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NAS BRUNSWICK
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FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT
FOR BUILDINGS 642 AND 643 WITH TRANSMITTAL LETTER NAS BRUNSWICK ME
12/1/2010
NAS BRUNSWICK

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

December 1, 2010

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

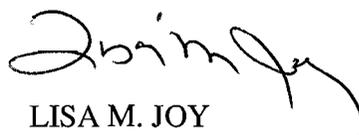
Subj: Final RCRA Partial Closure Report for Buildings 642 and 643

Dear Mr. Vigneault:

A copy of the Final RCRA Partial Closure Report for Buildings 642 and 643 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 642 and 643

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 642 – WEAPONS ADMINISTRATION
BUILDING 643 – SENTRY HOUSE
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
NOVEMBER 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 642 and 643 at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

Buildings 642 and 643 are located in the southern portion of NASB Brunswick, east of the southernmost portion of the runway (Figure 1). Buildings 642 and 643 are located within the Anti-Underwater Warfare [AUW] Facility, which is located in the Weapons Area along an unnamed road running east-west from Merriconeag Road to Orion Street. To the east of Buildings 642 and 643 within the AUW are Building 626 (Inert Ordnance Storage), Building 539 (Explosives Administration/Armory) (Figure 2). Access to the AUW was restricted; the AUW is surrounded by a double security fence. Directly to the north and northwest of Buildings 642 and 643 is Installation Restoration Program (IRP) Site 1 (Orion Street Landfill-North) and Site 3 (Orion Street Landfill-South [Hazardous Waste Burial Area]).

Building 642, constructed in 1978, served as both a weapons administration and a security facility (operated by the Marine Corp). The building consists of a 4,450-square-foot multi-room, single-level building on a concrete slab foundation and was heated by natural gas.

Building 643 was constructed in 1978 and served as a guard shack (sentry house). It consists of a single-level, one-room building on a slab foundation, and has an area of 140 square feet. Photographs of both buildings are provided as an attachment to this report.

Buildings 642 and 643 are located within the Weapons/Magazine Area. The Weapons/Magazine Area RCRA Partial Closure Report will address the land surrounding and the groundwater underlying Buildings 642 and 643.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (Tetra Tech) project team interviewed NAS Brunswick Environmental Department personnel and reviewed both NAS Brunswick and the Augusta, Maine MEDEP files to collect available information concerning Buildings 642 and 643, 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, 1976, 1989, and 2006 (PWD, 1943, 1946, 1952, 1956, 1975, 1976, 1989, and 2006) and site building lists for 1965, 1976, 2003, 2006, and 2008 (PWD, 1965, 1976, 2003, 2006, and 2008) were also reviewed.

Building 642

The 2006 buildings index is the first available building list to include Building 642, and indicates it to be a 2,419-square-foot structure constructed in 1978. This construction date is consistent with aerial photographs and historical site plans:

- The 1978 aerial photograph is the earliest to show Building 642, and it is shown in its current location; the area is vacant and wooded on aerial photographs prior to 1978.
- An “as-built” Reaction Force Facility Site Plan drawing dated 1978 shows the construction of Building 642 as the Reaction Force Facility. This plan indicates that septic tank, distribution tank, and seepage bed were constructed and a 75-kVa transformer was installed at the northeast corner of Building 642 (approximate location of current transformers). The drawing also indicates other AUW area improvements including extension of the roadway and modification of the security fencing to enclose the new Buildings 642 and 643 (NAVFAC, 1978).
- A “built as per plans” Reaction Force Facility Addition drawing (date estimated 1985) shows additions to Building 642 included a new dorm (150 square feet) and vehicle garage (775 square feet), for a total of 4,450 square feet after renovations. Other renovations were listed on this plan, including minor structural modifications. (NAVFAC, 1985 estimated).
- Review of historical aerial photographs dated 1981 and 1989 shows that a large addition was constructed on the south side of Building 642, likely prior to or during 1989.

A historical site plan (unknown dates) show that the interior of the building includes a storage area for armored vehicles, two mechanical rooms, a ready room, several storage rooms for clean gear and arms, several relief rooms, office space, a shop, restrooms, and a bunk room.

On the Building 642 evacuation plan the vehicle bay and an office were labeled as AWSEP Bay (Armament Weapons Support Equipment Program) Bay. Vehicles and trailers were repaired in the vehicle bays, according to NAS Brunswick personnel, who also stated that a torpedo shop had been located in Building 642 at one time; however, no other historical site information was located regarding that use of the building.

According to historical records and NAS Brunswick Environmental Department personnel, following its construction in 1978, Building 642 was used as a security force facility. Also, according to NAS Brunswick Environmental Department personnel, hazardous waste generation at Building 642 was episodic in nature, with no operations producing hazardous waste on a regular basis. The source of most hazardous waste generated by activities at Building 642 was aerosol paints, used on an “as needed” basis. NAS Brunswick has a program in place that tracks hazardous waste to ensure proper handling and disposal. However, the database tracking system does not distinguish between the various buildings within the Weapons Area.

The NAS Brunswick Transformer Database does not list electrical transformers associated with Building 642; however, the 1978 historical plan discussed above, indicates transformers were installed at the northeast corner of the building.

The NAS Brunswick Master/Historical Aboveground and Underground Storage Tank Inventory lists two underground storage tanks (USTs) for Building 642 (642.0 and 642.1). Tank 642.0 is listed as a 1,000-gallon UST for storage of No. 2 fuel oil. This tank was installed in 1977 and was removed and replaced with a new UST in 1992. Tank 642.1, installed in 1992 and listed as active, and is a 1,000-gallon UST for No. 1 fuel oil; however, NAS Brunswick personnel reported that the tank was removed on August 30, 2010. There are no above ground storage tanks (ASTs) or oil/water separators (OWS) registered to Building 642 (Environmental Department, 2009). No OWS are listed for Building 642 on the NAS Brunswick Revised Oil/Water Separator List (PWD, 2008b).

According to MEDEP and NAS Brunswick spill records, no spills were reported in the vicinity of Building 642 (Environmental Department, 1988; Environmental Department 1999; and MEDEP, 2010).

Building 643

The 2006 buildings index is the first to include Building 643, and indicates it to be a 140-square-foot structure, constructed in 1978. This construction date is consistent with aerial photographs and site plans:

- The 1978 aerial photograph is the earliest to show Building 643, where it is shown in its current location; the area is vacant and wooded on photographs earlier than 1978.
- An “as-built” Reaction Force Facility Site Plan drawing dated 1978 shows the construction of Building 643 as New Sentry House.

The NAS Brunswick Transformer Database lists no electrical transformers for Building 643 (PWD, 2010).

The NAS Brunswick Master/Historical Aboveground and Underground Storage Tank Inventory lists no USTs or ASTs associated with Building 643 (Environmental Department, 2009). No OWS are listed for Building 643 on the NAS Brunswick Revised Oil/Water Separator List (PWD, 2008b).

According to historical records and NAS Brunswick Environmental Department personnel, following its construction in 1978, Building 643 was used only as a guard shack (sentry house). There is no record of hazardous waste generation at Building 643 (Environmental Department, 2010).

According to MEDEP and NAS Brunswick spill records, no spills were reported in the vicinity of Building 643 (Environmental Department, 1988; Environmental Department 1999; and MEDEP, 2010).

4. SITE VISIT AND INVESTIGATION

A site visit was conducted on June 3, 2010 by Mr. James Forrelli, P.E., Mindi Messmer, and Chelsea Fellows of Tetra Tech. The purpose of the visit was to verify information gathered during the records search and to collect additional information as necessary to prepare this closure report. Tetra Tech personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. Buildings 642 and 643 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:

Building 642 Site Visit

- At the time of inspection, Building 642 was vacant and in fair condition. The interior consisted of two vehicle bays, offices, two storage rooms, a bunk room, a ready room, a tool/gear room, two restrooms, and a mechanical room containing a boiler and associated generator.
- Peeling paint was observed at Building 642 in three interiors rooms (storage room, bunk room, and the restroom located on the north side of the building).
- Two openings observed in the flooring of the Vehicle Storage area were used for exhaust ventilation, according to NAS Brunswick personnel.
- Floor tiles and pipe wrap that may possibly contain asbestos were observed.
- 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 modifications to the structure, which may conceal signs of a past release, were observed.
- Three pole-style transformers were observed, mounted on a concrete pad located at the northeast exterior corner of Building 642.
- UST-fill-pipes were observed at the northeast corner of the building. According to NAS Brunswick personnel, the tank (Tank 642.1) was present, but had been drained closed yet. (NAS Brunswick personnel later reported that the tank was removed on August 30, 2010.) No evidence of a past release from this UST was observed.

Based on the site visit observations and records research findings, samples were collected at Building 642 to investigate the potential presence of hazardous waste residue as a result of peeling paint conditions, the electrical transformer pad, and small arms storage and maintenance (that may have occurred during the building's use as a security facility). The investigation sample results are discussed in the following.

Building 642 Peeling Paint Investigation

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 June 17, 2010. The samples were analyzed for total RCRA metals and PCBs by Tetra Tech's subcontracted analytical laboratory, Analytics Environmental Laboratory (Analytics), of Portsmouth, New Hampshire. The resulting analytical data underwent limited data validation consisting of field duplicate evaluation, blank contamination evaluation, and completeness evaluation.

The paint-chip analytical results are summarized in Table 1. For each total metals analysis, the results were compared to 20 times the TCLP regulatory limit for hazardous waste. Using "the Rule of 20", if a result is less than 20 times its TCLP regulatory limit, then the sample could not possibly leach enough of the compound under TCLP conditions to fail the TCLP limit, even if all the compound dissolved into the extraction fluid. Paint PCB results were compared to the Toxic Substances Control Act (TSCA) PCB limit for building material bulk product waste of 50 ppm (50 mg/kg).

As presented in Table 1, total metals concentrations of chromium and mercury were the only metals concentrations in the Building 642 paint-chip samples that exceeded 20 times the TCLP limit; PCBs were not detected. Based on these results, it was determined that loose paint and paint chip removal is necessary at Building 642 to complete the MEDEP hazardous waste closure requirements (discussed in Section 6).

Building 642 Electrical Transformer Pad Investigation

As of July 1, 1979, the United States Environmental Protection Agency (EPA) prohibited all manufacturing of new PCB electrical equipment (transformers and capacitors). Due to the age of the building (1978), it is possible PCB-containing transformers were used at Building 642. Therefore, soil samples were collected around the transformer pad to assess potential PCB impacts to soil. Eight surface soil samples from four locations around the transformer pad (Figure 3) on June 17, 2010. A hand auger was used to collect samples from 0 to 6 inches below ground surface (bgs) and from 6 to 24 inches bgs at each of the four locations.

All soil samples were submitted for PCB analysis by Analytics. The resulting analytical data underwent limited data validation consisting of field duplicate evaluation, blank contamination evaluation, and completeness evaluation.

As shown in Table 2, soil sample PCB results were compared to the MEDEP standard for total PCBs in soil, 1 part per million (ppm). For informational purposes, results were also compared to EPA Regional Screening Levels (RSLs) for residential soil (EPA, 2010). In one soil sample, B642-SB02-0624 (from the 6- to 24-inch interval bgs), Aroclor-1254 was detected at a concentration of 297 µg/kg, above the RSL of 220 micrograms per kilogram (µg/kg). However, the total PCB levels were below the MEDEP criterion of 1 ppm (1 mg/kg). PCBs were not detected in any of the other soil samples.

Based on the records research findings, site visit observations, and sampling results, it was determined that neither further investigation nor sampling of the transformer area at Building 642 is required to complete the MEDEP hazardous waste closure requirements.

Building 642 Residue Investigation

On June 17, 2010, floor-wipe samples were collected from nine locations in Building 642, as shown on Figure 3. Wipe samples were submitted for RCRA metals and semi-volatile organic compound (SVOC) analysis by Tetra Tech's subcontracted analytical laboratory, Analytix. The resulting analytical data underwent limited data validation consisting of field duplicate evaluation, blank contamination evaluation, and completeness evaluation.

Wipe sample results for the Building 642 investigation is presented in Table 3. For lead, analytical results were compared to the following MEDEP criteria for lead-contaminated settled dust, applicable for RCRA closures:

- Floors: 40 micrograms per square foot (µg/ft²)
- Walls and other flat surfaces up to a height of 8 feet: 250 µg/ ft²
- Surfaces above 8 feet: visibly clean (dust-free)

There are no Maine criteria for the other seven RCRA metals or the SVOCs. For informational purposes, wipe sample results for six of the other seven metals were compared to World Trade Center (WTC) Settled Dust Screening Values (there are no WTC screening values for selenium) (WTC, 2003). The data validation findings indicate that some of the SVOC detections are related to blank contamination or were qualified as "J" (approximate).

As shown in Table 3, lead was detected in each of the nine floor-wipe samples at levels exceeding the MEDEP criterion for floors (40 µg/ft²). Cadmium was also detected in four wipe samples at levels which exceed the WTC criterion. All levels of other detected metals in these samples were below the screening values. Based on the analytical results, cleaning of Building 642 was required to remove lead-contaminated residue exceeding the associated MEDEP criterion for dust on floors (discussed in Section 6).

Building 643 Site Investigation

- At the time of inspection, Building 643 was vacant and in fair condition.
- Extensive areas of peeling paint was observed in the building interior.
- 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 modifications to the structure, which may conceal signs of a past release, were observed.

For reasons discussed above under Building 642 Peeling Paint Investigation, a loose paint sample were collected at Building 643 to investigate the potential presence of hazardous waste residue as a result of peeling paint conditions. Therefore, a sample of the loose paint observed during the site visit was collected on June 17, 2010. The sample was analyzed for total RCRA 8 metals and PCBs by Tetra Tech's subcontracted analytical laboratory, Analytix. The resulting

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

The Building 643 paint-chip analytical results are summarized in Table 1. The total metals results were compared to 20 times the TCLP regulatory limit for hazardous waste as discussed under Building 642 Peeling Paint Investigation.

As presented in Table 1, total metals concentrations of chromium and lead in the Building 643 paint-chip sample exceeded 20 times the TCLP limit; PCBs were not detected. Based on these results, it was determined that loose paint and paint chip removal was required at Building 643 to complete the MEDEP hazardous waste closure requirements (discussed in Section 6).

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research, NAS Brunswick Environmental Department personnel interviews, operations at Building 642 generated small quantities of paint waste and aerosols on an episodic basis; these wastes were handled and disposed of under the NAS Brunswick hazardous waste department.

Based site visit observations and sampling results, hazardous waste residue was generated at Building 642 in the form of lead-contaminated settled dust from small arms maintenance and vehicle storage and maintenance activities associated with operations conducted at the former security building. The areas impacted by lead-dust were also addressed by the closure actions described in Section 6.0.

In addition, based on sampling results, hazardous waste residue was generated at Building 642 in the form of chromium-, and mercury-contaminated peeling paint, and at Building 643, in chromium- and lead-contaminated peeling paint. These areas were addressed by the closure actions described in Section 6.0.

6. CLOSURE ACTIONS

Based on analytical results discussed in Section 4, closure actions were required at Buildings 642 and 643 to satisfy the MEDEP hazardous waste closure requirements. Closure actions were conducted at Building 642 in September 2010 and at Building 643 in September and October 2010, as discussed below.

Building 642 Closure Actions

Tetra Tech's cleaning subcontractor (Global Remediation Services [Global]) performed floor- and wall-cleaning activities at Building 642, based on criteria exceedances in previous paint-chip and wipe samples, as discussed in Section 4. On September 29, 2010, cleaning activities were conducted in the bunk room, storage rooms (Nos. 1 and 2), ready room, vehicle storage room, and former shop. Prior to cleaning, floor openings were covered and sealed with polyethylene sheeting. The floors were then manually swept and then vacuumed with a high-efficiency particulate air (HEPA) vacuum. After sweeping and vacuuming, floors and walls were sprayed with a 2-percent, lead-specific detergent solution, scrubbed, and pressure-washed, using a 5,000-pounds-per-square-inch (PSI) steam cleaner. All cleaning wastewater was containerized using a wet-vacuum, placed in three 55-gallon drums, and transferred to the NAS Brunswick hazardous waste department for disposal. Upon completion, the Tetra Tech field representative performed a visual inspection of the cleaned areas.

Post-cleaning, confirmatory floor- and wall-wipe samples were collected from each of the cleaned rooms on October 1, 2010 (Figure 4). Samples were submitted to Analytics for RCRA metals analysis. The resulting analytical data underwent limited data validation consisting of field duplicate evaluation, blank contamination evaluation, and completeness evaluation. The October

1, 2010 wipe sample results are included in Table 4. Lead levels in several post-cleaning confirmatory wipe samples were above the associated MEDEP floor criterion. Cadmium levels in three floor-wipe samples and arsenic in one wall-wipe sample exceeded the WTC criteria (used for informational purposes only).

A second decontamination event (Event 2) was conducted at Building 642 on October 21, 2010, based on criteria exceedances in post-cleaning wipe samples discussed above. Floors and walls were cleaned again, using the procedures described above. After the work areas were allowed to dry, post-cleaning confirmatory wipe samples (Event 2) were collected on October 22, 2010. Eight floor-wipe samples (plus one blind duplicate) were collected for lead analysis by Analytics (Figure 5). The resulting analytical data underwent limited data validation consisting of field duplicate evaluation, blank contamination evaluation, and completeness evaluation. The October 22, 2010 wipe sample results are included in Table 5. With one exception, the confirmatory wipe sample results following the Event 2 decontamination indicated that lead was not detected at levels exceeding the associated MEDEP criterion ($40 \mu\text{g}/\text{ft}^2$). The exception was in the wipe sample collected from the former shop floor, where lead was detected at $46 \mu\text{g}/\text{ft}^2$, a slight exceedance of the criterion. However, the average lead level for the eight post-cleaning, confirmatory wipe samples (Event 2) is $22.5 \mu\text{g}/\text{ft}^2$, well below the criterion. Based on this low average lead level, additional closure action is not warranted at Building 642.

Building 643

On September 29 and 30, 2010, Tetra Tech's cleaning subcontractor, Global, performed clean-up activities for loose and flaking paint located in Building 643. Loose paint was removed using scrapers and wire brushes. All cleaning waste was vacuumed using a HEPA vacuum, placed in a 55-gallon drum, and transferred to the NAS Brunswick hazardous waste department for disposal. Upon completion, the Tetra Tech field representative performed a visual inspection of the cleaned area.

It was determined that neither further inspection nor sampling of Building 643 is required to complete the MEDEP hazardous waste closure requirements.

7. OTHER ENVIRONMENTAL CONSIDERATIONS

Any electrical transformers or USTs known to be associated with Buildings 642 or 643 are discussed in Section 3. No additional transformers or USTs were observed in the immediate vicinity of the buildings. No ASTs and no oil/water separators are known to be associated with Buildings 642 or 643, and none were observed in the immediate vicinity of the buildings.

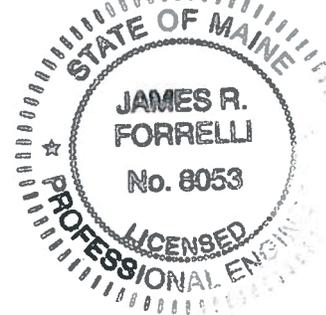
8. LIMITATIONS

This investigation of the hazardous waste closure requirement applies to the building footprints of Buildings 642 and 643 (building footprints shown on Figure 2). It does not apply to the land surrounding or the groundwater underlying Building 642 or Building 643.

9. CERTIFICATION

Historical operations resulted in the generation of hazardous waste residue at Building 642, NAS Brunswick, Maine, based on the findings of the investigation as presented in this Partial Closure Report. The hazardous waste closure of Building 642 and Building 643 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.

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**TABLE 1
INVESTIGATION PAINT-CHIP SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 642 – WEAPONS ADMINISTRATION
BUILDING 643 – SENTRY HOUSE
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID ⁽¹⁾		B642-PC01	B642-PC02	B643-PC01	
LOCATION		Building 642		Building 643	
		bunk room baseboard heater	storage room west wall	interior wall and door	
MATRIX		paint chip	paint chip	paint chip	
SAMPLE DATE		06/17/10	06/17/10	06/17/10	
METALS	CRITERIA		RESULTS		
	TCLP Limit (mg/L)	20x TCLP Limit (mg/kg)	(mg/kg)		
arsenic	5	100	7.5	0.59	0.28 J
barium	100	2000	200	16	130
cadmium	1	20	1.6	0.61	13
chromium	5	100	180	73	110
lead	5	100	67	37	1400
mercury	0.2	4	2.8	37	2.8
selenium	1	20	0.47 U	0.49 U	0.47 U
silver	5	100	0.094 U	0.097 U	0.093 U
PCB	CRITERIA		RESULTS		
			($\mu\text{g}/\text{kg}$)		
Aroclor-1016		--	330 U	300 U	63 U
Aroclor-1221		--	330 U	300 U	63 U
Aroclor-1232		--	330 U	300 U	63 U
Aroclor-1242		--	330 U	300 U	63 U
Aroclor-1248		--	330 U	300 U	63 U
Aroclor-1254		--	330 U	300 U	63 U
Aroclor-1260		--	330 U	300 U	63 U
Total Aroclor ⁽²⁾		50,000	330 U	300 U	63 U

Notes:

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

(2) Toxic Substances Control Act (TSCA) PCB limit for building materials is 50 ppm.

mg/kg milligram per kilogram

mg/L milligram per liter

 $\mu\text{g}/\text{kg}$ microgram per kilogram

J estimated

-- no criteria available

U not detected (with associated detection limit)

Shading indicates criteria exceeded

**TABLE 2
 INVESTIGATION SOIL SAMPLE RESULTS
 RCRA PARTIAL CLOSURE REPORT
 BUILDING 642 – WEAPONS ADMINISTRATION
 BUILDING 643 – SENTRY HOUSE
 NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID ⁽¹⁾	EPA RSLs ⁽²⁾ (µg/kg)	B642-SB01-0006	B642-SB01-0624	B642-SB02-0006	B642-SB02-0624	B642-SB03-0006	B642-SB03-0624	B642-SB04-0006	B642-SB04-0624
LOCATION		Building 642 transformer pad north side	Building 642 transformer pad north side	Building 642 transformer pad east side	Building 642 transformer pad east side	Building 642 transformer pad south side	Building 642 transformer pad south side	Building 642 transformer pad west side	Building 642 transformer pad west side
MATRIX		soil	soil	soil	soil	soil	soil	Soil	soil
DEPTH		0-6 inches bgs	6-24 inches bgs	0-6 inches bgs	6-24 inches bgs	0-6 inches bgs	6-24 inches bgs	0-6 inches bgs	6-24 inches bgs
SAMPLE DATE		6/17/10	6/17/10	6/17/10	6/17/10	6/17/10	6/17/10	6/17/10	6/17/10
PCB (µg/kg)									
Aroclor-1016	3,900	33 U	36 U	36 U	33 U	36 U	36 U	36 U	33 U
Aroclor-1221	140	33 U	36 U	36 U	33 U	36 U	36 U	36 U	33 U
Aroclor-1232	140	33 U	36 U	36 U	33 U	36 U	36 U	36 U	33 U
Aroclor-1242	220	33 U	36 U	36 U	33 U	36 U	36 U	36 U	33 U
Aroclor-1248	220	33 U	36 U	36 U	33 U	36 U	36 U	36 U	33 U
Aroclor-1254	220	33 U	36 U	36 U	297	36 U	36 U	36 U	33 U
Aroclor-1260	220	33 U	36 U	36 U	33 U	36 U	36 U	36 U	33 U
Total PCBs ⁽³⁾	1,000	33 U	36 U	36 U	297	36 U	36 U	36 U	33 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 mg/kg).
- bgs below ground surface
 µg/kg micrograms per kilogram
 U not detected (with associated detection limit)
 PCB polychlorinated biphenyl
 shading indicates criteria exceeded

**TABLE 3
PRE-CLEANING WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 642 – WEAPONS ADMINISTRATION
BUILDING 643 – SENTRY HOUSE
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID ⁽¹⁾	WTC	MEDEP floor	MEDEP wall	B642-WP01	B642-WP02	B642-WP03	B642-WP04	B642-WP04 (duplicate)	B642-WP05	B642-WP06	B642-WP07	B642-WP08	B642-WP08 (duplicate)	B642-WP09
LOCATION				Building 642 bunk room floor	Building 642 storage room No. 1 floor	Building 642 storage room No. 2 floor	Building 642 ready room west floor	Building 642 ready room west floor	Building 642 ready room east floor	Building 642 vehicle storage northwest floor	Building 642 vehicle storage southeast floor	Building 642 shop south floor	Building 642 shop south floor	Building 642 shop north floor
MATRIX				wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe
EVENT				pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning	pre-cleaning
SAMPLE DATE				06/17/10	06/17/10	06/17/10	06/17/10	06/17/10	06/17/10	06/17/10	06/17/10	06/17/10	06/17/10	06/17/10
METALS (µg/ft²)														
arsenic	36	--	--	4.6 U	20	4.6 U	4.8	5.3	6.2	7.2	19	10	9.3	11
barium	10000	--	--	48	220	83	130	120	190	210	180	130	140	100
cadmium	140	--	--	34	150	170	170	140	130	110	200	82	84	100
chromium	440	--	--	17	57	36	39	37	48	110	69	48	44	33
lead	NA	40	250	46 J	190 J	160 J	120 J	110 J	150 J	370 J	150 J	310 J	110 J	72 J
mercury	15	--	--	0.18	0.1	0.18	0.1	0.093	0.13	0.093 U	0.093 U	0.49	0.52	0.73
selenium	--	--	--	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U	9.3 U
silver	730	--	--	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U	1.9 U
SEMIVOLATILES (µg/ft²)														
acetophenone	--	--	--	10 J	19 U	18 J	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
benzaldehyde	--	--	--	33	26	47	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
bis(2-ethylhexyl)phthalate	--	--	--	1300 J	820	1700	480	440	430	160 U	80 U	1000	1200	170 U
butyl benzyl phthalate	--	--	--	40000	26000	50000	2700	2600	3100	180	25	190	160	47
di-n-butyl phthalate	--	--	--	NA	390	1200 J	140	130	130	19 U	19 U	19 J	19 U	28
di-n-octyl phthalate	--	--	--	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	32	49 J	19 U
other SVOCs	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
(1) Sample prefix "NASB" is not shown.
Wipe sample surface area: 10 cm by 10 cm
WTC Source: Table A-3 Settled Dust Screening Values and Supporting Toxicity Criteria from World Trade Center Indoor Environment Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks, May 2003
Shading indicates criteria exceeded
µg/ft² micrograms per square foot
J estimated result
U not detected (with associated detection limit)
-- no criteria available
NA not analyzed
ND not detected

**TABLE 4
POST-CLEANING INVESTIGATION WIPE SAMPLE RESULTS (EVENT 1)
RCRA PARTIAL CLOSURE REPORT
BUILDING 642 – WEAPONS ADMINISTRATION
BUILDING 643 – SENTRY HOUSE
NAVAL AIR STATION BRUNSWICK, MAINE
PAGE 1 of 2**

SAMPLE ID ⁽¹⁾	WTC	MEDEP floor	MEDEP wall	B642-WP10	B642-WP11	B642-WP12	B642-WP13	B642-WP14	B642-WP15	B642-WP16	B642-WP17	B642-WP18	B642-WP19	B642-WP20
LOCATION				Building 642 bunk room floor	Building 642 southwest bunk room wall	Building 642 storage room No. 1 floor	Building 642 storage room No. 1 west wall	Building 642 storage room No. 2 floor	Building 642 storage room No. 2 north wall	Building 642 ready room west floor	Building 642 ready room east floor	Building 642 ready room north wall	Building 642 ready room south wall	Building 642 shop north floor
MATRIX				wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe
EVENT				post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning
SAMPLE DATE				10/01/10	10/01/10	10/01/10	10/01/10	10/01/10	10/01/10	10/01/10	10/01/10	10/01/10	10/01/10	10/01/10
METALS (µg/ft ²)														
arsenic	36	--	--	4.6 UJ	4.6 U	20	53	4.6 U	4.6 U	4.6 UJ	4.6 UJ	4.6 U	4.6 U	14
barium	10000	--	--	37 J	12 J	68 J	15 J	34 J	15 J	170 J	110 J	19 J	16 J	160 J
cadmium	140	--	--	32	1.9 J	110	2.8 UJ	38	6.2 J	92	32	3.5 J	6.6 J	260
chromium	440	--	--	12 J	8 J	23 J	56 J	19 J	6.5 J	40 J	25 J	8 J	7.3 J	47 J
lead	NA	40	250	36	14	87	23	29	9.3	130	81	10	10	120
mercury	15	--	--	0.093 J	0.37	0.093 J	5.3	0.037 J	0.093 J	0.074 J	0.065 J	0.046 J	0.37	2.4
selenium	--	--	--	6.5 U	7.1 J	5.6 J	5.1 J	4.6 J	6.3 J	4 J	6.5 U	6.3 J	4.9 J	3.8 J
silver	730	--	--	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U

**TABLE 4
 POST-CLEANING INVESTIGATION WIPE SAMPLE RESULTS (EVENT 1)
 RCRA PARTIAL CLOSURE REPORT
 BUILDING 642 – WEAPONS ADMINISTRATION
 BUILDING 643 – SENTRY HOUSE
 NAVAL AIR STATION BRUNSWICK, MAINE
 PAGE 2 of 2**

SAMPLE ID ⁽¹⁾	WTC	MEDEP floor	MEDEP wall	B642-WP21	B642-WP22	B642-WP23	B642- WP23 (DUPLICATE)	B642-WP24	B642-WP25	B642-WP26
LOCATION				Building 642 shop south floor	Building 642 shop east wall	Building 642 vehicle storage northwest floor	Building 642 vehicle storage northwest floor	Building 642 vehicle storage southeast floor	Building 642 vehicle storage north wall	Building 642 vehicle storage south wall
MATRIX				wipe	wipe	wipe	wipe	wipe	wipe	wipe
EVENT				post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning	post-cleaning
SAMPLE DATE				10/01/10	10/01/10	10/01/10	10/01/10	10/01/10	10/01/10	10/01/10
METALS (µg/ft ²)										
arsenic	36	--	--	4.6 UJ	4.6 UJ	14	15	6.7 UJ	4.6 U	4.6 U
barium	10000	--	--	120 J	78 J	660 J	320 J	210 J	70 J	32 J
cadmium	140	--	--	87	9.3	170	140	130	21	5 J
chromium	440	--	--	38 J	19 J	190 J	67 J	76 J	36 J	19 J
lead	NA	40	250	130	22	220	160	120	78	56
mercury	15	--	--	0.37	0.46	0.093 J	0.19 J	0.0093 J	0.0093 J	0.037 J
selenium	--	--	--	6.7 J	4.2 J	4.8 J	6.5 U	8.1 J	4.7 J	6.5 U
silver	730	--	--	3.7 U	2.2 J	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U

Notes:

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

Wipe sample surface area: 10 cm by 10 cm

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

µg/ft² micrograms per square foot

J estimated result

U not detected (with associated detection limit)

-- no criteria available

NA not applicable

Shading indicates criteria exceeded

**TABLE 5
 POST-CLEANING WIPE SAMPLE RESULTS (EVENT 2)
 RCRA PARTIAL CLOSURE REPORT
 BUILDING 642 – WEAPONS ADMINISTRATION
 BUILDING 643 – SENTRY HOUSE
 NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID ⁽¹⁾	WTC	MEDEP floor	MEDEP wall	B642-WP27	B642-WP27 (duplicate)	B642-WP28	B642-WP29	B642-WP30	B642-WP31	B642-WP32	B642-WP33	B642-WP34
LOCATION				Building 642 bunk room floor	Building 642 bunk room floor	Building 642 storage room No. 1 floor	Building 642 storage room No. 2 floor	Building 642 shop floor	Building 642 ready room west floor	Building 642 ready room east floor	Building 642 vehicle storage northwest floor	Building 642 vehicle storage southeast floor
MATRIX				Wipe	Wipe	Wipe	Wipe	Wipe	Wipe	Wipe	Wipe	Wipe
EVENT				Post-Cleaning	Post-Cleaning	Post-Cleaning	Post-Cleaning	Post-Cleaning	Post-Cleaning	Post-Cleaning	Post-Cleaning	Post-Cleaning
SAMPLE DATE				10/22/10	10/22/10	10/22/10	10/22/10	10/22/10	10/22/10	10/22/10	10/22/10	10/22/10
METALS (µg/ft ²)												
lead	NA	40	250	8.1	9.2	21	23	46	19	22	35	19

Notes:

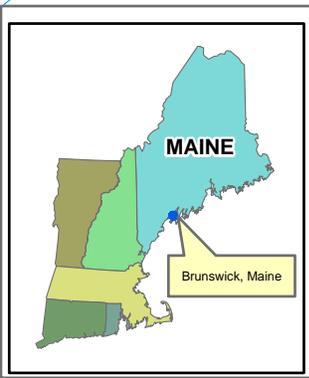
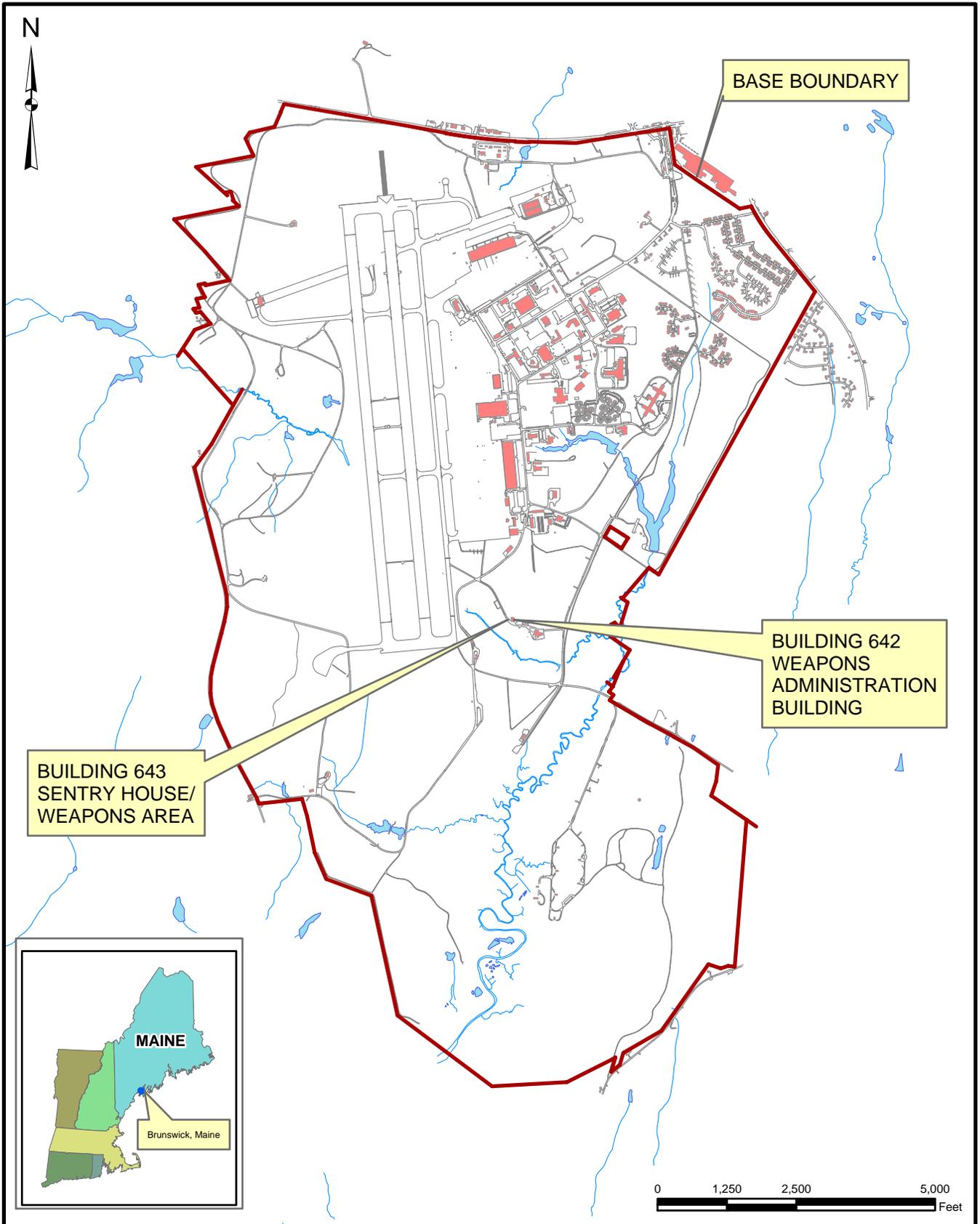
(1) Sample prefix "NASB" is not shown.

Wipe sample surface area: 10 cm by 10 cm

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

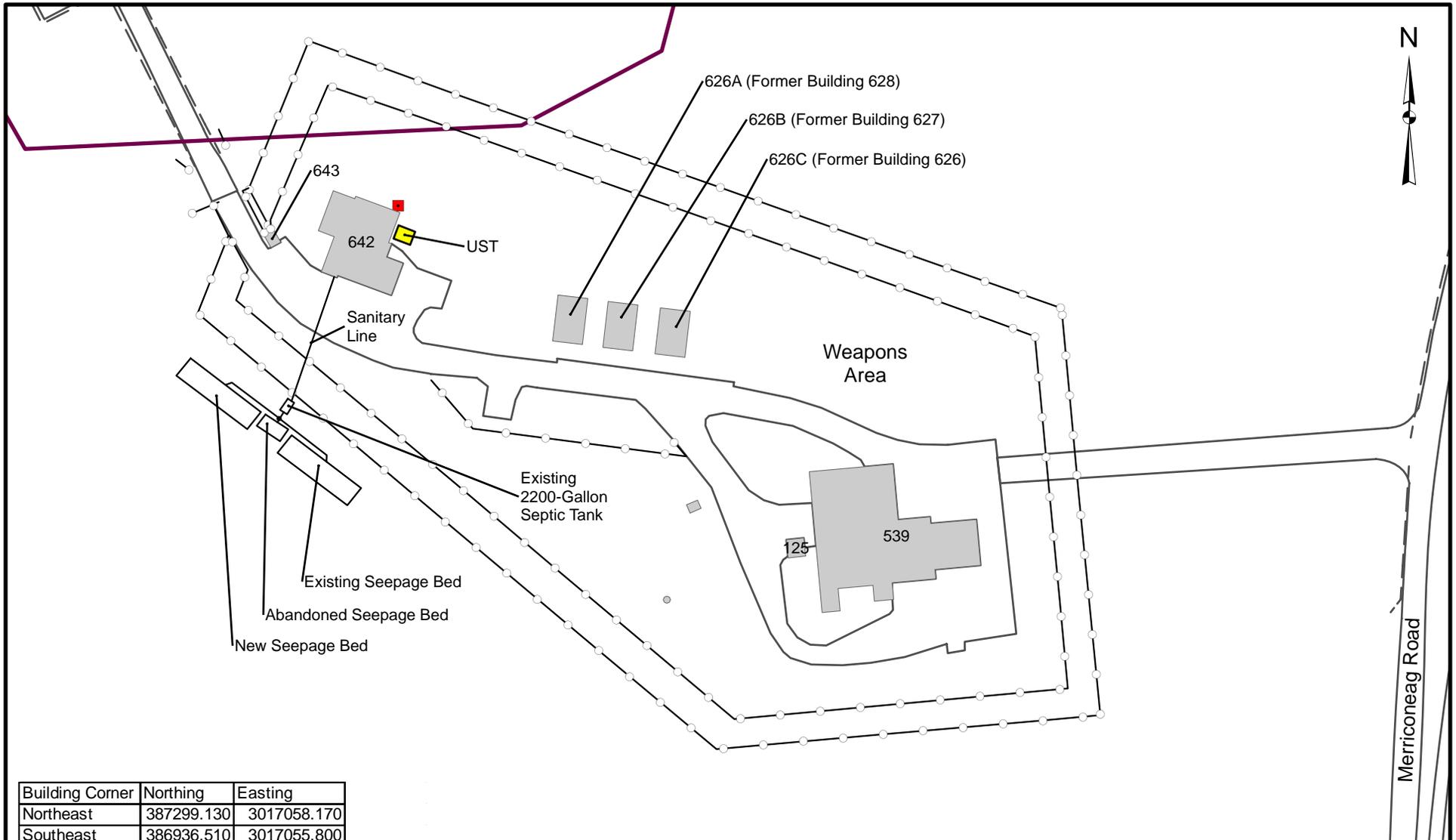
µg/ft² micrograms per square foot

Shading indicates criteria exceeded



SITE LOCATION MAP
BUILDING 642 - WEAPONS ADMINISTRATION BUILDING
AND BUILDING 643 - SENTRY HOUSE/WEAPONS AREA
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:_WASE_BLDG_642&643_LOCUS.MXD	
REV 0	DATE 11/19/10
FIGURE NUMBER 1	



Building Corner	Northing	Easting
Northeast	387299.130	3017058.170
Southeast	386936.510	3017055.800
Southwest	387010.760	3016730.430
Northwest	387088.750	3016731.300

Coordinates are in NAD 1983, Maine West, Feet



TETRA TECH

SITE PLAN

**BUILDING 642 - WEAPONS ADMINISTRATION BUILDING AND
 BUILDING 643 - SENTRY HOUSE/WEAPONS AREA
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE**

SCALE
AS NOTED

FILE
L:\NASB_BLDG_642&643_SITE_MAP.MXD

REV DATE
0 11/22/10

FIGURE NUMBER
FIGURE NO. 2

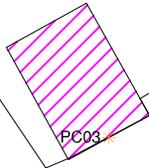
LEGEND

- WP01 ▲ FLOOR WIPE SAMPLE LOCATION
- WP03 ✱ PAINT CHIP SAMPLE LOCATION
- SB01 ● SOIL SAMPLE LOCATION
-  DECONTAMINATION WORK AREA
-  1984 ADDITION

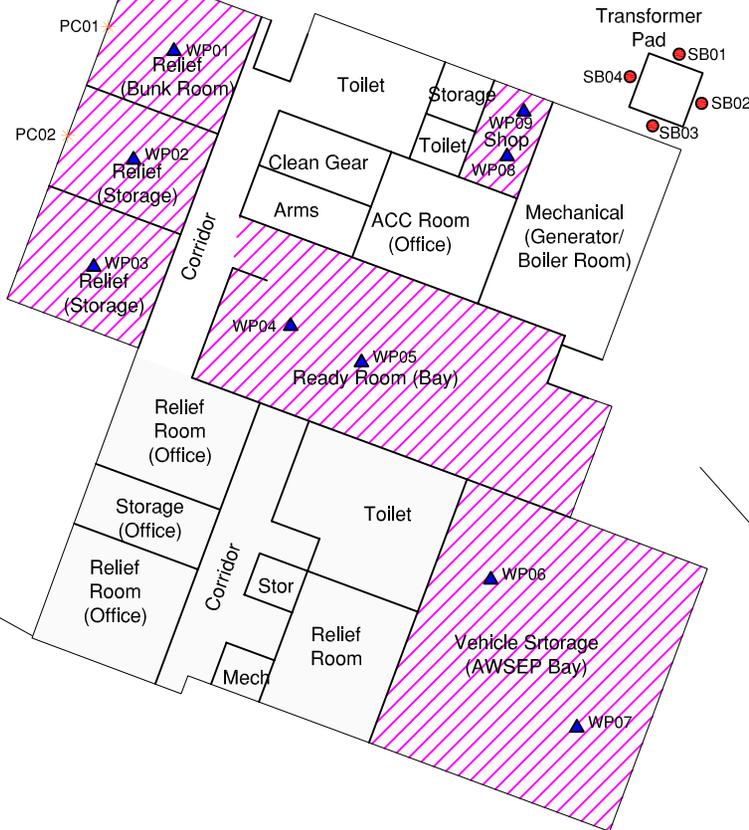
NOTE: INITIAL SAMPLING CONDUCTED ON 6/17/10



BUILDING 643



BUILDING 642



TETRA TECH NUS, INC.

INVESTIGATION SAMPLE LOCATIONS
BUILDING 642 - WEAPONS ADMINISTRATION AND
BUILDING 643 WEAPONS AREA SENTRY HOUSE
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE
AS NOTED

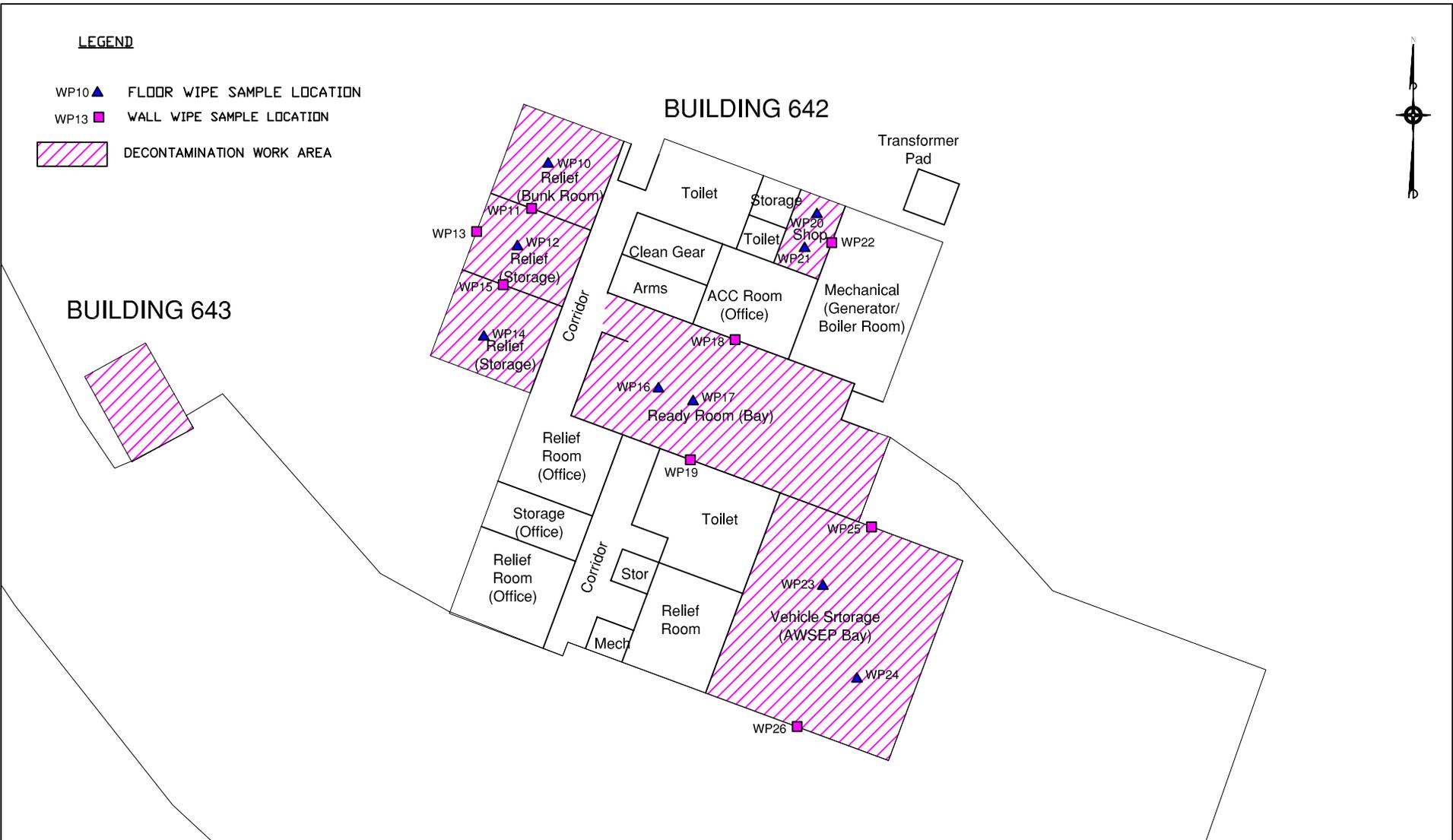
FILE
\\NASB_BLDG_642&643_PRE_SAMP.DWG

REV	DATE
0	11/22/10

FIGURE NUMBER
3

LEGEND

- WP10 ▲ FLOOR WIPE SAMPLE LOCATION
- WP13 ■ WALL WIPE SAMPLE LOCATION
-  DECONTAMINATION WORK AREA



BUILDING 643

BUILDING 642

Transformer Pad



TETRA TECH NUS, INC.

POST-CLEANING SAMPLES - EVENT 1
 BUILDING 642 - WEAPONS ADMINISTRATION AND
 BUILDING 643 WEAPONS AREA SENTRY HOUSE
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE
 AS NOTED

FILE
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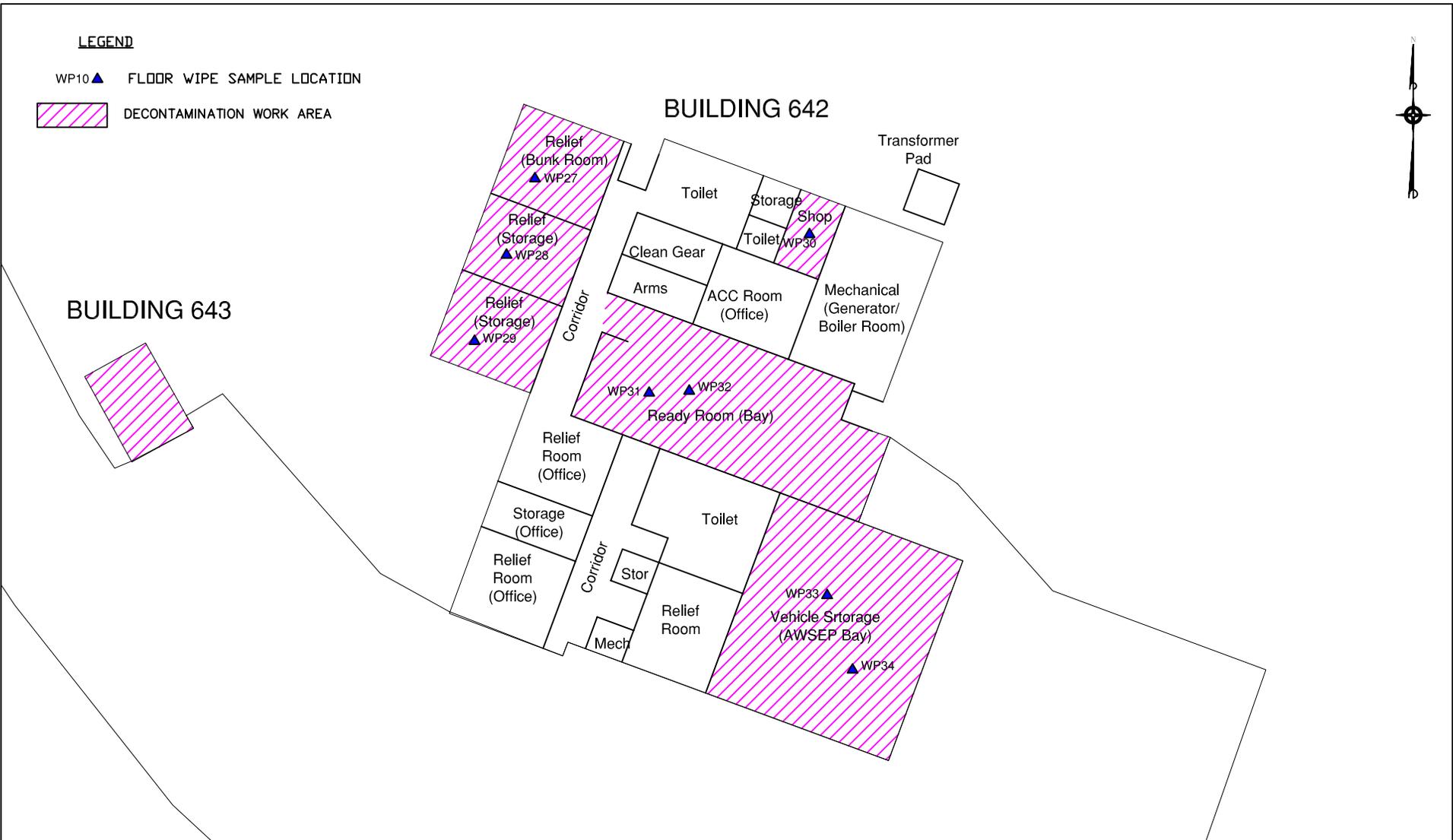
REV	DATE
0	11/22/10

FIGURE NUMBER
 4

LEGEND

WP10 ▲ FLOOR WIPE SAMPLE LOCATION

 DECONTAMINATION WORK AREA



BUILDING 643

BUILDING 642

GRAPHIC SCALE



TETRA TECH NUS, INC.

POST-CLEANING SAMPLES - EVENT 2
 BUILDING 642 - WEAPONS ADMINISTRATION AND
 BUILDING 643 WEAPONS AREA SENTRY HOUSE
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE
 AS NOTED

FILE
 V:\NASB_BLDG_642&643_POST2_SAMP.DWG

REV	DATE
0	11/22/10

FIGURE NUMBER
 5

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

Inspection Date: 6/03/10

Personnel: Chelsea Fellows / James Forrelli, P.E. / Mindi Messmer

Weather: Cloudy, Showers, 60s

GENERAL BUILDING INFORMATION / USES

Building Name: Building 642 – Reaction Force Building / WEPS Administration/AUW Area (Anti-Underwater Warfare)

Function: Offices / Bay Areas / Storage

Size: 4,319 SF

Year of Construction: 1978

Building 642 is located at NASB Brunswick in the Weapons Area west of Buildings 539 (Explosives Administration/Armory) and 626 (Inert Ordnance Storage). It was constructed in 1978 and served as the Reaction Force building / WEPS Administration (operated by the Marine Corp) for its entire history.

Building 642 consists of a multi-room, single level building on a concrete slab foundation. The exact size of the building is questionable – an addition was added to Building 642 in 1989 or 1990 but building lists indicate it is 2640 SF.

Building 642 was heated by a natural gas boiler with an associated generator inside the building. Building 643 (Sentry House in Weapons Area) is located northwest of Building 642.

HWSA INSPECTION / CONDITION

- No record of hazardous waste stored at Building 642.
- At the time of inspection, Building 642 was vacant and in poor condition. The interior consisted of 2 bay areas, 4 offices, 2 storage rooms, a bunk room, and a tool/gear room. Two restrooms and a mechanical room containing a boiler and associated generator were also present.
- Peeling paint was observed in three interior rooms at Building 642 (storage room, bunk room, and the restroom located on the north side of the building).
- Two openings in the flooring were observed in the vehicle maintenance area and were used for exhaust ventilation according to NAS personnel.
- Floor tiles and pipe installation possibly contain asbestos.
- 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 modifications to the structure, which may conceal signs of a past release, were observed.
- The contents stored in the storage rooms are unknown.
- UST filler pipes were observed on the east corner of the building. No evidence of a past leak from this UST was observed.
- Three pole-style transformers were observed mounted on a pad located on the southeast side of Building 642.

POTENTIAL PCB-CONTAINING TRANSFORMERS

Three pole-style transformers were observed mounted on a pad located on the north side of Building 642. The transformers are not in the NASB transformer database. New 75 kVa transformer indicated on 1976 plans in approximate location of current transformers. Considering the age of Building 642, the transformers may be a potential source of PCB contamination if a leak has occurred.

APPLICABLE REPORTS / DOCUMENTS

Available historical aerial photos were reviewed for past uses:

1943 map – Building 642 area not shown on map.

1946 map – Same as 1943 map.

1952 map – Same as 1943 map.

1953 aerial – Building 642/643 area appears to be wooded however coverage is not good.

1956 map – Vacant. Merriconeag Road shown to the east and Dump Road shown to the northwest.

1957 map – Buildings 539 and 540 (Sentry House) shown to the east of current Building 642 location. Fenced area shown but other buildings in area not shown. (1957-7.jpg) Dump pit shown to the southwest across Mere Brook. East to west oriented underground cable shown just north of the compound and railroad tracks shown parallel to the east side Merriconeag Road. Underground pipeline shown east of Merriconeag Road. Pit identified to the northwest in approximate location of Sites 1/3.

1958 aerial – Area of Buildings 642/643 vacant/wooded area along edge of old landfill (Current Sites 1 & 3 location). Buildings 539 and 540 visible within fenced area. Houses/barns visible to the southeast of the fenced AUW compound. Building visible across entrance to AUW compound on east side of Merriconeag Road.

1962 map – Building 642 not shown on map.

1975 map – Same as 1962 map.

1978 aerial – Buildings 642 and 643 visible within fenced area along with Bunkers 626, 627 and 628 and Building 539. Several other smaller structures visible to the southeast and northeast of Building 539. Houses/barns to the southeast no longer present. Parking area visible to the west of Building 642 outside of fenced area.

1978 map – Buildings 642 and 643 not shown on map. Buildings 539 and Bunkers 626, 627 and 628 shown to the east. Fenced area shown around AUW compound.

1979 map – Building 642/643 area not shown on map.

1981 aerial – same as 1978 aerial. No building visible across Merriconeag Road.

1983 map – Building 642 shown. Buildings 626, 627, 628 and 539 shown to the east within fenced area. Buildings 540 and 643 not shown. Building 71 shown to the northeast of the compound.

1984 aerial – same as 1978 and 1981 aerials.

1989 map – Same as 1983 map.

1989 aerial – same as 1984 aerial except addition to the southern side of the Building 642 structure is visible.

1993 aerial – same as 1989 aerial.

1997 aerial – same as 1989 aerial.

2006 map – Buildings 642 and 643 shown with Buildings 539, 626, 627 and 628 shown to the east within the fenced area. Building 125 shown adjacent to the west side of Building 539.

NAS historical site lists include Buildings 642 and Building 643 starting in 2006 - construction dates of 1978. Building 642 is listed as 2640 SF and Building 643 140 SF.

Two underground storage tanks (USTs) are listed in the NAS database for Building 642 (642.0 and 642.1). One of the tanks (642.0) is listed as a 1,000 gallon UST for storage of #2 fuel oil that was installed in 1977, removed in 1992 and replaced with a new UST. The other UST (642.1) is listed as a 1,000-gallon #1 fuel oil tank installed in 1992. According to plant personnel at the time of the initial walkthrough the tank was present but had been drained. The tank was removed on 8/30/10. There are no above ground storage tanks (ASTs) or oil-water separators (OWS) registered to Building 642. A sanitary septic system is located on the northwestern side of Building 642. Historical plans indicate that the sanitary system was altered in 1989 or 1990 and likely included installation of a new septic tank, seepage bed and distribution box. A historic plan (date unknown) states that Building 642 has total SF of 4450 after renovations.

HAZARDOUS WASTE STORAGE RECORDS

No hazardous waste was historically stored at Building 642 according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith. The NAS hazardous waste database lists hazardous waste generated by Weapons department but are not segregated by Building.

MISCELLANEOUS NOTES

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

INSPECTOR SIGNATURE: Mindi Messmer

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

Inspection Date: 6/03/10

Personnel: Chelsea Fellows / James Forrelli, P.E. / Mindi Messmer

Weather: Cloudy, Showers, 60s

GENERAL BUILDING INFORMATION / USES

Building Name: Building 643 – Sentry House/Weapons Area
Function: Guard Shack
Size: 140 SF
Year of Construction: 1978

Building 643 is located at NASB Brunswick in the Weapons Area west of Buildings 539 (Explosives Administration/Armory) and 626 (Inert Ordnance Storage). It was constructed in 1978 and served as a guard shack for its entire history.

Building 643 consists of a 140 SF single room, single level building on a slab foundation.

Building 643 is associated with Building 642 – Reaction Force Building.

HWSA INSPECTION / CONDITION

No record of hazardous waste stored at Building 643.

At the time of inspection, Building 643 was vacant and in very poor condition. The interior consisted of one room.

Peeling paint (possibly containing lead) was observed on the exterior and interior of the building.

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 modifications to the structure, which may conceal signs of a past release, were observed.

POTENTIAL PCB-CONTAINING TRANSFORMERS

No transformer that could be a potential source of polychlorinated biphenyls (PCBs) contamination in the event of a leak was observed. According to the NASB transformer database there are no transformers associated with Building 643.

APPLICABLE REPORTS / DOCUMENTS

Available historical aerial photos were reviewed for past uses:

1943 map – Building 642 area not shown on map.

1946 map – Same as 1943 map.

1952 map – Same as 1943 map.

1953 aerial – Building 642/643 area appears to be wooded however coverage is not good.

1956 map – Vacant. Merriconeag Road shown to the east and Dump Road shown to the northwest.

1957 map – Buildings 539 and 540 (Sentry House) shown to the east of current Building 642 location. Fenced area shown but other buildings in area not shown. (1957-7.jpg) Dump pit shown to the southwest across Mere Brook. East to west oriented underground cable shown just north of the compound and railroad tracks shown parallel to the east side Merriconeag Road. Underground pipeline shown east of Merriconeag Road. Pit identified to the northwest in approximate location of Sites 1/3.

1958 aerial – Area of Buildings 642/643 vacant/wooded area along edge of old landfill (Current Sites 1 & 3 location). Buildings 539 and 540 visible within fenced area. Houses/barns visible to the southeast of the fenced AUW compound. Building visible across entrance to AUW compound on east side of Merriconeag Road.

1962 map – Building 642 parcel not shown on map.

1975 map – Same as 1962 map.

1978 aerial – Buildings 642 and 643 visible within fenced area along with Bunkers 626, 627 and 628 and Building 539. Several other smaller structures visible to the southeast and northeast of Building 539. Houses/barns to the southeast no longer present. Parking area visible to the west of Building 642 outside of fenced area.

1978 map – Buildings 642 and 643 not shown on map. Buildings 539 and Bunkers 626, 627 and 628 shown to the east. Fenced area shown around AUW compound.

1979 map – Building 642/643 area not shown on map.

1981 aerial – same as 1978 aerial. No building visible across Merriconeag Road.

1983 map – Building 642 shown. Buildings 626, 627, 628 and 539 shown to the east within fenced area. Buildings 540 and 643 not shown. Building 71 shown to the northeast of the compound.

1984 aerial – same as 1978 and 1981 aerials.

1989 map – Same as 1983 map.

1989 aerial – same as 1984 aerial except addition to the southern side of the Building 642 structure is visible.

1993 aerial – same as 1989 aerial.

1997 aerial – same as 1989 aerial.

2006 map – Buildings 642 and 643 shown with Buildings 539, 626, 627 and 628 shown to the east within the fenced area. Building 125 shown adjacent to the west side of Building 539.

NAS historical site lists include Buildings 642 and Building 643 starting in 2006 - construction dates of 1978. Building 642 is listed as 2640 SF and Building 643 140 SF.

There are no above ground storage tanks (ASTs), underground storage tanks (USTs) or oil-water separators (OWS) registered to Building 643.

HAZARDOUS WASTE STORAGE RECORDS

No hazardous waste was historically stored at Building 643 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: Mindi Messmer

PHOTOGRAPHS



No. 1 Building 642 Weapons Administration – NAS Brunswick
Weapons Administration east elevation

June 3, 2010



No. 2 Building 642 Weapons Administration – NAS Brunswick
Weapons Administration transformers mounted on a concrete pad at the northeast corner

June 3, 2010



No. 3 Building 642 Weapons Administration – NAS Brunswick June 3, 2010
Weapons Administration underground storage tank filler pipes located on the east side of the building



No. 4 Building 642 Weapons Administration – NAS Brunswick June 3, 2010
Weapons Administration vehicle storage bay



No. 5 Building 642 Weapons Administration – NAS Brunswick
Weapons Administration mechanical room

June 3, 2010



No. 6 Building 642 Weapons Administration – NAS Brunswick
Building 642 ready room

June 3, 2010



No. 7 Building 642 Weapons Administration – NAS Brunswick October 1, 2010
Weapons Administration storage room #1 showing wipe sample location (B642-WP012)



No. 8 Building 642 Weapons Administration – NAS Brunswick October 1, 2010
Weapons Administration shop showing wipe sampling locations (B642-WP21 and B642-WP20)



No. 1 Building 643 Weapons Area Sentry House – NAS Brunswick June 3, 2010
Sentry House - southwest elevation



No. 2 Building 643 Weapons Area Sentry House – NAS Brunswick June 3, 2010
Sentry House interior view (prior to loose paint removal)