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NAS BRUNSWICK
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FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT
FOR BUILDINGS 538, 639, 644 AND 649 WITH TRANSMITTAL LETTER NAS BRUNSWICK
ME
4/23/2010
NAS BRUNSWICK

**ENVIRONMENTAL DEPARTMENT
NAVAL AIR STATION
437 HUEY DRIVE
BRUNSWICK, ME 04011**

April 23, 2010

Mr. Edward Vigneault
Maine Department of Environmental Protection
Division of Oil and Hazardous Waste Facilities Registration
17 State House Station
Augusta, ME 04333-0017

Subj: Final RCRA Partial Closure Report for Buildings 538, 639, 644, and 649

Dear Mr. Vigneault:

A copy of the Final RCRA Partial Closure Report for Buildings 538, 639, 644, and 649 at Naval Air Station Brunswick is provided as Enclosure (1).

If you have any questions, please contact Mr. Mike Fagan at 921-1717 or via e-mail at michael.fagan1@navy.mil.

Sincerely,



LISA M. JOY
Environmental Director

Enclosure: (1) Final RCRA Partial Closure Reports for Buildings 538, 639, 644, and 649

Copy to:
NAVFAC Mid-Atlantic (B. Abraham)
NAS Brunswick (M. Fagan/D. Smith)
EPA Region I (M. Daly)
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BRAC PMO NE (P. Burgio)

RCRA PARTIAL CLOSURE REPORT
for
BUILDING 538 – NEX SERVICE STATION PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
APRIL 2010

1. INTRODUCTION

The purpose of this report is to present the findings and conclusions of the investigation conducted to determine if the Maine Department of Environmental Protection (MEDEP) RCRA or hazardous waste closure requirements have been completed for the Building 538 parcel at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

The Building 538 parcel is located in the central portion of NAS Brunswick (see Figure 1). The approximately 1-acre parcel (see Figure 2) is bordered to the north by the Building 295 parcel, to the east by the Building 11 parcel, to the south by Burbank Avenue and the Building 27 parcel, and to the west by Pelican Street and the Buildings 225 and 252 parcel. The parcel contains Building 538 (the Navy Exchange [NEX] Service Station building), the associated asphalt-paved and grass-covered areas. Photographs taken during the site visit are provided in an attachment.

Building 538, constructed in 1957, consists of a 5,292 square-foot one-story concrete and block building on a slab foundation. The building was used as an automobile service and gasoline filling station for its entire history. Building 538 contains a two-bay service area, four storage rooms, an office space, retail space, and a recycling space located in a converted service bay area in the eastern portion of the building. The facility is no longer operating; the service island/dispenser area, gasoline pumps, and gasoline underground storage tanks (USTs) were removed in 2009.

Building 538 is part of the NEX Service Station Petroleum, Oil, and Lubricants (POL) site in which petroleum-contaminated soil and groundwater is being remediated as part of the POL Site program.

Building 538 is heated by a fuel oil-fired furnace, forced-air heating system.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (Tetra Tech) project team interviewed NAS Brunswick Environmental Department personnel and performed records research at both NAS Brunswick and the MEDEP office in Augusta, Maine to collect available information concerning Building 538, including past use and operations at that location.

According to NAS Brunswick Environmental Department personnel, since its construction in 1957, the sole use of Building 538 has been as a automotive service and gasoline filling station including retail vending space and a bottle and can recycling space. There is no record of hazardous waste generation or accumulation at Building 538 with the exception of universal waste including car batteries. Universal waste was collected and disposed of properly at an offsite facility by the NAS Brunswick Environmental Department.

Records reviewed include: historical aerial photographs; the NAS Brunswick Other Environmental Liabilities (OEL) Database; area-specific reports; facility plans and drawings; and hazardous waste records. Aerial photographs dated 1958, 1978, 1981, 1984, 1989, and 1993 (all produced by James W. Sewall) were reviewed along with Public Works Department site base maps dated 1943, 1946, 1952, 1956, 1983, 1989, and 2006 to provide historical information.

Building 538 is shown at this location on aerial photographs starting in 1958. NAS Brunswick maps dated 1943, 1946, and 1952, document the presence of no buildings at the parcel. Building 17 and Building 19, both barracks, were present to the north and west of the parcel, respectively. In 1956, the Navy Exchange Filling Station (T-220) is present on the Building 538 parcel, with Building 295 (Water Reservoir Pump House) to the north. Beginning with the 1958 aerial photos, Building 538 is present in its current location along with Building 295 to the north of the parcel. Building 19 to the west was demolished prior to the 1978 aerial photo, and Building 17 was demolished prior to the 1981 aerial photo, with the Navy Exchange (Building 11) constructed to the west of the parcel. From 1983 on, no additional changes to the area were noted.

The NAS Brunswick Removed Transformer Database lists one non-polychlorinated-biphenyl (PCB)-containing electrical transformer for Building 538. Information provided in the database for the transformer is listed below. The serial number for the RTE-manufactured unit indicates that it was manufactured after 1979 and therefore is unlikely to contain PCB. As of July 1, 1979, the United States Environmental Protection Agency (EPA) prohibited all manufacturing of new PCB electrical equipment (transformers and capacitors). However, due to the age of the building, it is possible that PCB-containing transformers were in service at the Building 538 transformer pad at some time in the past.

Transformer	Manufacturer	Serial No.	Manufacture Date	Notes
75-kVa non-PCB-containing	RTE ⁽¹⁾	RTE 876000111 ⁽²⁾	1987	Adjacent to Building 295 transformer

⁽¹⁾ Rural Transformer & Electric (RTE), now owned by Cooper Power Systems

⁽²⁾ The first two digits of the serial numbers denote the year of manufacture (EES, 1998)

According to NAS Brunswick records, the following USTs were present at Building 538. Other information relating to these tanks was not found.

Serial No.	Capacity and Make	Product	Installation Date	Removal Date
10045-059	275-gallon steel	lube oil	1974	November 1989
10045-063	1,000-gallon steel	No. 2 fuel oil	1975	1991
14682-001	10,000-gallon steel	unleaded gasoline	1974	October 22, 1992
14682-002	10,000-gallon steel	premium unleaded gasoline	1974	October 26, 1992
14682-003	10,000-gallon steel	premium gasoline	1974	October 27, 1992
14682-004	10,000-gallon steel	premium unleaded gasoline	July 1993	September 2009
14682-005	10,000-gallon steel	premium unleaded gasoline	July 1992	September 2009

According to NAS Brunswick records, the following above ground storage tanks (ASTs) were present at Building 538. Other information relating to these tanks was not found.

Serial No.	Capacity and Make	Product	Installation Date	Removal Date
A538.0	550-gallon DWS	No. 1 fuel oil (heating)	1991	Active
A538.1	275 gallon-SWS	waste oil	1993	1996
A538.2	250 gallon-DWSV	Waste Oil	1996	2001

DWS double-walled steel
 DWSV double-walled, steel vault
 SWS single-wall steel

The Building 538 parcel is located within the NEX Service Station POL Site. As a result of gasoline leaks from the underground storage tanks and associated piping, soil and groundwater underlying the area spanned by the NEX Service Station and Building 27 were contaminated by petroleum hydrocarbons, specifically gasoline range organics (GROs). Past active remediation has consisted of petroleum product-contaminated soil excavation and removal, air sparging soil vapor extraction, and a chemical oxidation event. Most recently, a bioremediation program attempted to treat the dissolved and sorbed phases of petroleum contamination in the subsurface

near Building 27 using enhanced biological activity (microbes) (EA, 2004). The fuel USTs were removed in September 2009 and additional contaminated soil removal occurred in December 2009 (Acadia, 2009). Groundwater monitoring is on-going. A remedial action report was not available at this time.

NAS Brunswick Instruction 5090.1C establishes institutional controls for the base that includes an interim soil restriction zone for the NEX Service Station Site due to petroleum contamination (NAS Brunswick, 2008). The instruction specifies the use of administrative controls that restrict excavation/disturbance of soils within the zone. The NEX Service Station interim soil restriction zone covers the southern portion of the Building 538 parcel.

Information concerning groundwater underlying the Building 538 parcel is available in the 2004 corrective action plan for the NEX Service Station Site prepared by EA Engineering, Science, and Technology, Inc, (EA). Historically, groundwater contour data have shown a prominent flow pattern to the southwest across the NEX Service Station site. The depth to groundwater at the site in June 2003 ranged from approximately 3.05 ft below ground surface (bgs) to approximately 8.05 ft bgs. Historically, seasonal fluctuations of the water table of up to several feet are common at the NEX Service Station, and the shallow groundwater table typically exhibits a shallow hydraulic gradient of approximately 0.010 to 0.011 foot per foot (ft/ft) (EA, 2004).

4. SITE VISIT AND INVESTIGATION

A Building 538 site visit was conducted on February 2, 2010 by Tetra Tech personnel Mr. Brandon Smith, P.E. and Mr. James Forrelli, P.E. The purpose of the visit was to verify information gathered during the records search and to collect additional information as necessary to prepare this RCRA Partial Closure Report. Tetra Tech personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. Building 538 and the associated parcel of land were visually inspected for signs of hazardous waste generation or storage. Site visit observations, recorded on the attached Building Inspection Form⁽¹⁾ are summarized below:

- At the time of inspection, Building 538 was unoccupied and in fair condition. The gasoline pumps and island, hydraulic lifts, and automotive and retail supplies were not present.
- No evidence of current or past hazardous waste generation activities was observed.
- No evidence of hazardous waste residues was observed.
- Typical petroleum staining was observed in the service bay and a recent leak of fuel oil from the day tank was observed with a strong petroleum odor and some staining. No modifications to the structure, which may conceal signs of a past release, were observed.
- No hazardous waste storage or accumulation areas were observed. It is unknown where universal waste was stored prior to collection by NAS Brunswick Environmental or the location of the former waste oil ASTs.
- One pad-mounted transformer location was observed on the north side of the building. No evidence of a past leak from these transformers was observed.

Because Building 538 was constructed prior to 1979, the transformer pad, located north of the building, could potentially be an area of PCB soil contamination, if there had been an historical transformer leak. On February 24, 2010, Tetra Tech collected surface soil samples from four locations surrounding the transformer pad using a hand auger. Due to the close proximity to the transformer pad for Building 295, samples were collected from the fourth sample location for both Building 295 and Building 538. Sample identifications from the fourth location are labeled as Building 295 but reported here since they were collected on the north side of the Building 538 transformer pad. At the transformer pad located south of Building 538, four samples were collected from 0 to 6 inches bgs [NASB-B538-SB01-0006 through NASB-B538-SB03-0006, and NASB-B295-SB04-0006], two samples were collected from 6 to 24 inches bgs [NASB-B538-SB02-0624 and NASB-B295-SB04-0624], one sample from 6 to 18 inches bgs [NASB-B538-SB01-0618] and one sample was collected from 6 to 12 inches bgs (NASB-B538-SB03-0612). Sample locations are presented on Figure 3.

All soil samples were submitted for PCB analysis by Tetra Tech's subcontracted analytical laboratory (Analytics Environmental Laboratory, Portsmouth, New Hampshire). Sample analytical data underwent limited data validation, consisting of field duplicate evaluation, blank contamination evaluation, and completeness evaluation. As presented in the attached Table 1, PCB was not detected in any of the soil samples collected at Building 538. (The EPA Regional Screening Levels [RSLs] for Residential Soil are included in Table 1 for informational purposes [EPA, 2009].) Based on the analytical results, all concentrations are below the MEDEP RCRA standard for total PCB in soil of 1 part per million (ppm).

Based on the available information regarding historical activities at the Building 538 parcel, there is no evidence that groundwater underlying the parcel has been adversely impacted by a release of hazardous waste from within the parcel. However, groundwater at the Building 538 parcel has been previously impacted by dissolved-phase hydrocarbon releases from the NEX gas station source area.

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research, site visit observations and NAS Brunswick Environmental Department personnel interviews, no hazardous waste generation, hazardous waste accumulation, or hazardous waste storage, with the exception of universal waste, was conducted at the Building 538 parcel.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

The USTs or ASTs known to be associated with the Building 538 parcel are discussed in Sections 3 and 4. No other tanks were observed in the immediate vicinity of Building 538.

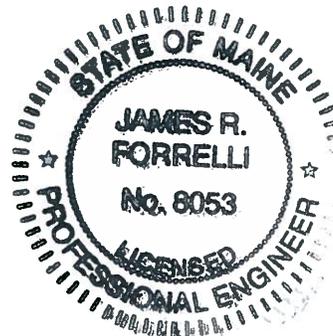
7. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the Building 538 parcel (as shown on Figure 2) only.

8. CERTIFICATION

Based on the findings of this investigation, there have been no activities resulting in the generation, accumulation or storage of hazardous waste at the Building 538 parcel, NAS Brunswick, Maine. Therefore, the hazardous waste closure of the Building 538 parcel was completed in accordance with the provisions of MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11.


James Forrelli, P.E.
Senior Project Engineer
Tetra Tech NUS, Inc.



⁽¹⁾ The Building Inspection Form provides preliminary information collected during the building inspection, including information from visual observations, Navy personnel interviews, and from documents reviewed during file reviews. It does not reflect any additional information provided at a later date that further clarifies or corrects preliminary information collected during the building inspection and file reviews.

REFERENCES

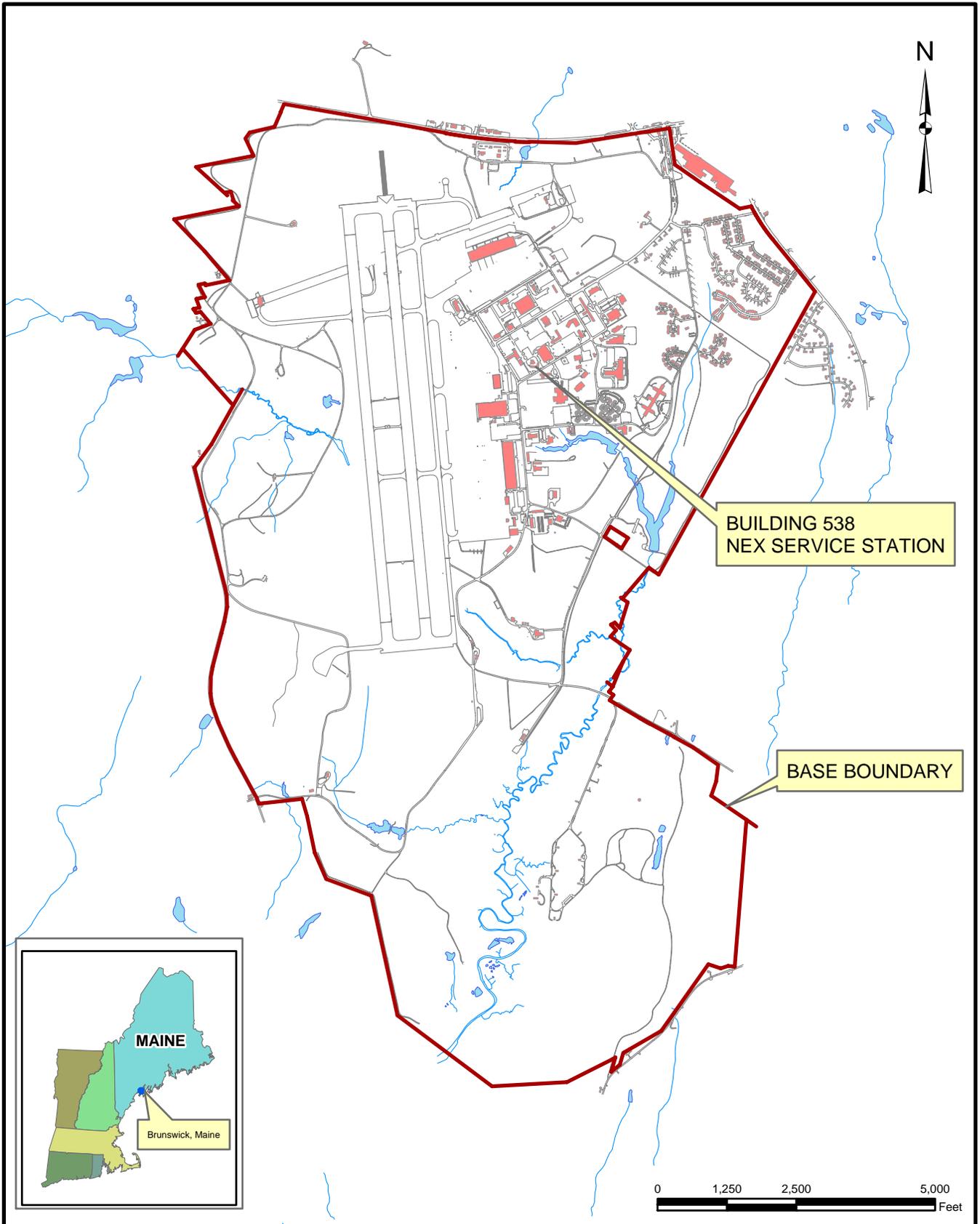
- Acadia Environmental Technology, 2009. UST Closure Assessment. October 12, 2009.
- BNAS Reuse Master Plan Property Condition Assessment. Mid-Coast Regional Redevelopment Authority, Brunswick, ME. 2006.
- EA Engineering, Science, and Technology, Inc, 2004. Corrective Action Plan. Navy Exchange Service Station, Naval Air Station, Brunswick, ME. Final. March 2004.
- ECC, 2008. Site Management Plan, A Road Map for Environmental Cleanup, Naval Air Station Brunswick, Brunswick, ME. December 2008.
- EES (Elizabethton Electric System), 1998. QuickSheet Data Table, PCB Information. Prepared by Elizabethton Electric System, June 1998. (<http://www.eesonline.org/programs/pcbdata.html>).
- James W. Sewall Company, 1958. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. October 9, 1958.
- James W. Sewall Company, 1978. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. November 22, 1978.
- James W. Sewall Company, 1984. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. April 23, 1984.
- James W. Sewall Company, 1989. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. April 2, 1989.
- NAS Brunswick Environmental Department. Master/Historical Underground Storage Tank Inventory. NAS Brunswick, Maine. February 5, 1996.
- NAS Brunswick Environmental Department. NASB Removed Transformer Database.
- Naval Air Station (NAS) Brunswick, 2008. Naval Air Station Brunswick Instruction 5090.1C From: Commanding Officer, Subj: Restriction on Soil Excavation, Groundwater Use, and Remedial Component Disturbance. March 5, 2008.
- Public Works Department, 1943. "US Naval Air Station, Brunswick, Maine, Building Site Plan Showing Locations of Underground Water Distribution Lines and Hydrants," NAS Brunswick, Maine. September 4, 1943.
- Public Works Department, 1946. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1946," NAS Brunswick, Maine. June 30, 1946.
- Public Works Department, 1952. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1952," NAS Brunswick, Maine. June 30, 1952.
- Public Works Department, 1956. General Station Map, Encl. 2. NAS Brunswick, Maine. 1956.
- Public Works Department , 1983. "Existing Conditions Map. Public Works Department Drawing No. 2157" NAS Brunswick, Maine. May 5, 1983.
- Public Works Department , 1989. "Existing Conditions Map. Public Works Department Drawing No. 2157" NAS Brunswick, Maine. Revised April 2, 1989.
- Public Works Department, 2006. Brunswick Naval Air Station, NAS Brunswick, Maine. 2006.

**TABLE 1
SOIL SAMPLE PCB RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 538 – NEX SERVICE STATION
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID	EPA RSLs ⁽¹⁾ (µg/kg)	NASB-B538- SB01-0006	NASB-B538- SB01-0618	NASB- B538-SB02- 0006	NASB-B538- SB02-0624	NASB-B538- SB03-0006	NASB-B538- SB03-0612	NASB-B295- SB04-0624 ⁽³⁾
LOCATION		transformer pad	transformer pad	transformer pad	transformer pad	transformer pad	transformer pad	transformer pad
MATRIX		soil	soil	soil	soil	soil	soil	soil
DEPTH		0-6 inch bgs	6-18 inch bgs	0-6 inch bgs	6-24 inch bgs	0-6 inch bgs	6-12 inch bgs	6-24 inch bgs
SAMPLE DATE		02/24/10	02/24/10	02/24/10	02/24/10	02/24/10	02/24/10	02/23/10
PCB (µg/kg)								
Aroclor-1016	3,900	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1221	140	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1232	140	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1242	220	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1248	220	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1254	220	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Aroclor-1260	220	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U
Total PCB ⁽²⁾	1,000	20 U	18 U	21.5 U	21.5 U	23 U	23 U	18 U

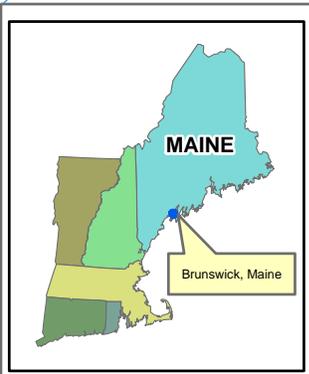
Notes:

- (1) EPA Regional Screening Levels [RSLs] for residential soil provided for informational purposes
(2) MEDEP action limit for PCB spill (1 mg/kg)
(3) Sample located between Buildings 295 and 538 transformer pads.
bgs below ground surface
µg/kg micrograms per kilogram
U not detected (with associated detection limit)
PCB polychlorinated biphenyl



BUILDING 538
NEX SERVICE STATION

BASE BOUNDARY



0 1,250 2,500 5,000 Feet



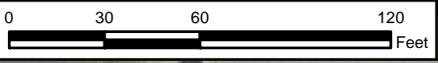
Tetra Tech NUS, Inc.

SITE LOCATION MAP
 BUILDING 538 - NEX SERVICE STATION
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\NASE_BLDG_538_LOCUS.MXD	
REV 0	DATE 04/16/10
FIGURE NUMBER 1	



Legend
 Parcel Boundary



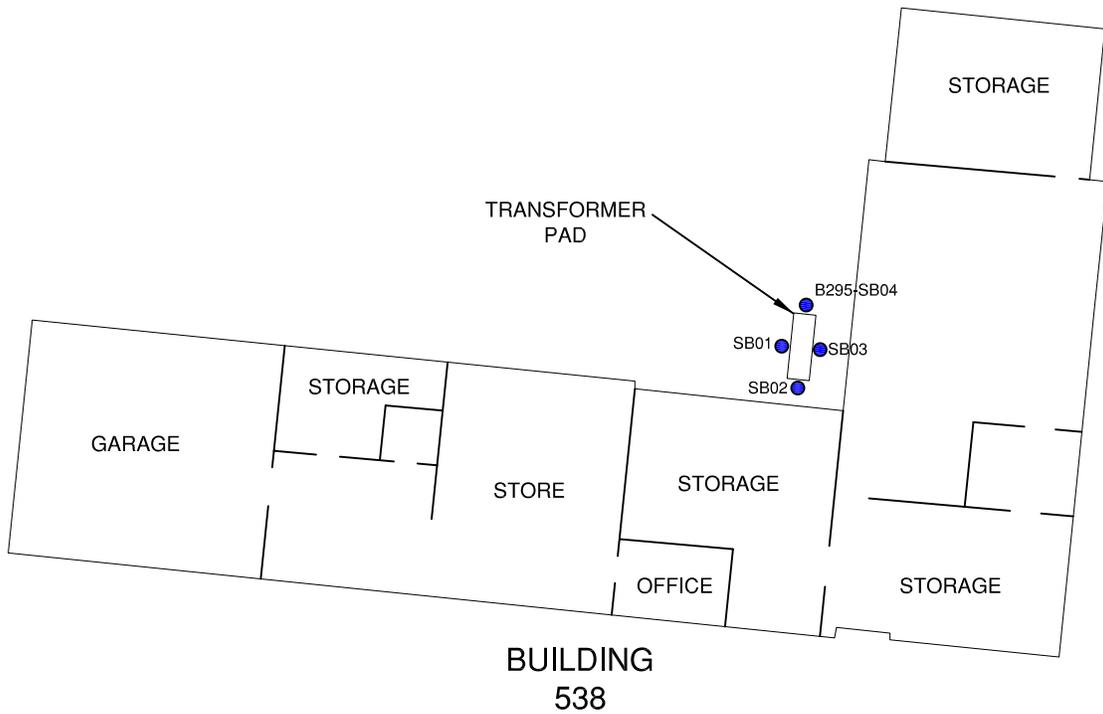
Building Corner	Northing	Easting
Northeast	387224.250	3015536.810
Southeast	387142.000	3015530.810
Southwest	387155.620	3015393.310
Northwest	387186.120	3015396.440

Coordinates are in NAD 1983, Maine West, Feet



SITE PLAN
BUILDING 538 - NEX SERVICE STATION
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE \\.\BLDG_538_ORTHO.MXD	
REV 0	DATE 04/16/10
FIGURE NUMBER FIGURE NO. 2	



BUILDING
538

LEGEND

SB01 ● SHALLOW SOIL SAMPLE LOCATION

GRAPHIC SCALE



TETRA TECH NUS, INC.

FLOOR PLAN
 BUILDING 538 - NEX SERVICE STATION
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE
AS NOTED

FILE
\\.\NASB_BLDG_538_FP.DWG.DWG

REV	DATE
0	04/16/10

FIGURE NUMBER
3

**BUILDING INSPECTION FORM
RCRA PARTIAL CLOSURE PROGRAM
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22**

Inspection Date: 2/2/2010
Personnel: Brandon Smith, P.E. / James Forrelli, P.E.
Weather: Clear, 20s

GENERAL BUILDING INFORMATION / USES

Building Name: NEX Service Station
 Function: Service and gasoline station and bottle/can recycling
 Size: 5,292 SF
 Year of Construction: 1957

Building 538 is located northeast of the intersection of Burbank Avenue and Pelican Street at NAS Brunswick. It was constructed in 1957 and served as a service and gasoline station for its entire history. Four of the service bays on the eastern portion of the building were converted to a bottle and can recycling space and storage at an unknown date. Building 538 consists of a 5,292 square-foot, one story building on a slab foundation.

Building 538 was used as service and gasoline station including retail vending space and a bottle and can recycling space. Building 538 contains a two bay service area, four storage rooms, office, retail space, and a recycling space in a converted service bay on the eastern portion of the building. The service island and pumps were removed in 2009. Building 538 is part of the NEX Service Station POL site in which petroleum contaminated soil and groundwater is being remediated under the POL Site program.

Building 538 was heated via a fuel oil fired furnace.

BUILDING INSPECTION / CONDITION

No record of hazardous waste stored at Building 538. Universal waste including car batteries was generated and disposed of offsite properly. The building was unoccupied at the time of the site visit and appeared in fair condition. The gasoline pumps and island, hydraulic lifts and automotive and retail supplies were not present. No potential evidence of current or past hazardous waste generation activities was observed. No evidence of hazardous waste residues was observed. Typical petroleum staining was observed in the service bay and a recent leak of fuel oil from the day tank was observed with a strong petroleum odor and staining. No modifications to the structure, which may conceal signs of a past release, were observed. No hazardous waste storage areas or hazardous waste accumulation areas were observed. It is unknown where universal waste was stored prior to collection by NASB Environmental or the location of the former waste oil ASTs.

HAZARDOUS WASTE STORED / GENERATED

No record of hazardous waste stored or generated at Building 538 with the exception of universal waste, according to NASB personnel.

POTENTIAL PCB-CONTAINING TRANSFORMERS

The NASB transformer database lists the following transformer associated with Building 538:
 75 KVA Pad-Mounted - RTE Serial No. 876000111 - Non-PCB containing (Mineral Oil)

Due to the age of the building, soil sampling around the pad is recommended in order to confirm that the soil is free of PCBs from potential former transformers.

APPLICABLE REPORTS / DOCUMENTS

Available historical plans and aerial photos were reviewed for past property uses:

- 1943 plan - No buildings present. Building 17 (Barracks) present to the north and Building 19 (Barracks) to the west.
- 1946 plan - Same as 1943.
- 1952 plan - Same as 1946.
- 1956 plan - T-220 (Navy Exchange Filling Station) is present at current location of Building 538.
- 1958 aerial - Building 538 (NEX gas station) present with Building 295 to the north, Building 17 to the north and Building 19 to the west.
- 1978 aerial - Same as 1958 aerial; Building 19 to the west has been demolished.
- 1981 aerial - Same as 1978 aerial; Building 17 demolished and Building 11 (NEX) constructed to the east.
- 1983 plan - Building 538 not shown. Buildings 225/252 present to the west and Building 11 (NEX) to east.
- 1984 aerial - Same as 1981 aerial.
- 1989 plan - same as 1983 plan
- 1989 aerial - same as 1984 aerial.
- 1993 aerial - same as 1989 aerial.
- 2006 plan - Building 538 shown in current location with Building 295 to the north.

According to NASB records, the following USTs were present at Building 538:

- 10045-059, a 275 gallon steel UST containing lube oil (installed 1974, removed Nov 1989)
- 14682-001, a 10,000 gallon steel UST containing unleaded gasoline (installed 1974, removed 10/22/92)
- 14682-002, a 10,000 gallon steel UST containing premium unleaded gasoline (installed 1974, removed 10/26/92)
- 14682-003, a 10,000 gallon steel UST containing premium gasoline (installed 1974, removed 10/27/92)
- 14682-004, a 10,000 gallon steel UST containing premium unleaded gasoline (installed Jul 1993, removed Sep 2009)
- 10045-063, a 1,000 gallon steel UST containing #2 fuel oil (installed 1975, removed 1991)
- 14682-005, a 10,000 gallon steel UST containing premium unleaded gasoline (installed Jul 1992, removed Sep 2009)

According to NASB records, the following ASTs are present at Building 538:

- A538.0, a 550 gallon DWS tank containing #1 fuel oil for heating (installed 1991, active)
- A538.1, a 275 gallon SWS tank for waste oil accumulation (installed 1993, removed 1996)
- A538.2, a 250 gallon DSWV tank for waste oil accumulation (installed 1996, removed 2001)

HAZARDOUS WASTE STORAGE RECORDS

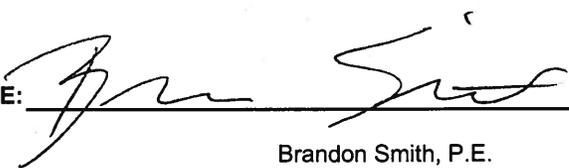
No hazardous waste was historically stored at Building 538 except temporary of universal waste, according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

MISCELLANEOUS NOTES

Tetra Tech personnel were accompanied on the inspection by D. Bruce Smith, NAS Brunswick Hazardous Waste Manager.

(SEE ATTACHED BUILDING FLOOR PLAN AND PHOTOGRAPHS)

INSPECTOR SIGNATURE:



Brandon Smith, P.E.

PHOTOGRAPHS



No. 1 Building 538 – NAS Brunswick
Building 538 – Southeast elevation

February 2, 2010



No. 2 Building 538 – NAS Brunswick
Building 538 – Southwest elevation with service bay and retail store.

February 2, 2010

PHOTOGRAPHS



No. 3 Building 538 – NAS Brunswick
Building 538 – Building 538 former bottle and can recycling area interior

February 2, 2010



No. 4 Building 538 – NAS Brunswick
Building 538 – Building 295 pad-mounted transformer (left) adjacent to Building 538 transformer (right)

February 2, 2010

RCRA PARTIAL CLOSURE REPORT
For
BUILDING 639 – NAVY INFORMATION OPERATIONS DETACHMENT PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
APRIL 2010

1. INTRODUCTION

The purpose of this report is to present the findings and conclusions of the investigation conducted to determine if the Maine Department of Environmental Protection (MEDEP) RCRA or hazardous waste closure requirements have been completed for the Building 639 parcel at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

The Building 639 parcel is located in the north-central portion of NAS Brunswick (see Figure 1). The approximately 0.83-acre parcel (see Figure 2) is bordered to the northwest by Burbank Avenue and the Building 512 parcel, to the northeast by the Building 644 parcel, to the southeast by the Building 59 parcel, and to the southwest by Pegasus Street.

The parcel contains Building 639 (the Navy Information Operations Detachment [NIOD] building), surrounding grass-covered areas and asphalt-paved parking area located northeast of the building. Building 639, constructed in 1975, consists of a 3,540 square-foot one-story brick-veneer structure with a crawl space on a slab foundation. The main entrance to the building is located on the northeastern side of the building as shown on Figure 2. Building 639 contains administrative and classroom space. A detached, brick-veneer storage room is located to the south of the building. Building 639 is heated by an electric baseboard heat system. Photographs taken during the site visit are provided in an attachment.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (Tetra Tech) project team interviewed NAS Brunswick Environmental Department personnel and performed records research at both NAS Brunswick and the MEDEP office in Augusta, Maine to collect available information concerning Building 639, including past use and operations at that location.

According to NAS Brunswick Environmental Department personnel, since its construction in 1975, the sole use of Building 639 has been as a training facility. Building 639 first served as an operational training building for Directional Frequency and Recording (DIFAR) system training and then for NIOD training. There is no record of hazardous waste generation, accumulation or storage at Building 639.

Records reviewed include: historical aerial photographs; the NAS Brunswick Other Environmental Liabilities (OEL) Database; area-specific reports; facility plans and drawings; and hazardous waste records. Aerial photographs dated 1958, 1978, 1981, 1984, 1989 and 1993 (all produced by James W. Sewall) were reviewed along with Public Works Department site base maps dated 1943, 1946, 1952, 1956, 1983, 1989, and 2006 to provide historical information.

NAS Brunswick maps dated 1943, 1946, 1952, and 1956 and the aerial photo dated 1958 show no buildings present in this location. Building 639 is shown at this location on aerial photographs starting in 1978. Prior to 1978, the Building 639 area was used for parking. On the 1983 map the building is labeled "DIFAR".

The NASB Removed Transformer Database lists one non-polychlorinated-biphenyl (PCB)-containing electrical transformer for Buildings 54 and 639; a 300-kVa pad-mounted Square D

transformer with Serial No. 860926-A1. This pad-mounted transformer is physically located on the adjacent Building 54 parcel and was not investigated as part of the Building 639 parcel closure.

According to NAS Brunswick records, no USTs or ASTs were present at Building 639.

No groundwater investigations have been conducted in the vicinity of the Building 639 parcel; therefore groundwater characterization information for the parcel is not available. Available information for known, nearby groundwater contamination areas was reviewed to determine if groundwater underlying the Building 639 parcel could potentially be impacted by another (off-parcel) source area. The only identified groundwater contamination that could potentially impact the parcel is the dissolved phase hydrocarbon plume associated with the Old Navy Fuel Farm (ONFF), located north and upgradient of Building 639. The ONFF was decommissioned in 1993 and remediated in 2000. Recent ONFF groundwater monitoring program results indicate that groundwater is encountered at about 3 to 7 feet below grade and flows to the southeast from the ONFF across Fitch Avenue and the Building 151 parcel (ESI, 2009). (Building 151 is located approximately 800 feet northeast of Building 639.) Based upon the ONFF groundwater monitoring program information, it is unlikely that groundwater at Building 639 is impacted by the ONFF hydrocarbon groundwater plume.

4. SITE VISIT AND INVESTIGATION

A Building 639 site visit was conducted on February 2, 2010 by Tetra Tech personnel Mr. Brandon Smith, P.E. and Mr. James Forrelli, P.E. The purpose of this visit was to verify information gathered during the records search and to collect additional information as necessary to prepare this RCRA Partial Closure Report. Tetra Tech personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. Building 639 and the associated parcel of land were visually inspected for signs of hazardous waste generation or storage. Site visit observations, recorded on the attached Building Inspection Form⁽¹⁾ are summarized below:

- At the time of inspection, Building 639 was not occupied and in good condition. Office equipment and furniture were present.
- No evidence of hazardous waste residues was observed.
- No signs of a past release (staining, unusual odors, stressed vegetation, etc.) nor structural modifications that could conceal signs of a past release were observed.
- No hazardous waste storage or accumulation areas were observed.
- One suspected former transformer pad was observed on the southwest side of the building (this is not the pad discussed in Section 3 above). No evidence of a past leak from this potential former transformer was observed.

The suspected pad-mounted transformer location on the southwestern side of the building could potentially have been a historical source of PCB soil contamination in the event of a transformer leak. On February 24, 2010, Tetra Tech collected surface soil samples from four locations around the transformer pad at Building 639 as shown on Figure 3. A hand auger was used for the collection of four samples from 0 to 6 inches below ground surface (bgs) [NASB-B639-SB01-0006 through NASB-B639-SB04-0006] and four samples from 6 to 24 inches bgs (NASB-B639-SB01-0624 through NASB-B639-SB04-0624).

All soil samples were submitted for PCB analysis by Tetra Techs subcontractor analytical laboratory (Analytics Environmental Laboratory, Portsmouth, New Hampshire). As presented in the attached Table 1, Arochlor-1260 was detected in two of the four surface soil samples collected from 0 to 6 inches bgs at concentrations below the EPA Regional Screening Levels [RSLs] for Residential Soil (EPA, 2009). PCBs were not detected in other soil samples collected as shown in Table 1. Based on the analytical results, some residual PCB are present within the shallower surface soil; however, all concentrations are below the MEDEP RCRA standard for total PCBs in soil of 1 part per million (ppm).

Based on the available information regarding historical activities at the Building 639 parcel, there is no evidence that groundwater underlying the parcel has been adversely impacted by a release from within the parcel or from an upgradient source.

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research, site visit observations and NAS Brunswick Environmental Department personnel interviews, no hazardous waste generation, hazardous waste accumulation, or hazardous waste storage, with the exception of universal waste, was conducted at the Building 639 parcel.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

There are no USTs or ASTs known to be associated with the Building 639 parcel as discussed in Sections 3 and 4. No other tanks were observed in the immediate vicinity of Building 639. The facility space is heated by electric baseboard heating.

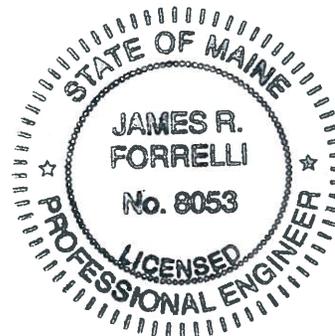
7. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the Building 639 parcel (as shown on Figure 2) only.

8. CERTIFICATION

Based on the findings of this investigation, there have been no activities resulting in the generation, accumulation or storage of hazardous waste at the Building 639 parcel, NAS Brunswick, Maine. Therefore, the hazardous waste closure of the Building 639 parcel was completed in accordance with the provisions of MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11.


James Forrelli, P.E.
Senior Project Engineer
Tetra Tech NUS, Inc.



⁽¹⁾ The Building Inspection Form provides preliminary information collected during the building inspection, including information from visual observations, Navy personnel interviews, and from documents reviewed during file reviews. It does reflect any additional information provided at a later date that further clarifies or corrects preliminary information collected during the building inspection and file reviews.

REFERENCES

BNAS Reuse Master Plan Property Condition Assessment. Mid-Coast Regional Redevelopment Authority, Brunswick, ME. 2006.

Ecor Solutions, Inc. (ESI). 2009. Final Groundwater Monitoring Report, April 2008 and October 2008 Sampling Events, Old Navy Fuel Farm, Naval Air Station Brunswick, Maine. September.

James W. Sewall Company, 1958. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. October 9, 1958.

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James W. Sewall Company, 1984. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. April 23, 1984.

James W. Sewall Company, 1989. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. April 2, 1989.

NAS Brunswick Environmental Department. Master/Historical Underground Storage Tank Inventory. NAS Brunswick, Maine. February 5, 1996.

NAS Brunswick Environmental Department. NASB Removed Transformer Database.

Naval Air Station (NAS) Brunswick, 2008. Naval Air Station Brunswick Instruction 5090.1C From: Commanding Officer, Subj: Restriction on Soil Excavation, Groundwater Use, and Remedial Component Disturbance. March 5, 2008.

Public Works Department, 1943. "US Naval Air Station, Brunswick, Maine, Building Site Plan Showing Locations of Underground Water Distribution Lines and Hydrants," NAS Brunswick, Maine. September 4, 1943.

Public Works Department, 1946. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1946," NAS Brunswick, Maine. June 30, 1946.

Public Works Department, 1952. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1952," NAS Brunswick, Maine. June 30, 1952.

Public Works Department, 1956. General Station Map, Enclosure 2. , NAS Brunswick, Maine. 1956.

Public Works Department, 1962. "Map of Streets," US Naval Air Station, Brunswick, Maine, NAS Brunswick, Maine. 1962.

Public Works Department, 1983. "Existing Conditions Map. Public Works Department Drawing No. 2157" NAS Brunswick, Maine. May 5, 1983.

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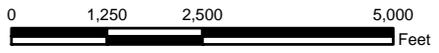
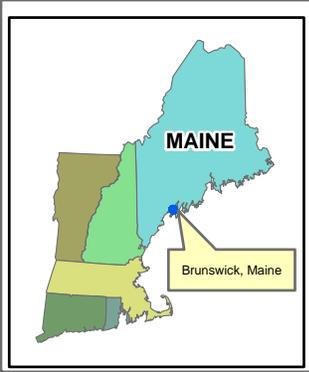
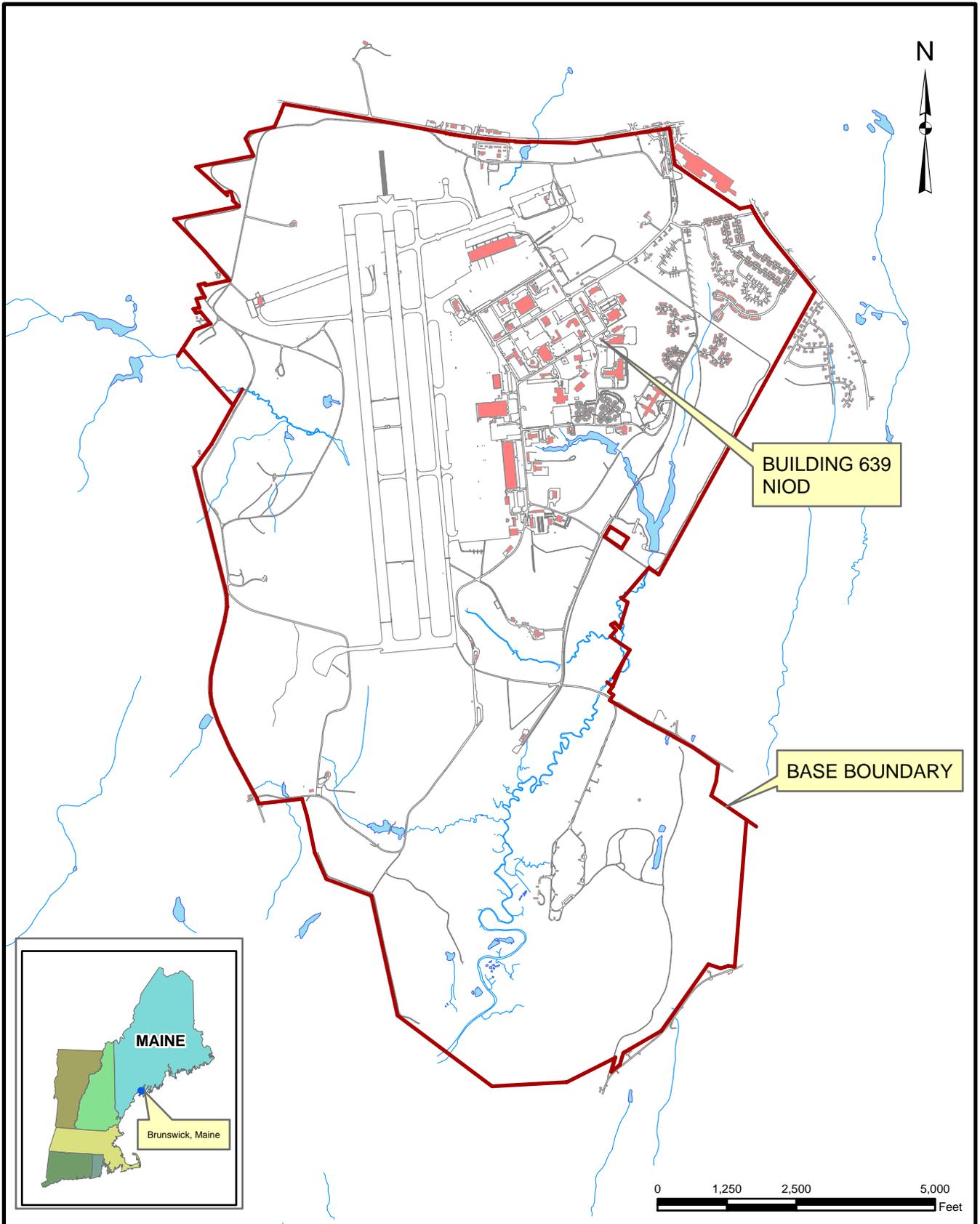
Public Works Department, 2006. Brunswick Naval Air Station, NAS Brunswick, Maine. 2006.

**TABLE 1
SOIL SAMPLE PCB RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 639 – NAVY INFORMATION OPERATIONS DETACHMENT
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID	EPA RSLs ⁽¹⁾ (µg/kg)	NASB-B639- SB01-0006	NASB-B639- SB01-0624	NASB- B639-SB02- 0006	NASB-B639- SB02-0624	NASB-B639- SB03-0006	NASB-B639- SB03-0624	NASB-B639- SB04-0006	NASB-B639- SB04-0624
LOCATION		transformer pad	transformer pad	transformer pad	transformer pad	transformer pad	transformer pad	transformer pad	transformer pad
MATRIX		soil	soil	soil	soil	soil	soil	soil	soil
DEPTH		0-6 inch bgs	6-24inch bgs	0-6 inch bgs	6-24 inch bgs	0-6 inch bgs	6-24 inch bgs	0-6 inch bgs	6-24 inch bgs
SAMPLE DATE		02/24/10	02/24/10	02/24/10	02/24/10	02/24/10	02/24/10	02/24/10	02/24/10
PCB (µg/kg)									
Aroclor-1016	3,900	20 U	18 U	20 U	18 U	20 U	16.5 U	20 U	18 U
Aroclor-1221	140	20 U	18 U	20 U	18 U	20 U	16.5 U	20 U	18 U
Aroclor-1232	140	20 U	18 U	20 U	18 U	20 U	16.5 U	20 U	18 U
Aroclor-1242	220	20 U	18 U	20 U	18 U	20 U	16.5 U	20 U	18 U
Aroclor-1248	220	20 U	18 U	20 U	18 U	20 U	16.5 U	20 U	18 U
Aroclor-1254	220	20 U	18 U	20 U	18 U	20 U	16.5 U	20 U	18 U
Aroclor-1260	220	20 U	18 U	20 U	18 U	47	16.5 U	65	18 U
Total PCB ⁽²⁾	1,000	20 U	18 U	20 U	18 U	47	16.5 U	65	18 U

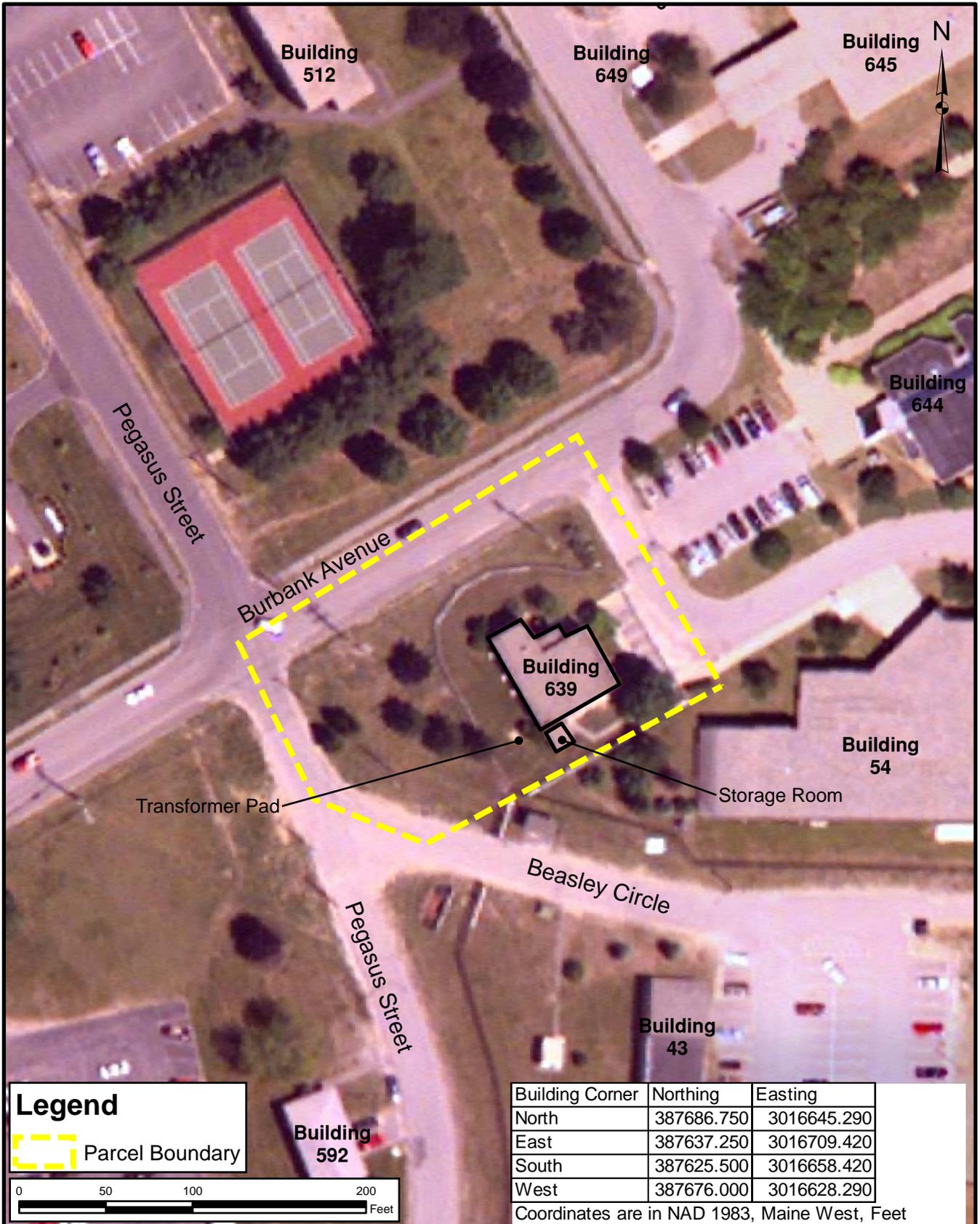
Notes:

- (1) EPA Regional Screening Levels [RSLs] for residential soil provided for informational purposes
- (2) MEDEP action limit for PCB spill (1 mg/kg).
- bgs below ground surface
- µg/kg micrograms per kilogram
- U not detected (with associated detection limit)
- PCB polychlorinated biphenyl



SITE LOCATION MAP
 BUILDING 639 - NIOD
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\NASB_BLDG_639_LOCUS.MXD	
REV 0	DATE 04/12/10
FIGURE NUMBER 1	



Legend
 Parcel Boundary



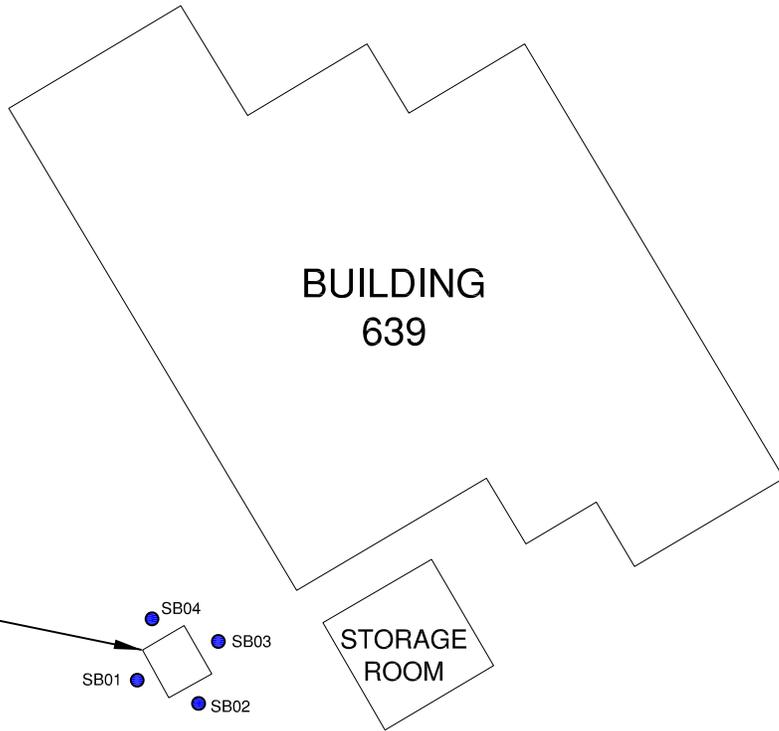
Building Corner	Northing	Easting
North	387686.750	3016645.290
East	387637.250	3016709.420
South	387625.500	3016658.420
West	387676.000	3016628.290

Coordinates are in NAD 1983, Maine West, Feet



SITE PLAN
BUILDING 639 - NIOD
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:_BLDG_639_ORTHO.MXD	
REV 0	DATE 04/15/10
FIGURE NUMBER FIGURE NO. 2	



LEGEND

SB01 ● SHALLOW SOIL SAMPLE LOCATION



TETRA TECH NUS, INC.

FLOOR PLAN
 BUILDING 639 - NIOD
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE
 AS NOTED

FILE
 \.. \NASB_BLDG_644_FP.DWG.DWG

REV	DATE
0	04/12/10

FIGURE NUMBER
 3

**BUILDING INSPECTION FORM
RCRA PARTIAL CLOSURE PROGRAM
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22**

Inspection Date: 2/2/2010
Personnel: Brandon Smith, P.E. / James Forrelli, P.E.
Weather: Clear, 20s

GENERAL BUILDING INFORMATION / USES	
Building Name:	NIOD
Function:	Operational Training Building for NIOD
Size:	3,540 SF
Year of Construction:	1975
<p>Building 639 is located east of the intersection of Burbank Avenue and Pegasus Street and to the south is Beasley Circle at NAS Brunswick. It was constructed in 1975 and served as an operational training building for Directional Frequency and Recording (DIFAR) system training and then Navy Information Operations Detachment (NIOD) for it's entire history. Building 639 consists of a 3,540 square-foot, single story building with crawl space on a slab foundation.</p> <p>Building 639 was used as administrative and classroom training for the DIFAR system and then NIOD. Building 639 contains administrative and classroom space. An attached brick storage room is attached on the exterior and was empty.</p> <p>Building 639 is heated via electric baseboard heat.</p>	

BUILDING INSPECTION / CONDITION
<p>No record of hazardous waste stored at Building 639. The building was unoccupied at the time of the site visit and appeared in good condition. Office equipment and furniture was present.</p> <p>No potential evidence of current or past hazardous waste generation activities was observed.</p> <p>No evidence of hazardous waste residues was observed.</p> <p>No signs of a past release (staining, unusual odors, stressed vegetation, etc.) were observed. No modifications to the structure, which may conceal signs of a past release, were observed.</p> <p>No hazardous waste storage areas or hazardous waste accumulation areas were observed.</p>

HAZARDOUS WASTE STORED / GENERATED
<p>No record of hazardous waste stored or generated at Building 639, according to NASB personnel.</p>

POTENTIAL PCB-CONTAINING TRANSFORMERS
<p>The NASB transformer database lists the following transformer associated with Buildings 54 and 639: 300 KVA Pad-Mounted - Square D Serial No. 860926-A1 - Non-PCB containing (<1 ppm PCBs)</p> <p>It should be noted that the pad-mounted transformer associated with Buildings 54 and 639 is physically located within the Building 54 property, not Building 639.</p> <p>A suspected former transformer pad was observed near the southwest corner of Building 639. No transformer was present, but due to the age of the building, soil sampling around the pad is recommended.</p>

APPLICABLE REPORTS / DOCUMENTS

Available historical plans and aerial photos were reviewed for past property uses:
1943 plan - No buildings present. Building 25 (BOQ) present to the north and Building 30 (Dispensary) to the west.
1946 plan - Same as 1943, Air Force Compound and Beasley Circle present to the south now.
1952 plan - Same as 1946, Building 639 area labelled as parking
1956 plan - Same as 1952
1958 aerial - Air Force Compound present to the south. Building 639 area is used as a parking lot for cars.
1978 aerial - Building 639 present in current location. A row of trailers are present to the east.
1981 aerial - Building 639 present in the current location. A parking lot has been added to the east.
1983 plan - Building 639 present in current location labeled as DIFAR.
1984 aerial - same as 1981 aerial
1989 plan - same as 1983 plan
1989 aerial - same as 1984 aerial, Building 56 (FASO) present to the south now.
1993 aerial - same as 1989 aerial.
2006 plan - same as 1989 plan.

According to NASB records, no USTs or ASTs were present at Building 639.

HAZARDOUS WASTE STORAGE RECORDS

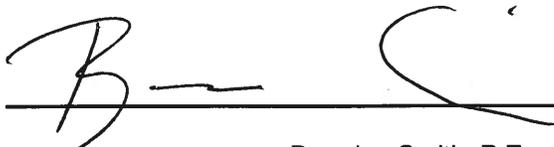
No hazardous waste was historically stored at Building 639, according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

MISCELLANEOUS NOTES

Tetra Tech personnel were accompanied on the inspection by D. Bruce Smith, NAS Brunswick Hazardous Waste Manager.

(SEE ATTACHED BUILDING FLOOR PLAN AND PHOTOGRAPHS)

INSPECTOR SIGNATURE:



Brandon Smith, P.E.

PHOTOGRAPHS



No. 1 Building 639 – NAS Brunswick February 2, 2010
Building 639 – NIOD Building exterior north elevation showing main entrance



No. 2 Building 639 – NAS Brunswick February 2, 2010
Building 639 - NIOD Building exterior southwest elevation showing suspected former transformer pad and soil sample locations

PHOTOGRAPHS



No. 3 Building 639 – NAS Brunswick
Building 639 – NIOD Building interior training room

February 2, 2010



No. 4 Building 639 – NAS Brunswick
Building 639 - NIOD Building interior office space

February 2, 2010

RCRA PARTIAL CLOSURE REPORT
For
BUILDING 644 – P-3C OPERATIONAL TRAINER PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
APRIL 2010

1. INTRODUCTION

The purpose of this report is to present the findings and conclusions of the investigation conducted to determine if the Maine Department of Environmental Protection (MEDEP) RCRA or hazardous waste closure requirements have been completed for the Building 644 parcel at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

The Building 644 parcel is located in the north-central portion of NAS Brunswick (see Figure 1). The approximately 1.6-acre parcel (see Figure 2) is bordered to the northwest by Burbank Avenue and its intersection with Sewall Avenue, to the northeast by Sewell Street, to the north by the Building 645 and 649 parcels, to the southwest by Building 639 across an access road to Building 54 and to the south and southeast by Building 54 and associated parking. To the east is an undeveloped wooded area. Building 645 was the medical/dental clinic building, Building 649 was the ambulance bay, Building 639 was a specialized instrumentation training building, and Building 54 was a survival training school.

The parcel contains Building 644 (the P-3C Operational Trainer building), surrounding grass-covered areas and an asphalt-paved parking area located southwest of the building. There are three entrances to the building: one on the southwest side of the building adjacent to the parking lot, one on the southeast side and one on the northeast side as shown on Figure 2. Photographs taken during the site visit are provided in an attachment.

Building 644, built in 1979, consists of a 13,571 square-foot, one-floor cast-in-place concrete structure on a slab foundation. Building 644 served as an operational trainer building for the P-3C Orion aircraft for its entire history. The building contained administrative and classroom space and a full-scale P-3C Orion flight-simulator trainer. Additional classroom/training space was added to the northeastern portion of Building 644 in 1989.

Building 644 is heated via a natural-gas fired furnace. Previously, it was heated via a fuel-oil fired furnace.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (Tetra Tech) project team interviewed NAS Brunswick Environmental Department personnel and performed records research at both NAS Brunswick and the MEDEP office in Augusta, Maine to collect available information concerning Building 644, including past use and operations at that location.

According to NAS Brunswick Environmental Department personnel, since its construction in 1979, the sole use of Building 644 has been as a training facility. There is no record of hazardous waste generation, accumulation or storage at Building 644.

Records reviewed include: historical aerial photographs; the NAS Brunswick Other Environmental Liabilities (OEL) Database; area-specific reports; facility plans and drawings; and hazardous waste records. Aerial photographs dated 1958, 1978, 1981, 1984, 1989 and 1993 (all produced by James W. Sewall) were reviewed along with Public Works Department site base maps dated 1943, 1946, 1952, 1956, 1983, 1989, and 2006 to provide historical information.

NAS Brunswick maps dated 1943, 1946, 1952, and 1956 and the aerial photo dated 1958 show no buildings present in this location. Building 644 is shown at this location on aerial photographs starting in 1978, it was likely under construction. On the 1989 aerial photograph an addition to Building 644 is visible.

The NASB Removed Transformer Database lists one non-polychlorinated-biphenyl (PCB)-containing electrical transformer for Building 644; a 750-kVa pad-mounted transformer (RTE Serial No. 886006512). The serial numbers for the RTE-manufactured units indicate that they were manufactured after 1979 and therefore are unlikely to contain PCBs. As of July 1, 1979, the United States Environmental Protection Agency (EPA) prohibited all manufacturing of new PCB electrical equipment (transformers and capacitors). Since there are no buildings shown on this parcel prior to 1979 it is unlikely that a PCB-containing transformer existed on the Building 644 parcel.

According to NAS Brunswick records, two underground storage tanks (USTs) were present at Building 644. NASB records indicate that a 550-gallon, fiberglass-reinforced plastic (FRP) tank containing No. 2 fuel oil (UST #10045-074) was installed in 1985 and removed in January 1994. A 500-gallon, FRP tank containing hydraulic oil was installed in 1977 and removed in 1991 (UST #10045-440). Additionally, NAS Brunswick records indicated three above ground storage tanks (ASTs) were present at Building 644. A 500-gallon, double-walled steel (DWS) AST (A644.0) utilized for diesel storage was installed in 1994 and removed in 1996. In 1996, a 6,000-gallon, double-walled- steel vault (DWSV) tank (A644.2) that stored No. 1 fuel oil for heating was installed in 1996 and cleaned and closed in place on April 16, 2009. Additionally, the NAS Brunswick records indicate that a 150-gallon, single-walled steel (SWS) tank (A644.1) containing hydraulic oil for the P-3C simulator was installed in Building 644 on an unknown date. This tank was removed and shipped to another Navy installation as part of the P-3C flight-simulator trainer in January 2010.

No groundwater investigations have been conducted in the vicinity of the Building 644 parcel; therefore groundwater characterization information for the parcel is not available. Available information for known, nearby groundwater contamination areas was reviewed to determine if groundwater underlying the Building 644 parcel could potentially be impacted by another (off-parcel) source area. The only identified groundwater contamination that could potentially impact the parcel is the dissolved phase hydrocarbon plume associated with the Old Navy Fuel Farm (ONFF), located north and upgradient of Building 644. The ONFF was decommissioned in 1993 and remediated in 2000. Recent ONFF groundwater monitoring program results indicate that groundwater is encountered at about 3 to 7 feet below grade and flows to the southeast from the ONFF across Fitch Avenue and the Building 151 parcel (ESI, 2009). (Building 151 is located approximately 800 feet northeast of Building 644.) Based upon the ONFF groundwater monitoring program information, it is unlikely that groundwater at Building 644 is impacted by the ONFF hydrocarbon groundwater plume.

4. SITE VISIT AND INVESTIGATION

A Building 644 site visit was conducted on February 2, 2010 by Tetra Tech personnel Mr. Brandon Smith, P.E. and Mr. James Forrelli, P.E. The purpose of this visit was to verify information gathered during the records search and to collect additional information as necessary to prepare this RCRA Partial Closure Report. Tetra Tech personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. Building 644 and the associated parcel of land were visually inspected for signs of hazardous waste generation or storage. Site visit observations, recorded on the attached Building Inspection Form⁽¹⁾ are summarized below:

- At the time of inspection, Building 644 was not occupied and in good condition. The flight simulator and other major components of the trainer systems had been removed. Office equipment and furniture were present.

- Potential evidence of current or past hazardous waste generation activities was observed. A small electronics soldering station in Room 11 was identified by NAS Brunswick personnel during the inspection.
- No evidence of hazardous waste residues was observed.
- Hydraulic oil staining of the floor in the hydraulic equipment room (adjacent to the trainer room) was observed. A floor drain that previously drained to the 500-gallon hydraulic oil UST was closed at the time of the UST removal in 1991.
- No other signs of a past release (staining, unusual odors, stressed vegetation, etc.) nor structural modifications that could conceal signs of a past release were observed.
- No hazardous waste storage or accumulation areas were observed.
- One pad-mounted transformer was observed on the south side of the building. No evidence of a past leak from this transformer was observed.

Due to the potential evidence of current or past hazardous waste generation activities observed in Room 11 during the site inspection, three wipe samples were collected on February 24, 2010 to assess the potential for lead and other metals residue in the electronics soldering station. One sample (NASB-B644-WP01) was collected from the floor below the work bench, one sample (NASB-B644-WP02) was collected from the work bench and one sample (NASB-B644-WP03) was collected from the wall below the former fume hood pipe chase penetration. Wipe sample locations are shown on Figure 3. Wipe samples were submitted for laboratory analysis for RCRA 8 metals.

Wipe sample results for the Building 644 investigation are presented in Table 1. The lead analytical results were compared to the following MEDEP criteria for lead-contaminated settled dust, applicable for RCRA closures:

Floors: 40 micrograms per square foot ($\mu\text{g}/\text{ft}^2$)
Walls and other flat surfaces up to a height of 8 feet: 250 $\mu\text{g}/\text{ft}^2$
Surfaces above 8 feet: visibly clean (dust-free)

The lead surface wipe sample results for the Room 11 investigation are presented in Table 1. As shown, lead levels in all three wipe samples are below the respective criteria. There are no Maine criteria for the other seven RCRA metals. For information purposes, wipe sample results for the other seven metals were compared with available World Trade Center Settled Dust Screening Values (WTC, 2003). As shown in Table 1 all levels of these metals, if detected, are below the screening values.

Based on the available information regarding historical activities at the Building 644 parcel, there is no evidence that groundwater underlying the parcel has been adversely impacted by a release from within the parcel or from an upgradient source.

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research, site visit observations and NAS Brunswick Environmental Department personnel interviews, no hazardous waste generation, hazardous waste accumulation, or hazardous waste storage, with the exception of universal waste, was conducted at the Building 644 parcel.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

The only USTs or ASTs known to be associated with the Building 644 parcel are discussed in Sections 3 and 4. No other tanks were observed in the immediate vicinity of Building 644. The facility space is heated by a natural-gas-fired furnace; natural gas is supplied through pipeline by the local gas utility company.

7. LIMITATIONS

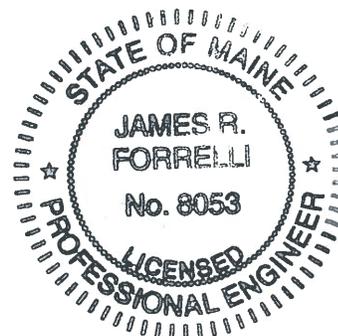
This investigation of the hazardous waste closure requirement applies to the Building 644 parcel (as shown on Figure 2) only.

8. CERTIFICATION

Based on the findings of this investigation, there have been no activities resulting in the generation, accumulation or storage of hazardous waste at the Building 644 parcel, NAS Brunswick, Maine. Therefore, the hazardous waste closure of the Building 644 parcel was completed in accordance with the provisions of MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11.



James Forrelli, P.E.
Senior Project Engineer
Tetra Tech NUS, Inc.



⁽¹⁾ The Building Inspection Form provides preliminary information collected during the building inspection, including information from visual observations, Navy personnel interviews, and from documents reviewed during file reviews. It does not reflect any additional information provided at a later date that further clarifies or corrects preliminary information collected during the building inspection and file reviews.

REFERENCES

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EES (Elizabethton Electric System), 1998. QuickSheet Data Table, PCB Information. Prepared by Elizabethton Electric System, June 1998. (<http://www.eesonline.org/programs/pcbdata.html>).

James W. Sewall Company, 1958. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. October 9, 1958.

James W. Sewall Company, 1978. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. November 22, 1978.

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Public Works Department, 1943. "US Naval Air Station, Brunswick, Maine, Building Site Plan Showing Locations of Underground Water Distribution Lines and Hydrants," NAS Brunswick, Maine. September 4, 1943.

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Public Works Department, 1989. "Existing Conditions Map. Public Works Department Drawing No. 2157" NAS Brunswick, Maine. Revised April 2, 1989.

Public Works Department, 2006. Brunswick Naval Air Station, NAS Brunswick, Maine. 2006.

World Trade Center, 2003. Table A-3 Settled Dust Screening Values and Supporting Toxicity Criteria from World Trade Center Indoor Environmental Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks, May 2003.

**TABLE 1
WIPE SAMPLE METALS RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 644 – P-3C OPERATIONAL TRAINER PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID	WTC	MEDEP floor	MEDEP wall	NASB-B644-WP01	NASB-B644-WP02	NASB-B644-WP03
LOCATION				Room 11 - Floor	Room 11 - Bench	Room 11 - Wall
MATRIX				wipe	wipe	wipe
SAMPLE DATE				02/24/10	02/24/10	02/24/10
METALS ($\mu\text{g}/\text{ft}^2$)						
Arsenic	36	--	--	4.6 U	4.6 U	4.6 U
Barium	10000	--	--	46	9.3 U	15
Cadmium	140	--	--	34 ^	14 ^	4 ^
Chromium	440	--	--	79	9.3 U	19
Lead	NA	40	250	31	15	19
Mercury	15	--	--	0.17	0.093 U	0.093 U
Selenium	--	--	--	9.3 U	9.3 U	9.3 U
Silver	730	--	--	11	1.9 U	1.9 U

Notes:

Wipe sample surface area: 10 cm by 10 cm

WTC Source: Table A-3 Settled Dust Screening Values and Supporting Toxicity Criteria from World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks, May 2003

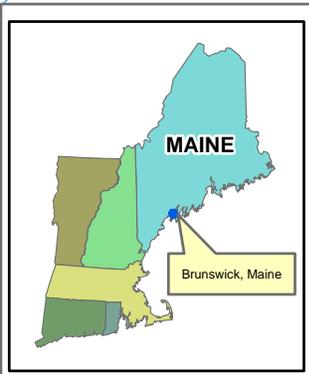
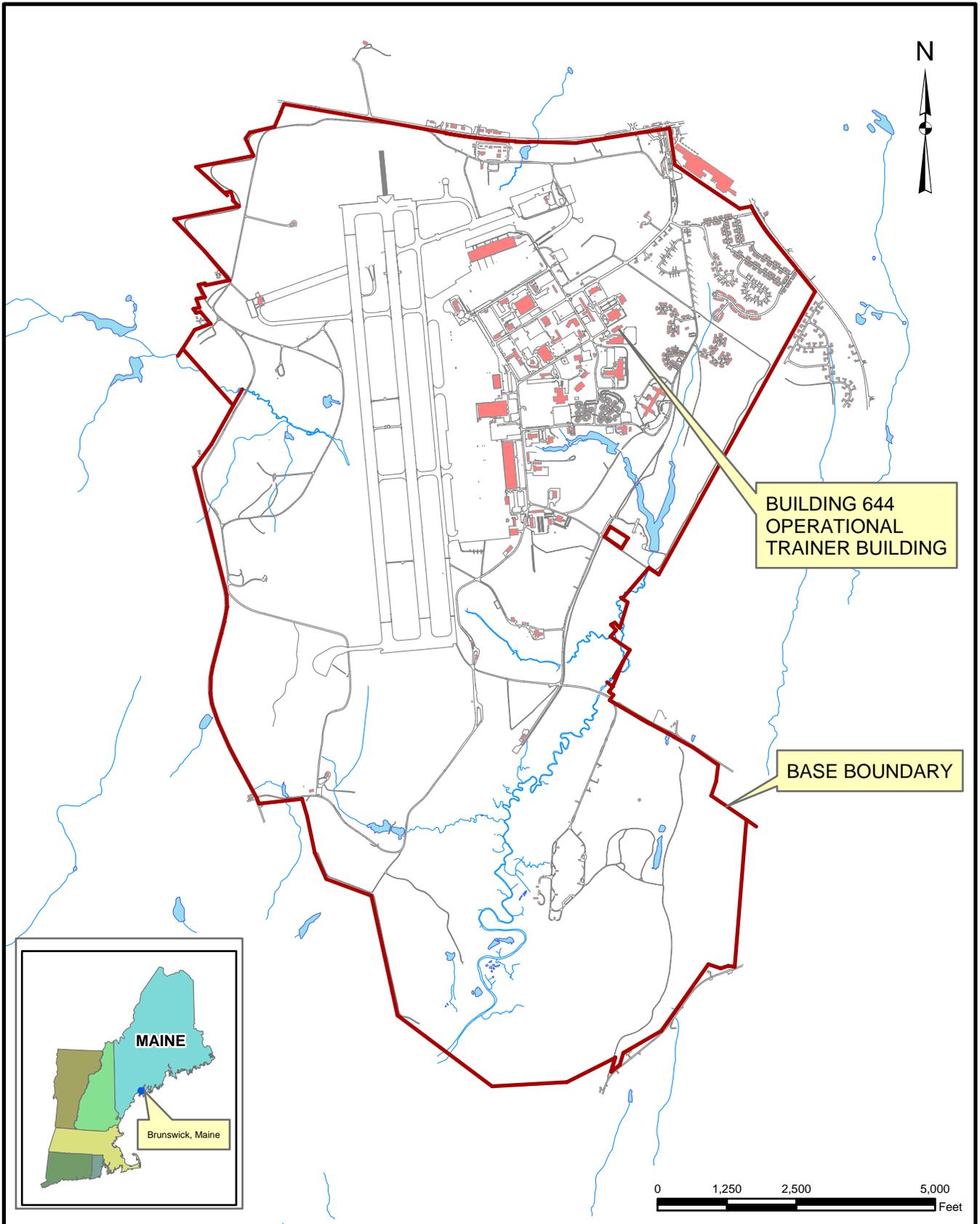
^ estimated result; instrument calibration slightly exceeds quality control limits

 $\mu\text{g}/\text{ft}^2$ micrograms per square foot

-- no criteria available

NA not applicable

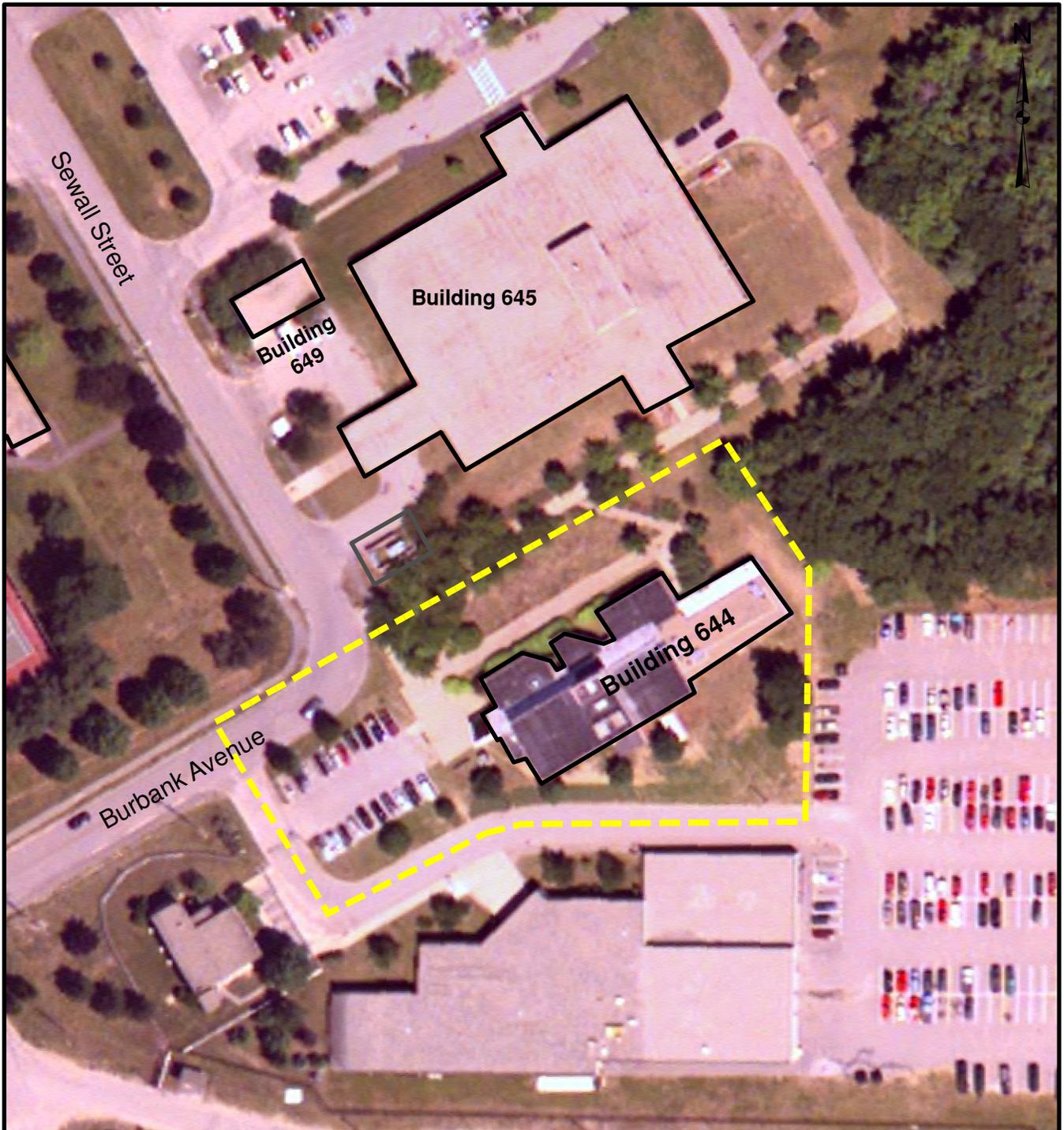
U not detected (with associated detection limit)



Tetra Tech NUS, Inc.

SITE LOCATION MAP
BUILDING 644 - OPERATIONAL TRAINER BUILDING
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:_NASB_BLDG_644_LOCUS.MXD	
REV 0	DATE 03/22/10
FIGURE NUMBER 1	



Legend

- Parcel Boundary
- BLDG_544_outline



Building Corner	Northing	Easting
North	387916.990	3017032.410
East	387878.750	3017055.790
South	387770.750	3016900.910
West	387806.250	3016846.540

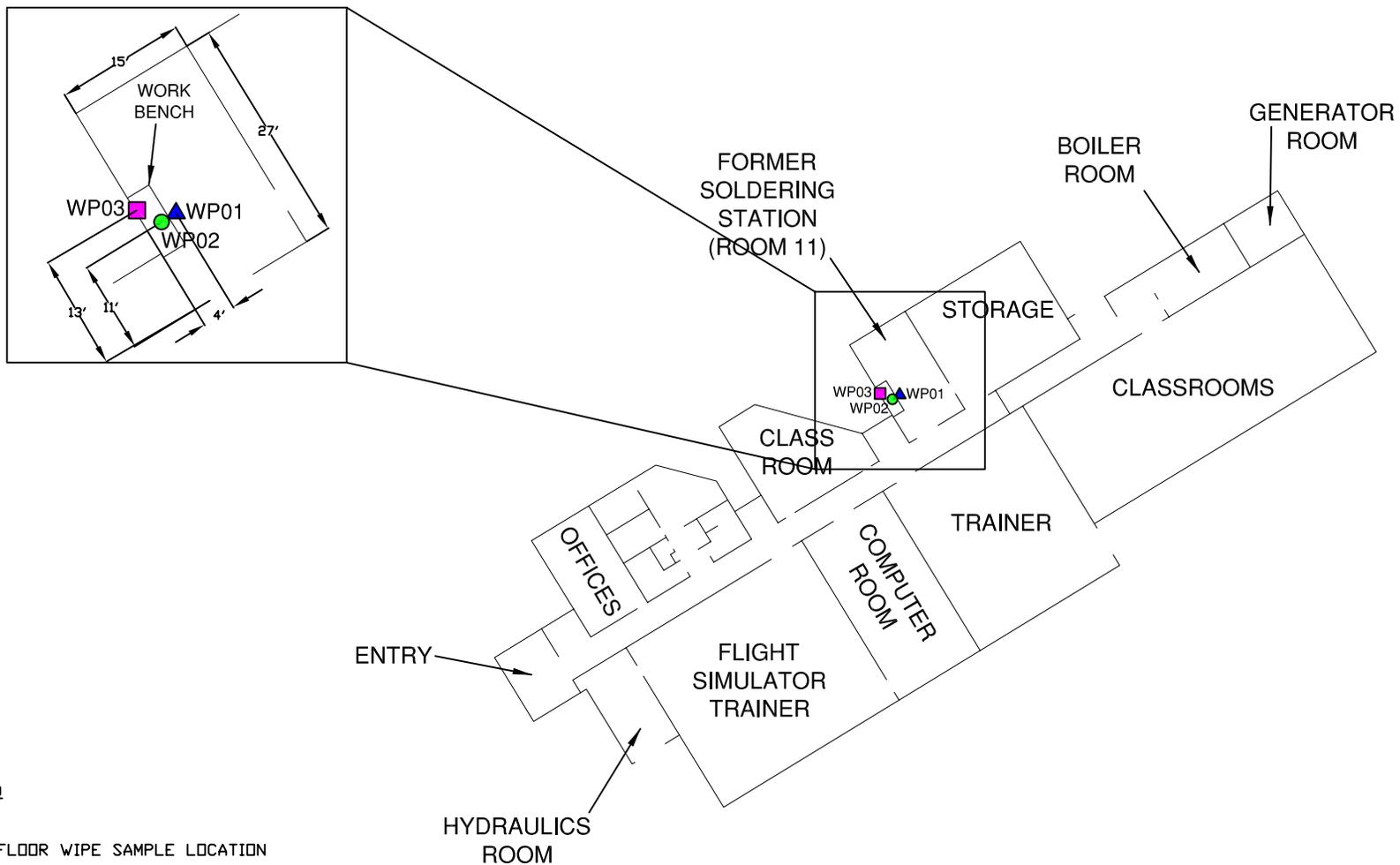
Coordinates are in NAD 1983, Maine West, Feet



Tetra Tech NUS, Inc.

SITE PLAN
BUILDING 644 - OPERATIONAL TRAINER BUILDING
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE \\.\BLDG_644_ORTHO.MXD	
REV 0	DATE 03/22/10
FIGURE NUMBER FIGURE NO. 2	



LEGEND

- WP01 ▲ FLOOR WIPE SAMPLE LOCATION
- WP03 ■ WALL WIPE SAMPLE LOCATION
- WP02 ● WORK BENCH SAMPLE LOCATION



TETRA TECH NUS, INC.

FLOOR PLAN
BUILDING 644 - OPERATIONAL TRAINER BUILDING
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE \\.\NASB_BLDG_644_FP.DWG.DWG	
REV 0	DATE 04/15/10
FIGURE NUMBER 3	

**BUILDING INSPECTION FORM
RCRA PARTIAL CLOSURE PROGRAM
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22**

Inspection Date: 2/2/2010
Personnel: Brandon Smith, P.E. / James Forrelli, P.E.
Weather: Clear, 20s

GENERAL BUILDING INFORMATION / USES

Building Name: Operational Trainer Building
 Function: Operational Trainer for the Orion P3 Aircraft
 Size: 13,571 SF
 Year of Construction: 1979

Building 644 is located east of the intersection of Burbank Avenue and Sewall Street at NAS Brunswick. It was constructed in 1979 and served as an operational trainer building for the P3 Orion aircraft for its entire history. Building 644 consists of a 13,571 square-foot, two story building on a slab foundation.

Building 644 was used as administrative and classroom training for the P3 Orion aircraft. Building 644 contains administrative and classroom space and included a full-scale Orion P3 flight trainer. Additional classroom/training space was added to the northeastern portion of Building 644 in 1989.

Building 644 is heated via a natural gas furnace. Prior to the natural gas heat, it was heated via a fuel oil fired furnace.

BUILDING INSPECTION / CONDITION

No record of hazardous waste stored at Building 644.
 The building was unoccupied at the time of the site visit and appeared in good condition. Office equipment, furniture, and components of the trainer systems was present.
 Potential evidence of current or past hazardous waste generation activities was observed. A small electronics soldering station was identified by NASB personnel during the inspection and should be sampled for lead residue.
 No evidence of hazardous waste residues was observed.
 Hydraulic oil staining of the floor of the P3 trainer hydraulic equipment room adjacent to the trainer was observed. A floor drain that previously drained to the 500 gallon hydraulic oil UST was closed at the time of the UST removal in 1991. No modifications to the structure, which may conceal signs of a past release, were observed.
 No hazardous waste storage areas or hazardous waste accumulation areas were observed.

HAZARDOUS WASTE STORED / GENERATED

No record of hazardous waste stored or generated at Building 644, according to NASB personnel.

POTENTIAL PCB-CONTAINING TRANSFORMERS

The NASB transformer database lists the following transformer associated with Building 644:
 750 KVA Pad-Mounted - RTE Serial No. 886006512 - Non-PCB containing (Mineral Oil)

APPLICABLE REPORTS / DOCUMENTS

Available historical plans and aerial photos were reviewed for past property uses:
1943 plan - No buildings present. Building 25 (BOQ) present to the north and Building 30 (Dispensary) to the west.
1946 plan - Same as 1943, Air Force Compound and Beasley Circle present to the south now.
1952 plan - Same as 1946, Building 644 area labelled as parking
1956 plan - Same as 1952
1958 aerial - Air Force Compound present to the south. Building 644 area is used as a parking lot.
1978 aerial - Building 644 present in current location. Building doesn't appear to be complete yet.
1981 aerial - Building 644 present in the current location.
1983 plan - Building 644 present in current location.
1984 aerial - Building 644 present in current location, cargo container/trailer has been removed on the south side of the building.
1989 plan - same as 1983 plan
1989 aerial - same as 1984 aerial, Building 56 (FASO) present to the south now. Storage container on the northeast side removed and addition is present.
1993 aerial - same as 1989 aerial.
2006 plan - same as 1989 plan.

According to NASB records, the following USTs were present at Building 644:
UST #10045-074, a 550 gallon FRP tank containing #2 fuel oil (installed 1985, removed in January 1994).
UST #10045-440, a 500 gallon FRP tank containing hydraulic oil (installed 1977, removed in 1991)

According to NASB records, the following ASTs were present at Building 644:
A644.0, a 500 gallon DWS tank containing diesel (installed in 1994, removed in 1996)
A644.1, a 150 gallon SWS tank containing hydraulic oil for the P3 simulator (unknown installation)
A644.2, a 6000 gallon DWSV tank containing #1 fuel oil for heating (installed 1996, cleaned and closed in place 04/16/09).

HAZARDOUS WASTE STORAGE RECORDS

No hazardous waste was historically stored at Building 644, according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

MISCELLANEOUS NOTES

Tetra Tech personnel were accompanied on the inspection by D. Bruce Smith, NAS Brunswick Hazardous Waste Manager.

(SEE ATTACHED BUILDING FLOOR PLAN AND PHOTOGRAPHS)

INSPECTOR SIGNATURE:



Brandon Smith, P.E.

PHOTOGRAPHS



No. 1 Building 644 – NAS Brunswick February 2, 2010
Building 644 – P-3C Operational Trainer Building southwest elevation showing main entrance



No. 2 Building 644 – NAS Brunswick February 2, 2010
Building 644 – P-3C Operational Trainer Building exterior southeast elevation

PHOTOGRAPHS



No. 3 Building 644 – NAS Brunswick February 2, 2010
Building 644 P-3C Operational Trainer Building pad-mounted transformer



No. 4 Building 644 – NAS Brunswick February 2, 2010
Building 644 P-3C Operational Trainer Building simulator room (after simulator removal)

PHOTOGRAPHS



No. 5 Building 644 – NAS Brunswick February 2, 2010
Building 644 P-3C Operational Trainer Building Room 11 (electronics soldering station)



No. 6 Building 644 – NAS Brunswick February 2, 2010
Building 644 – P-3C Operational Trainer Building former flight trainer simulator hydraulics room

RCRA PARTIAL CLOSURE REPORT
for
BUILDING 649 – AMBULANCE GARAGE PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
APRIL 2010

1. INTRODUCTION

The purpose of this report is to present the findings and conclusions of the investigation conducted to determine if the Maine Department of Environmental Protection (MEDEP) Resource Conservation and Recovery Act (RCRA) or hazardous waste closure requirements have been completed for the Building 649 parcel at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

The Building 649 parcel is located in the north-central portion of NAS Brunswick (see Figure 1). The approximately 0.23-acre parcel (see Figure 2) is bordered to the northwest by the Building 151 parcel; to the northeast and southeast by the Building 645 parcel, the former medical/dental clinic; and to the southwest by Sewell Street and Building 512, the former officer's quarters. The parcel contains Building 649, known as the Ambulance Garage and adjacent grass-covered area.

Building 649 was constructed in 1979 and consists of a 1,377 square-foot, single-story structure on a concrete slab foundation. The building served as an ambulance garage for the medical/dental clinic (Building 645). Its interior space consists of two vehicle bays, a locker room and an equipment storage room. Photographs of the Building 649 exterior are provided in an attachment. The building is heated by a natural gas-fired boiler. It was previously heated by propane-fired system.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (Tetra Tech) project team interviewed NAS Brunswick Environmental Department personnel and performed records research at both NAS Brunswick and the MEDEP office in Augusta, Maine to collect available information concerning Building 649 parcel including past use and operations at that location.

According to NAS Brunswick Environmental Department personnel, since its construction in 1979, the sole use of Building 649 has been as an ambulance garage.

Records reviewed include: historical aerial photographs; the NAS Brunswick Other Environmental Liabilities (OEL) Database; area-specific reports; facility plans and drawings; and hazardous waste records. Aerial photographs dated 1958, 1978, 1984, and 1989 (all produced by James W. Sewall Company) were reviewed along with Public Works Department site base maps dated 1946, 1952, 1956, 1983, 1989, and 2006 to provide historical information.

No hazardous waste was generated during the operations in Building 649, according to NAS Brunswick personnel.

Building 649 (apparently while under construction) is first visible on the 1978 aerial photograph (Sewall, 1978). Between 1946 and 1962, two former Air Force Buildings 11(AF) and 13(AF) spanned the location of the Building 649 parcel. Review of available NAS Brunswick records has not revealed any information regarding the use of the former Air Force buildings. Based on the aerial photographs and the known use of the buildings in the area within the 1940s to 1960s timeframe, the usage of the four former Air Force buildings is presumed to be non-industrial.

According to the NAS Brunswick transformer database, no transformers are associated with Building 649.

No underground storage tanks (USTs) or above ground storage tanks (ASTs) have been utilized at Building 649 parcel according to NAS Brunswick records. No accidental releases were identified in the NAS Brunswick or MEDEP spill records relating to Building 649 parcel.

Available information for known, nearby groundwater contamination areas was reviewed to determine if groundwater underlying the Building 649 parcel could potentially be impacted by another (off-parcel) source area. The only identified groundwater contamination that could potentially impact the parcel is the dissolved phase hydrocarbon plume associated with the Old Navy Fuel Farm (ONFF), located north and upgradient of Building 649. The ONFF was decommissioned in 1993 and remediated in 2000. Recent ONFF groundwater monitoring program results indicate that groundwater is encountered at about 3 to 7 feet below grade and flows to the southeast from the ONFF across Fitch Avenue and the Building 151 parcel, located northeast of the Building 649 parcel (ESI, 2009). (Building 151 is located approximately 430 feet northeast of Building 649.) Based upon the ONFF groundwater monitoring program information, it is unlikely that groundwater at Building 649 is impacted by the ONFF hydrocarbon groundwater plume.

4. SITE VISIT AND INVESTIGATION

Site visits were conducted by Mr. Brandon Smith, P.E., and Mr. James Forrelli, P.E., of Tetra Tech on January 21, 2010 and February 9, 2010. The purpose of the visits was to verify information gathered during the records search and to collect additional information as necessary to prepare this RCRA Partial Closure Report. The building interior was observed during the January site visit. Snow cover at the time of the January site visit prevented direct observation of the exterior grounds, necessitating the second visit in February to observe the grounds. Tetra Tech personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. The Building 649 parcel location was visually inspected for signs of hazardous waste generation or storage. Photographs taken during the site visit are provided in the attachments to this report. Site visit observations, recorded on the attached Building Inspection Form⁽¹⁾, are summarized below:

- The building was occupied at the time of the site visit and appeared in good condition.
- No evidence of current or past hazardous waste generation was observed.
- No evidence of hazardous waste residues was observed.
- No signs of a past release (staining, unusual odors, stressed vegetation, etc.) nor structural modifications that could conceal signs of a past release were observed.
- No hazardous waste storage or accumulation areas were observed.
- No transformers were observed.

Based on the available information regarding historical activities at the Building 649 parcel, there is no evidence that groundwater underlying the parcel has been adversely impacted by a release from within the parcel. However, groundwater at the Building 649 parcel may have been previously impacted by dissolved-phase hydrocarbon migration from the off-parcel, upgradient ONFF source area, a known NAS Brunswick groundwater contamination area. Current monitoring data indicate that these impacts have been largely mitigated.

Based on the records research findings and site visit observations, it was determined that neither further inspection nor sampling of Building 649 parcel is required to complete the MEDEP hazardous waste closure requirements.

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research, site visit observations and NAS Brunswick Environmental Department personnel interviews, no hazardous waste generation, hazardous waste accumulation, or hazardous waste storage was conducted, with the exception of universal waste, at the Building 649 parcel.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

No USTs or ASTs have been utilized at the Building 649 parcel according to NAS Brunswick records. No other tanks were observed in the immediate vicinity of the Building 649 parcel. The facility space is heated by a natural-gas-fired furnace; natural gas is supplied through pipeline by the local gas utility company.

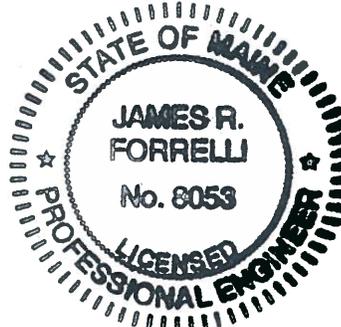
7. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the Building 649 parcel (as shown on Figure 2) only.

8. CERTIFICATION

Based on the findings of this investigation, there have been no activities resulting in the generation, accumulation or storage of hazardous waste at the Building 649 parcel, NAS Brunswick, Maine. Therefore, the hazardous waste closure of Building 649 parcel was completed in accordance with the provisions of MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11.

James R. Forrelli
 James Forrelli, P.E.
 Senior Project Engineer
 Tetra Tech NUS, Inc.



⁽¹⁾ The Building Inspection Form provides preliminary information collected during the building inspection, including information from visual observations, Navy personnel interviews, and from documents reviewed during file reviews. It does not reflect any additional information provided at a later date that further clarifies or corrects preliminary information collected during the building inspection and file reviews.

REFERENCES

Ecor Solutions, Inc. (ESI). 2009. Final Groundwater Monitoring Report, April 2008 and October 2008 Sampling Events, Old Navy Fuel Farm, Naval Air Station Brunswick, Maine. September.

James W. Sewall Company, 1958. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. October 9, 1958.

James W. Sewall Company, 1978. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. November 22, 1978.

James W. Sewall Company, 1984. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. April 23, 1984.

James W. Sewall Company, 1989. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. April 2, 1989.

BNAS Reuse Master Plan Property Condition Assessment. Mid-Coast Regional Redevelopment Authority, Brunswick, ME. 2006.

Master/Historical Underground Storage Tank Inventory. NAS Brunswick, Maine. 02/05/96.

Naval Air Station (NAS) Brunswick, 2008. Naval Air Station Brunswick Instruction 5090.1C From: Commanding Officer, Subj: Restriction on Soil Excavation, Groundwater Use, and Remedial Component Disturbance. March 5, 2008.

Naval Energy and Environmental Support Activity (NEESA). 1983. Initial Assessment Study of Naval Air Station, Brunswick, Maine (NEESA 13-031). June.

Public Works Department, 1946. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1946," NAS Brunswick, Maine. June 30, 1946.

Public Works Department, 1952. "Map of US Naval Air Station, Brunswick, Maine, Showing conditions on June 30, 1952," NAS Brunswick, Maine. June 30, 1952.

Public Works Department, 1956. General Station Map, Enclosure 2. , NAS Brunswick, Maine. 1956.

Public Works Department, 1959. "Building Number 38 Floor Plan (First Floor Plan), Public Works Department Drawing No. 561." NAS Brunswick, Maine. Revised May 20, 1966.

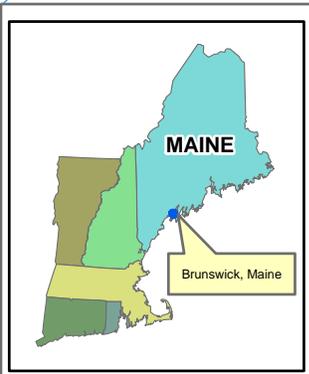
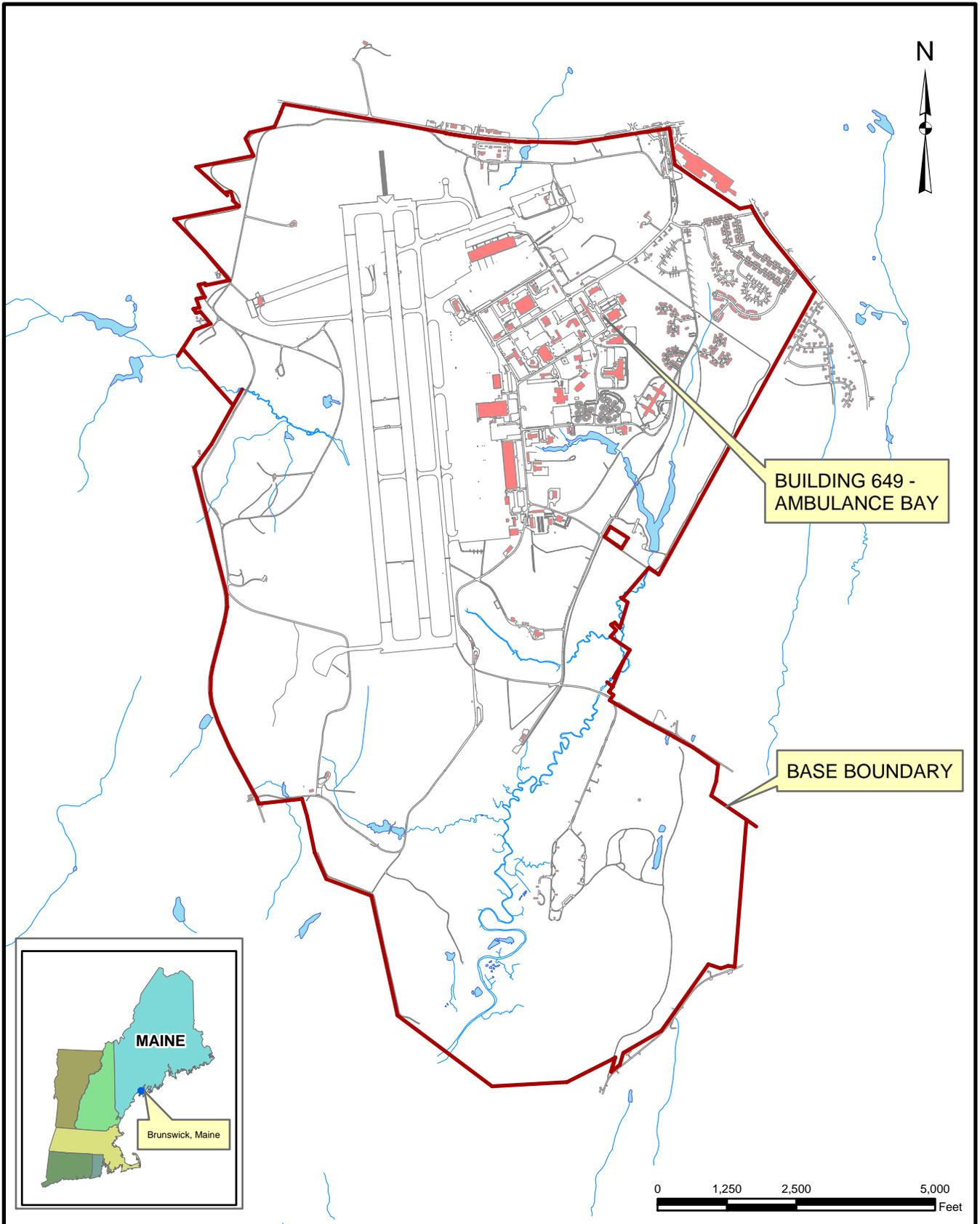
Public Works Department, 1959. "Building Number 38 Floor Plan (Basement), Public Works Department Drawing No. 562." NAS Brunswick, Maine. Revised January 8, 1971.

Public Works Department, 1962. "Map of Streets," US Naval Air Station, Brunswick, Maine, NAS Brunswick, Maine. 1962.

Public Works Department , 1983. "Existing Conditions Map. Public Works Department Drawing No. 2157" NAS Brunswick, Maine. May 5, 1983.

Public Works Department , 1989. "Existing Conditions Map. Public Works Department Drawing No. 2157" NAS Brunswick, Maine. Revised April 2, 1989.

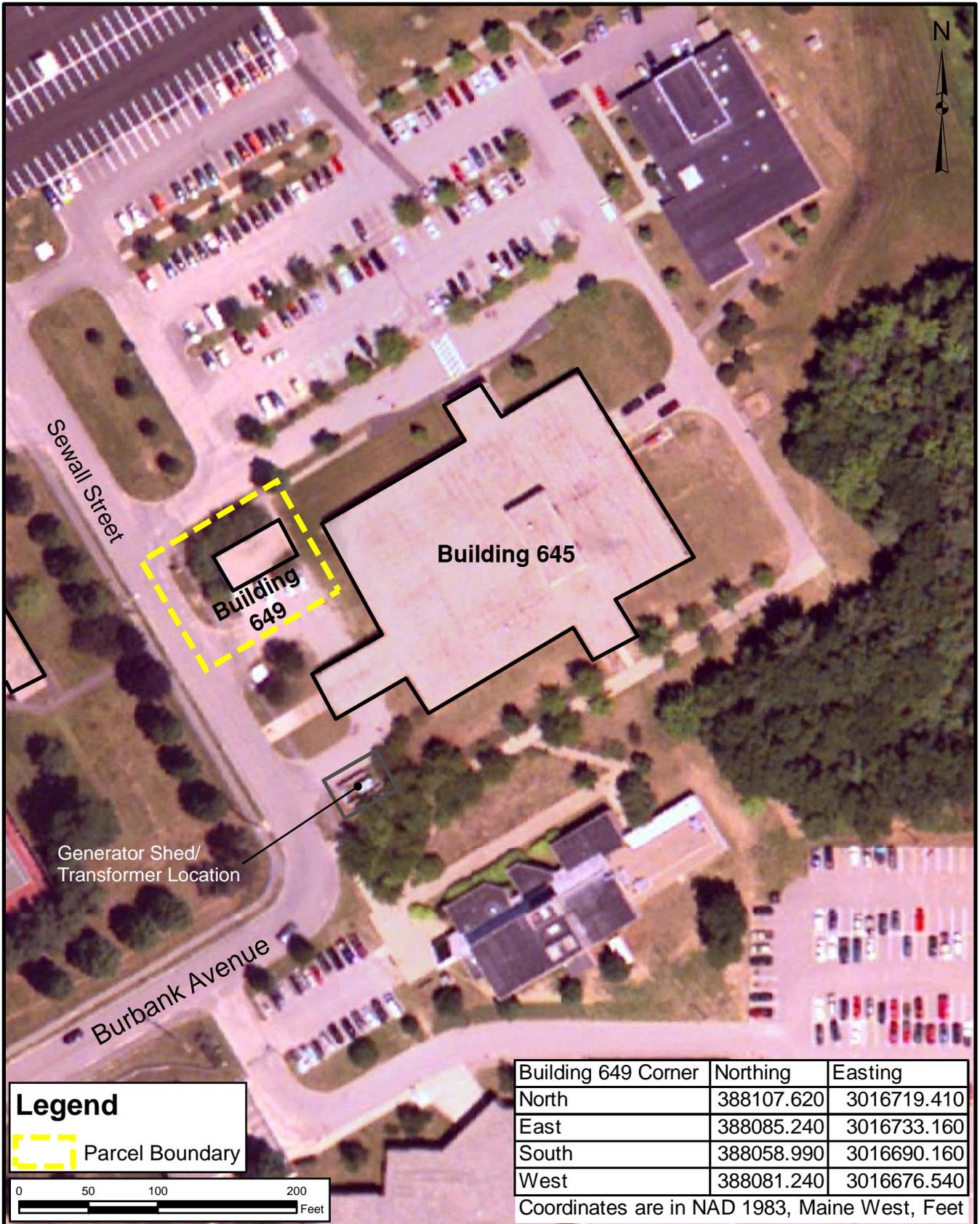
Public Works Department, 2006. Brunswick Naval Air Station, NAS Brunswick, Maine. 2006.



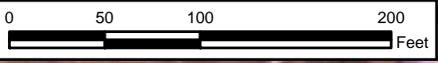
Tetra Tech NUS, Inc.

SITE LOCATION MAP
 BUILDING 649 - AMBULANCE GARAGE
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\NASB_BLDG_649_LOCUS.MXD	
REV 0	DATE 04/20/10
FIGURE NUMBER 1	



Legend
 Parcel Boundary



Building 649 Corner	Northing	Easting
North	388107.620	3016719.410
East	388085.240	3016733.160
South	388058.990	3016690.160
West	388081.240	3016676.540

Coordinates are in NAD 1983, Maine West, Feet



SITE PLAN
 BUILDING 649 - AMBULANCE GARAGE
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE \\.\BLDG_649_ORTHO.MXD	
REV 0	DATE 04/20/10
FIGURE NUMBER FIGURE NO. 2	

**BUILDING INSPECTION FORM
RCRA PARTIAL CLOSURE PROGRAM
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22**

Inspection Date: 1/21/2010
Personnel: Brandon Smith, P.E. / James Forrelli, P.E. / Mindi Messmer
Weather: Clear, 20s

GENERAL BUILDING INFORMATION / USES

Building Name: Ambulance Garage
 Function: Medical/Dental Clinic Ambulance Garage
 Size: 1,377 SF
 Year of Construction: 1979

Building 649 is located northwest of the intersection of Burbank Avenue and Sewall Street at NAS Brunswick. It was constructed in 1979 and served as an ambulance garage for its entire history. Building 649 consists of a 1,377 square-foot, single story concrete block building on a slab foundation.

Building 649 was used as the ambulance garage for the base medical and dental clinic. Building 649 contains two ambulance bays with a stretcher rack overhead, along with a flammable cabinet for automotive supplies. A storage room and a small locker room are off the ambulance bays.

Building 649 is heated by natural gas. It was heated previously via propane.

BUILDING INSPECTION / CONDITION

No record of hazardous waste stored at Building 649.

The building was occupied at the time of the site visit and appeared in good condition.

No evidence of current or past hazardous waste generation activities was observed.
 No evidence of hazardous waste residues was observed.
 No signs of a past release (staining, unusual odors, stressed vegetation, etc.) were observed. No modifications to the structure, which may conceal signs of a past release, were observed.
 No hazardous waste storage areas or hazardous waste accumulation areas were observed.

HAZARDOUS WASTE STORED / GENERATED

No record of hazardous waste stored or generated at Building 649, according to NASB personnel.

POTENTIAL PCB-CONTAINING TRANSFORMERS

The NASB transformer database lists no transformers associated with Building 649.

APPLICABLE REPORTS / DOCUMENTS

Available historical plans and aerial photos were reviewed for past property uses:
1943 plan - No buildings present. Building 38 (Officers Club) present to the north.
1946 plan - Buildings 11 (AF) and 13 (AF) present - Unknown Air Force Buildings.
1952 plan - Same as 1946
1956 plan - Same as 1952
1958 aerial - Buildings 11 and 13 present - Air Force Aircraft and Paint & Oil Storehouses
1978 aerial - Buildings 645 (Medical/Dental Clinic) and 649 present
1983 plan - Building 645 and 649 present.
1984 aerial - same as 1978 aerial
1989 plan - same as 1983 plan
1989 aerial - same as 1978 aerial
2006 plan - same as 1989 plan.

According to NASB records, no ASTs or USTS were associated with building 649.

HAZARDOUS WASTE STORAGE RECORDS

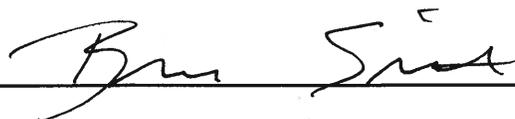
No hazardous waste was historically stored at Building 649, according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

MISCELLANEOUS NOTES

Tetra Tech personnel were accompanied on the inspection by D. Bruce Smith, NAS Brunswick Hazardous Waste Manager.

(SEE ATTACHED PHOTOGRAPHS)

INSPECTOR SIGNATURE:



Brandon Smith, P.E.

PHOTOGRAPHS



No. 1
Building 649 – NAS Brunswick
Building 649 – Ambulance garage exterior southwest elevation

February 9, 2010



No. 2
Building 649 – NAS Brunswick
Building 649 – Ambulance garage exterior east elevation

February 9, 2010