	**150000**	**120000**
Calcium, Total	NS	**160000**	**180000 J**
Iron, Dissolved	**300***	**15000**	**3200**
Iron, Total	**300***	**170000**	**330000 J**
Magnesium, Dissolved	**35000**	**36000**	**26000**
Magnesium, Total	**35000**	**61000**	**83000**
Potassium, Dissolved	NS	**6000**	**3700**
Potassium, Total	NS	**17000**	**20000**
Sodium, Dissolved	**20000**	**26000**	**22000**
Sodium, Total	**20000**	**24000**	**20000**
Antimony, Dissolved	**3**	**0.35 J**	**0.17 J**
Antimony, Total	**3**	**0.51 J**	**0.5 J**
Arsenic, Dissolved	**25**	**5.4**	**1.4**
Arsenic, Total	**25**	**47**	**65**
Barium, Dissolved	**1000**	**130**	**65**
Barium, Total	**1000**	**830**	**1800 J**
Beryllium, Dissolved	**3**	**0.35 J**	0.4 U
Beryllium, Total	**3**	**3.5**	**7.2**
Cadmium, Dissolved	**5**	**0.22**	**0.05 J**
Cadmium, Total	**5**	**1.5 J**	**2.6 J**
Chromium, Dissolved	**50**	**14**	**3.6**
Chromium, Total	**50**	**120**	**220 J**
Cobalt, Dissolved	NS	**9.3**	**3.8**
Cobalt, Total	NS	**87**	**150**
Copper, Dissolved	**200**	**19**	**6.5**

Table 3-11
Groundwater Sample Analytical Results, Site Inspection
Site TU009 - WWTP Bypass UST Near IRP Site 6
Schenectady Air National Guard Base
Scotia, New York

Location	NYSDEC TOGS Ambient Water Quality Standards	TU009	
Sample ID		TU09GW12	TU09GW13
Sample Date		11/14/2014	11/14/2014
Media		Groundwater	Groundwater
Copper, Total	200	190	280 J
Lead, Dissolved	25	8.8	2.6
Lead, Total	25	92	210 J
Manganese, Dissolved	300*	490	1200
Manganese, Total	300*	3700	7600 J
Nickel, Dissolved	100	20	5.7
Nickel, Total	100	190	310 J
Selenium, Dissolved	10	1.3	1.2
Selenium, Total	10	1.2 J	3.5 J
Silver, Dissolved	50	0.067 J	0.1 U
Silver, Total	50	0.18 J	1.1
Thallium, Dissolved	0.5	0.19 J	0.065 J
Thallium, Total	0.5	1.1	2
Vanadium, Dissolved	NS	16	5
Vanadium, Total	NS	110	280 J
Zinc, Dissolved	2000	46	20
Zinc, Total	2000	400	800 J
Mercury, Total	0.7	0.36	0.79

Notes:

Only compounds detected one or more times are shown

Bold indicates value above laboratory detection limit.

Shading indicates value above screening criteria.

µg/L = micrograms/liter

*Values exist solely for aesthetic considerations

NS = No screening criteria available

ND - standard is any detectable concentration

Data Qualifiers:

J = Estimated concentration

U = Not detected at concentration shown

UJ = Not detected at estimated concentration shown

Table and notes taken directly from AECOM. 2015. Final Regional Compliance Restoration Program Preliminary Assessment/Site Inspection, Schenectady Air National Guard Base, Scotia, New York. August 2015.

Table 3-12
Groundwater Sample Analytical Results, Remedial Investigation
Site TU009 - WWTP Bypass UST Near IRP Site 6
Schenectady Air National Guard Base
Scotia, New York

	CAS Number	2016 USEPA Tapwater RSL[a]	MCL[b]	6 NYCRR Part 703 Drinking Water[c]	PAL											
						Location ID:	SC-TU009-6MW22		SC-TU009-6MW22		SC-TU009-6MW24		SC-TU009-MW003		SC-TU009-MW003	
						ID:	SC-TU009-6MW22-G-1		SC-TU009-6MW22-G-1-D		SC-TU009-6MW24-G-1		SC-TU009-MW003-G-1		SC-TU009-MW003-G-2	
						Lab Sample ID:	280-84353-11		280-84353-12		280-84353-10		280-84353-9		280-90742-1	
						Date:	6/8/2016		6/8/2016		6/8/2016		6/8/2016		11/7/2016	
						interval:	4-9 ft bgs		4-9 ft bgs		4-9 ft bgs		2.5-9.5 ft bgs		2.5-9.5 ft bgs	
Total Metals by 6010C/7470A																
Aluminum	7429-90-5	20000	NP	NP	20000	µg/L	**130**	J	**130**	J	**540**		**4200**		**170**	J
Antimony	7440-36-0	7.8	6	3	3	µg/L	12	U	12	U	12	U	12	U	12	U
Arsenic	7440-38-2	0.052	10	25	10	µg/L	15	U	15	U	15	U	15	U	15	U
Barium	7440-39-3	3800	2000	1000	1000	µg/L	**1.9**	J	**2.5**	J	**84**		**37**		**64**	
Beryllium	7440-41-7	25	4	3	3	µg/L	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
Cadmium	7440-43-9	9.2	5	5	5	µg/L	1.8	U	1.8	U	1.8	U	**1.7**	J	**0.6**	J
Calcium	7440-70-2	NP	NP	NP	NP	µg/L	**180000**	J-	**180000**	J-	**180000**		**200000**		**240000**	J
Chromium	7440-47-3	NP	100	50	50	µg/L	2.6	U	2.6	U	**2.1**	J	**4.7**	J	**1.1**	J
Cobalt	7440-48-4	6	NP	NP	6	µg/L	4.5	U	4.5	U	4.5	U	**110**		4.5	U
Copper	7440-50-8	800	1300	200	200	µg/L	10	U	10	U	**4.3**	J	**8.4**	J	10	U
Iron	7439-89-6	14000	NP	300	300	µg/L	**180**		**180**		**1200**		**30000**		**6700**	
Lead	7439-92-1	15	15	25	15	µg/L	10	U	**2.7**	J	10	U	**2.6**	J	10	U
Magnesium	7439-95-4	NP	NP	35000	35000	µg/L	**40000**		**38000**		**26000**		**51000**		**69000**	
Manganese	7439-96-5	430	NP	300	300	µg/L	**3500**	J	**4200**		**1500**		**11000**		**14000**	J
Nickel	7440-02-0	390	NP	100	100	µg/L	**6.2**	J	**6.2**	J	**3.1**	J	**190**		**4.2**	J
Potassium	9/7/7440	NP	NP	NP	NP	µg/L	**3700**		**3600**		**5200**		**34000**		**31000**	
Selenium	7782-49-2	100	50	10	10	µg/L	19	U	19	U	19	U	19	U	19	U
Silver	7440-22-4	94	NP	50	50	µg/L	3.5	U	3.5	U	3.5	U	3.5	U	3.5	U
Sodium	7440-23-5	NP	NP	20000	20000	µg/L	**52000**		**51000**		**63000**		**110000**		**110000**	
Thallium	7440-28-0	0.2	2	0.5	0.5	µg/L	19	U	19	U	19	U	19	U	**11**	J
Vanadium	7440-62-2	86	NP	NP	86	µg/L	4	U	4	U	**1.5**	J	**1.8**	J	**1.1**	J
Zinc	7440-66-6	6000	NP	2000	2000	µg/L	**15**	J	**16**	J	**30**	J	**120**	J	**5.9**	J
Mercury	7439-97-6	0.63	2	0.7	0.7	µg/L	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
Dissolved Metals by 6010C/7470A																
Aluminum, Dissolved	7429-90-5 (dis)	20000	NP	NP	20000	µg/L	70	U	70	U	70	U	**800**		70	U
Antimony, Dissolved	7440-36-0 (dis)	7.8	6	3	3	µg/L	12	U	12	U	12	U	12	U	12	U
Arsenic, dissolved	7440-38-2 (dis)	0.052	10	25	10	µg/L	15	U	15	U	15	U	15	U	**16**	J
Barium, Dissolved	7440-39-3 (dis)	3800	2000	1000	1000	µg/L	2	U	2	U	**53**		**34**		**71**	
Beryllium, Dissolved	7440-41-7 (dis)	25	4	3	3	µg/L	1.2	U	1.2	U	1.2	U	1.2	U	1.2	U
Cadmium, Dissolved	7440-43-9 (dis)	9.2	5	5	5	µg/L	**0.57**	J	**0.52**	J	1.8	U	**1.9**	J	**0.55**	J
Calcium, Dissolved	7440-70-2 (dis)	NP	NP	NP	NP	µg/L	**190000**		**200000**		**190000**		**220000**		**220000**	J
Chromium, Dissolved	7440-47-3 (dis)	NP	100	50	50	µg/L	2.6	U	2.6	U	**0.68**	J	**0.71**	J	**0.9**	J
Cobalt, Dissolved	7440-48-4 (dis)	6	NP	NP	6	µg/L	4.5	U	4.5	U	4.5	U	**120**		4.5	U
Copper, Dissolved	7440-50-8 (dis)	800	1300	200	200	µg/L	10	U	10	U	**4.6**	J	**5.7**	J	10	U
Iron, dissolved	7439-89-6 (dis)	14000	NP	300	300	µg/L	85	U	85	U	85	U	**23000**		**5800**	J
Lead, dissolved	7439-92-1 (dis)	15	15	25	15	µg/L	**4**	J	**2.8**	J	10	U	**3.7**	J	**2.9**	J
Magnesium, Dissolved	7439-95-4 (dis)	NP	NP	35000	35000	µg/L	**42000**		**43000**		**28000**		**56000**		**65000**	
Manganese, Dissolved	7439-96-5 (dis)	430	NP	300	300	µg/L	**2300**		**2300**		**31**		**13000**		**12000**	J
Nickel, Dissolved	7440-02-0 (dis)	390	NP	100	100	µg/L	**4.9**	J	**4.4**	J	5	U	**210**		**2.2**	J
Potassium, Dissolved	7440-09-7 (dis)	NP	NP	NP	NP	µg/L	**3500**		**3500**		**4400**		**33000**		**33000**	
Selenium, dissolved	7782-49-2 (dis)	100	50	10	10	µg/L	19	U	19	U	19	U	19	U	19	U
Silver, Dissolved	7440-22-4 (dis)	94	NP	50	50	µg/L	3.5	U	3.5	U	3.5	U	3.5	U	3.5	U
Sodium, Dissolved	7440-23-5 (dis)	NP	NP	20000	20000	µg/L	**48000**		**50000**		**63000**		**110000**		**110000**	
Thallium, Dissolved	7440-28-0 (dis)	0.2	2	0.5	0.5	µg/L	19	U	19	U	19	U	19	U	19	U
Vanadium, Dissolved	7440-62-2 (dis)	86	NP	NP	86	µg/L	4	U	4	U	4	U	4	U	**1.5**	J
Zinc, Dissolved	7440-66-6 (dis)	6000	NP	2000	2000	µg/L	**9.1**	J	**8.9**	J	**5.9**	J	**120**	J	15	U
Mercury, Dissolved	7439-97-6 (dis)	0.63	2	0.7	0.7	µg/L	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U

Table 3-12
Groundwater Sample Analytical Results, Remedial Investigation
Site TU009 - WWTP Bypass UST Near IRP Site 6
Schenectady Air National Guard Base
Scotia, New York

	CAS Number	2016 USEPA Tapwater RSL[a]	MCL[b]	6 NYCRR Part 703 Drinking Water[c]	PAL	Location ID:	SC-TU009-6MW22		SC-TU009-6MW22		SC-TU009-6MW24		SC-TU009-MW003		SC-TU009-MW003
						ID:	SC-TU009-6MW22-G-1		SC-TU009-6MW22-G-1-D		SC-TU009-6MW24-G-1		SC-TU009-MW003-G-1		SC-TU009-MW003-G-2
						Lab Sample ID:	280-84353-11		280-84353-12		280-84353-10		280-84353-9		280-90742-1
						Date:	6/8/2016		6/8/2016		6/8/2016		6/8/2016		11/7/2016
						interval:	4-9 ft bgs		4-9 ft bgs		4-9 ft bgs		2.5-9.5 ft bgs		2.5-9.5 ft bgs
SVOCs by 8270D															
1,2,4,5-Tetrachlorobenzene	95-94-3	1.7	NP	5	5	µg/L	4.4	U	4.4	U	6.2	U	4.4	U	NA
1,2,4-Trichlorobenzene	120-82-1	1.2	70	5	5	µg/L	0.99	U	1	U	1.4	U	1	U	NA
1,2-Dichlorobenzene	95-50-1	300	600	3	3	µg/L	0.5	U	0.5	U	0.7	U	0.5	U	NA
1,2-Diphenylhydrazine	122-66-7	0.078	NP	ND	0.078	µg/L	0.5	U	0.51	U	0.71	U	0.51	U	NA
1,3-Dichlorobenzene	541-73-1	NP	NP	3	3	µg/L	0.99	U	1	U	1.4	U	1	U	NA
1,4-Dichlorobenzene	106-46-7	0.48	75	3	3	µg/L	0.99	U	1	U	1.4	U	1	U	NA
2,2'-oxybis[1-chloropropane]	108-60-1	710	NP	5	5	µg/L	0.99	U	1	U	1.4	U	1	U	NA
2,4,5-Trichlorophenol	95-95-4	1200	NP	NP	1200	µg/L		R		R	1.4	U	1	U	NA
2,4,6-Trichlorophenol	88-06-2	4.1	NP	NP	4.1	µg/L		R		R	1.4	U	1	U	NA
2,4-Dichlorophenol	120-83-2	46	NP	NP	46	µg/L		R		R	2.8	U	2	U	NA
2,4-Dimethylphenol	105-67-9	360	NP	50	50	µg/L		R		R	2.8	U	2	U	NA
2,4-Dinitrophenol	51-28-5	39	NP	10	10	µg/L		R		R	42	U	30	U	NA
2,4-Dinitrotoluene	121-14-2	0.24	NP	5	5	µg/L	4.4	U	4.4	U	6.2	U	4.4	U	NA
2,6-Dichlorophenol	87-65-0	NP	NP	NP	NP	µg/L		R		R	5.6	U	4	U	NA
2,6-Dinitrotoluene	606-20-2	0.048	NP	5	5	µg/L	4.4	U	4.4	U	6.2	U	4.4	U	NA
2-Chloronaphthalene	91-58-7	750	NP	10	10	µg/L	0.99	U	1	U	1.4	U	1	U	NA
2-Chlorophenol	95-57-8	91	NP	NP	91	µg/L		R		R	6.2	U	4.4	U	NA
2-Methylnaphthalene	91-57-6	36	NP	NP	36	µg/L	0.99	U	1	U	1.4	U	1	U	NA
2-Methylphenol	95-48-7	930	NP	NP	930	µg/L		R		R	2.8	U	2	U	NA
3 & 4 Methylphenol	782-60-0	NP	NP	NP	NP	µg/L		R		R	0.7	U	0.5	U	NA
3,3'-Dichlorobenzidine	91-94-1	0.13	NP	5	5	µg/L		R		R	6.2	U	4.4	U	NA
3-Nitroaniline	99-09-2	NP	NP	5	5	µg/L		R		R	6.2	U	4.4	U	NA
4,6-Dinitro-2-methylphenol	534-52-1	1.5	NP	NP	1.5	µg/L		R		R	12	U	8.9	U	NA
4-Chloroaniline	106-47-8	0.37	NP	5	5	µg/L		R		R	6.2	U	4.4	U	NA
4-Chlorophenyl phenyl ether	7005-72-3	NP	NP	NP	NP	µg/L	4.4	U	4.4	U	6.2	U	4.4	U	NA
4-Nitroaniline	100-01-6	3.8	NP	5	5	µg/L	4.4	UJ	4.4	UJ	6.2	U	4.4	U	NA
4-Nitrophenol	100-02-7	NP	NP	NP	NP	µg/L		R		R	5.6	U	4	U	NA
Acenaphthene	83-32-9	530	NP	20	20	µg/L	0.99	UJ	1	UJ	1.4	U	1	U	NA
Acenaphthylene	208-96-8	NP	NP	NP	NP	µg/L	0.99	UJ	1	UJ	1.4	U	1	U	NA
Anthracene	120-12-7	1800	NP	50	50	µg/L	0.99	UJ	1	UJ	1.4	U	1	U	NA
Benzidine	92-87-5	0.00011	NP	5	5	µg/L		R		R		R		R	NA
Benzo[a]anthracene	56-55-3	0.012	NP	0.002	0.002	µg/L	0.99	U	1	U	1.4	U	1	U	NA
Benzo[a]pyrene	50-32-8	0.0034	0.2	ND	0.2	µg/L	0.99	U	1	U	1.4	U	1	U	NA
Benzo[b]fluoranthene	205-99-2	0.034	NP	0.002	0.002	µg/L	2	U	2	U	2.8	U	2	U	NA
Benzo[g,h,i]perylene	191-24-2	NP	NP	NP	NP	µg/L	0.99	U	1	U	1.4	U	1	U	NA
Benzo[k]fluoranthene	207-08-9	0.34	NP	0.002	0.002	µg/L	0.99	U	1	U	1.4	U	1	U	NA
Benzoic acid	65-85-0	75000	NP	NP	75000	µg/L	30	U	30	U	42	U	**13**	J	NA
Benzyl alcohol	100-51-6	2000	NP	NP	2000	µg/L	0.5	U	0.5	U	0.7	U	0.5	U	NA
Bis(2-chloroethoxy)methane	111-91-1	59	NP	5	5	µg/L	2	U	2	U	2.8	U	2	U	NA
Bis(2-chloroethyl)ether	111-44-4	0.014	NP	1	1	µg/L	0.99	U	1	U	1.4	U	1	U	NA
Bis(2-ethylhexyl) phthalate	117-81-7	5.6	6	5	5	µg/L	2	U	2	U	2.8	U	2	U	NA
Butyl benzyl phthalate	85-68-7	16	NP	50	50	µg/L	2	U	2	U	2.8	U	2	U	NA
Carbazole	86-74-8	NP	NP	NP	NP	µg/L	0.99	UJ	1	UJ	1.4	U	1	U	NA
Chrysene	218-01-9	3.4	NP	0.002	0.002	µg/L	2	U	2	U	2.8	U	2	U	NA
Dibenz(a,h)anthracene	53-70-3	0.0034	NP	NP	0.0034	µg/L	2	U	2	U	2.8	U	2	U	NA
Dibenzofuran	132-64-9	7.9	NP	NP	7.9	µg/L	0.99	U	1	U	1.4	U	1	U	NA
Diethyl phthalate	84-66-2	15000	NP	50	50	µg/L	0.99	U	1	U	1.4	U	1	U	NA
Dimethyl phthalate	131-11-3	NP	NP	50	50	µg/L	0.5	U	0.5	U	0.7	U	0.5	U	NA
Di-n-butyl phthalate	84-74-2	900	NP	50	50	µg/L	4.4	U	4.4	U	6.2	U	4.4	U	NA
Di-n-octyl phthalate	117-84-0	200	NP	50	50	µg/L	0.99	U	1	U	1.4	U	1	U	NA

Table 3-12
Groundwater Sample Analytical Results, Remedial Investigation
Site TU009 - WWTP Bypass UST Near IRP Site 6
Schenectady Air National Guard Base
Scotia, New York

	CAS Number	2016 USEPA Tapwater RSL[a]	MCL[b]	6 NYCRR Part 703 Drinking Water[c]	PAL	Location ID:	SC-TU009-6MW22		SC-TU009-6MW22		SC-TU009-6MW24		SC-TU009-MW003		SC-TU009-MW003
						ID:	SC-TU009-6MW22-G-1		SC-TU009-6MW22-G-1-D		SC-TU009-6MW24-G-1		SC-TU009-MW003-G-1		SC-TU009-MW003-G-2
						Lab Sample ID:	280-84353-11		280-84353-12		280-84353-10		280-84353-9		280-90742-1
						Date:	6/8/2016		6/8/2016		6/8/2016		6/8/2016		11/7/2016
						interval:	4-9 ft bgs		4-9 ft bgs		4-9 ft bgs		2.5-9.5 ft bgs		2.5-9.5 ft bgs
Fluoranthene	206-44-0	800	NP	50	50	µg/L	**0.27**	J	0.5	U	0.7	U	0.5	U	NA
Fluorene	86-73-7	290	NP	50	50	µg/L	0.99	U	1	U	1.4	U	1	U	NA
Hexachlorobenzene	118-74-1	0.0098	1	0.04	0.04	µg/L	2	U	2	U	2.8	U	2	U	NA
Hexachlorobutadiene	87-68-3	0.14	NP	0.5	0.5	µg/L	9.9	U	10	U	14	U	10	U	NA
Hexachlorocyclopentadiene	77-47-4	0.41	50	5	5	µg/L	30	U	30	U	42	U	30	U	NA
Hexachloroethane	67-72-1	0.33	NP	5	5	µg/L	4.4	U	4.4	U	6.2	U	4.4	U	NA
Indeno[1,2,3-cd]pyrene	193-39-5	0.034	NP	0.002	0.002	µg/L	2	U	2	U	2.8	U	2	U	NA
Isophorone	78-59-1	78	NP	50	50	µg/L	0.5	U	0.5	U	0.7	U	0.5	U	NA
Naphthalene	91-20-3	0.17	NP	10	10	µg/L	0.99	U	1	U	1.4	U	1	U	NA
Nitrobenzene	98-95-3	0.14	NP	0.4	0.4	µg/L	2	U	2	U	2.8	U	2	U	NA
N-Nitrosodimethylamine	62-75-9	0.00011	NP	NP	0.00011	µg/L	0.99	U	1	U	1.4	U	1	U	NA
N-Nitrosodi-n-propylamine	621-64-7	0.011	NP	NP	0.011	µg/L	0.99	U	1	U	1.4	U	1	U	NA
N-Nitrosodiphenylamine	86-30-6	12	NP	50	50	µg/L	0.99	UJ	1	UJ	1.4	U	1	U	NA
N-Nitrosopyrrolidine	930-55-2	0.037	NP	NP	0.037	µg/L		R		R		R		R	NA
Pentachlorophenol	87-86-5	0.04	1	NP	1	µg/L		R		R	84	U	60	U	NA
Phenanthrene	85-01-8	NP	NP	50	50	µg/L	0.99	U	1	U	1.4	U	1	U	NA
Phenol	108-95-2	5800	NP	NP	5800	µg/L		R		R	6.2	U	4.4	U	NA
Pyrene	129-00-0	120	NP	50	50	µg/L	0.99	UJ	1	UJ	1.4	U	1	U	NA

Notes:
Bold indicates value above laboratory detection limit.
Shading indicates value above PAL.

PAL References:
a - USEPA May 2016 Tapwater RSL (http://www2.epa.gov/risk/risk-based-screening-table-generic-tables)
b - USEPA National Primary Drinking Water Regulations (http://water.epa.gov/drink/contaminants/)
c - 6 NYCRR Part 703 Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (http://www.dec.ny.gov/chemical/23853.html)

Data Flags:
J – Result is estimated.
J- – Result is estimated, Low Bias.
R – Rejected.
U – Analyte is not detected at or above the Limit of Detection.
UJ – Analyte is not detected, but there is uncertainty concerning the reported value.

µg/L	Microgram per liter
CAS	Chemical Abstracts Service
D	Duplicate sample
ft bgs	Feet below ground surface
ID	Identification
MCL	Maximum contaminant level
MW	Monitoring well
NP	Not published
NYCRR	New York Codes, Rules, and Regulations
PAL	Project action limit
RSL	Regional Screening Level
SVOC	Semivolatile organic compound
TOGS	Technical and Operational Guidance Series
TU009	Waste Water Treatment Plan Bypass UST near Installation Restoration Program Site 6
USEPA	U.S. Environmental Protection Agency

ATTACHMENT A
PUBLIC NOTICE

(This page intentionally left blank)

State of New York, ss.:
City and County of Schenectady

PUBLIC COMMENT PERIOD
No Further Response Action Planned Decision Document for Sites ZZ007, TU008, and TU009 - Schenectady Air National Guard Base, Scotia, NY

National Guard Bureau (NGB) has completed a No Further Response Action Planned Decision Document (NFRAP DD) for Sites ZZ007, TU008, and TU009 at Schenectady Air National Guard Base (ANGB) located in Scotia, New York. Site ZZ007 includes the area of Former Building 13, demolished in the mid-1990s, where hazardous materials were used. Site TU008 includes Former Building 4, which was a vehicle maintenance facility demolished in 1996, and the associated Former Heating Oil Underground Storage Tank (UST) #41. Site TU009 consists of a Wastewater Treatment Plant (WWTP) Bypass UST used in the 1980s for the WWTP that was demolished in 2002. NGB, in consultation with the New York State Department of Environmental Conservation (NYSDEC), recently completed a Remedial Investigation (RI) at the three Sites and determined that no contamination is present and that no further action is needed to protect human health and the environment. The NFRAP DD identifies no further action as the proposed decision at Sites ZZ007, TU008, and TU009.

A printed copy of the NFRAP DD, including an electronic copy of the RI Report, is available for public review at the reference desk of the Schenectady Public Library – Central Library, 99 Clinton St., Schenectady, NY. Internet access is also available at the Schenectady Public Library. The RI Report is also available online at Website http://afcec.publicadmin-record.us.af.mil/Search.aspx. To access reports on the Website, select "Air National Guard," then choose "Schenectady APT (Stratton),NY" from the Installation List, and click on the "Search" button; ths pulls up a list of records to view.

The public is invited to comment on the proposed decision. Written comments should be directed to the contact below during the 30-day Public Comment Period, December 13, 2017 to January 11, 2018, postmarked no later than January 11, 2018 if by mail.

Jody Murata
Program Manager, NGB/A4OP
Shepperd Hall
3501 Fetchet Avenue
Joint Base Andrews, MD 20762-5157
jody.a.murata.civ@mail.mil

NGB has not scheduled a public information meeting for this DD. If a member of the public desires a public meeting, a request should be directed to Ms. Murata. The purpose of the public meeting, if requested, would be to provide an explanation of this DD and to solicit comments from the attendees.

12/13 2324697

Sha'Taysia McGill of the City of Schenectady, being duly sworn, says that he/she is Principal Clerk in the office of the Daily Gazette Co., published in the City of Schenectady and that the notice/advertisement, of which the annexed is a printed copy, has been regularly published in the Daily Gazette and/or Sunday Gazette as follows:

1 insertions on December 13, 2017

Shataysea McGill

Sworn to me on this 19th day of December, 2017

NOTARY PUBLIC

ALISON COOKE
COMMISSIONER OF DEEDS
MY COMMISSION EXPIRES
7/12/19

ATTACHMENT B
NYSDEC REMEDIAL INVESTIGATION REPORT CONCURRENCE LETTER

(This page intentionally left blank)

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau A
625 Broadway, 12th Floor, Albany, NY 12233-7015
P: (518) 402-9625 I F: (518) 402-9627
www.dec.ny.gov

AUG 17 2017

Jody Ann C. Murata, GS-13
Restoration Branch
NGB/A7OR
Shepperd Hall
3501 Fetchet Avenue
Joint Base Andrews, MD 20762-5157

Re: Air National Guard Stratton
Site No.: 447022

Dear Ms. Murata,

The New York State Department of Environmental Conservation Division of Environmental Remediation (Department) has reviewed the Remedial Investigation Report ZZ007, TU008 and TU009, dated June 2017. Based on the review, the Department finds the document to be acceptable. If you have any questions please contact me at 518-402-9620.

Regards,

Brian Jankauskas, P.E.
Environmental Engineer II
Remedial Bureau A, Section C

cc: J. Swartwout, DEC
S. Karpinski steven.karpinski@health.ny.gov
J. Murata jody.murata@ang.af.mil
J. Kotch jennifer.r.kotch.civ@mail.mil