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NAS BRUNSWICK
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FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT
FOR BUILDING 209 WITH TRANSMITTAL LETTER NAS BRUNSWICK ME
7/16/2010
NAS BRUNSWICK

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

July 16, 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 209

Dear Mr. Vigneault:

A copy of the Final RCRA Partial Closure Report for Building 209 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,


Fol LISA M. JOY
Environmental Director

Enclosure: (1) Final RCRA Partial Closure Report for Building 209

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

RCRA PARTIAL CLOSURE REPORT
for
BUILDING 209 – ELECTRIC DISTRIBUTION BUILDING
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
JULY 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 209 parcel at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

The Building 209 parcel is located in the north-central portion of NAS Brunswick (Figure 1). The approximately 0.2-acre parcel is bordered to the north by Seahawk Avenue and to the east, south, and west by the Building 9 parcel (Figure 2). The parcel contains Building 209 (the Electric Distribution Building), surrounding grass-covered areas, and asphalt-paved parking drive and parking areas located east, south and west of the building.

Building 209, constructed in 1954, consists of a 2,283 square-foot single-story, concrete wall and concrete-block building on a concrete slab foundation. As indicated in Figure 3, Building 209 is now comprised of four main rooms: the regulator vault, the generator room (to the west), the new regulator vault, and office and storage space. The building is currently not heated. It was originally heated via steam, and then by an oil-fired boiler until the base was converted to natural gas in 2001. 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 the Building 209 parcel, including past use and operations at that location.

According to NAS Brunswick Environmental Department personnel the building has been used as a transformer and electric distribution building since its construction in 1954, and also as the weather service office for a period of time (described below). The original building consisted of the "regulator vault" room (Figure 3). Two building additions were constructed: the first addition was built sometime between 1964 and 1974, to the east of the regulator vault. This housed the weather service operation until the late 1980s. A second addition was built in 1974. A radar tower associated with the weather service was also present to the south of the building during the 1980s. There is no record of hazardous waste generation at the Building 209 parcel.

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. Aerial photographs dated 1958, 1978, 1981, 1984, 1989, 1993 and 1997 (all produced by James W. Sewall) were reviewed along with Public Works Department site base maps dated 1943, 1946, 1952, 1956, 1975, 1983, 1989, and 2006 to provide historical information.

Building 209 is shown at the present location on base maps beginning in 1956. Prior to 1956, no buildings are shown at the location, which was undeveloped land, with former Building 6 (Public Works Electric Shop) to the west and former Building 48 (Public Works Carpenter Shop) to the

southwest. In 1956, Building 209 is listed as the Transformer Building, and only the “regulator vault” portion of the current building, is present.

Engineering drawings dated 1964 show a transformer pad located to the west of Building 209, with three 25-KVa transformers for Buildings 6 and 48 (PWD, 1964). The 1974 as-built drawings are the earliest to show the late-1960’s building addition for the weather service, added to the east of the regulator vault. A second addition to Building 209 was constructed in 1974, also consisting of office space for the weather service (NAVFAC Northern Division, 1974). Also in the 1974 drawings, three new 75-KVa oil-filled transformers are shown on the existing transformer pad located west of the building. Drawings dated 1980 provide for the construction of the addition housing the generator on the west side of the structure (NAVFAC Northern Division, 1980). Finally, drawings dated 1995 show renovations to the structure to provide for a second or new regulator vault at the location of the former weather service radar and map display rooms (PWD, 1995).

Beginning with the 1981 aerial photograph, a tower structure is shown in the paved area south of Building 209. The 1989 aerial photograph shows the tower structure has been removed. The 2006 base map shows Building 209 in its current location with former Buildings 6 and 48 demolished, and the majority of the area is paved.

The NAS Brunswick Transformer Database lists 11 non-polychlorinated-biphenyl (non-PCB)-containing electrical transformers, 4 switches and 14 regulators for Building 209 (listed below). As of July 1, 1979, the United States Environmental Protection Agency (USEPA) prohibited all manufacturing of new PCB electrical equipment (transformers and capacitors). Due to the age of Building 209 and unknown dates of manufacture of a number of transformers, regulators, and switches at the building, the possibility exists that PCBs were present within some equipment. If there had been a historical leak, there could be potential areas of PCB surface contamination within Building 209 or around the transformer pad.

Building 209 Transformers

Transformer	Manufacturer	Serial No.	Date of Manufacture	Notes
75-kVa non-PCB pad-mounted	RTE Corp. ⁽¹⁾	846000364 ⁽²⁾	1984	Mineral oil
500-kVa non-PCB pad-mounted	T&R Electric Supply	04080	Unknown	Oil contains less than 50 ppm total PCB ⁽⁵⁾
25-kVa non-PCB wall-mounted	Westinghouse	78A391376 ^(3,4)	1978	Wall-mounted inside B209; 1.4 ppm total PCB ⁽⁵⁾
60-kVA non-PCB pad-mounted	Cooper	0237012948 ⁽²⁾	2002	Oil contains less than 1 ppm total PCB ⁽⁵⁾
Unknown	Crouse-Hinds ⁽¹⁾	3830	Unknown	Removed
Unknown	Crouse-Hinds	3831	Unknown	Removed
Unknown	Crouse-Hinds	3832	Unknown	Removed
300-kVa non-PCB pad-mounted	RTE Corp.	846000298 ⁽²⁾	1984	Removed; mineral oil
500-kVa non-PCB pad-mounted	RTE Corp.	846001669 ⁽²⁾	1984	Removed; mineral oil
Non-PCB pad-mounted	G & W Electric	A11274	Unknown	Removed; oil contains less than 50 ppm total PCB ⁽⁵⁾
60-kVa non-PCB pad-mounted	Eastern Electric	PMR536595	Unknown	Removed; oil contains less than 50 ppm total PCB ⁽⁵⁾

(1) Rural Transformer & Electric (RTE) and Crouse-Hinds are now owned by Cooper Power Systems (EES, 1998)

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

(3) Westinghouse serial numbers are organized as year (two digits), manufacturing plant code (blank or one letter), month code (one letter), sequential number (ESS, 1998)

(4) Westinghouse – Sharon, PA plant manufactured PCB-containing transformers (EES, 1998)

(5) NAS Brunswick Environmental Department. Removed Transformer Database
ppm – parts per million

Building 209 Switches

Switch	Manufacturer	Serial No.	Date of Manufacture	Notes
Non-PCB-containing	Unknown	840734	Unknown	Oil contains less than 50 ppm PCB ⁽¹⁾
Non-PCB containing	Unknown	9F2F3CA0	Unknown	Removed; oil contains less than 50 ppm PCB ⁽¹⁾
Non-PCB containing	Unknown	9F2F3CB0	Unknown	Removed; oil contains less than 50 ppm PCB ⁽¹⁾
Non-PCB containing	Unknown	9F2F3C0	Unknown	Removed; oil contains less than 50 ppm PCB ⁽¹⁾

(1) NAS Brunswick Environmental Department. Removed Transformer Database

ppm – parts per million

Building 209 Regulators

Recloser Switch/ Regulator	Manufacturer	Serial No.	Date of Manufacture	Notes
50-kVa non-PCB-containing	GS Hevi-Duty Electric	82348825-8	Unknown	Oil contains less than 1 ppm PCB ⁽¹⁾
30-kVa non-PCB-containing	Crouse-Hinds ⁽²⁾	4108	Unknown	
15-kVa non-PCB-containing	Hevi-Duty Electric	A39415-5	Unknown	Oil contains less than 1 ppm PCB ⁽¹⁾
50-kVa non-PCB-containing	GS Hevi-duty Electric	82348825-16	Unknown	Oil contains less than 1 ppm PCB ⁽¹⁾
30-kVa non-PCB-containing	Crouse-Hinds	4105	Unknown	
30-kVa non-PCB-containing	Crouse-Hinds	4106	Unknown	
30-kVa non-PCB-containing	Crouse-Hinds	4107	Unknown	
30-kVa non-PCB-containing	Crouse-Hinds	4109	Unknown	
30-kVa non-PCB-containing	Crouse-Hinds	4110	Unknown	
15-kVa non-PCB-containing	Hevi-Duty Electric	PM01244	Unknown	Removed; oil contains 12 ppm PCB ⁽¹⁾
15-kVA non-PCB-containing	Hevi-Duty Electric	PM01246	Unknown	Removed; oil contains 12 ppm PCB ⁽¹⁾
15-kVa non-PCB-containing	General Electric	9980656	Unknown	Removed; oil contains 18 ppm PCB ⁽¹⁾
37-kVa non-PCB-containing	Hevi-Duty Electric	A67075	Unknown	Removed; oil contains 6 ppm PCB ⁽¹⁾
15-kVa non-PCB-containing	Hevi-Duty Electric	A39415-6	Unknown	Removed; oil contains 17 ppm PCB ⁽¹⁾

(1) NAS Brunswick Environmental Department. Removed Transformer Database

(2) Crouse-Hinds is now owned by Cooper Power Systems.

ppm – parts per million

According to NAS Brunswick records, one 550-gallon, fiberglass-reinforced plastic (FRP) underground storage tank (UST) (10045-434) was installed in 1977 and removed in October 1992. The UST contained diesel fuel for the emergency generator at Building 209. An aboveground storage tank (AST) (A209.0) replaced the UST in 1992 and is currently active. The AST is also 550 gallons in capacity and is a single-walled steel tank.

No groundwater investigations have been conducted in the vicinity of the Building 209 parcel; therefore, groundwater characterization information for the parcel is not available. Information on

known groundwater contamination areas at NAS Brunswick was reviewed to determine if groundwater underlying the Building 209 parcel could potentially be impacted by another (off-parcel) source area.

4. SITE VISIT AND INVESTIGATION

Building 209 site visits were conducted on February 2, 2010 and April 27, 2010 by Tetra Tech personnel, Mr. Brandon Smith, P.E. and Mr. James Forrelli, P.E. 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. Tetra Tech personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. Building 209 and the associated land parcel 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 initial inspection, Building 209 was occupied and in fair condition. Electrical equipment was present in the regulator vault and the new regulator vault. During the initial site visit, the office area was being used to store electrical parts. At the time of the second site visit, the office area was empty.
- 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.) were observed. Three building additions to the original regulator vault were observed in site plans and record (as-built) drawings. It is possible that a building addition could conceal signs of a historical release if a release had occurred in the associated area.
- No hazardous waste storage or accumulation areas were observed.
- Four pad-mounted transformers were observed west of the building. Ten electrical regulators were observed inside the building. No evidence of a past leak from these transformers was observed.
- Evidence of suspected mold growth (black spots and musty odor) was observed on the interior office/storage room (former equipment maintenance room) east wall.

Available information regarding the historical activities at the Building 209 parcel and the location of known NAS Brunswick groundwater contamination areas includes no evidence to suggest that groundwater underlying the Building 209 parcel has been adversely impacted by a release, either from within the parcel or from another (off-parcel) source area.

Due to the unknown manufacture date of the regulators and switches used at Building 209, it is possible that PCBs were/are present in the equipment, and areas of PCB surface contamination could exist within Building 209 if there had been a historical leak. On March 11, 2010, sampling was conducted in order to evaluate this possibility: Tetra Tech collected wipe samples from eight locations inside Building 209. Three samples, NASB-B209-WP01 through NASB-B209-WP03, were collected from the regulator vault room floor below the regulator units. Five wipe samples, NASB-B209-WP04 through NASB-B209-WP08, were collected from the new regulator vault room floor, from areas between the regulators.

Because of unknown dates of manufacture for previous transformers, the possibility of PCBs in the equipment cannot be eliminated. There could potentially be areas of PCB soil contamination if there had been a historical transformer leak. To evaluate this possibility, Tetra Tech collected surface soil samples from six locations on May 6, 2010. The samples were collected using direct-push technology (DPT) drilling and hand-auger methods, and were from locations adjacent to the transformer pad, west of Building 209. At each of the six locations, samples were collected from 0 to 6 inches below ground surface (bgs) and from 6 to 24 inches bgs. Samples collected from 0 to 6 inches bgs are identified as NASB-B209-SB01-0006 through NASB-B209-SB06-0006.

Samples collected from 6 to 24 inches bgs are identified as NASB-B209-SB01-0624 through NASB-B209-SB06-0624. Figure 3 presents all sample locations.

All wipe and soil samples were 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, consisting of field duplicate evaluation, blank contamination evaluation, and completeness evaluation.

As presented in Table 1, low levels of PCB were detected in two wipe samples: in one of the three wipe samples collected from the floor of the regulator vault room, and in one of the five wipe samples from the floor of the new regulator vault room. As shown in Table 2, PCBs were not detected in any of the soil samples collected adjacent to the Building 209 transformer pad. The EPA Regional Screening Levels (RSLs) for Residential Soil are included in Table 2 for informational purposes (EPA, 2009).

Due to the detection of PCBs in two of the wipe samples collected from the floor of the regulator vault rooms (NASB-B209-WP03 and NASB-B209-WP04, as described above and shown on Table 1), bulk sampling of the porous concrete flooring in these two rooms was required to determine if PCB-contaminated concrete is present. On June 17, 2010, seven bulk concrete samples were collected from the regulator vault room floor and the new regulator vault room floor. The samples were collected adjacent to seven of the eight the previously collected wipe sample locations and are shown on Figure 3 (A floor covering is installed over the concrete floor at one of the wipe sample locations and therefore this location was not sampled.). Concrete samples were collected in accordance with the *USEPA Region I Draft Standard Operating Procedure (SOP) for Sampling Concrete in the Field*, dated December 12, 1997. An electric-powered hammer drill equipped with a 1/2-inch carbide drill bit was used to drill five 1/2-inch deep holes at each of the seven concrete sample locations. At each sample location, pulverized concrete was placed into a four-ounce amber jar using a dedicated stainless steel scoopula. After each use, the drill bit was decontaminated using a liquid Alconox solution and was rinsed with de-ionized water prior to collection of the next sample.

The concrete samples were analyzed for PCBs by Analytics Environmental Laboratory. The resulting data underwent limited data validation, as described above, and is presented in Table 3. PCB levels in all seven concrete samples were less than 1 milligram per kilogram (mg/kg) (or 1 part per million [ppm]), the MEDEP clean-up criterion for PCB waste residue for areas of unrestricted use. The Toxic Substance Control Act (TSCA) PCB regulations [40 CFR 761.1(a)(4)(A)] also specify a PCB clean-up level of 1.0 part per million.

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 the Building 209 parcel.

6. OTHER ENVIRONMENTAL CONSIDERATIONS

USTs or ASTs known to be associated with Building 209 are discussed in Sections 3 and 4. No other tanks were observed in the immediate vicinity of Building 209. The 1996 demolition and additions drawings note that carpet adhesive and floor tiles to be removed tested positive for asbestos and that paint covering concrete wall and concrete masonry block tested positive for lead (PWD, 1995).

A suspected mold condition was observed in the office/storage room, as discussed in Section 4.

7. LIMITATIONS

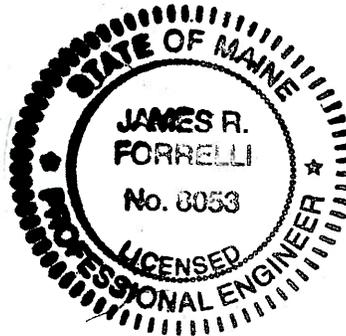
This investigation of the hazardous waste closure requirement applies to the Building 209 parcel (as shown on Figure 2) only.

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 209 parcel, NAS Brunswick, Maine. Therefore, the hazardous waste closure of the Building 209 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 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. <http://www.eesonline.org/programs/pcbdata.html>.

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NAVFAC Northern Division, 1974. Addition to Existing Weather Service metrological Offices (Bldg,. 209). NAVFAC Drawing 2014243.

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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.

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PWD, 1964. Runway Lighting Equipment Vault, Bldg. 209, Elevations – East and West (engineering drawing).

PWD, 1975. General Development, Existing and Planned, Operations Area, US Naval Air Station, Brunswick, Maine.

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

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

PWD, 1995. Building 209 – Demolition/Additions. Drawing 95-C-7010.

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

PWD. 2010. Transformer Database. NAS Brunswick, Maine.

U.S. Environmental Protection Agency, 1991. Wipe Sampling and Double Wash/Rinse Cleanup as Recommended by the Environmental Protection Agency PCB Spill Cleanup Policy, June 23, 1987, Revised and Clarified on April 18.

TABLE 1
INTERIOR WIPE SAMPLE PCB RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 209 – ELECTRIC DISTRIBUTION BUILDING
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID	EPA PCB Spill Cleanup Policy ⁽¹⁾	NASB-B209- WP01	NASB-B209- WP02	NASB-B209- WP03	NASB-B209- WP04	NASB-B209- WP05	NASB-B209- WP06	NASB-B209- WP07	NASB-B209- WP08
LOCATION		regulator vault floor – between regulators along west wall	regulator vault floor – between regulators along west wall	regulator vault floor – southeast corner	new regulator vault room floor – between regulators along north wall	new regulator vault room floor– between regulators along north wall	new regulator vault room floor – northeast corner between regulators	new regulator vault room floor – between regulators along east wall	new regulator vault room floor – southeast corner adjacent to regulator along east wall
MATRIX		surface wipe	surface wipe	surface wipe	surface wipe	surface wipe	surface wipe	surface wipe	surface wipe
SAMPLE DATE		3/11/10	3/11/10	3/11/10	3/11/10	3/11/10	3/11/10	3/11/10	3/11/10
PCB ($\mu\text{g}/100 \text{ cm}^2$)									
Aroclor-1016		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Aroclor-1221		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Aroclor-1232		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Aroclor-1242		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Aroclor-1248		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Aroclor-1254		0.25 U	0.25 U	0.7	1.6	0.25 U	0.25 U	0.25 U	0.25 U
Aroclor-1260		0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Total PCBs	10	0.25 U	0.25 U	0.7	1.6	0.25 U	0.25 U	0.25 U	0.25 U

Notes:

(1) Source: U.S. Environmental Protection Agency, Wipe Sampling and Double Wash/Rinse Cleanup as Recommended by the Environmental Protection Agency PCB Spill Cleanup Policy, June 23, 1987, Revised and Clarified on April 18, 1991.

Laboratory results reported as micrograms per wipe.

Wipe sample surface area: 100 cm^2 (10 cm by 10 cm)

$\mu\text{g}/100 \text{ cm}^2$ micrograms per 100 square centimeters

U not detected (with associated detection limit)

PCB polychlorinated biphenyl

**TABLE 2
SOIL SAMPLE PCB RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 209 – ELECTRIC DISTRIBUTION BUILDING
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID	EPA RSLs ⁽¹⁾ (µg/kg)	MEDEP Action Limit ⁽²⁾ (µg/kg)	NASB- B209- SB01- 0006	NASB- B209- SB01- 0624	NASB- B209- SB02- 0006	NASB- B209- SB02- 0624	NASB- B209- SB03- 0006	NASB- B209- SB03- 0624	NASB- B209- SB04- 0006	NASB- B209- SB04- 0624	NASB- B209- SB05- 0006	NASB- B209- SB05- 0624	NASB- B209- SB06- 0006	NASB- B209- SB06- 0624		
LOCATION			transfr m. pad	transfrm. pad	transfrm. Pad											
MATRIX			soil	soil	Soil											
DEPTH			0-6 inches bgs	6-24 inches bgs	0-6 inches bgs	6-24 inches bgs										
SAMPLE DATE			05/06/1 0	05/06/10	05/06/10	05/06/10	05/06/10	05/06/10	05/06/10	05/06/10	05/06/10	05/06/10	05/06/10	05/06/10	05/06/10	05/06/10
PCB (µg/kg)																
Aroclor-1016	3,900		16.5 U													
Aroclor-1221	140		16.5 U													
Aroclor-1232	140		16.5 U													
Aroclor-1242	220		16.5 U													
Aroclor-1248	220		16.5 U													
Aroclor-1254	220		16.5 U													
Aroclor-1260	220		16.5 U													
Total PCBs ⁽²⁾		1,000	16.5 U													

Notes:

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

(2) 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

transfrm. transformer

**TABLE 3
INTERIOR CONCRETE SAMPLE PCB RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 209 – ELECTRIC DISTRIBUTION BUILDING
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID	MEDEP Action Limit ⁽¹⁾ (µg/kg)	TSCA PCB Regulations ⁽²⁾ (µg/kg)	NASB- B209-C01	NASB-B209- C02	NASB-B209- C03	NASB-B209- C04	NASB-B209- C05	NASB-B209- C06	NASB-B209- C07
LOCATION			regulator vault floor – between regulators along west wall	regulator vault floor – between regulators along west wall	regulator vault floor – southeast corner	regulator room floor– between regulators along north wall	regulator room floor – northeast corner between regulators	regulator room floor – between regulators along east wall	regulator room floor – southeast corner adjacent to regulator along east wall
MATRIX			concrete	concrete	concrete	concrete	concrete	concrete	concrete
DEPTH			0 to 0.5 inches	0 to 0.5 inches	0 to 0.5 inches	0 to 0.5 inches	0 to 0.5 inches	0 to 0.5 inches	0 to 0.5 inches
SAMPLE DATE			06/17/10	06/17/10	06/17/10	06/17/10	06/17/10	06/17/10	06/17/10
PCB (µg/kg)									
Aroclor-1016			33 U	33 U	33 U	33 U	33 U	33 U	33 U
Aroclor-1221			33 U	33 U	33 U	33 U	33 U	33 U	33 U
Aroclor-1232			33 U	33 U	33 U	33 U	33 U	33 U	33 U
Aroclor-1242			33 U	33 U	33 U	33 U	33 U	33 U	33 U
Aroclor-1248			33 U	33 U	33 U	33 U	33 U	33 U	33 U
Aroclor-1254			33 U	33 U	33 U	194	99	36	87
Aroclor-1260			353	307	219	33 U	33 U	33 U	33 U
Total PCB ⁽¹⁾	1,000	1,000	353	307	219	194	99	36	87

Notes:

(1) MEDEP policy for PCB waste residue: clean-up level for unrestricted use (1 milligram per kilogram, equivalent to 1,000 µg/kg).

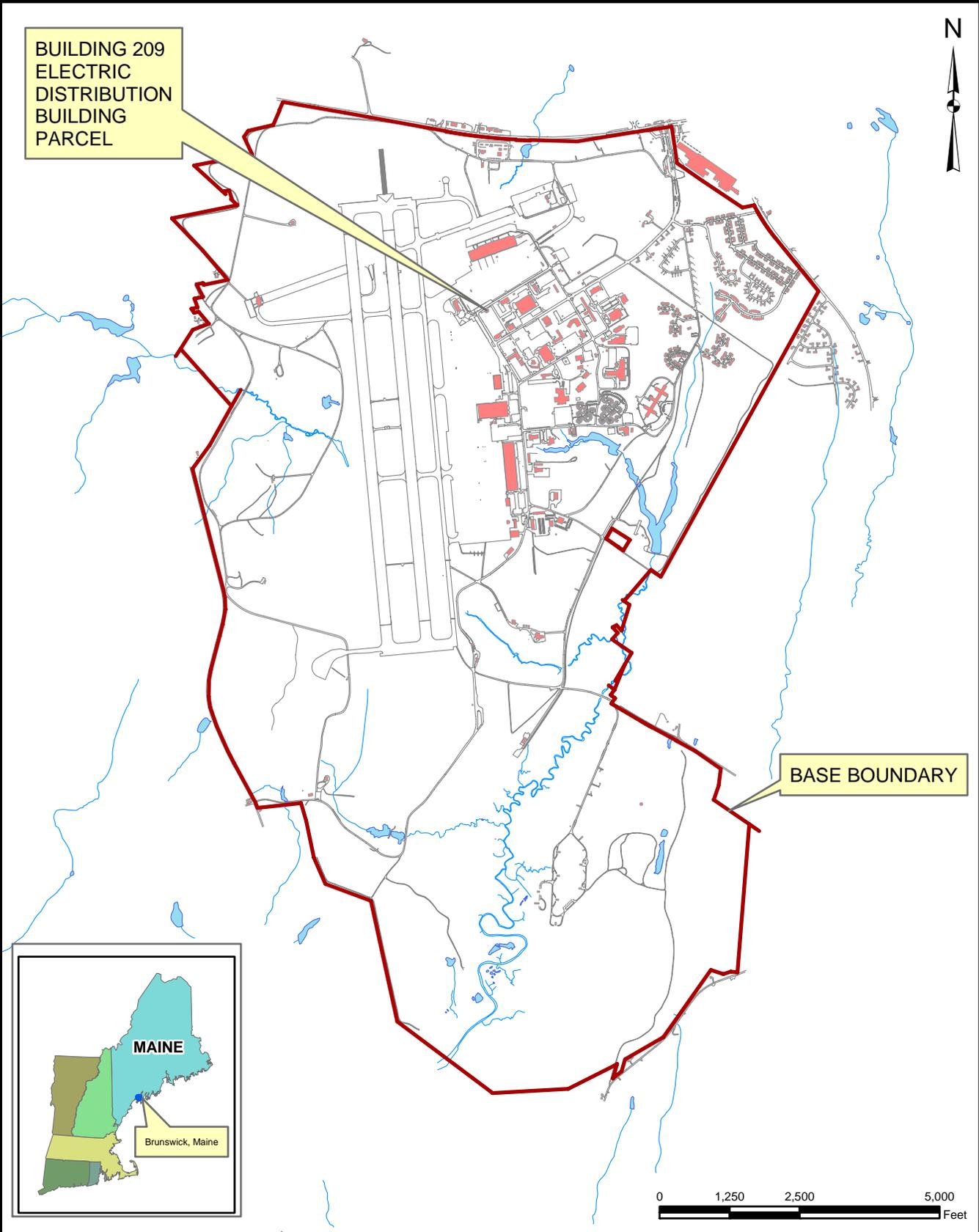
(2) Toxic Substances Control Act (TSCA) PCB regulations [40 CFR 761.1(a)(4)(A)]

µg/kg micrograms per kilogram

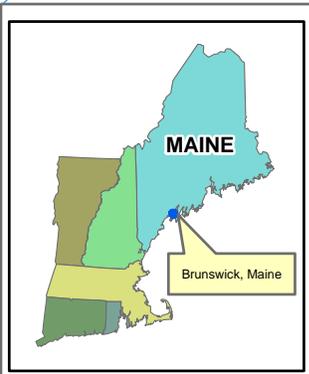
U not detected (with associated detection limit)

PCB polychlorinated biphenyl

BUILDING 209
ELECTRIC
DISTRIBUTION
BUILDING
PARCEL



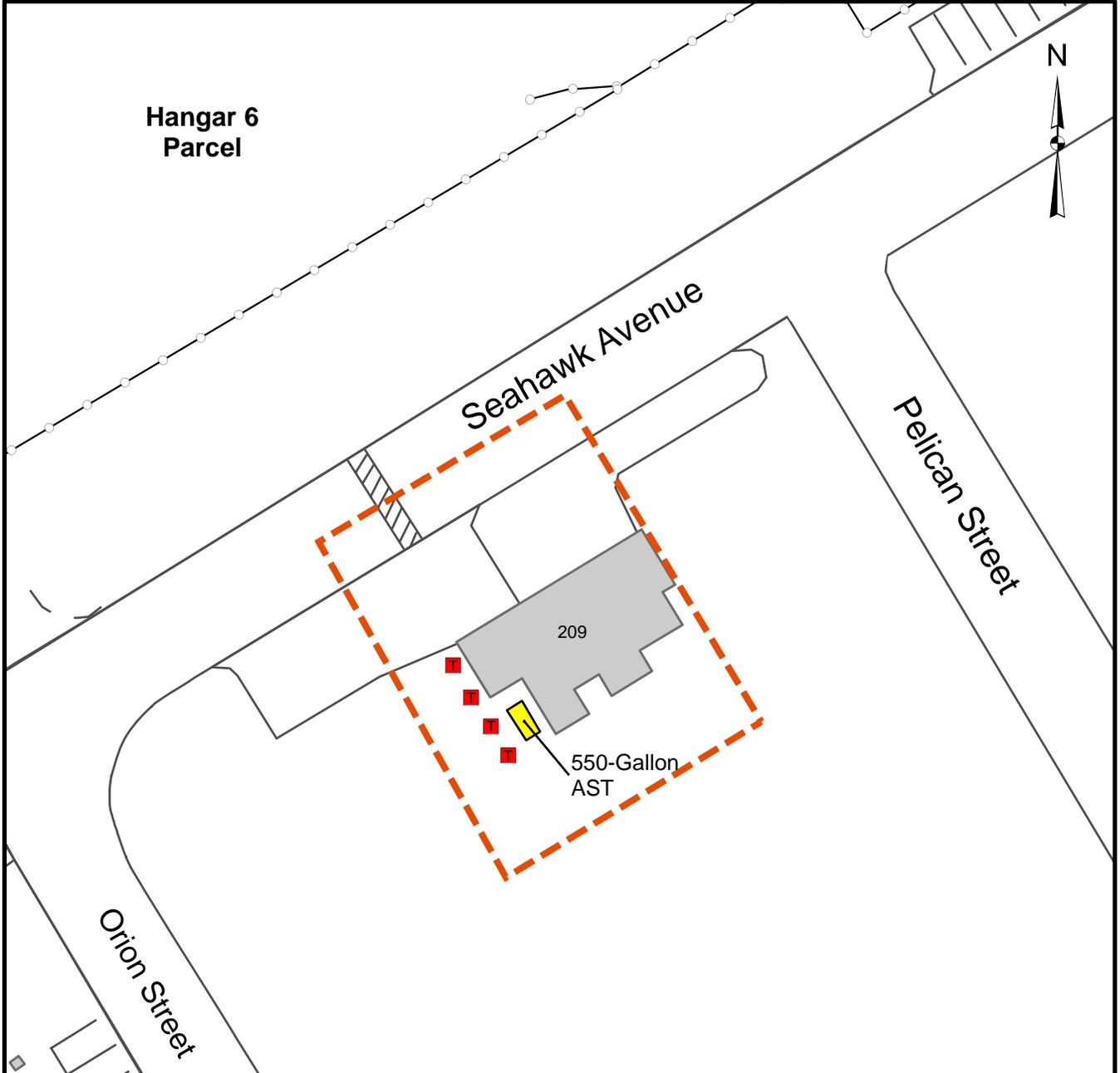
BASE BOUNDARY



Tetra Tech NUS, Inc.

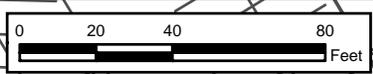
SITE LOCATION MAP
BUILDING 209 - ELECTRIC DISTRIBUTION BUILDING PARCEL
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\NASB_BLDG_209_LOCUS.MXD	
REV 0	DATE 07/01/10
FIGURE NUMBER 1	



Legend

- Parcel Boundary
- Aboveground Storage Tank
- Airfield Security Fence
- Transformer



Building Corner	Northing	Easting
North	388193.540	3014614.110
East	388163.540	3014627.000
South	388129.200	3014587.110
West	388158.090	3014555.780

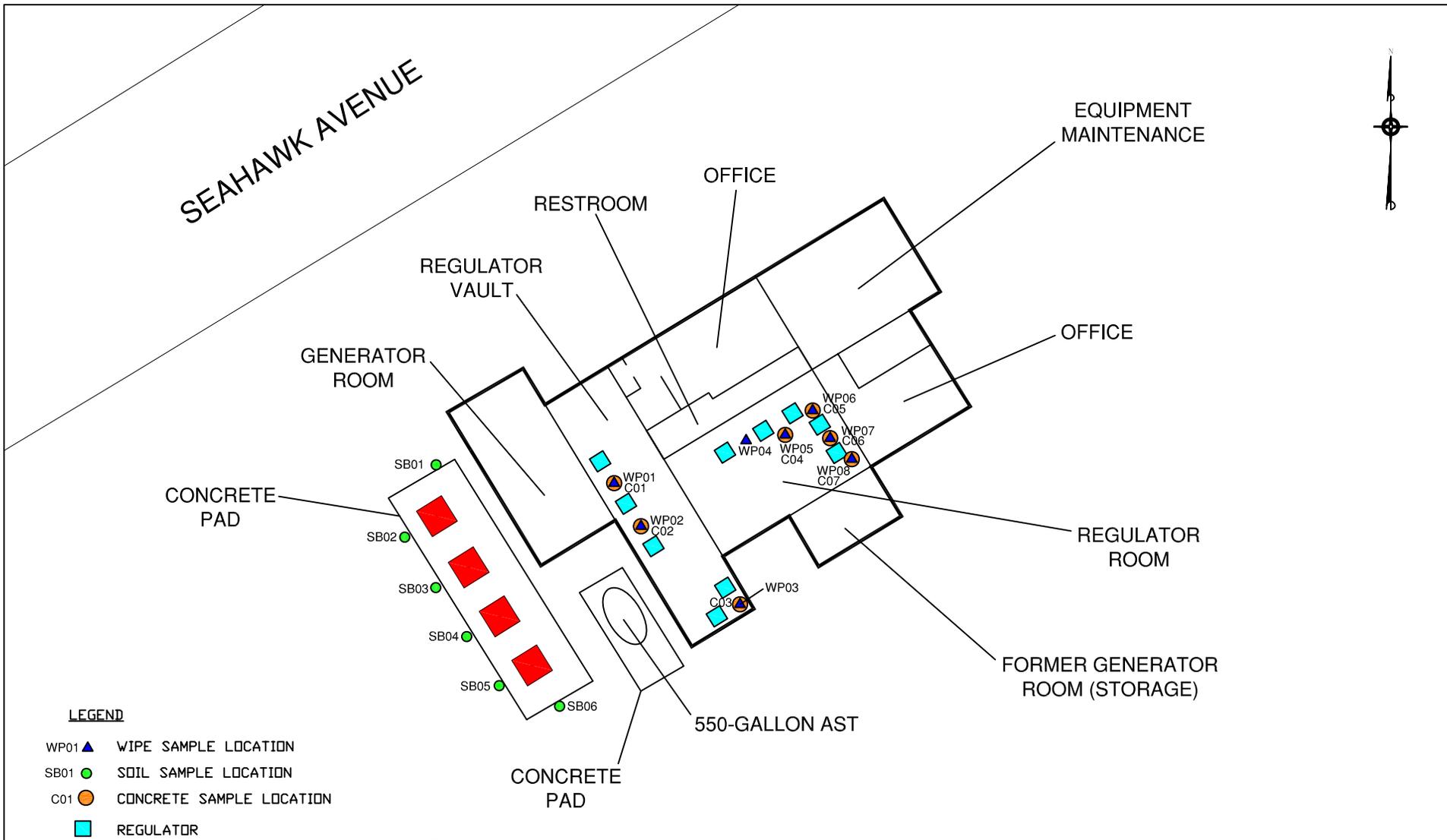
Coordinates are in NAD 1983, Maine West, Feet



Tetra Tech NUS, Inc.

SITE LOCATION MAP
 BUILDING 209 - ELECTRIC DISTRIBUTION BUILDING PARCEL
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\02258\CP.DR\NASB_BLDG_49_SITE_MAP.MXD	
REV 0	DATE 07/01/10
FIGURE NUMBER FIGURE NO. 2	



LEGEND

- WP01 ▲ WIPE SAMPLE LOCATION
- SB01 ● SOIL SAMPLE LOCATION
- C01 ○ CONCRETE SAMPLE LOCATION
- REGULATOR
- TRANSFORMER



TETRA TECH NUS, INC.

SAMPLE LOCATION MAP
 BUILDING 209 - ELECTRIC DISTRIBUTION BUILDING PARCEL
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE \\.\NASB_BLDG_209_FP.DWG	
REV 0	DATE 07/01/10
FIGURE NUMBER FIGURE NO. 3	

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

Inspection Date: 2/2/2010

Personnel: James Forrelli, P.E. / Brandon Smith, P.E.

Weather: Clear, 20s

GENERAL BUILDING INFORMATION / USES

Building Name: Electric Distribution Building
 Function: Runway lighting electric distribution
 Size: 2,283 SF
 Year of Construction: 1954

Building 209 is located in the central portion at NAS Brunswick, south of Seahawk Avenue, east of Orion Street, north of Building 9 and west of Building 41. It was constructed in 1954 and consists of a single store concrete block building on a concrete slab foundation. The building consists of four main rooms: an electrical vault, emergency generator room, electrical equipment room, and office/storage space.

Building 209 was used as a transformer/electrical distribution building since 1954, as well as a weather service building until the 1980s.

No hazardous waste was generated during the operations in Building 209, according to NASB personnel.

Building 209 is currently heated via natural gas. It was originally heated by steam heat and then fuel oil.

BUILDING INSPECTION / CONDITION

No record of hazardous waste stored at Building 209.

At the time of the site visit, the building appeared in fair condition. Electrical equipment was present in the vault room and control room. During the initial site visit, the office area was used to store electrical parts. At the time of the second site visit, the office area was empty.

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. Three additions to the original vault area, which may conceal signs of a past release, were observed in site plans.

No hazardous waste storage areas or hazardous waste accumulation areas were observed.

HAZARDOUS WASTE STORED / GENERATED

No hazardous waste was stored or generated at Building 209, according to NASB personnel.

POTENTIAL PCB-CONTAINING TRANSFORMERS

The following transformers associated with Building 209 were listed in the transformer database:

See attached summary table.

APPLICABLE REPORTS / DOCUMENTS

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

1943 plan - Location of Building 209 was undeveloped land. Building 6 (Public Works electric shop) and Building 48 (Public Works Carpenter Shop) present to the west and southwest, respectively.

1946 plan - same as 1943 plan.

1952 plan - Same as 1946 plan

1956 plan - Building 209 (vault room only), listed as the transformer building, present.

1958 aerial - Building 209 (vault room only) present with the paved parking lot area to the south and east.

1964 Vault Plans - Shows only the runway lighting vault. A transformer pad to the west on an unpaved area with 3 25-kva transformers for Building 6 and 48 is present.

1974 As-Built Plans - First weather service building addition added to the east of the vault shown (built between 1964 and 1974). Second weather service building addition to the east built in 1974. Shows 3 new 75 kva oil-filled transformers on the existing pad west of the vault exterior.

1978 aerial - Shows Building 209 with the original electrical vault and the two weather service building additions to the west. Building 6 and 48 still present.

1981 aerial - Same as 1978 aerial. Tower structure is in the paved area to the south of Building 209.

1984 aerial - Similar to the 1981 aerial with the addition of three long trailer buildings to the east of Building 209 in the paved parking area.

1989 plan - Similar to 1984 aerial, tower structure is no longer present to the south.

1993 aerial - Similar to 1989 aerial, trailer building to the east of Building 209 not present.

1997 aerial - Same as 1993 aerial.

2006 plan - Building 209 in current location. Building 6 and 48 not present.

2006 Google Earth Image - Buildings 6 and 48 not present. Only small paved area east, west, and south of Building. Remaining area is now grass.

The following USTs were present at Building 209:

One 550 gallon FRP UST (10045-434) containing diesel for generator (Installed 1997, removed October 1992)

The following ASTs are present at Building 209:

One 275 gallon SWS AST (A209.0) containing #1 oil for generator (Installed 1992, active)

HAZARDOUS WASTE STORAGE RECORDS

No hazardous waste was historically stored at Building 209, according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

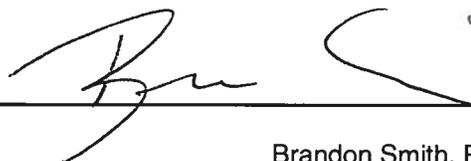
MISCELLANEOUS NOTES

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

Due to presence of historical PCB-containing (>1 ppm PCB)transformers, sampling is recommended.

(SEE ATTACHED PHOTOGRAPHS)

INSPECTOR SIGNATURE: _____



Brandon Smith, P.E.

PHOTOGRAPHS



No. 1 Building 209 – NAS Brunswick
Electric Distribution Building exterior – north elevation

May 12, 2010



No. 2 Building 209 – NAS Brunswick
Electric Distribution Building exterior – west elevation

May 12, 2010

PHOTOGRAPHS



No. 3 Building 209 – NAS Brunswick
Electric Distribution Building – regulator vault room

February 2, 2010



No. 4 Building 209 – NAS Brunswick
Electric Distribution Building – new regulator vault room

February 2, 2010

PHOTOGRAPHS



No. 5 Building 209 – NAS Brunswick April 27, 2010
Electric Distribution Building interior – office/storage room (former equipment maintenance room) east wall



No. 6 Building 209 – NAS Brunswick April 27, 2010
Electric Distribution Building interior – office