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NAS BRUNSWICK
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FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT
FOR BUILDING 516 NITEFLITE NAS BRUNSWICK ME
3/1/2010
TETRA TECH NUS

**RCRA PARTIAL CLOSURE REPORT
for
BUILDING 516 – NITEFLITE
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
MARCH 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 516, at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

The Building 516 parcel is located on Neptune Drive at NAS Brunswick (Figures 1 and 2). The parcel includes an asphalt-covered parking area to the west of Building 516 and grassy area to the south and east.

Building 516, known as Niteflite, occupies the north central area of the 2.0-acre parcel. It was constructed in 1958 and served as a Navy enlisted men's club until 2004, when operations were relocated to other facilities at NAS Brunswick. Building 516 has been unoccupied since that time.

The building is 14,983 square feet in area and is a single story on a slab foundation with cinder block walls. It is comprised of several function spaces and related support facilities, including a ballroom, formal and informal bar areas, a dining room, a kitchen, and office space. A boiler room is located on the west side of the building.

Building 516 was heated by an oil-fired boiler until the base was converted to natural gas.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (TtNUS) 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 the Building 516 parcel, including past use and operations at that location.

According to NAS Brunswick Environmental Department personnel, since its construction in 1958, the sole use of Building 516 has been as a Navy enlisted men's club. There is no record of hazardous waste operations at Building 516.

The NAS Brunswick records search revealed the following information pertinent to a future determination as to whether the hazardous waste closure requirements of the MEDEP Regulations Chapter 851, Standards for Generators of Hazardous Waste, Section 11 apply to Building 516.

Records reviewed include: historical aerial photographs; the NAS Brunswick Other Environmental Liabilities (OEL) Database; area-specific reports; facility plans and drawings; and hazardous operation records. A review of historical aerial photographs dated 1958, 1978, 1984, 1989, 1993, and 1997 was conducted. All historical photographs show Building 516 in its current location.

According to the NASB Removed Transformer Database, a previous 150 kVa non-polychlorinated-biphenyl (non-PCB) -containing transformer (516.0) was moved to Building 53. The manufacturer and serial number listed on the previous transformer is R.T.E. (Rural

Transformer & Electric, now owned by Cooper Power Systems), Serial No. RTE 896003343. All R.T.E. transformers are non-PCB-containing (EES, 1998). The first two digits of the serial number denote the year of manufacture of this transformer as 1989. As of July 1, 1979, the United States Environmental Protection Agency (EPA) prohibited all manufacturing of new PCB electrical equipment (transformers and capacitors).

Additional information concerning Building 516 discovered during the file and database search is provided below.

One 6,000-gallon, fiberglass-reinforced plastic underground storage tank (UST, 10045-055) containing No. 2 fuel oil was installed in 1984 and removed in 1995, according to NASB records. A 250-gallon aboveground storage tank (AST, A516.0) containing cooking oil was located in Building 516, according to NASB records. One 6,000-gallon AST (A516.1) that previously contained No. 2 fuel oil is located at Building 516. A closure sticker on the tank identified this AST as being closed on August 5, 2008.

No groundwater investigations have been conducted in the vicinity of the Building 516 parcel; therefore groundwater characterization information for the parcel is not available. Available information for known groundwater contamination areas at NAS Brunswick was reviewed to determine if groundwater underlying the Building 516 parcel could potentially be impacted by another (off-parcel) source area.

4. SITE VISIT AND INVESTIGATION

A Building 516 site visit was conducted by Mr. Brandon Smith, P.E. and Mr. James Forrelli, P.E., of TtNUS on June 30, 2009. 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. TtNUS personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager and Mr. Paul Burgio, Navy Base Realignment and Closure (BRAC) Program Management Office (PMO). The Building 516 location was visually inspected for signs of hazardous waste generation or storage activity. Site visit observations, recorded on the attached Building Inspection Form⁽¹⁾, are summarized below:

- At the time of inspection, Building 516 was unoccupied and in fair condition. Water damage from roof leaks was noted throughout and a dry powder chemical release occurred in the kitchen area.
- The interior consisted of a number of functional spaces and support facilities, including a ballroom, formal and informal bar areas, a dining room, a kitchen, and office space.
- 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.) nor structural modifications that could conceal signs of a past release were observed.
- No hazardous waste storage or accumulation areas were observed.
- A pad-mounted transformer was observed on the southwestern side of the building. A different transformer (non-PCB-containing) was previously located at the same location, as described in Section 3.

The available information regarding the historical activities that occurred at the parcel and the location of known NAS Brunswick groundwater contamination areas indicates that there is no evidence to suggest that groundwater underlying the Building 516 parcel has been adversely impacted by a release, either from within the parcel or from another (off-parcel) source area.

Based on the findings of the records research and site visit observations, it was determined that sampling for PCBs around the transformer pad at the Building 516 parcel was required to complete the MEDEP hazardous waste closure requirements.

The pad-mounted transformer location on the southwestern side of the building could potentially be a historical source of PCB soil contamination in the event of a transformer leak. On October 7, 2009, TtNUS collected eight surface soil samples around the transformer pad at Building 516. A hand auger was used for the collection of four samples from 0 to 6 inches below ground surface (bgs) [NASB-B516-SS01-0006 through NASB-B516-SS04-0006] and four samples from 6 to 24 inches bgs (NASB-B516-SS01-0624 through NASB-B516-SS04-0624). Sample locations are presented on Figure 3.

All soil samples were submitted for PCB analysis by TtNUS's subcontractor analytical laboratory (Analytics Environmental Laboratory, Portsmouth, New Hampshire). As presented in the attached Table 1, PCBs were not detected in any of the soil samples collected at Building 516. (The EPA Regional Screening Levels [RSLs] for Residential Soil are included in Table 1 for informational purposes [EPA, 2009].)

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 activity or hazardous waste accumulation or storage activity was conducted at Building 516.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

The only USTs or ASTs known to be associated with Building 516 are discussed in Section 3. No other tanks were observed in the immediate vicinity of Building 516. The facility space is heated by a natural-gas-fired furnace; natural gas is supplied through pipeline by the local gas utility company.

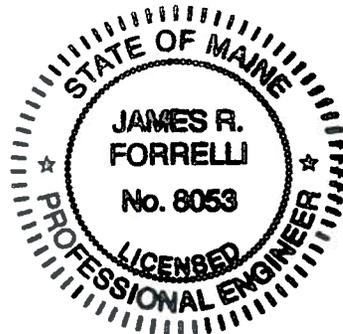
7. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the Building 516 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 516 parcel, NAS Brunswick, Maine. Therefore, the hazardous waste closure of the Building 516 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

1958 NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. 10/09/58.

1978 NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. 11/22/78.

1984 NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. 04/23/84.

1989 NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. 04/02/89.

1993 NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. 11/08/93.

1997 NAS Brunswick Aerial Photographs. James W. Sewall Company, Old Town, ME. 05/1997.

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

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

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

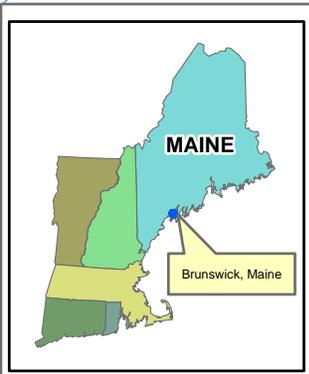
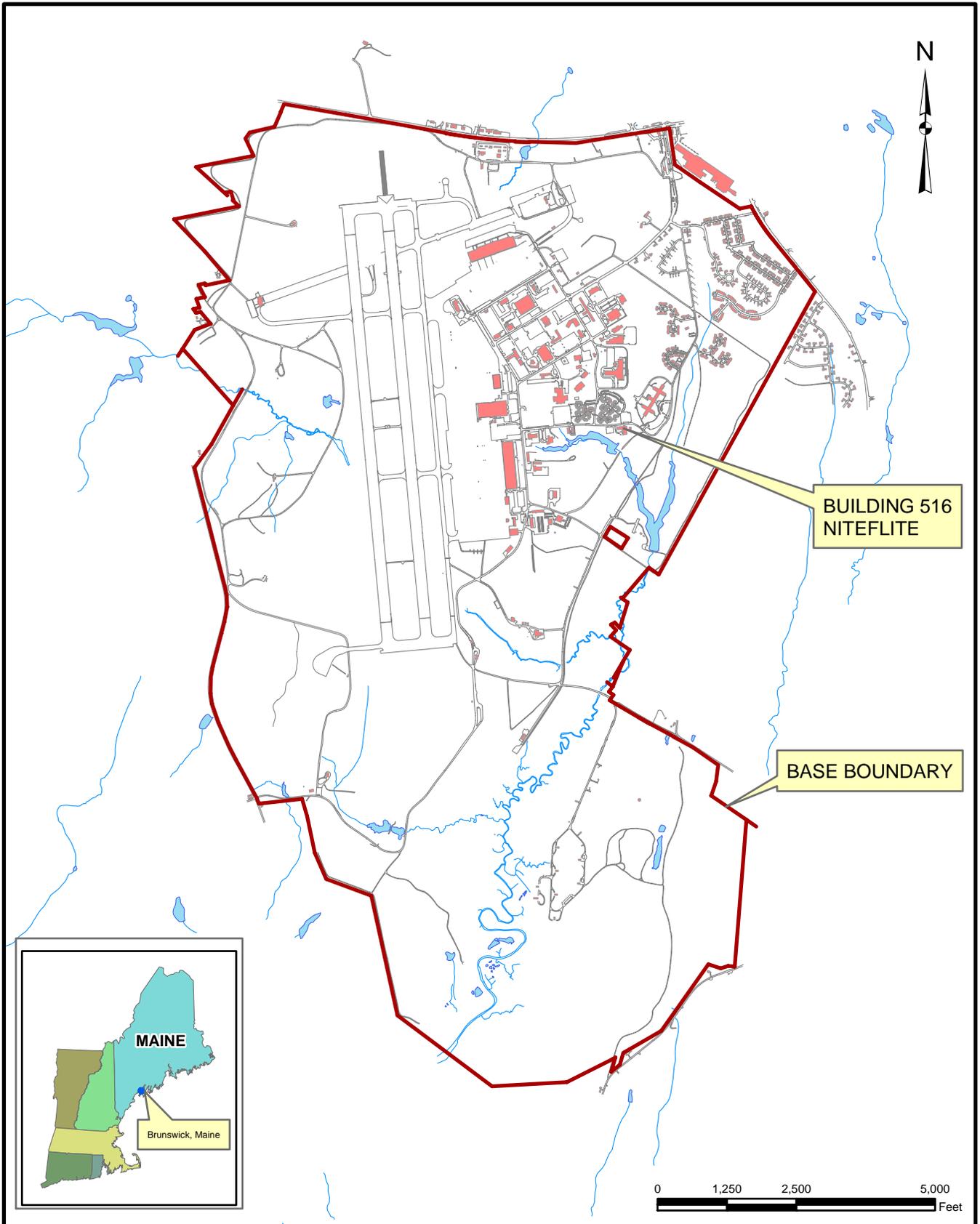
USEPA, 2009. United States Environmental Protection Agency Regions 3, 6, and 9. April 2009, Updated December 23, 2009. Regional Screening Levels for Chemical Contaminants at Superfund Sites.

**TABLE 1
SOIL SAMPLE PCB RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 516 – NITEFLITE
NAVAL AIR STATION BRUNSWICK, MAINE**

PCB (µg/kg)	EPA RSLs ⁽¹⁾ (µg/kg)	SS01-0006	SS01-0624	SS02-0006	SS02-0624	SS03-0006	SS03-0624	SS04-0006	SS04-0624
Aroclor-1016	3,900	18 U	16.5 U	18 U	20 U				
Aroclor-1221	140	18 U	16.5 U	18 U	20 U				
Aroclor-1232	140	18 U	16.5 U	18 U	20 U				
Aroclor-1242	220	18 U	16.5 U	18 U	20 U				
Aroclor-1248	220	18 U	16.5 U	18 U	20 U				
Aroclor-1254	220	18 U	16.5 U	18 U	20 U				
Aroclor-1260	220	18 U	16.5 U	18 U	20 U				

Notes:

- (1) EPA Regional Screening Levels [RSLs] for residential soil provided for informational purposes
- PCB polychlorinated biphenyl
- µg/kg micrograms per kilogram
- U not detected (with associated detection limit)



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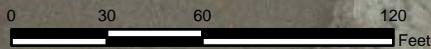
SITE LOCATION MAP
 BUILDING 516 - NITEFLITE
 RCRA PARTIAL CLOSURE REPORT
 NAS BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\N\NASB_BLDG_516_LOCUS.MXD	
REV 0	DATE 03/12/10
FIGURE NUMBER 1	



Legend

 Parcel Boundary



Building Corner	Northing	Easting
Northeast	386095.674	3017122.430
Southeast	385947.453	3017128.504
Southwest	385943.808	3017073.832
Northwest	386081.095	3016952.339

Coordinates are in NAD 1983, Maine West, Feet



Tetra Tech NUS, Inc.

SITE PLAN

BUILDING 516 - NITEFLITE PARCEL
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE
 AS NOTED

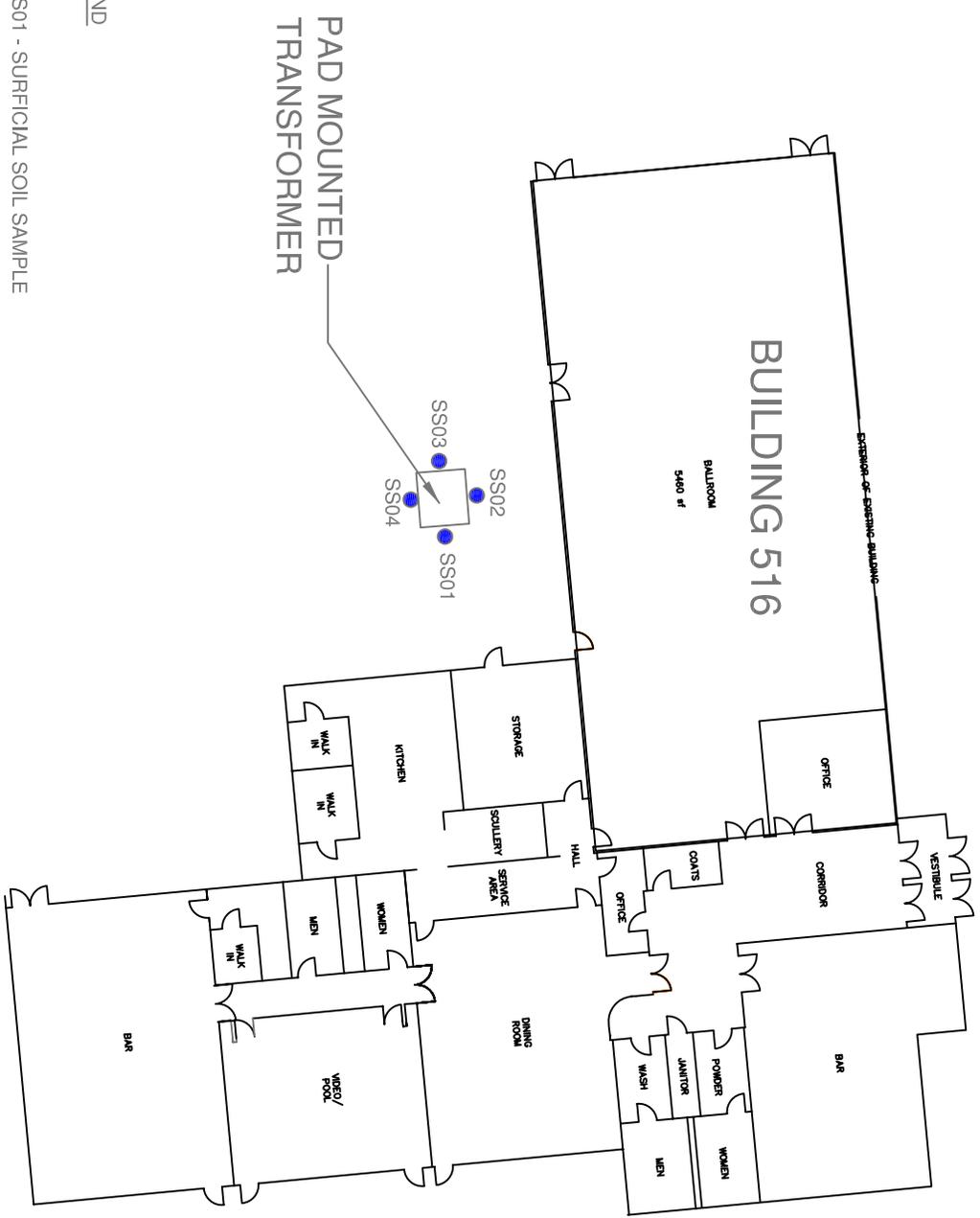
FILE

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REV	DATE
0	03/12/10

FIGURE NUMBER

2



LEGEND

● SS01 - SURFICIAL SOIL SAMPLE



TETRA TECH NUS, INC.

FLOOR PLAN
BUILDING 516 - NITEFLITE
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE
AS NOTED

FILE
\\NASB_BLDG_516_FP.DWG.DWG

REV 0 DATE 03/12/10

FIGURE NUMBER 3

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

Inspection Date: 6/30/2009
Personnel: James Forrelli, P.E. / Brandon Smith, P.E.
Weather: Overcast, 60s

GENERAL BUILDING INFORMATION / USES

Building Name: Niteflite
Function: NASB Enlisted Men's Club
Size: 14,983 SF
Year of Construction: 1958

Building 516 is located on Neptune Drive at NAS Brunswick. It was constructed in 1958 and served as a Navy enlisted men's club for its entire history. Building 516 consists of a 14,983 square-foot, wood frame one level building with a basement on a slab foundation.

Building 516 contains a number of function spaces including a ballroom, formal and informal bar areas, and dining room, a kitchen, and office space. A boiler room is located in the basement.

Building 516 was used only as a Navy enlisted men's club. No hazardous materials were used in its operation and no hazardous waste was generated, according to NASB personnel.

Building 31 was heated by an oil-fired furnace/boiler until the base was converted to natural gas.

BUILDING INSPECTION / CONDITION

No record of hazardous waste stored at Building 516.

The building was not occupied at the time of the site visit and appeared in fair condition. Water damage was noted throughout from roof leaks and a dry powder chemical release occurred in the kitchen area.

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.

A transformer that could be a potential source of polychlorinated biphenyls (PCBs) contamination in the event of a leak was observed on the southwestern side of the building.

A 6,000 gallon fuel oil AST was observed on the southwest corner of Building 516 with a closure sticker dated 08/05/09.

APPLICABLE REPORTS / DOCUMENTS

Available historical aerial photos were reviewed for past property uses:

- 1958 - Building 516 present.
- 1978 - Building 516 present.
- 1984 - Building 516 present.
- 1993 - Building 516 present.
- 1997 - Building 516 present.

One 6,000 gallon fiberglass reinforced plastic UST (10045-055) containing #2 fuel oil was installed in 1984 and removed in 1995 according to NASB records.

A 250 gallon AST (A516.0) containing cooking oil was located in Building 516. A 6,000 gallon AST (A516.1) containing #2 fuel oil was located at Building 516 and closed on 08/05/09 according to a closure sticker on the AST.

A memorandum from the NASB Asbestos Program Manager, stated that "All painted surfaces of building 516 are considered to contain some levels of lead. The interior paint that has been sampled has varied results from very low concentrations to 0.51% that was found on a pipe in an office storage room. Other building materials may contain lead, as in roof flashing, vent sealant and the window glazing. Laboratory analysis using TEM indicates that Asbestos Containing Vinyl tile and Mastic is present in the TV room, Night Managers office and storage area. Other areas of vinyl tile have negative results but the associated black mastic is positive for asbestos. Roofing tar and flashing has been analyzed with positive results. PLM analysis indicates there is asbestos containing straight pipe and pipe joint insulation located throughout the building as well as some brown exterior siding panels. Records indicate that during renovation activities, some asbestos abatement may have been performed. Therefore, the potential exists for some remaining asbestos containing materials that are inaccessible without destructive testing."

A pad mounted transformer was present on the southwest side of Building 516. According to the removed transformer database, a non-PCB containing 150 kva transformer, 516.0 (Serial No. RTE 896003343), was moved to Building 53.

HAZARDOUS WASTE STORAGE RECORDS

No hazardous waste was historically stored at Building 516, 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 and Paul Burgio, Navy BRAC PMO.

(SEE ATTACHED BUILDING FLOOR PLAN AND PHOTOGRAPHS)

INSPECTOR SIGNATURE:



Brandon Smith, P.E.

PHOTOGRAPHS



No. 1 Building 516 – NAS Brunswick June 30, 2009
Exterior of Building 516 - Niteflite



No. 2 Building 516 – NAS Brunswick June 30, 2009
Pad-mounted transformer at Building 516 – Niteflite