

N60087.AR.002295
NAS BRUNSWICK
5090.3a

FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT
FOR BUILDINGS 450 AND 451 WITH TRANSMITTAL LETTER NAS BRUNSWICK ME
1/6/2011
NAS BRUNSWICK

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

January 6, 2011

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

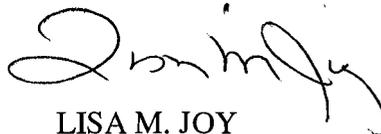
Subj: Final RCRA Partial Closure Report for Buildings 450 and 451

Dear Mr. Vigneault:

A copy of the Final RCRA Partial Closure Report for Buildings 450 and 451 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 Report for Buildings 450 and 451

Copy to:
NAVFAC Mid-Atlantic (B. Abraham)
NAS Brunswick (M. Fagan/D. Smith)
EPA Region I (M. Daly)
MARRA (V. Boundy)
Curtis Memorial Library (L. Oliver)
Lepage Environmental (C. Lepage)
BRAC PMO NE (P. Burgio)

RCRA PARTIAL CLOSURE REPORT
for
BUILDING 450 – FIRE DEPARTMENT ALERT RESPONSE OFFICE
BUILDING 451 – FIRE DEPARTMENT TRAINING OFFICE
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
DECEMBER 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 Buildings 450 and 451 at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

Building 450, Fire Department Alert Response Office, and Building 451, Fire Department Training Office, are located in the north-central portion of NAS Brunswick, east of the runway system and the Airfield Parking Apron Area (Figure 1). Building 292 (Fire Department) is located immediately north of Buildings 450 and 451.

Building 450 – Fire Department Alert Response Office

Building 450 is a line shack known as the Fire Department Alert Response Office, and is also labeled as Structure W. It is located on a portion of the concrete airfield parking apron within the Building 292 parcel, and is immediately southwest of the southernmost corner of Building 292 (Fire Department) (Figure 2). Line shacks are portable buildings used as office, shelter, and storage space for airfield ground crews. These temporary buildings are positioned on the concrete apron areas, as needed, to support airfield operations.

Building 450 is bordered immediately to the north by Building 292; to the east by a fenceline, and beyond, by Building 451 (Fire Department Training Office, also a line shack); to the south by a spill response trailer; and to the west by the airfield parking apron (Figure 2).

Building 450 was constructed in 1980 and the building footprint area is listed as a 375-square-foot structure (PWD, 2003). The one-story, wood-framed, wooden structure is unpainted, has a metal roof, and is supported on steel skids. The building interior consists of a single room with 12-inch by 12-inch floor tiles, fluorescent lighting, painted sheetrock walls, and an electric, wall-mounted air conditioning (AC)/heating unit. Photographs of the Building 450 exterior and interior are provided in an attachment to this report.

Building 451 – Fire Department Training Office

Building 451, known as the Fire Department Training Office, is also a line shack and is positioned on the other side of the fence (east) from Building 450 (Figure 2). It is also located on the concrete airfield parking apron within the Building 292 parcel. Building 451 is bordered to the north by Building 292; to the east by a parking area and the Building 45 (Hazardous Waste Transfer Facility) parcel; to the south by the Airfield Parking Apron Area; and to the west by the fenceline, and beyond, by Building 450 and the spill response trailer.

Installed in 1980, the two-room building footprint area is listed at 375 square feet (PWD, 2003). The one-story, wood-framed, wooden structure (with peeling paint) has an asphalt-shingle roof and is supported on concrete blocks. The two interior rooms were used as offices and each contains a ceiling-mounted electric heater, 12-inch by 12-inch floor tiles, fluorescent lighting, and wooden walls and ceiling. Photographs of the Building 451 exterior and interior are provided in an attachment to this report.

Buildings 450 and 451 is located within the Building 292 (Fire Department) parcel. The investigation conducted under this report applies only to the building footprints of Building 450 and Building 451 (as shown on Figure 2). The Building 292 (Fire Department) Parcel RCRA Partial Closure Report addresses the land surrounding and the groundwater underlying Building 450 and Building 451.

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 Buildings 450 and 451, 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 and 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, 1979, 1983, 1989, and 2006 (PWD, 1943, 1946, 1952, 1956, 1975, 1979, 1983, 1989, and 2006) and site building lists for 1950, 1965, 1966, 1976, and 2006 (PWD, 1950, 1965, 1966, 1976, and 2006) were also reviewed.

The 1957 plan and 1958 aerial photograph are the earliest visuals to show any buildings on the Building 292 parcel, which had previously been vacant and was called the "Softball Horshoe." The 2006 building list indicates that Building 292 (initially named the Crash Facility and the Fire/Rescue Facility on the 2006 building list) was constructed in 1957. It remained the only building on the parcel until the line shacks were added in 1980. The 1981 aerial is the earliest image that shows several small structures similar to line shacks and storage sheds on the concrete apron in the vicinity of Building 292, although the image lacks sufficient clarity to identify the structures further. The 2003 building list indicates that Buildings 450 and 451 were added in 1980 (PWD, 2006), and they appear to be visible in the available plans and aerials starting with the 1981 aerial. The current aerial view of the parcel, as shown on the "Google" internet search engine, confirms the current location of Buildings 450 and 451.

According to NAS Brunswick Environmental Department personnel, since their initial installation, Buildings 450 and 451 (line shacks) were used for office space associated with Fire Department operations. Although the NASB Hazardous Waste Database indicates that there was hazardous waste generation associated with the Fire Department operations, there is no record of hazardous waste generation or accumulation at Buildings 450 or 451 (Environmental Department, 2010).

According to MEDEP and NAS Brunswick spill records, no spills were reported in the vicinity of Buildings 450 or 451 (Environmental Department, 1999; Environmental Department 2005; and MEDEP, 2010).

The NAS Brunswick Transformer Database lists no electrical transformers associated with the current Buildings 450 or 451 (PWD, 2009).

The NAS Brunswick Master/Historical Aboveground Storage Tank (AST) and Underground Storage Tank (UST) Inventory records list no ASTs or USTs associated with Buildings 450 or 451 (Environmental Department, 2009).

Buildings 450 and 451 have no sanitary service (Navy, 2006). No oil/water separators (OWS) have been associated with either Building 450 or 451 (PWD, 2008).

4. SITE VISIT AND INVESTIGATION

A site visit was conducted by Mr. Brian Geringer and Mr. Mark Speer, P.E., of Tetra Tech on December 20, 2010. The visit included the areas of Buildings 450 and 451. The purpose of the site visit 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. The two buildings were visually inspected for signs of hazardous waste generation or storage activity. Site visit observations, recorded on the attached Building Inspection Forms ⁽¹⁾, are summarized below:

Building 450

- At the time of inspection, Building 450 was unoccupied and in good condition.
- The building measurements are 12 feet in width by 24 feet in length (288 square feet).
- No evidence of current or past hazardous waste generation activities was observed.
- No signs of a past release (staining, unusual odors, stressed vegetation, etc.) were 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 transformers that could be a potential source of PCB contamination were observed in the vicinity of the building.
- No floor drains were observed.
- No ASTs, USTs, or oil/water separators associated with this building were observed.
- Some floor tiles, 12-inch by 12-inch, on the floor of Building 450 were observed to be in fair to poor condition and were loose. The tiles and adhesive mastic are suspected to be asbestos-containing materials (ACM), based on the estimated building construction date (approximately 1980).

Building 451

- At the time of inspection, Building 451 was unoccupied and in good condition.
- The building measured 12 feet by 24 feet (288 square feet).
- No evidence of current or past hazardous waste generation activities was observed.
- No signs of a past release (staining, unusual odors, stressed vegetation, etc.) were 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 transformers that could be a potential source of PCB contamination were observed in the vicinity of the building.
- No floor drains were observed.
- No ASTs, USTs, or oil/water separators associated with this building were observed.
- The floor tiles in Building 451 and the adhesive mastic are suspected to be asbestos-containing materials (ACM), based on the estimated building construction date (approximately 1980).
- Peeling paint was observed on the building's exterior.

If paint peels, flakes, or is otherwise removed, the paint-chip waste material may be a hazardous waste, subject to RCRA requirements. Paint wastes exhibiting the "toxicity characteristic" as measured using the Toxicity Characteristic Leaching Procedure (TCLP) must be handled and disposed of in conformance with hazardous waste laws and regulations. Therefore, the loose paint observed during the site visit was sampled on December 20, 2010. The sample was analyzed for TCLP RCRA metals and for PCBs by Tetra Tech's subcontracted analytical laboratory, Katahdin Analytical Services (Katahdin) of Scarborough, Maine. The resulting

analytical data underwent limited data validation consisting of blank contamination evaluation and completeness evaluation.

The paint-chip sample analytical results are summarized in Table 1. The TCLP metals results were compared to TCLP criteria; as shown, all TCLP metals concentrations met the criteria. Paint PCB results were compared to the Toxic Substances Control Act (TSCA) PCB limit for building material bulk product waste (50 parts per million [ppm], or 50 milligrams per kilogram [mg/kg]). As presented in Table 1, PCB was not detected in the paint-chip sample.

Based on the records research findings, site visit observations, and analytical results, it was determined that neither further inspection nor sampling of Buildings 450 or 451 are 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 was conducted at Buildings 450 or 451.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

No tanks or transformers were historically associated with Buildings 450 or 451, and none were observed in the immediate vicinity of the buildings.

It is suspected that floor tiles and the adhesive mastic materials observed in Buildings 450 and 451 are ACM, as discussed in Section 4 of this report.

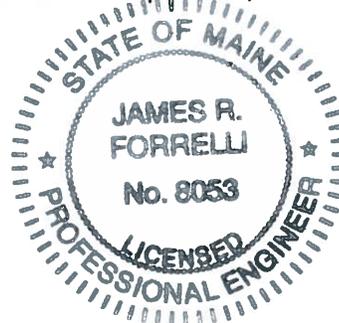
7. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the building footprints of Buildings 450 and 451 (building footprints as shown on Figure 2). It does not apply to the land surrounding or the groundwater underlying Buildings 450 and 451.

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 Buildings 450 and 451 at NAS Brunswick, Maine. Therefore, the hazardous waste closure of Buildings 450 and 451 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

Environmental Department, 1999. Environmental Incident Log - Book No. 1, July 1988-November 1999, Environmental Department, Naval Air Station Brunswick, Maine.

Environmental Department, 2005. Environmental Incident Log - Book No. 2, December 1999-July 2005, Environmental Department, Naval Air Station Brunswick, Maine.

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

Environmental Department, 2010. Hazardous Waste Database, Naval Air Station Brunswick
Environmental Department, Brunswick, Maine.

MEDEP, 2010. MEDEP Spills Database. Maine Department of Environmental Protection, Augusta, Maine.

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. (Revised 8-20-45)

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

PWD, 1950. "Available for Lease U.S. Naval Air Station, Brunswick, Maine," First Naval District acting for the Bureau of Yards & Docks Department, US Naval Air Station Brunswick, Maine. May 24.

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, 1966. "Building & Structure List, Department of the Navy Bureau of Yards & Docks Department" US Naval Air Station Brunswick, Maine. Updated January 1.

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, 1979. "Existing Conditions Map Operations Area," Department of the Navy Bureau of Yards & Docks Drawing No. 925130" US Naval Air Station Brunswick, Maine. Updated June 12.

PWD, 1983. "Existing Conditions Map Operations Area," Naval Facilities Engineering Command, Northeast Division Drawing No. 2068165" Naval Air Station Brunswick, Maine. Updated May 5.

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

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

TABLE 1
INVESTIGATION PAINT-CHIP SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 451 – FIRE DEPARTMENT TRAINING OFFICE
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID⁽¹⁾		B451-PC01
LOCATION		Building 451 exterior
MATRIX		paint chip
SAMPLE DATE		12/20/10
METALS (mg/L)	TCLP Limit	
arsenic	5	0.025 U
barium	100	1.34
cadmium	1	0.190
chromium	5	0.0042 J
lead	5	0.0059 J
mercury	0.2	0.0002
selenium	1	0.035 U
silver	5	0.020 U
PCB (µg/kg)		
Aroclor-1016		460 U
Aroclor-1221		460 U
Aroclor-1232		540 U
Aroclor-1242		460 U
Aroclor-1248		460 U
Aroclor-1254		460 U
Aroclor-1260		460 U
Total Aroclor ⁽²⁾	50,000	3200 U

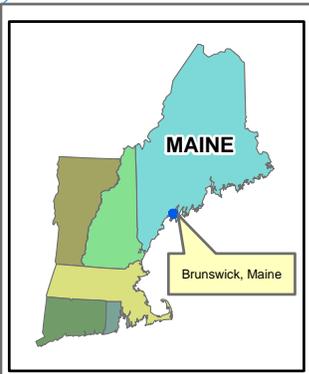
Notes:

- (1) Sample prefix "NASB" is not shown.
(2) Toxic Substances Control Act (TSCA) PCB limit for building materials is 50 parts per million (ppm).
mg/L milligram per liter
µg/kg microgram per kilogram
J estimated
-- no criteria available
U not detected (with associated detection limit)

BUILDING 450
FIRE DEPARTMENT
ALERT RESPONSE
OFFICE

BUILDING 451
FIRE DEPARTMENT
TRAINING OFFICE

BASE BOUNDARY



Tetra Tech NUS, Inc.

SITE PLAN

BUILDING 450 - FIRE DEPARTMENT ALERT RESPONSE OFFICE

BUILDING 451 - FIRE DEPARTMENT TRAINING OFFICE

RCRA PARTIAL CLOSURE REPORT

NAVAL AIR STATION BRUNSWICK, MAINE

SCALE
AS NOTED

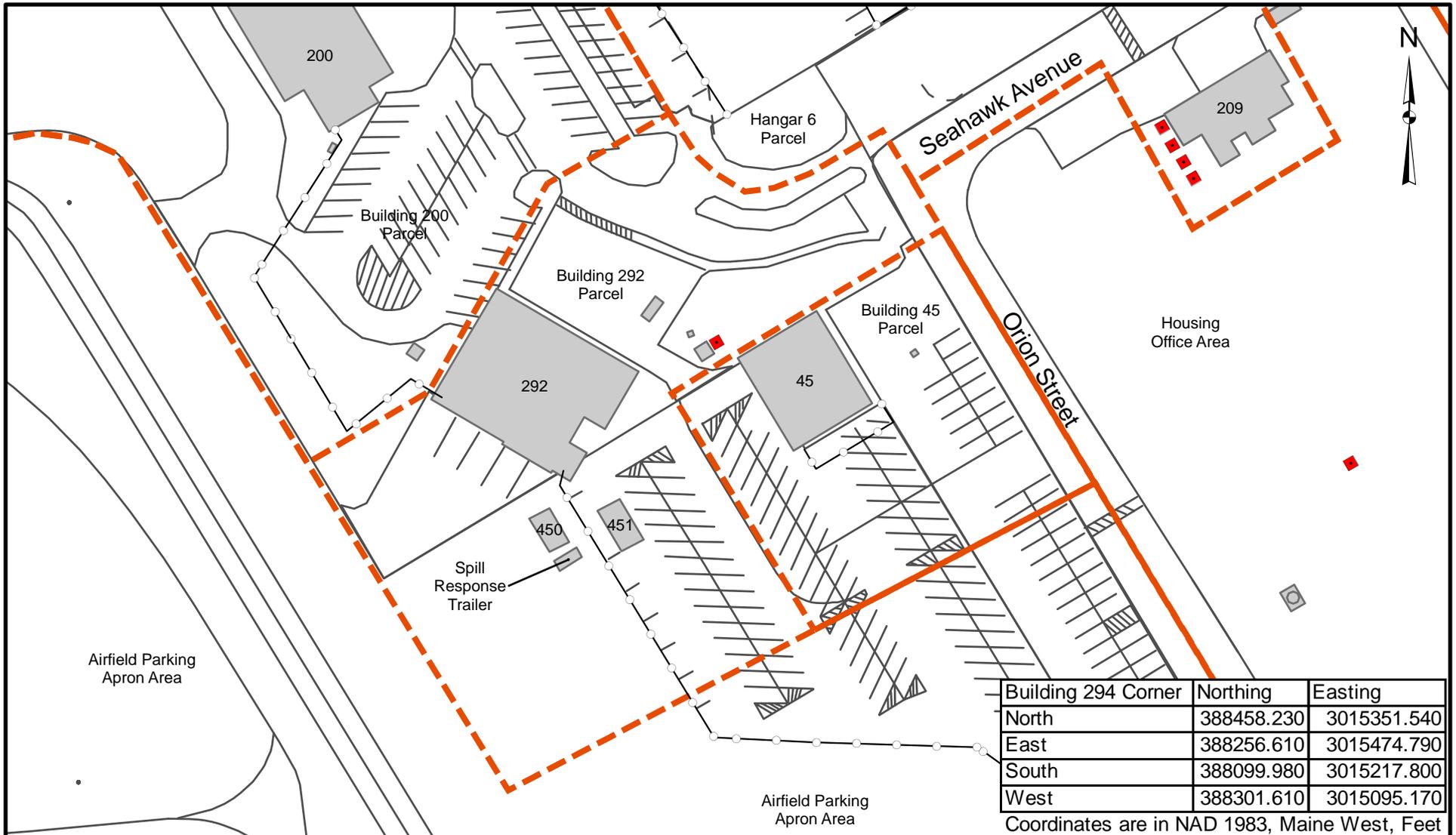
FILE

I:_NASB_BLDG_450&451_LOCUS.MXD

REV	DATE
0	12/30/10

FIGURE NUMBER

1

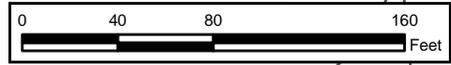


Building 294 Corner	Northing	Easting
North	388458.230	3015351.540
East	388256.610	3015474.790
South	388099.980	3015217.800
West	388301.610	3015095.170

Coordinates are in NAD 1983, Maine West, Feet

Legend

- Fenceline
- Parcel Boundary



TETRA TECH

SITE PLAN
BUILDING 450 - FIRE DEPARTMENT ALERT RESPONSE OFFICE
BUILDING 451 - FIRE DEPARTMENT TRAINING OFFICE
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\NASB_BLDG_450&451_SITE_MAP.MXD	
REV 0	DATE 12/30/10
FIGURE NUMBER FIGURE NO. 2	

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

Inspection: Date: 12/20/10

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

Weather: Snow Flurries, windy, and temperature in the 20s

GENERAL BUILDING INFORMATION / USES

Building Name: Fire Department Alert Response Office

Function: Administrative Space

Size: 12 ft x 24 ft

Year of Construction: 1980

- One-room wood-line shack with wood exterior and metal roof, also labeled as Structure W
- Mounted on skids and located on concrete apron SW of Building 292
- Interior – painted sheetrock walls, 12 ft x 12 ft floor tiles and fluorescent lighting
- Electric heater/AC wall unit located on interior wall
- Building appeared to be in good condition, except for some floor tiles that are delaminating.

HWSA INSPECTION / CONDITION

No hazardous materials or hazardous waste was observed in or near the building. No staining or signs of a spillage was observed.

POTENTIAL PCB-CONTAINING TRANSFORMERS

No transformers were observed at or near Building 450.

APPLICABLE REPORTS / DOCUMENTS

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

1946 - 1956 maps – No buildings are visible on this parcel of land, called the “Softball Horsehoe.”

1953 aerial – No buildings are visible in this area

1957 - 1979 maps - Building 292 (listed as the Crash Garage) is the only building shown in the parcel

1981 aerial - Several small structures similar to line shacks and storage sheds first visible on the concrete apron in the vicinity of Building 292. Possibly includes Buildings 450 and 451 (built in 1980)

1984 – 1997 aerials – Same as 1981 aerial

1989 and 2006 map – Tiny structures are visible (but not clear) to the south of Building 292

2003 building list – Presents the first listing of Building 450 as the “Fire Department Alert Response Office,” - also name change of Building 292 to the “Fire/Rescue Facility”

Current Google aerial – Current site configuration.

The NASB records did not show any listings of ASTs or USTs at or near Building 450. The MEDEP spills database did not report any spills associated with Building 450.

No oil-water separators (OWS) or septic tanks were present at this parcel according to NASB records.

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

Inspection: Date: 12/20/10

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

Weather: Snow Flurries, windy, and temperature in the 20s

GENERAL BUILDING INFORMATION / USES

Building Name: Fire Department Training Office

Function: Administrative Space

Size: 12 ft x 24 ft

Year of Construction: 1980

- Two-room wood-line shack with painted wood exterior and asphalt shingle roof
- Mounted on concrete blocks and located on concrete apron near Building 292
- Interior – 12 ft x 12 ft floor tiles, wood walls/ceiling, and fluorescent lighting
- Ceiling-mounted electric heater located in each of the two rooms
- Communication jacks on walls, also server box
- Building appeared to be in good condition, except for peeling paint on the exterior

HWSA INSPECTION / CONDITION

No hazardous materials or hazardous waste was observed in or near the building. No staining or signs of a spillage was observed. A sample of the peeling paint on the exterior was collected for TCLP RCRA 8 Metals and PCBs.

POTENTIAL PCB-CONTAINING TRANSFORMERS

No transformers were observed at or near Building 451.

APPLICABLE REPORTS / DOCUMENTS

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

1946 - 1956 maps – No buildings are visible on this parcel of land, called the “Softball Horsehoe.”

1953 aerial – No buildings are visible in this area

1957 - 1979 maps - Building 292 (listed as the Crash Garage) is the only building shown in the parcel

1981 aerial - Several small structures similar to line shacks and storage sheds first visible on the concrete apron in the vicinity of Building 292. Possibly includes Buildings 450 and 451 (built in 1980)

1984 – 1997 aerials – Same as 1981 aerial

1989 and 2006 map – Tiny structures are visible (but not clear) to the south of Building 292

2003 building list – Presents the first listing of Building 451 as the “Fire Department Training Office,” - also name change of Building 292 to the “Fire/Rescue Facility”

Current Google aerial – Current site configuration.

The NASB records did not show any listings of ASTs or USTs at or near Building 451. The MEDEP spills database did not report any spills associated with Building 451.

PHOTOGRAPHS



No. 1 Buildings 450 and 451, NAS Brunswick December 20, 2010
Alert Response Office northwest elevation; Training Office in left background and spill response trailer in right background



No. 2 Buildings 450 and 451, NAS Brunswick December 20, 2010
Alert Response Office southeast elevation



No. 3 Buildings 450 and 451, NAS Brunswick December 20, 2010
Alert Response Office interior (looking south)



No. 4 Buildings 450 and 451, NAS Brunswick December 20, 2010
Alert Response Office interior (looking north)



No. 5 Buildings 450 and 451, NAS Brunswick December 20, 2010
Training Office southeast elevation (spill response trailer in background to the west)



No. 6 Buildings 450 and 451, NAS Brunswick December 20, 2010
Training Office southwest elevation (looking northeast, towards Building 292)



No.7 Buildings 450 and 451, NAS Brunswick December 20, 2010
Training Office interior



No. 8 Buildings 450 and 451, NAS Brunswick December 20, 2010
Training Office interior; east entrance/exit door and entrance to second room on south side