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NAS BRUNSWICK
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FINAL RESOURCE CONSERVATION AND RECOVERY ACT PARTIAL CLOSURE REPORT
FOR BUILDING 29 WITH TRANSMITTAL LETTER NAS BRUNSWICK ME
3/31/2011
NAS BRUNSWICK

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

March 31, 2011

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

Subj: Final RCRA Partial Closure Report for Building 29

Dear Mr. Vigneault:

A copy of the Final RCRA Partial Closure Report for Building 29 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,



fm LISA M. JOY
Environmental Director

Enclosure: (1) Final RCRA Partial Closure Report for Building 29

Copy to:
NAVFAC Mid-Atlantic (B. Abraham)
NAS Brunswick (M. Fagan/D. Smith)
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RCRA PARTIAL CLOSURE REPORT
for
BUILDING 29 – AUTO HOBBY SHOP
NAVAL AIR STATION BRUNSWICK, MAINE
USEPA IDENTIFICATION NUMBER ME8170022018
MARCH 2011

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 29 parcel at Naval Air Station Brunswick (NAS Brunswick).

2. PROPERTY DESCRIPTION

Building 29 (Auto Hobby Shop) parcel is located in the central portion of NAS Brunswick (Figure 1). The 2.53-acre parcel is bordered as follows (Figure 2):

- to the north by Neptune Drive and Building 211 parcel;
- to the east by the Building 201 (Galley) parcel;
- to the south by Building 81 (CHRIMP) parcel, the former Building 52 (Storehouse), currently a concrete loading dock and Building 51 (Fire Prevention/NCIS Bldg.) parcel;
- to the west by Orion Street and Hangar 5 parcel.

Site 9 (Neptune Drive Disposal Site) spans the northeast area of the Building 29 parcel. This site is the location of a former solid waste incinerator and the landfill for the resulting incinerator ash. In addition, liquid waste and solvents were disposed of at Site 9. The Site is being investigated by the Navy's Installation Restoration Program (IRP) (Navy, 2006).

Building 79 (Hobby Shop Storage) is located within the Building 29 parcel, and the land area surrounding Building 79 is part of this parcel report. However, Building 79 itself was included in the RCRA Partial Closure Report for Building 79 (Hobby Shop Storage) and is not evaluated in this report.

Building 29 was constructed in 1988 and has an area of 12,000 square feet. It is single story, steel-truss roof with concrete masonry unit (CMU) wall structure on a concrete slab foundation. It served as the recreation rental and auto hobby shop for NAS Brunswick. One area was designated for painting operations. Small quantities of paint and thinner were used in the paint booth in 1991. Painting operations ceased and the paint booth was removed in mid-1992. The building interior consists of office, recreation rental, ski maintenance, metal shop, frame shop, engine repair area, repair bays, wash stalls, utility room and storage rooms. A vented, bench welding area in the building is infrequently used. The repair bays have aboveground electric lifts that have hydraulic fluid reservoirs. The building is heated with natural gas hot water boilers located in a boiler room.

The abrasive blasting shed is located immediately south of Building 29. The shed is an unheated CMU wall structure on a concrete slab. This shed was used to store chainsaws, ice augers, mowers, generators and other equipment.

A designated storage shed (Structure XXX) is located south of Building 29. It is a 64-square-foot unheated precast concrete structure and was used for recreational equipment storage. A flammable locker (Structure X4) is located southwest of Building 29. The locker is a 30-square-foot wooden structure with metal grate and concrete spill containment bottom. The locker was used to store gasoline cans.

Photographs of the Building 29 parcel are provided as an attachment to this report.

3. PROPERTY HISTORY AND RECORDS RESEARCH

The Tetra Tech NUS, Inc. (Tetra Tech) project team interviewed NAS Brunswick Environmental Department personnel and performed records research at both NAS Brunswick and the MEDEP office in Augusta, Maine to collect available information concerning the Building 29 parcel, including past use and operations at that location.

Records reviewed include historical aerial photographs, the NAS Brunswick Other Environmental Liabilities (OEL) Database, area-specific reports, facility plans and drawings, and hazardous waste records. Aerial photographs dated 1953, 1958, 1978, 1981, 1984, 1989, 1993, and 1997 (Sewall, 1953, 1958, 1978, 1981, 1984, 1989, 1993, and 1997) were reviewed. Additional aerial photographs for the parcel dated 1940, 1959, 1965, 1966, 1972, 1978, and 1980 were also reviewed (U.S. EPA, 1987). Public Works Department (PWD) site base maps dated 1943, 1946, 1952, 1956, 1969, 1975, 1989, and 2006 (PWD, 1943, 1946, 1952, 1956, 1969, 1975, 1989, and 2006) and PWD building lists for 1965, 1976, 2003, and 2008 (PWD, 1965, 1976, 2003, and 2008a) were also reviewed.

The 1946 historical plan is the earliest to show the Building 29 area. This plan shows Range Road running north-south through the area and an unnamed brook running east-west, with no other area features present. The 1956 historical plan shows the area bordered by First Street to the west and Avenue G to the north, with no structures present. Beginning with the 1958 aerial photograph, the area of the current Building 29 (Hobby Shop) parcel is shown with a parking area in the northern portion and a grass-covered area in the southern portion. In the 1975 historical plan, First Street is renamed Orion Street and Avenue G is renamed Neptune Drive. No further changes are noted until the 1989 aerial photograph and plan, which show Building 29, Building 79 and Structure XXX, with associated paved parking areas. In the 1997 aerial photograph, Structure X4 was present at the current location of Building 29 Parcel. No further changes are noted in photographs or plans dated after 1997.

Based on a review of the historical building lists and on discussions with NAS Brunswick Public Works Department personnel, Building 29 has been used as the auto hobby shop since its construction in 1988.

NAS Brunswick has a program in place that tracks hazardous waste to ensure proper handling and disposal. According to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith, hazardous waste generation was tracked by squadron and/or activity (department). An itemized list of hazardous wastes associated with hobby shop operations was obtained from the Hazardous Waste Database, for the period from 1990 through 2009. Information on the associated RCRA waste codes and quantities of waste was also included. This listing is provided as Table 1.

Building 29 has historically been (and is currently being) served by the base-wide sanitary sewer system (Navy, 2006). The NAS Brunswick Revised Oil/Water Separator List indicates one active oil/water separator (OWS) associated with Building 29 (PWD, 2008b). The OWS list also indicates that the repair bay floor drains and car wash of Building 29 are the source of flow to this 225-gallon, steel box in floor OWS, which eventually discharges to the sanitary sewer system.

According to MEDEP and NAS Brunswick spill records, no spills were reported in the Building 29 parcel (Environmental Department, 1999; Environmental Department 2005; and MEDEP, 2010).

The NAS Brunswick Transformer Database lists one non-polychlorinated-biphenyl (PCB) pad-mounted transformer for Building 29 as a 150-kVA, Non-PCB mineral oil unit manufactured by Rural Transformer & Electric (RTE) in 1987 (Serial No. 876006112) (PWD, 2009).

The first two digits of the serial number indicate that the transformer was manufactured in 1987, and is therefore unlikely to contain polychlorinated-biphenyl (PCB). As of July 1, 1979, the United States Environmental Protection Agency (EPA) prohibited all manufacturing of new PCB electrical equipment (transformers and capacitors). In addition, according to an electrical utility guide for identifying non-PCB transformers, all RTE transformers are non-PCB-containing (DTM, 2006).

According to NAS Brunswick records, one underground storage tank (UST) was associated with Building 29: a 550-gallon UST that stored waste oil was installed in 1987 and removed in January 1994. Three aboveground storage tanks (ASTs) were also associated with Building 29, according to NAS Brunswick records, as indicated below (Environmental Department, 2009). According to the Environmental Department, two 275-gallon ASTs were installed for waste oil storage in 1994 (near the former UST location) but were then replaced in 1996 by a 500-gallon concrete-vaulted AST. This AST has a spill bucket and double-walled aboveground piping and is located south of Building 29. In 1999, a 2,000-gallon fuel oil tank was installed on the eastern side of the building as part of the base-wide Boiler Decentralization and Facility Consolidation project. The tank is double-walled with double-walled piping and is also located in a paved area. It was closed in April 2009. Currently, the building's boiler uses natural gas.

Most of the Building 29 parcel is located within the former pre-1950 NAS Brunswick Skeet Range, however the likely shot-fall zone is located east of the parcel (figure 2). The range is being investigated under the Military Munitions Response Program (MMRP). This investigation includes analysis of soil samples collected from abutting and adjacent parcels east of the Building 29 parcel. Any adverse impacts to the parcel resulting from past range activities will be addressed by future MMRP investigations and/or remedial actions.

Groundwater flow is generally to the southeast across the Building 29 parcel, toward the unnamed stream and the two impoundments located south of Neptune Drive (Figure 2). Wells MW-09-001 and MW-09-227, located on the Building 29 parcel, are monitored on a semi-annual basis as part of the Site 9 Long Term Monitoring Program (LTMP). Groundwater levels are measured and groundwater samples are collected from these wells as part of the LTMP for VOC laboratory analysis on a semi-annual basis. The depths to groundwater measured during the LTMP on the Building 29 parcel range from approximately 6 to 7 feet below ground surface (bgs). Groundwater flow is generally to the southeast across the Building 29 parcel, toward the unnamed stream and the two impoundment ponds located south of Neptune Drive (Figure 2).

Well MW-09-001, located at the south central portion of the parcel, was installed in 2007 in order to assess groundwater quality southwest of the Site 9 Landfill. Cis- 1,2-dichloroethene and trichloroethene concentrations have been below Federal Maximum Contaminant Levels (MCLs) and Maine Maximum Exposure Guidelines (MEGs) (H&S, 2010) in groundwater samples collected from this well. DRO and metals analysis were suspended in 2009 for MW-09-001 since concentrations were historically below applicable criteria (ECC, 2009).

Monitoring Well MW-09-227 is located in the northwestern portion of the Building 29 parcel and hydraulically side gradient of the main portion of the Site 9 landfill area. Cis- 1,2-dichloroethene, trichloroethene and methyl tert butyl ether concentrations have historically been below MCLs and MEGs (H&S, 2010) in groundwater samples collected from this well.

Groundwater underlying the Building 201 parcel, located east of Building 29 parcel has been impacted by the migration of contaminated groundwater from the upgradient IRP Site 9 source area (groundwater flow is in a south-southeast direction from the Site 9 landfill/source area). Long-term protectiveness of the remedy will be verified by continued monitoring, in accordance with the LTMP (Tetra Tech, 2010b). Any additional action that may be needed in the future to address potential future adverse impacts to the Building 29 parcel, resulting from Site 9, will be addressed as part of the IRP.

4. SITE VISIT AND INVESTIGATION

An initial site visit was conducted on November 10, 2010 by Mr. Brian Geringer, Mr. Brandon Smith, P.E., and Mr. James Forrelli, P.E., of Tetra Tech. The interior and exterior areas of Building 29 were inspected. The purpose of the site visit was to verify information gathered during the records search and to collect information as necessary to prepare this closure report. Tetra Tech personnel were accompanied by Mr. D. Bruce Smith, the NAS Brunswick Hazardous Waste Manager. The Building 29 parcel was visually inspected for signs of hazardous waste generation or storage. Site visit observations, recorded on the attached Building Inspection Form⁽¹⁾, are summarized below:

- At the time of the site visit, Building 29 was unoccupied, vacant, and in fair condition.
- Mower storage shed (Structure XXX) and flammable locker (Structure X4) were vacant.
- The interior of Building 29 consisted of office, recreation rental, ski maintenance, metal shop, frame shop, engine repair area, repair bays, wash stalls, utility room and storage rooms.
- No structural modifications, which could conceal signs of a past release, were observed.
- A vented, bench welding area was located in metal shop. Staining was observed on the floor of metal shop.
- Grinding, parts washing, and glove-box sand-blasting areas were identified within engine repair area. Staining was observed on the floor and walls at various locations of engine build up area.
- The OWS associated with Building 29 was located at west end of work stall area. Numerous stains were observed on the floor of work stall area including repair bay areas and benches.
- Blast media ("Black Beauty"), aqueous parts-washing solution, and waste oil were reportedly used and/or stored at Building 29. Waste oil was pumped to the 500-gallon AST located south of Building 29.
- Trench drains were observed in the floor of repair bay areas and wash stalls. According to NAS Brunswick records, these floor drains and car wash of Building 29 are connected to the OWS of the building as discussed in Section 3.
- No peeling and flaking paint was observed on the exterior or interior of the building.
- One non-polychlorinated-biphenyl (PCB) pad-mounted transformer was located south of Building 29.
- A 500-gallon, concrete-vaulted AST (A29.3) was located south of the Building 29. The tank is labeled "used oil, aircraft fuel, hydraulic fluid, engine oil", as observed on March 9, 2011.
- A 2,000-gallon AST (A29.4) was installed on the eastern side of the building in 1999. This fuel oil tank is double-walled with double-walled piping and was closed in April 2009. The tank appeared to be in good condition and no evidence of a past leak from this AST was observed.
- A flammable locker (Structure X4) is located southwest of Building 29 and used to store gasoline cans. Debris and dirt were observed on the floor.
- The abrasive blasting shed was used to store chainsaws, ice augers, mowers, generators and other equipment. Staining was observed on the floor of this shed.

Based on the site visit observations and records research findings, it was determined that closure actions were required at Building 29 parcel to satisfy the MEDEP hazardous waste closure requirements. Environmental samples were collected at Building 29 to investigate the potential presence of hazardous waste residue that may have been associated with Building 29.

On January 24, 2011, three pre-cleaning wipe samples from floors were collected from 3 locations in Building 29, including machine bay, repair bays 4 and 10, as shown on Figure 3. Wipe samples were collected with cotton gauze saturated with deionized water for RCRA metals analysis. A 10-centimeter (cm) by 10-cm sampling area was wiped with the cotton gauze while applying moderate pressure. Floor wipe samples were submitted for RCRA metals analysis, by

Tetra Tech's subcontracted laboratory, Analytics Environmental Laboratories. 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 29 investigation are presented in Table 2. 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 ($\mu\text{g}/\text{ft}^2$)
Walls and other flat surfaces up to a height of 8 feet: 250 $\mu\text{g}/\text{ft}^2$
Surfaces above 8 feet: visibly clean (dust-free)

There are no Maine criteria for the other seven RCRA metals or for the SVOCs. However, for these RCRA Partial Closure activities, the MEDEP has approved the use of World Trade Center (WTC) Settled Dust Screening Values (WTC, 2003) as clearance values for wipe sample results for six of the other seven metals (there are no WTC screening values for selenium). Therefore, the investigation and closure actions were designed to meet the lead-contaminated settled dust criteria and all other metals-contaminated settled dust clearance values.

As shown in Table 2, lead exceeded the MEDEP criterion for floors ($40 \mu\text{g}/\text{ft}^2$) in all floor-wipe samples, ranging from $88 \mu\text{g}/\text{ft}^2$ (repair bay 10) to $140 \mu\text{g}/\text{ft}^2$ (machines bay). All levels of other detected metals were below the WTC screening values.

Based on site visit observations and the analytical results, cleaning of Building 29 (discussed in Section 6) was required to remove lead-contaminated residue from Building 29 parcel, where lead residue was present at levels that exceeded the associated MEDEP criterion for dust on floors, walls and other flat surfaces (discussed in Section 6).

5. HAZARDOUS WASTE GENERATION AND STORAGE

Based on the records research and NAS Brunswick Environmental Department personnel interviews, former operations at Building 29 generated various wastes on an episodic basis; these wastes were handled and disposed of under the NAS Brunswick hazardous waste department, as discussed in Section 3.

Based on site visit observations and sampling results, lead-contaminated residue exceeding clearance criteria was generated at Building 29. No other metals exceeded applicable settled dust clearance values. The areas impacted by lead-dust were also addressed by the closure actions described in Section 6.0.

6. CLOSURE ACTIONS

Closure actions were required at Building 29 to satisfy the MEDEP hazardous waste closure requirements. Closure actions were conducted at Building 29 from January 21, 2011 through March 16, 2011, as discussed below.

Tetra Tech's cleaning subcontractor (TK&K Services [TK&K]) performed floor- and wall- cleaning activities at Building 29 based on the site visit observations and records research findings, as discussed in Section 4. On January 21, 2011, cleaning activities were conducted in Building 29 including the repair bays, metal shop, engine repair area, machine bay and three ski shop rooms. The floors were manually swept and then vacuumed with a high-efficiency particulate air (HEPA) vacuum. After sweeping and vacuuming, the floor drains were covered and sealed (to prevent cleaning fluid from entering them). Floors and walls were then 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 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 areas.

Floor cleaning was conducted on February 1, 2011 by TK&K in the abrasive blasting shed area, using the procedures described above. All cleaning wastewater was containerized using a wet-vacuum, placed in a 55-gallon drum, and transferred to the NAS Brunswick hazardous waste department for disposal.

After the work areas were allowed to dry, nineteen (plus two duplicate) post-cleaning floor-wipe samples and thirty five (plus three duplicate) wall- or bench-wipe samples were collected at the cleaned areas of Building 29 from January 24 to January 26, 2011. Four wipe samples were collected from the abrasive blasting shed on February 1, 2011 (Figure 4). Samples were submitted to Tetra Tech's subcontracted analytical laboratory for RCRA metals analysis. The resulting analytical data underwent limited data validation consisting of field duplicate evaluation blank contamination evaluation and completeness evaluation. The post-cleaning event 1 wipe sample results are included in Table 3. Five confirmatory floor-wipe samples, the lead level results (42 to 150 $\mu\text{g}/\text{ft}^2$) exceeded the MEDEP floor criterion. No wall and bench wipe sample exceeded the MEDEP wall and other flat surface criterion for lead.

Based on Event 1 results, a second decontamination event of floor cleaning activities was conducted on February 22, 2011 by TK&K in repair bays 2, 3, 5, 6 and the engine repair area, using the procedures described above. All cleaning wastewater was containerized using a wet-vacuum, placed in 55-gallon drums, and transferred to the NAS Brunswick hazardous waste department for disposal. After the work areas were allowed to dry, five floor-wipe confirmatory samples were collected from the cleaned areas on February 23, 2011 (Figure 5). Samples were submitted to Tetra Tech's subcontracted analytical laboratory for lead analysis. The resulting analytical data underwent limited data validation consisting of blank contamination and completeness evaluation. The post-cleaning Event 2 wipe sample results are included in Table 4. Lead levels in these samples were well below the associated MEDEP floor criteria, therefore, additional closure action is not warranted at Building 29.

On March 16, 2011, the concrete spill containment bottom of Structure X4 was cleaned to meet the visibly clean (dust-free) standard. Upon completion, the Tetra Tech field representative performed a visual inspection of the cleaned areas.

7. OTHER ENVIRONMENTAL CONSIDERATIONS

Any electrical transformers, OWS, USTs or ASTs known to be associated with Building 29 are discussed in Sections 3 and 4. No other transformers, OWS, or tanks were observed in the immediate vicinity of the building.

8. LIMITATIONS

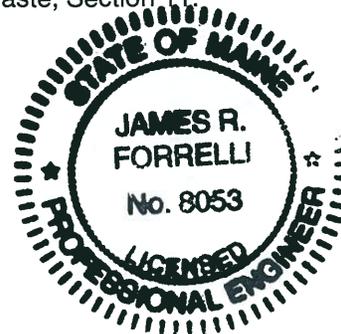
This investigation of the hazardous waste closure requirement applies to the Building 29 parcel (as shown on Figure 2) only.

9. CERTIFICATION

Based on the findings of the investigation as presented in this Partial Closure Report, historical operations resulted in the generation of hazardous waste, including residue in the form of lead-contaminated residue in several areas of Building 29, NAS Brunswick, Maine. Closure actions were conducted to remove lead-contaminated residue to levels meeting MEDEP criteria for lead-contaminated settled dust surfaces applicable for RCRA closures. Therefore, the hazardous waste closure of Building 29 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.

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TABLE 1
HAZARDOUS WASTE QUANTITIES 1990 THROUGH 2009
RCRA PARTIAL CLOSURE REPORT
BUILDING 29 – AUTO HOBBY SHOP PARCEL
NAVAL AIR STATION BRUNSWICK, MAINE

Description	RCRA Waste Code	Quantity (pounds)
aerosol	G06 G11	798
aerosol empty	G06 G11	791.40
antifreeze nrcr	G09, G16, FC, D004, D008	3299.54
blast media	D006, D007	83
contaminated oil	G16	11.66
gasoline/water mix	G19, G11	164.36
lamps, fluorescent 4 foot	U01	1.92
lamps, fluorescent 6 foot	U01	0.96
lamps, fluorescent stick	U01	0.4
solvent	D001, D008, D018, D39, D35, D40	616
no-halogenated solvent	F003	3920
paint	G06	14.06

**TABLE 2
PRE-CLEANING WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 29 – AUTO HOBBY SHOP
NAVAL AIR STATION BRUNSWICK, MAINE**

SAMPLE ID ⁽¹⁾				B29-WP01	B29-WP02	B29-WP03
LOCATION				Machine bay floor	Bay 10 floor	Bay 4 floor
MATRIX				wipe	wipe	wipe
SAMPLE DATE				01/24/11	01/24/11	01/24/2011
				CRITERIA		
METALS ($\mu\text{g}/\text{ft}^2$)	WTC	MEDEP floor	MEDEP wall			
arsenic	36	--	--	4.6 UJ	8.1 U	4.6 UJ
barium	10000	--	--	120	640	330
cadmium	140	--	--	8.2 J	7.7 J	20
chromium	440	--	--	42	100	75
lead	NA	40	250	140	88	91
mercury	15	--	--	0.093 UJ	0.093 UJ	0.093 UJ
selenium	--	--	--	6.5 U	6.5 U	6.5 U
silver	730	--	--	0.65 J	1.5 J	0.74 J

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

 $\mu\text{g}/\text{ft}^2$ micrograms per square foot

U not detected (with associated detection limit)

J estimated result

-- no criteria available

NA not applicable

Shading indicates criteria exceeded

TABLE 3
POST-CLEANING EVENT 1 WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 29 – AUTO HOBBY SHOP
NAVAL AIR STATION BRUNSWICK, MAINE
PAGE 1 OF 7

SAMPLE ID ⁽¹⁾		B29-WP04	B29-WP05	B29-WP06	B29-WP07	B29-WP08	B29-WP09	B29-WP10	B29-WP10 (duplicate)	B29-WP11		
LOCATION		metals bay floor	metals bay west wall	metals bay south wall	metals bay east wall	engine repair bay floor	engine repair bay west wall	engine repair bay south wall	engine repair bay south wall	engine repair bay east wall		
MATRIX		wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe		
SAMPLE DATE		01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11		
		CRITERIA										
METALS ($\mu\text{g}/\text{ft}^2$)	WTC	MEDEP floor	MEDEP wall									
arsenic	36	--	--	4.6 U	4.6 U	4.6 U	4.6 U	4.6 UJ	4.6 UJ	4.6 U	4.6 U	4.6 U
barium	10000	--	--	52	39	37	14 U	37	130	54	18 U	9.2 UJ
cadmium	140	--	--	2.4 J	1.9 J	2.8 UJ	1.9 J	2.2 J	4.9 J	1.6 J	2.8 UJ	2.8 UJ
chromium	440	--	--	17	15 U	21	4.5 UJ	15 U	62	20	6.3 UJ	3.7 UJ
lead	NA	40	250	24	15	17	6.5	44	150	20	12	24
mercury	15	--	--	0.093 UJ	0.28	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ
selenium	--	--	--	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U
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

TABLE 3
POST-CLEANING EVENT 1 WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 29 – AUTO HOBBY SHOP
NAVAL AIR STATION BRUNSWICK, MAINE
PAGE 2 OF 7

SAMPLE ID ⁽¹⁾				B29-WP12	B29-WP13	B29-WP14	B29-WP15	B29-WP16	B29-WP17	B29-WP18	B29-WP19	B29-WP20			
LOCATION				engine repair bay bench	bay 1 floor	bay 1 west wall	bay 2 floor	bay 3 floor	bay 4 floor	bay 4 east wall	between bays 2 and 3 south wall	machine bay floor			
MATRIX				wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe			
SAMPLE DATE				01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11			
				CRITERIA											
METALS (µg/ft²)				WTC	MEDEP floor	MEDEP wall									
arsenic				36	--	--	4.6 UJ	4.6 U	4.6 U	4.6 UJ	4.6 UJ	4.6 U	4.6 U	4.6 UJ	
barium				10000	--	--	87	48	17 U	150	100	50	22 U	45	28 U
cadmium				140	--	--	5.8 J	2.3 J	1.6 J	6.7 J	9.3 J	4.3 J	2.1 J	2.8 UJ	1.3 J
chromium				440	--	--	14 U	6.5 UJ	4.3 UJ	41	73	7.1 UJ	10 UJ	82	7.5 UJ
lead				NA	40	250	45	20	29	56	150	31	12	7.8	16
mercury				15	--	--	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ
selenium				--	--	--	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U
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

TABLE 3
POST-CLEANING EVENT 1 WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 29 – AUTO HOBBY SHOP
NAVAL AIR STATION BRUNSWICK, MAINE
PAGE 3 OF 7

SAMPLE ID ⁽¹⁾		B29-WP20 (duplicate)	B29-WP21	B29-WP22	B29-WP23	B29-WP24	B29-WP25	B29-WP26	B29-WP27	B29-WP28		
LOCATION		machine bay floor	Machine bay west wall	Machine bay east wall	Bay 12 west wall	Bay 12 floor	Bay 12 bench	Bay 11 floor	Bay 11 bench	Between Bays 10 and 11 north wall		
MATRIX		wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe		
SAMPLE DATE		01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11		
		CRITERIA										
METALS (µg/ft²)	WTC	MEDEP floor	MEDEP wall									
arsenic	36	--	--	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ		
barium	10000	--	--	40	33 U	74	29 U	110	42	66	28 U	31 U
cadmium	140	--	--	1.5 J	2.8 UJ	1.3 J	2.8 UJ	4.6 J	3.3 J	2.2 J	1.4 J	2.8 UJ
chromium	440	--	--	11 UJ	29	13 UJ	5.7 UJ	26	6.2 UJ	6.3 UJ	13 UJ	12 UJ
lead	NA	40	250	24	15	26	15	24	39	16	58	11
mercury	15	--	--	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ
selenium	--	--	--	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U
silver	730	--	--	3.7 U	0.65 J	3.7 U	0.93 J	3.7 U				

**TABLE 3
POST-CLEANING EVENT 1 WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 29 – AUTO HOBBY SHOP
NAVAL AIR STATION BRUNSWICK, MAINE
PAGE 4 OF 7**

SAMPLE ID ⁽¹⁾		B29-WP29	B29-WP30	B29-WP30 (duplicate)	B29-WP31	B29-WP32	B29-WP33	B29-WP34	B29-WP35	B29-WP36		
LOCATION		bay 10 floor	bay 10 bench	bay 10 bench	bay 9 floor	bay 9 bench	between bays 8 and 9 north wall	bay 8 floor	bay 8 east wall	bay 7 floor		
MATRIX		wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe		
SAMPLE DATE		01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/25/11	01/26/11		
	CRITERIA											
METALS ($\mu\text{g}/\text{ft}^2$)	WTC	MEDEP floor	MEDEP wall									
arsenic	36	--	--	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ		
barium	10000	--	--	91	32 U	39	80	41	18 U	76	34 U	99
cadmium	140	--	--	1.8 J	2.4 J	2.9 J	2.6 J	1.8 J	1.1 J	3.1 J	2.2 J	6.3 J
chromium	440	--	--	32	9.3 UJ	8.8 UJ	41	9.3 UJ	7.5 UJ	17	8.1 UJ	8.5 UJ
lead	NA	40	250	38	35	41	28	50	8.6	20	7.6	30
mercury	15	--	--	0.093 U	0.093 UJ	0.65	0.093 UJ	0.19 J	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ
selenium	--	--	--	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U
silver	730	--	--	3.7 U	0.74 J	3.7 U	3.7 U	0.56 J	3.7 U	3.7 U	3.7 U	3.7 U

TABLE 3
POST-CLEANING EVENT 1 WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 29 – AUTO HOBBY SHOP
NAVAL AIR STATION BRUNSWICK, MAINE
PAGE 5 OF 7

SAMPLE ID ⁽¹⁾		B29-WP37	B29-WP38	B29-WP39	B29-WP40	B29-WP40 (duplicate)	B29-WP41	B29-WP42	B29-WP43	B29-WP44		
LOCATION		bay 7 west wall	bay 7 east wall	bay 5 floor	bay 5 west wall	bay 5 west wall	bay 5 east wall	bay 6 floor	bay 6 west wall	bay 6 east wall		
MATRIX		wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe		
SAMPLE DATE		01/26/11	01/26/11	01/26/11	01/26/11	01/26/11	01/26/11	01/26/11	01/26/11	01/26/11		
		CRITERIA										
METALS ($\mu\text{g}/\text{ft}^2$)	WTC	MEDEP floor	MEDEP wall									
arsenic	36	--	--	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	1.9 J	4.6 UJ	4.6 UJ	
barium	10000	--	--	9.3 U	11 U	120	10 U	9.1 UJ	13 U	85	12 U	9.3 U
cadmium	140	--	--	2.8 UJ	2.8 UJ	10	2.8 UJ	2.8 UJ	1.2 J	4.5 J	2.8 UJ	2.8 UJ
chromium	440	--	--	3.7 UJ	4.5 UJ	10 UJ	3.7 UJ	3.7 UJ	6.5 UJ	20	3.7 UJ	3.7 UJ
lead	NA	40	250	3.7 UJ	5.9	42	5.9	5.6	14	43	3.7 UJ	3.7 UJ
mercury	15	--	--	0.19 J	0.093 UJ	0.093 UJ	0.046 J	0.093 UJ	0.093 UJ	0.093 UJ	0.019 J	0.093 UJ
selenium	--	--	--	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U
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

TABLE 3
POST-CLEANING EVENT 1 WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 29 – AUTO HOBBY SHOP
NAVAL AIR STATION BRUNSWICK, MAINE
PAGE 6 OF 7

SAMPLE ID ⁽¹⁾		B29-WP45	B29-WP46	B29-WP47	B29-WP48	B29-WP49	B29-WP50	B29-WP50 (duplicate)	B29-WP51	B29-WP52		
LOCATION		ski shop southeast floor	ski shop northwest floor	ski shop north wall	ski shop west wall	ski shop east wall	ski sharpening shop floor	ski sharpening shop floor	ski sharpening shop north wall	ski sharpening shop west wall		
MATRIX		wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe		
SAMPLE DATE		01/26/11	01/26/11	01/26/11	01/26/11	01/26/11	01/26/11	01/26/11	01/26/11	01/26/11		
		CRITERIA										
METALS (µg/ft ²)	WTC	MEDEP floor	MEDEP wall									
arsenic	36	--	--	4.6 UJ	4.6 UJ	12 J	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	
barium	10000	--	--	20 U	37	7.2 UJ	5.8 UJ	5 UJ	44	51	10 U	7.5 UJ
cadmium	140	--	--	1.3 J	1.5 J	2.8 UJ	2.8 UJ	2.8 UJ	1.4 J	1.5 J	2.8 UJ	2.8 UJ
chromium	440	--	--	11 UJ	16 U	20	3.7 UJ	9.3 UJ	15 U	20	5.1 UJ	3.9 UJ
lead	NA	40	250	15	14	6.1	7.4	4.7 U	24	27	4.4 UJ	3.7 UJ
mercury	15	--	--	0.019 J	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 UJ	0.093 J	0.093 UJ	0.093 UJ
selenium	--	--	--	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U
silver	730	--	--	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	3.7 U	0.56 J	3.7 U	3.7 U

TABLE 3
POST-CLEANING EVENT 1 WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 29 – AUTO HOBBY SHOP
NAVAL AIR STATION BRUNSWICK, MAINE
PAGE 7 OF 7

SAMPLE ID ⁽¹⁾				B29-WP53	B29-WP54	B29-WP55	B29-WP56	B29-WP57	B29-WP58	B29-WP59	B29-WP60	B29-WP61
LOCATION				ski sharpening shop east wall	ski storage room floor	ski storage room west wall	ski storage room south wall	ski storage room east wall	abrasive blasting shed floor	abrasive blasting shed west wall	abrasive blasting shed north wall	abrasive blasting shed east wall
MATRIX				wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe	wipe
SAMPLE DATE				01/26/11	01/26/11	01/26/11	01/26/11	01/26/11	02/01/11	02/01/11	02/01/11	02/01/11
				CRITERIA								
METALS (µg/ft ²)		WTC	MEDEP floor	MEDEP wall								
arsenic	36	--	--	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 UJ	4.6 U	4.6 U	1.6 J	1.1 J
barium	10000	--	--	7.2 UJ	44	6.4 UJ	7.3 UJ	6.4 UJ	29	31	14 U	13 U
cadmium	140	--	--	2.8 UJ	2.8 UJ	2.8 UJ	2.8 UJ	2.8 UJ	3.8 J	2.8 UJ	1.5 J	2.8 UJ
chromium	440	--	--	8.1 UJ	16 U	3.7 UJ	3.7 UJ	3.7 UJ	6.2 UJ	20	10 UJ	13 UJ
lead	NA	40	250	4.6 U	17	3.7 UJ	3.7 UJ	3.7 UJ	20	22	13	10
mercury	15	--	--	0.0093 J	0.093 UJ	0.093 UJ	0.093 J	0.093 UJ	0.037 J	0.028 J	0.19	0.028 J
selenium	--	--	--	3.9 J	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U	6.5 U
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

Notes:

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

(2) Wall and other flat surface samples were collected below a height of 8 feet.

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

U not detected (with associated detection limit)

J estimated result

-- no criteria available

NA not applicable

na not analyzed

ND not detected

Shading indicates criteria exceeded

TABLE 4
POST-CLEANING EVENT 2 WIPE SAMPLE RESULTS
RCRA PARTIAL CLOSURE REPORT
BUILDING 29 – AUTO HOBBY SHOP
NAVAL AIR STATION BRUNSWICK, MAINE

SAMPLE ID ⁽¹⁾			B29-WP62	B29-WP63	B29-WP64	B29-WP65	B29-WP66
LOCATION			engine repair bay floor	bay 2 floor	bay 3 floor	bay 5 floor	bay 6 floor
MATRIX			wipe	wipe	wipe	wipe	wipe
SAMPLE DATE			2/23/2011	02/23/11	02/23/11	02/23/11	02/23/11
			CRITERIA				
METALS ($\mu\text{g}/\text{ft}^2$)			MEDEP floor	MEDEP wall			
lead			40	250	3.7 UJ	3.7 UJ	6.6
						4.2 UJ	3.7 UJ

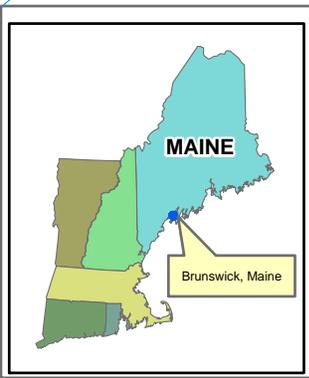
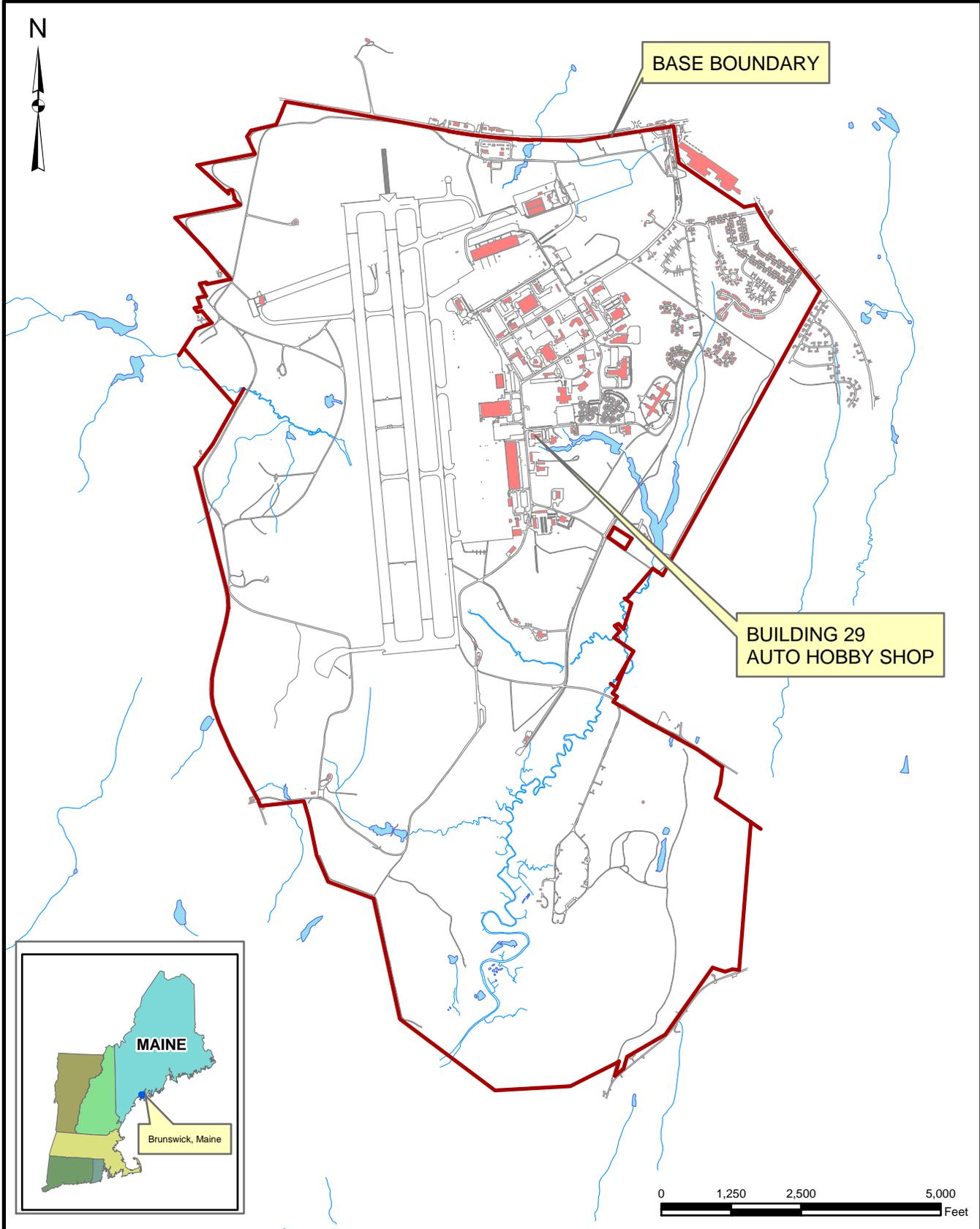
Notes:

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

Wipe sample surface area: 10 centimeters (cm) by 10 cm

 $\mu\text{g}/\text{ft}^2$ micrograms per square foot

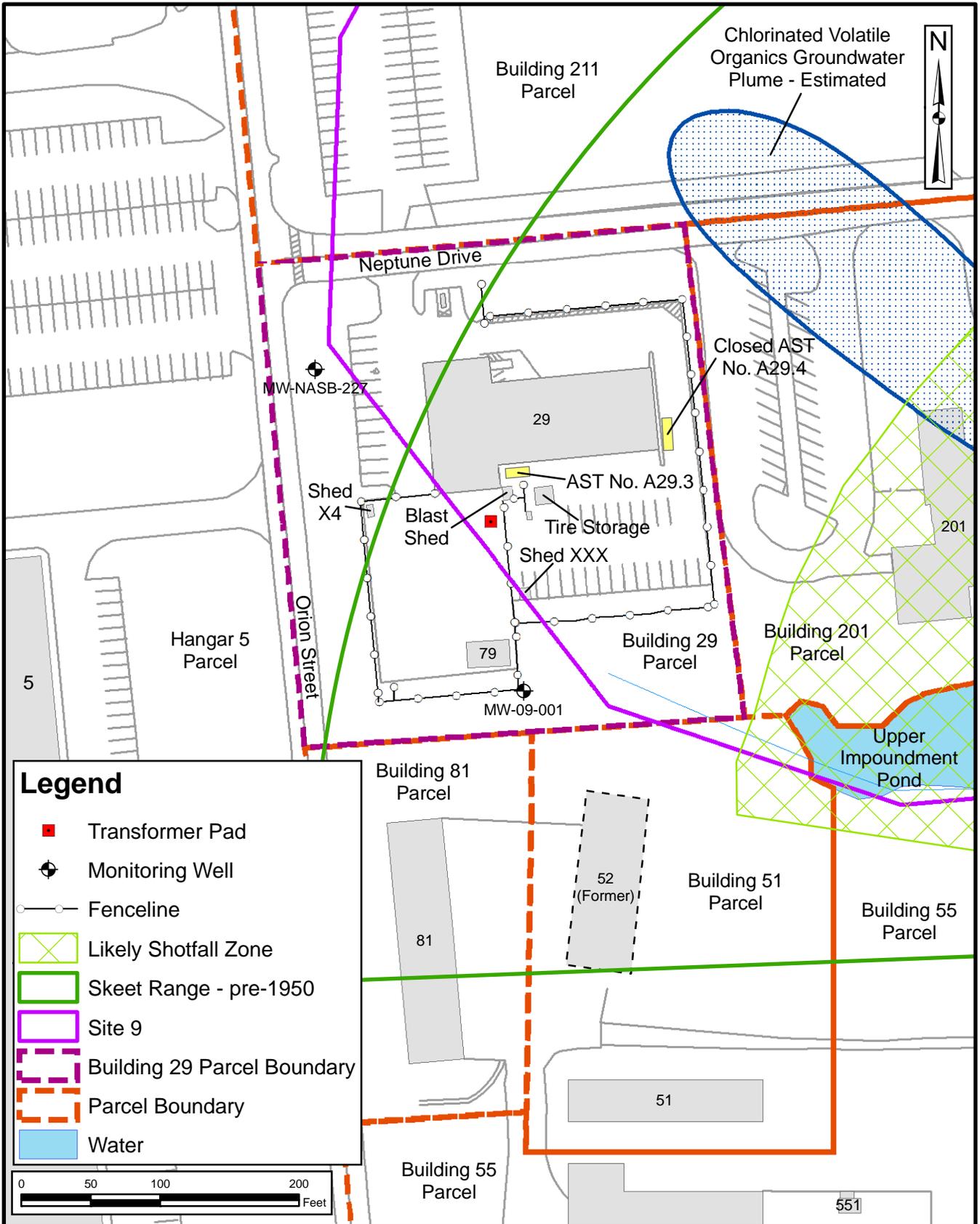
Shading indicates criteria exceeded



Tetra Tech NUS, Inc.

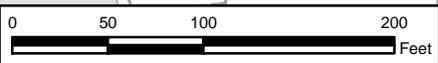
SITE LOCATION MAP
 BUILDING 29 - AUTO HOBBY SHOP PARCEL
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\02258\CP.DRIN\SB_BLDG_29_LOCUS.MXD	
REV 0	DATE 03/16/11
FIGURE NUMBER 1	



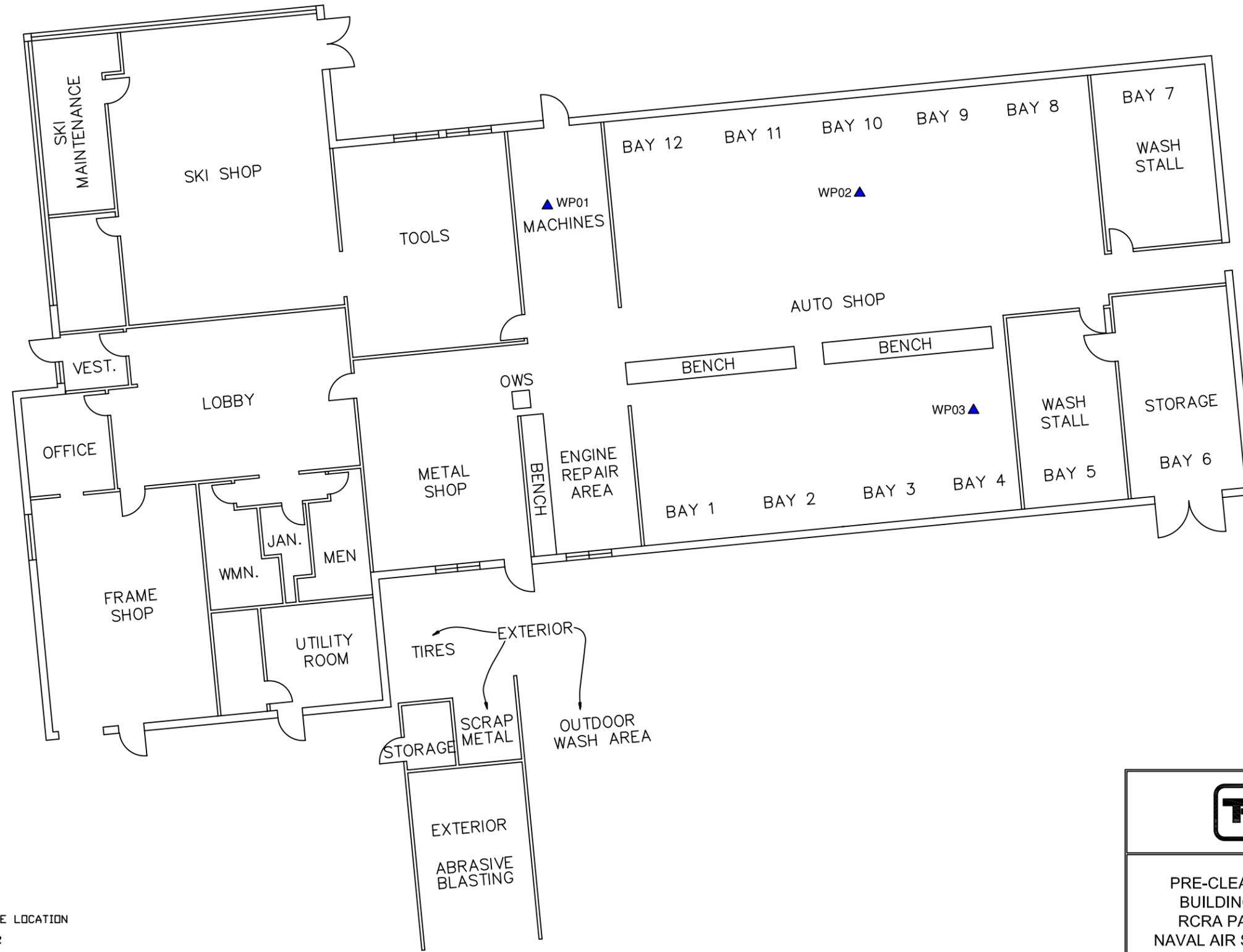
Legend

- Transformer Pad
- Monitoring Well
- Fenceline
- Likely Shotfall Zone
- Skeet Range - pre-1950
- Site 9
- Building 29 Parcel Boundary
- Parcel Boundary
- Water



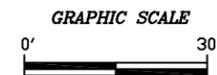
SITE LOCATION MAP
BUILDING 29 - AUTO HOBBY SHOP PARCEL
RCRA PARTIAL CLOSURE REPORT
NAVAL AIR STATION BRUNSWICK, MAINE

SCALE AS NOTED	
FILE I:\NASB_BLDG_29_SITE_MAP.MXD	
REV 0	DATE 03/18/11
FIGURE NUMBER 2	



LEGEND

WP01 ▲ FLOOR WIPE SAMPLE LOCATION
 OWS = OIL-WATER SEPARATOR



TETRA TECH NUS, INC.

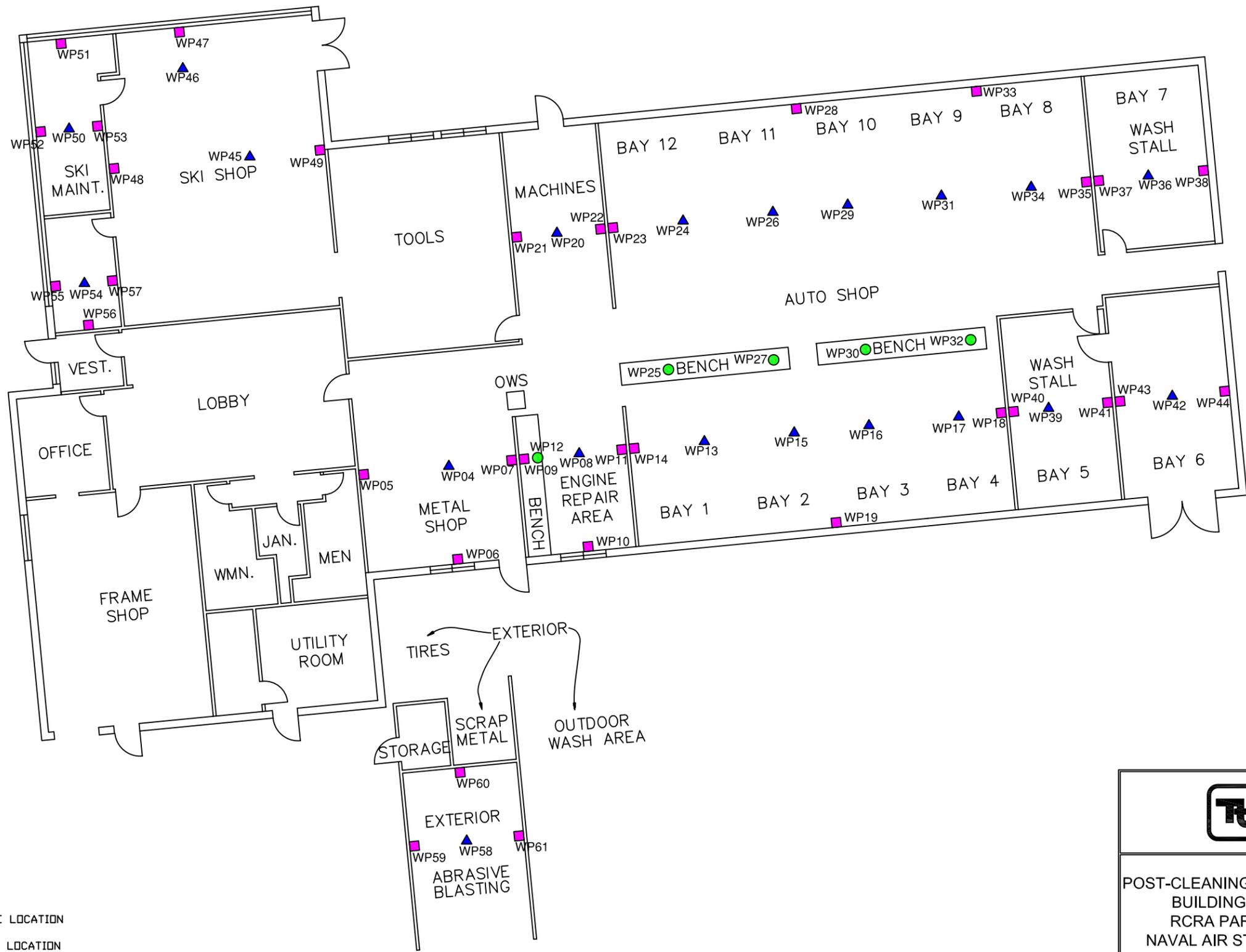
PRE-CLEANING SAMPLE LOCATIONS
 BUILDING 29 - AUTO HOBBY SHOP
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

FILE
 \.\NASB_BLDG_29_PRE.DWG

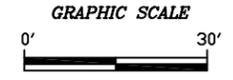
SCALE
 AS NOTED

FIGURE NUMBER
 FIGURE NO. 3

REV DATE
 0 3/18/11

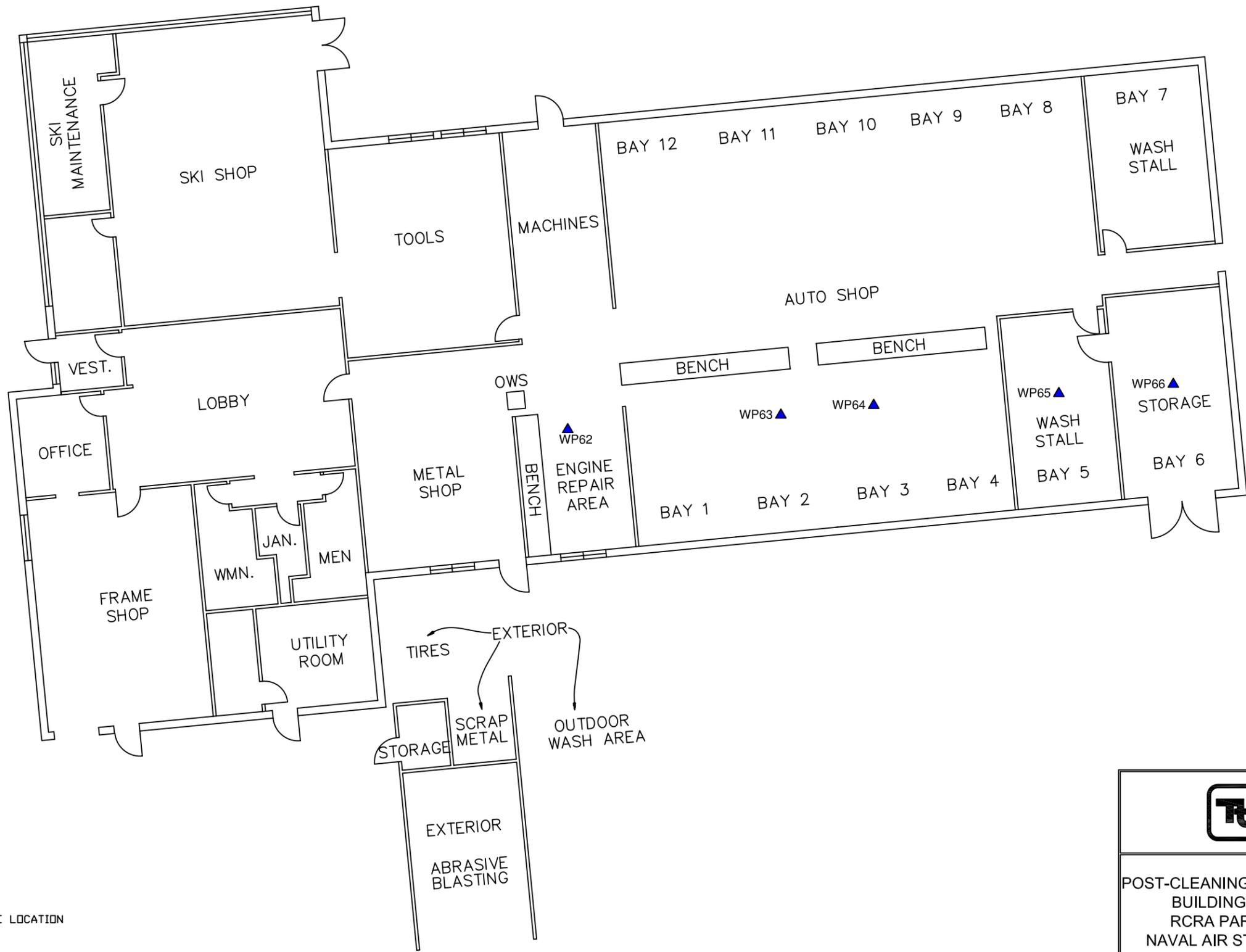


LEGEND
 WP04 ▲ FLOOR WIPE SAMPLE LOCATION
 WP05 ■ WALL WIPE SAMPLE LOCATION
 WP25 ● BENCH WIPE SAMPLE LOCATION
 OWS = OIL-WATER SEPARATOR



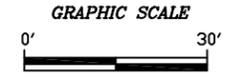
POST-CLEANING SAMPLE LOCATIONS-EVENT 1
 BUILDING 29 - AUTO HOBBY SHOP
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

FILE \\.\NASB_BLDG_29_POST1.DWG	SCALE AS NOTED
FIGURE NUMBER FIGURE NO. 4	REV DATE 0 3/18/11



LEGEND

WP62 ▲ FLOOR WIPE SAMPLE LOCATION
 OWS = OIL-WATER SEPARATOR



POST-CLEANING SAMPLE LOCATIONS-EVENT 2
 BUILDING 29 - AUTO HOBBY SHOP
 RCRA PARTIAL CLOSURE REPORT
 NAVAL AIR STATION BRUNSWICK, MAINE

FILE \\.\NASB_BLDG_29_POST2.DWG	SCALE AS NOTED
FIGURE NUMBER FIGURE NO. 5	REV DATE 0 3/18/11

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

Inspection Date: 11/10/10 and 3/9/11

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

Weather: Partly Cloudy, Windy, 40s

GENERAL BUILDING INFORMATION / USES

Building Name: Building 29 – Auto Hobby Shop (MWR Bld. 29, Auto Skills/OD Rent)

Function: Retail

Size: 12,000 SF

Year of Construction: 1988

Building 29 is located in the central portion of NAS Brunswick. Building 29 Parcel is bordered to the north by Neptune Drive and Building 211 Parcel; to the east, by the Building 201 (Galley) parcel; to the south, by Building 81 (CHRIMP) Parcel, the former Building 52 (Storehouse), currently a concrete loading dock and Buildings 51 (Fire Prevention/NCIS Bldg.); to the west, by Orion Street and Hangar 5 Parcel. It was constructed in 1988 and served as the recreation rental and auto hobby shop for NAS Brunswick.

Building 29 is a 12,000-square foot single story steel-truss roof with CMU block wall structure on a concrete slab foundation. The building interior consists of office, recreation rental, ski maintenance, metal shop, frame shop, engine repair area, repair bays, wash stalls, utility room and storage rooms. The building is heated with natural gas hot water boilers located in a Boiler Room.

The Abrasive Blasting Shed is located immediately south of Building 29. The shed is an unheated CMU block wall structure on a concrete slab. This shed was used to store chainsaws, ice augers, mower, generators and other equipments.

A designated storage shed is located south of Building 29. The shed is labeled XXX, and is a 64 SF unheated precast concrete structure. This shed was used to store mower and outboard engines. No hazardous materials were used in its operation and no hazardous waste was generated, according to NAS Brunswick personnel.

A shed labeled X4 is located southwest of Building 29. The shed is a 30 SF wooden structure and was used to store gasoline cans.

HWSA INSPECTION / CONDITION

Site visit observations, recorded on the attached Building Inspection Form⁽¹⁾, are summarized below:

- At the time of the site visit, Building 29 was unoccupied, vacant, and in fair condition.
- Mower storage shed (Structure XXX) and flammable locker (Structure X4) were vacant.
- The interior of Building 29 consisted of office, recreation rental, ski maintenance, metal shop, frame shop, engine repair area, repair bays, wash stalls, utility room and storage rooms.
- No structural modifications, which could conceal signs of a past release, were observed.
- A vented, bench welding area was located in metal shop. Staining was observed on the floor of metal shop.
- Grinding, parts washing, and glove-box sand-blasting areas were identified within engine repair area. Staining was observed on the floor and walls at various locations of engine build up area.
- The OWS associated with Building 29 was located at west end of work stall area. Numerous stains were observed on the floor of work stall area including repair bay areas and benches.

HWSA INSPECTION / CONDITION

- Blast media (“Black Beauty”), aqueous parts-washing solution, and waste oil were reportedly used and/or stored at Building 29. Waste oil was pumped to the 500-gallon AST located south of Building 29.
- Trench drains were observed in the floor of repair bay areas and wash stalls. According to NAS Brunswick records, these floor drains and car wash of Building 29 are connected to the OWS of the building as discussed in Section 3.
- No peeling and flaking paint was observed on the exterior or interior of the building.
- One non-polychlorinated-biphenyl (PCB) pad-mounted transformer was located south of Building 29.
- A 500-gallon concrete-vaulted AST (A29.3) was located south of the Building 29. The tank is labeled "used oil, aircraft fuel, hydraulic fluid, engine oil", as observed on March 9, 2011.
- A 2,000-gallon AST (A29.4) was installed on the eastern side of the building in 1999. This fuel oil tank is double-walled with double-walled piping and was closed in April 2009. The tank appeared to be in good condition and no evidence of a past leak from this AST was observed.
- A flammable locker (Structure X4) is located southwest of Building 29 and used to store gasoline cans. Debris and dirt were observed on the floor.
- The abrasive blasting shed was used to store chainsaws, ice augers, mower, generators and other equipments. Staining was observed on the floor of this shed.

POTENTIAL PCB-CONTAINING TRANSFORMERS

The following transformers are associated with Building 29 according to the NASB database:

Transformer	Manufacturer	Serial Number	Manufacture Date	Notes
150 kVA	RTE	876006112	1987	Building 29

RTE - Rural Transformer & Electric

APPLICABLE REPORTS / DOCUMENTS

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

- 1943 Map – No buildings shown in area
- 1946 map – No buildings shown in area
- 1952 map – No buildings shown in area
- 1953 aerial – No buildings present in area
- 1956 map – No buildings shown in area
- 1957 map – No buildings shown in area
- 1958 aerial – No buildings present in area
- 1965 buildings list – No buildings listed
- 1975 map – Building 201 shown
- 1976 buildings list – Building 201 (CPO Club) listed
- 1978 map – Building 201 shown
- 1978 aerial – Building 201 present
- 1979 map – Building 201 shown
- 1981 aerial – Building 201 present
- 1983 map – Building 201 shown
- 1984 aerial - same as 1981 aerial
- 1989 map – Buildings 29 and 201 shown
- 1989 aerial – Buildings 29 and 201 present
- 1993 aerial – Buildings 29, 79 and 201 present
- 1997 aerial - same as 1993 aerial
- 2003 building list – Buildings 29 (auto hobby shop), 79 (hobby shop storage), 201 (galley) listed
- 2006 map – Buildings 29, 79 and 201 shown
- 2008 building list – same as 2003 building list

APPLICABLE REPORTS / DOCUMENTS

According to NAS Brunswick records, underground storage tanks (USTs) ,aboveground storage tanks (ASTs) and oil/water separator (OWS) associated with Building 29 (PWD, 2008b).

ASTs

- Three 275-gallon Granby tanks for waste oil were installed in 1994 and all removed 1996.
- One 500-gallon concrete-vaulted AST (A29.3) for waste oil was installed in 1996 and is located south of Building 29.
- A 2,000-gallon AST (A29.4) was installed on the eastern side of the building in 1999. This fuel oil tank is double-walled with double-walled piping and was closed in April 2009.

USTs

- Tank 10045-430, 550 gallon waste oil tank was installed in 1987 and removed in 1994.

OWSs

- OWS 29, 225 gallon steel box in floor collects car wash and eventually discharges to the sanitary sewer system.

HAZARDOUS WASTE STORAGE RECORDS

Hazardous waste quantities records for period 2004 through 2009 disposed of through Hazardous Waste Department according to NAS Brunswick Hazardous Waste Manager, D. Bruce Smith.

Hazardous Waste Storage at Building 29 from 2003 to 2009

WASTE	WEIGHT
Aerosol	798.00
Aerosol Empty	791.40
Antifreeze NRCR	1,638.54
Contaminated Oil	11.66
Gasoline/Water mix	164.36
Lamps, Fluorescent 4 Foot	1.92
Lamps, Fluorescent 6 Foot	0.96
Lamps, Fluorescent Stick	0.4
Paint	14.06

There are no records of any spills at Building 29.

MISCELLANEOUS NOTES

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

INSPECTOR SIGNATURE: _____



PHOTOGRAPHS



No. 1 Building 29 – Auto Hobby Shop, NAS Brunswick
Building 29 Southwest elevation, main entrance



No. 2 Building 29 – Auto Hobby Shop, NAS Brunswick March 9, 2011
Building 29 south elevation and abrasive blasting shed east elevation, with 500-gallon waste oil AST



No. 3 Building 29 – Auto Hobby Shop, NAS Brunswick
Metal shop with welding booth area after cleaning



No. 4 Building 29 – Auto Hobby Shop, NAS Brunswick March 9, 2011
Auto shop, southeast corner of Building 29



No. 5 Building 29 – Auto Hobby Shop, NAS Brunswick November 10, 2010
500-gallon concrete-vaulted waste oil tank located south of Building 29



No. 6 Building 29 – Auto Hobby Shop, NAS Brunswick March 9, 2011
Closed AST (2,000gallon tank for No.1 heating oil), east of Building 29



No. 7 Building 29 – Auto Hobby Shop, NAS Brunswick
Northwest elevation of Building 29 transformer, located on the west side of abrasive blasting shed



No. 8 Building 29 – Auto Hobby Shop, NAS Brunswick
Abrasive blasting shed, interior view from entrance



No. 9 Building 29 – Auto Hobby Shop, NAS Brunswick
Structure XXX interior (recreation equipment storage)