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NAS BRUNSWICK
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FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT
FOR BUILDING 277 WITH TRANSMITTAL LETTER NAS BRUNSWICK ME
10/19/2010
NAS BRUNSWICK

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

October 19, 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 Building 277

Dear Mr. Vigneault:

A copy of the Final RCRA Partial Closure Report for Building 277 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,



LMJ LISA M. JOY
Environmental Director

Enclosure: (1) Final RCRA Partial Closure Report for Building 277

Copy to:
NAVFAC Mid-Atlantic (B. Abraham)
NAS Brunswick (M. Fagan/D. Smith)
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RCRA PARTIAL CLOSURE REPORT
for
BUILDING 277 – PUBLIC WORKS SEWAGE PUMP HOUSE
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
OCTOBER 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 Building 277 at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

Building 277 is located in the northern area of NAS Brunswick (Figure 1), along the inner base security fence on the north side of Perimeter Road, east of the former Naval Mobile Construction Battalion (NMCB) 27 Compound, also known as the SeaBee Compound (Figure 2). It is surrounded by grass-covered NAS Brunswick grounds sloping east and northeast toward an unnamed surface water body, and the outer security fence and Route 24, respectively. Building 277 is located along the western border of Site 8, Perimeter Road Disposal Site, a disposal site for construction and demolition debris, from 1964 to 1974.

The SeaBee Compound Area Parcel RCRA Partial Closure Report addresses the land surrounding and the groundwater underlying Building 277.

Building 277 consists of an in-ground sewage pump station and a small, aboveground instrumentation shed housing metering and electronic signaling equipment for the pump station. The one-room, un-heated shed, has an area of 49 square feet and features wood-framed construction on a concrete-pad foundation. The pumps and wet well are contained in an in-ground reinforced concrete structure accessible by aluminum access hatch doors. NAS Brunswick documentation indicates that the in-ground pump station was constructed in 1953 and that the shed was added about 1991. The pump station collects sanitary wastewater flow from the NMCB 27 Compound and is part of the NAS Brunswick sanitary wastewater collection system, which discharges to the Brunswick Sewer District. Photographs of the building are provided as an attachment to this report.

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 277, including past use and operations at these locations.

Records reviewed include historical aerial photographs, the NAS Brunswick Other Environmental Liabilities (OEL) Database, area-specific reports, facility plans, facility drawings, and hazardous waste records. Aerial photographs dated 1953, 1958, 1978, 1981, 1984, 1989, 1993 and 1997 (Sewall, 1953, 1958, 1978, 1981, 1984, 1989, 1993 and 1997) were reviewed. Public Works Department (PWD) site base maps dated 1943, 1946, 1952, 1956, 1975, 1989, and 2006 (PWD, 1943, 1946, 1952, 1956, 1975, 1989, and 2006) and site building lists for 1965, 1976, 2003, and 2008 (PWD, 1965, 1976, 2003, and 2008) were also reviewed.

According to NAS Brunswick Environmental Department personnel, Building 277 has been used as sanitary sewer pump station since initial construction. There is no record of hazardous waste generation or accumulation at Building 277.

Historical maps, building lists, and aerial photographs show the current location of Building 277 as vacant land until the building is noted on the 1965 Building List. In the 1981 aerial photograph the sanitary sewer in-ground pump station appears in its current location, west of the current Building 277 footprint. In the 1993 aerial photograph Building 277 appears at its current location. Due to photograph clarity issues, Building 277 and/or the associated in-ground pump station could not be identified in the 1958, 1978, 1984, 1989 or 1993 aerial photographs. Only the in-ground pump station was observed in the 1981 aerial photograph. In the 1989 aerial photograph, Building 277 appears at its current location. Building 277 and the associated in-ground pump station are also shown on the 2006 base map.

The NAS Brunswick Transformer Database lists three pole-mounted electrical transformers for Building 277 (PWD, 2009). The NAS Brunswick Transformer Database (PWD, 2009) indicates the three pole-mounted units were manufactured by ABB Power T & D Co., Inc. (serial numbers 90A341747, 90A341748, and 90A341749). The first digits of the serial numbers indicate that they were manufactured in 1990; therefore, it is unlikely the observed transformers contain polychlorinated-biphenyls (PCBs). As of July 1, 1979, the United States Environmental Protection Agency (EPA) prohibited all manufacturing of new PCB electrical equipment (transformers and capacitors). In addition, according to an electrical utility guide for identifying non-PCB transformers, all ABB Power T & D Co., Inc. transformers are non-PCB-containing (DTM, 2006). However, because the pump station has operated since 1953, the possibility exists that the transformers currently in service replaced older-model transformers that contained PCB. Three historic 15-Kva transformers (ID Nos. 2643-3-2, 2643-3-4, and 2643-3-5) were reportedly removed from the NMCB 27 Compound on June 17, 1991 for transport off site for disposal, however, it cannot be confirmed that these historic transformers were pole-mounted adjacent to the current Building 277.

The NAS Brunswick Master/Historical Aboveground and Underground Storage Tank Inventory lists no aboveground storage tanks (ASTs) or underground storage tanks (USTs) for Building 277 (Environmental Department, 2009). No oil/water separators are listed for Building 277 on the NAS Brunswick Revised Oil/Water Separator List (PWD, 2008b).

4. SITE VISIT AND INVESTIGATION

Site visits were conducted on September 1 and 2, 2010 by Mr. Brian Geringer and Mr. Mark K. Speer, P.E. of Tetra Tech. The visits included the areas of Building 277. The purpose of the site visits was to verify information gathered during the records search and to collect information as necessary to prepare this closure report. Tetra Tech personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. Building 277 was 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 the site visits, the Building 277 instrumentation shed was unoccupied and in good condition. The in-ground pump station was operational but no flow was observed as the SeaBee Compound was vacant.
- The in-ground pump station access doors were opened to observe the wet well; no solvent or petroleum odors were noted.
- No evidence of current or past hazardous waste generation was observed.
- No evidence of hazardous waste residues was observed.
- No structural modifications, which could conceal signs of a past release, were observed.
- No hazardous waste storage areas or hazardous waste accumulation areas were observed.
- No peeling or flaking paint was observed on the building exterior or interior.
- Three transformers that could be a potential source of PCB contamination were observed on a utility pole approximately 10 feet north of the pump station. Surface soil immediately west of the utility pole base was discolored by dark staining.
- No emergency generator was observed at the Building 277 location. No ASTs, USTs, or oil/water separators associated with Building 277 were observed.

- A 3-inch diameter riser pipe was observed immediately west of the in-ground pump station.

Due to the construction date (1953) of the pump station it is possible that previously pole-mounted transformers contained PCB oil. To evaluate the stained area as a historical PCB release, one surface soil sample was collected from the west side at the base of the utility pole (Figure 3) on September 2, 2010. The sample was collected using hand-auger methods, and was from a location immediately below a transformer and within an area of stained soil. The sample was collected from 0 to 6 inches below ground surface (bgs), and was identified as NASB-B277-SS01.

The soil sample was submitted for PCB analysis by Tetra Tech's subcontracted analytical laboratory (Analytics Environmental Laboratory, Portsmouth, New Hampshire). The resulting analytical data underwent limited data validation, blank contamination evaluation, and completeness evaluation. As presented in Table 1, PCB were not detected in the soil sample collected adjacent to the Building 277 utility pole.

Based on the records research findings and site visit observations, it was determined that neither further inspection nor sampling of Building 277 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, with the exception of universal waste, no hazardous waste generation, hazardous waste accumulation, or hazardous waste storage occurred at Building 277.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

No USTs or ASTs were observed in the immediate vicinity of Building 277.

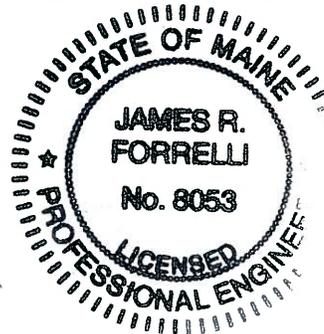
7. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the building footprint of Building 277 (building footprint as shown on Figure 2). It does not apply to the land surrounding or the groundwater underlying Building 277.

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 Building 277 at NAS Brunswick, Maine. Therefore, the hazardous waste closure of Building 277 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

DTM (Distribution Transformer Manufacturers), 2006. "Distribution Transformer Manufacturers and Available Polychlorinated Biphenyl Information". Elizabethton Electric System, Updated January.

Environmental Department, 2009. Master/Historical Aboveground and Underground Storage Tank Inventory. NAS Brunswick, Maine. February.

Navy (Department of the Navy, Base Realignment and Closure Program Management Office), 2006. "Final (Revision 2) Environmental Condition of Property Report for the Naval Air Station, Brunswick, Maine," NAS Brunswick, Maine. May 30.

PWD (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.

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

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

PWD, 1956. General Station Map, Enclosure 2. , NAS Brunswick, Maine.

PWD, 1965. "Index of Structures, Department of the Navy Bureau of Yards & Docks Department" US Naval Air Station Brunswick, Maine. Updated May 13.

PWD, 1975. "General Development, Existing and Planned, Operations Area," US Naval Air Station, Brunswick, Maine, NAS Brunswick, Maine. Updated December 2.

PWD, 1976. "Index of Structures, Naval Facilities Engineering Command, Northeast Division Drawing No. 747 256" Naval Air Station Brunswick, Maine. Updated September 21.

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

PWD, 2003. "NAS Brunswick, Facility List," US Naval Air Station, Brunswick, Maine, NAS Brunswick, Maine. March 9.

PWD, 2006. Brunswick Naval Air Station, NAS Brunswick, Maine.

PWD, 2008a. "Draft NAS Brunswick, Facility List," US Naval Air Station, Brunswick, Maine, NAS Brunswick, Maine. March.

PWD, 2008b. Revised Oil/Water Separator List, Table J-C4(a). NAS Brunswick, Maine. January 1.

PWD, 2009. Master Transformer Database. NAS Brunswick, Maine. June 24.

Sewall (James W. Sewall Company), 1953. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. June 29.

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

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

Sewall, 1981. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. October 17.

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

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

Sewall, 1993. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. November 8.

Sewall, 1997. NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. May 27.

U.S. Environmental Protection Agency (EPA), 2010. Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites. <http://www.epa.gov/region9/superfund/prg/>. May.

TABLE 1
SOIL SAMPLE PCB RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 277 – PUBLIC WORKS SEWAGE PUMP HOUSE
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID ⁽¹⁾	EPA RSLs ⁽²⁾ (µg/kg)	MEDEP Action Limit ⁽²⁾ (µg/kg)	B277-SS01
LOCATION			west side transformer utility pole
MATRIX			soil
DEPTH			0-6 inches bgs
SAMPLE DATE			09/02/10
PCB (µg/kg)			
Aroclor-1016	3,900		150 U
Aroclor-1221	140		150 U
Aroclor-1232	140		150 U
Aroclor-1242	220		150 U
Aroclor-1248	220		150 U
Aroclor-1254	220		150 U
Aroclor-1260	220		150 U
Total PCBs ⁽³⁾		1,000	150 U

Notes:

(1) Sample prefix "NASB" is not shown.

(2) EPA Regional Screening Levels [RSLs] for residential soil provided for informational purposes.

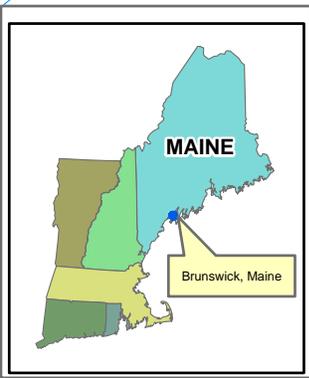
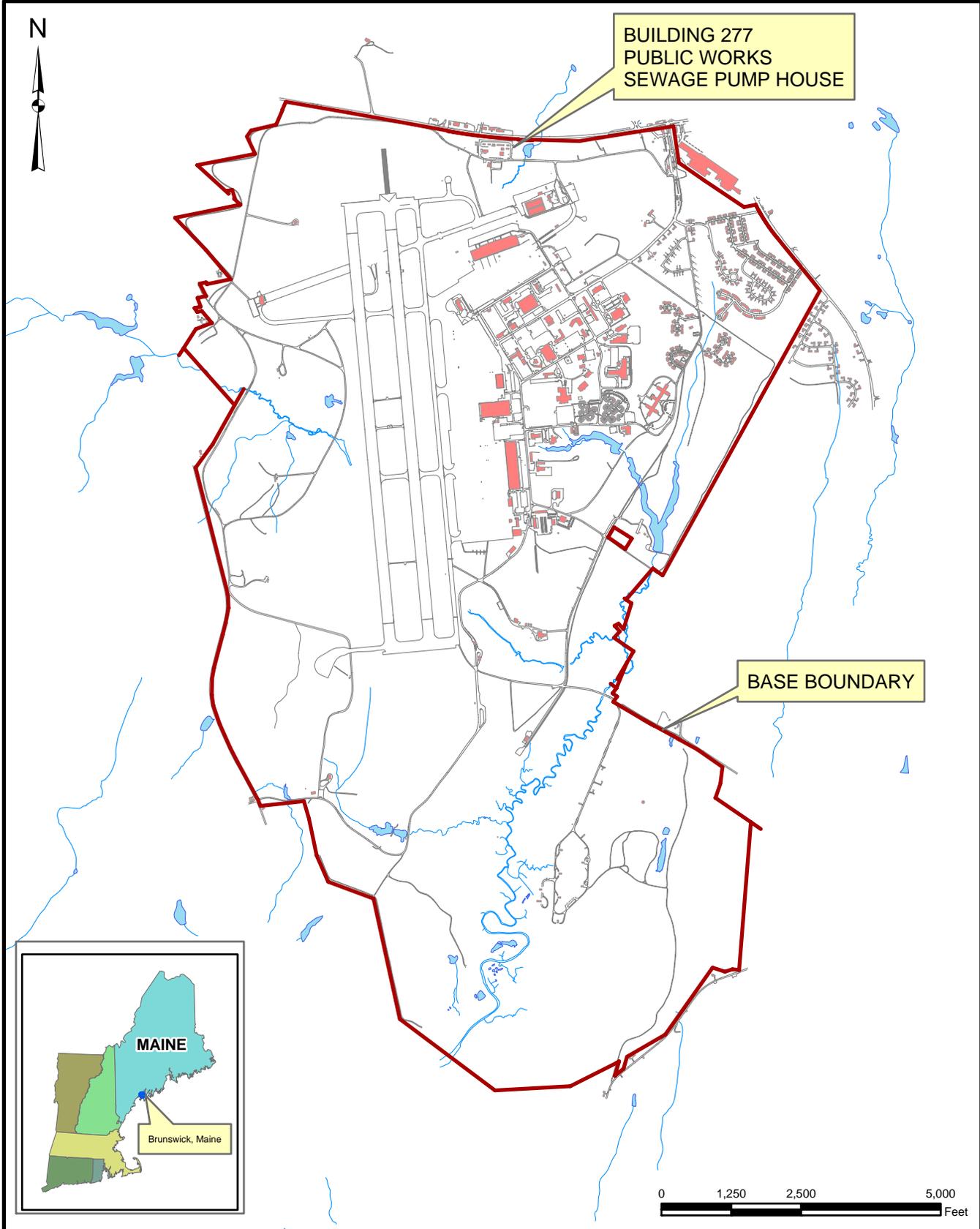
(3) MEDEP action limit for PCB spill (1 milligram per kilogram)

bgs below ground surface

µg/kg micrograms per kilogram

U not detected (with associated detection limit)

PCB polychlorinated biphenyl



Tetra Tech NUS, Inc.

SITE LOCATION MAP
BUILDING 277 - PUBLIC WORKS SEWAGE PUMP HOUSE
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

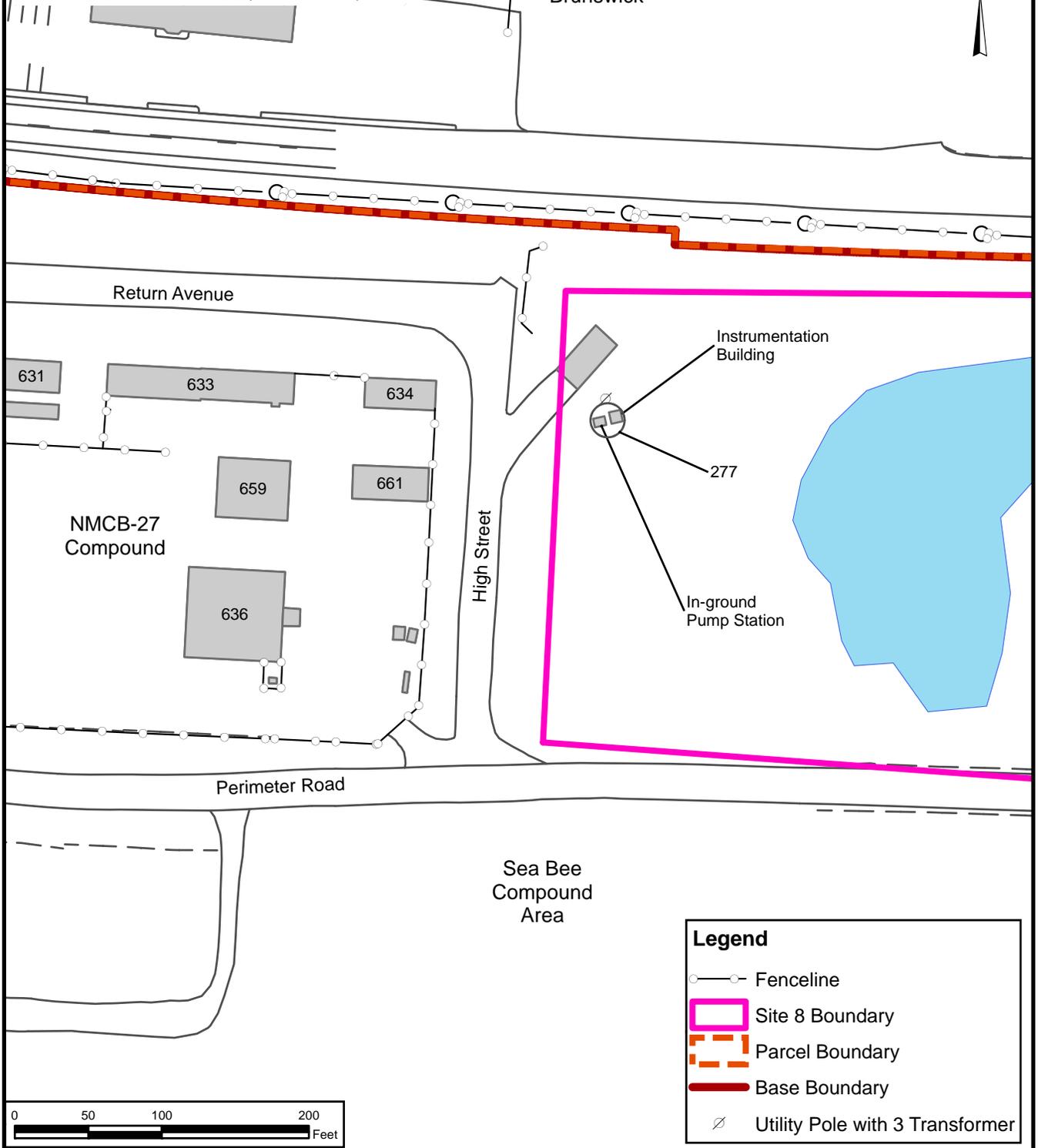
SCALE AS NOTED	
FILE I:\WASB_BLDG_277_LOCUS.MXD	
REV 0	DATE 10/15/10
FIGURE NUMBER 1	

I:\02258\CP_DR\WASE_BLDG_277_MAP.MXD DWM 10/15/10

Building 277 Corner	Northing	Easting
Northeast	391099.338	3015080.574
Southeast	391091.524	3015082.285
Southwest	391089.813	3015074.470
Northwest	391097.628	3015072.759

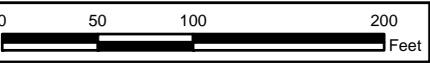
Coordinates are in NAD 1983, Maine West, Feet

Town of Brunswick



Legend

- Fenceline
- Site 8 Boundary
- Parcel Boundary
- Base Boundary
- Utility Pole with 3 Transformer



Tetra Tech NUS, Inc.

SITE PLAN
BUILDING 277 - PUBLIC WORKS SEWAGE PUMP HOUSE
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE \\NASB_BLDG_277_MAP.MXD	
REV 0	DATE 10/15/10
FIGURE NUMBER 2	



CONCRETE PAD

SS01 ●

UTILITY POLE WITH 3-15
KVA TRANSFORMERS
(277,277.1 AND 277.2)



IN-GROUND
PUMP STATION

INSTRUMENTATION
BUILDING

LEGEND

SS01 ● SURFICIAL SOIL SAMPLE LOCATION

GRAPHIC SCALE



TETRA TECH NUS, INC.

SAMPLE LOCATION MAP
BUILDING 277 - PUBLIC WORKS SEWAGE PUMP HOUSE
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE
AS NOTED

FILE
\\.\NASB_BLDG_277_FP.DWG

REV DATE
0 10/15/10

FIGURE NUMBER
FIGURE NO. 3

**HWSA INSPECTION REPORT
HAZARDOUS WASTE STORAGE AREAS CLOSURE
NAS BRUNSWICK
BRUNSWICK, MAINE
CTO WE22**

Inspection Date: 9/1/10

Personnel: Brian Geringer / Mark Speer, P.E.

Weather: Sunny, Humid, 90s

GENERAL BUILDING INFORMATION / USES

Building Name: Public Works Bld 277 (Sewage Pump House)

Function: Sanitary Sewer Lift Station

Size: 49 SF

Year of Construction: 1991 (approximately)

Building 277 is located in the north-central portion of the former air station; north of Perimeter Road; and east of the former Seabee Compound and High Street beyond; south of Route 24; and west of an unnamed surface water body and Site 8 beyond. Construction date of Building 277 is noted as 1953, and has served as a sanitary sewer lift station for its entire history.

Building 277 is a one-story, one-room, wood framed and sheathed structure on a concrete pad/foundation. An associated sanitary sewer in-ground pump station is located immediately southwest of the structure. No hazardous materials were used in its operation and no hazardous waste was generated here, according to NAS Brunswick personnel. Building 277 is unheated.

HWSA INSPECTION / CONDITION

At the time of inspection, Building 277 was in use and in good condition; this structure is not manned.

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, 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.

No peeling/chipping paint was observed.

POTENTIAL PCB-CONTAINING TRANSFORMERS

Three utility pole-mounted 15 KVA transformers were observed immediately north of Building 277 that were reported to have been manufactured in 1990 by ABB, with S/N's 90A341747, 90A34148 and 90A34149, and containing non-polychlorinated biphenyls (PCBs) oil.

A surficial soil sample (Sample ID NASB-B277-SB01) was collected on September 2, 2010 from 0-6 inches below grade and submitted for PCB analysis via EPA Method 8081. The sample was collected on the west side of the utility pole, at its base, and within an area of soil staining. The soil staining may also be associated with pole preservation materials, i.e. creosote. No other signs of a past release (unusual odors, stressed vegetation, etc.) were observed.

APPLICABLE REPORTS / DOCUMENTS

Available historical aerial photos and base maps were reviewed for past uses:

- 1943 map – None present, vacant land.
- 1946 map – None present, vacant land.
- 1950 building list – None present.
- 1952 map – Same as 1946 map.
- 1953 aerial – None present, vacant land.
- 1956 map – None present.
- 1957 map – Same as 1956 map.
- 1958 aerial – Undetermined due to lack of aerial clarity.
- 1965 building list – 277 Sewage Pump Station (Trailer Park).
- 1975 map – Same as 1956 map.
- 1976 building list – Same as 1965 list.
- 1978 map – Undetermined, map lacks sufficient detail in area of current Building 277 footprint.
- 1978 aerial – Undetermined due to lack of aerial clarity.
- 1979 map – Undetermined, map lacks sufficient detail in area of current Building 277 footprint.
- 1981 aerial – The sanitary sewer in-ground pump station associated with Building 277 is present, although the above ground Building 277 was not observed.
- 1984 aerial – None observed, although there is a dark shaded area in the approximate location of the current Building 277 in-ground pump station.
- 1989 map – Undetermined, map lacks sufficient detail in area of current Building 277 footprint.
- 1993 aerial – Building 277 is observed, although wet well is not.
- 1997 aerial – Same as 1993 aerial.
- 2003 building list – Building 277, Sewage Pumping Station, is listed.
- 2006 map – Building 277 is present, along with associated in-ground pump station.
- 2008 building list – Same as 2003 list.
- Current Google aerial – Current site configuration.

According to NASB records, No underground storage tanks (USTs), above ground storage tanks (ASTs), or oil-water separators (OWS) were registered to Building 277.

HAZARDOUS WASTE STORAGE RECORDS

No hazardous waste was historically stored at Building 277 according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

MISCELLANEOUS NOTES

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

INSPECTOR SIGNATURE: _____



PHOTOGRAPHS



No. 1 Building 277 – NAS Brunswick September 2, 2010
Building 277 southwest elevation; utility pole with three transformers in background



No. 2 Building 277 – NAS Brunswick September 2, 2010
Building 277 west elevation; pump station vault in foreground and instrumentation building in background



No. 3 Building 277 – NAS Brunswick
Building 277 interior

September 2, 2010



No. 4 Building 277 – NAS Brunswick
Building 277 pump station wet well interior

September 2, 2010