FINAL SUMMARY REPORT

SUSPECTED PCB CONTAINING ELECTRICAL **EQUIPMENT INVENTORY** VARIOUS NEW JERSEY ARMY NATIONAL GUARD **FACILITIES STATEWIDE**

Contract No. GS10F0094W Order No. W912KN-16-F-0032 PARS PROJECT NO. 1154-01



PREPARED FOR:

NEW JERSEY ARMY NATIONAL GUARD

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CONTRACTOR STATEMENT OF TECHNICAL REVIEW

PARS Environmental has completed the project titled *Suspected Polychlorinated Biphenyl Containing Electrical Equipment Inventory at New Jersey Army National Guard Facilities Statewide*. Notice is hereby given that an independent technical review (ITR) has been conducted that is appropriate to the level of risk and complexity inherent in the project. All comments resulting from the ITR have been resolved and incorporated into the document. During the ITR, compliance with established policy principles and procedures was verified.

During the ITR, compliance with established policy principles and p	procedures was verific
Program Manager, Contractor	<u>2/28/2017</u>
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Project Manager	
CONTRACTOR CERTIFICATION OF INDEPENDENT TEC	HNICAL REVIEW
Significant concerns and the explanation of the resolution are as follows:	ows:
No major technical concerns were identified during the Independent	t Technical Review.
Endy Ed	<u>2/28/2017</u>
Independent Technical Review Team Leader	



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TABLE

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TEANECK ARMORY 1982 PCB SURVEY



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LIST OF ACRONYMS

AST Above Ground Storage Tank

Cooper Power Systems

CSMS Combined Support Maintenance Shop

DMAVA Department of Military and Veterans Affairs

DSMV Department of State Motor Vehicles

FMS Field Maintenance Shop

GE General Electric
Howard Howard Industries
HO Headquarters

HVAC Heating, Ventilation and Air Conditioning

ITR Independent Technical Review JCP&L Jersey Central Power & Light JFHQ Joint Force Headquarters

MVSB Motor Vehicle Storage Building NJARNG New Jersey Army National Guard

NJDEP New Jersey Department of Environmental Protection

NJDOT New Jersey Department of Transportation

NJSP New Jersey State Police PARS PARS Environmental, Inc. PCB Polychlorinated Biphenyl

ppm Parts Per Million

PSE&G Public Service Electric & Gas ROM Rough Order of Magnitude

RTSM Regional Training Support Maintenance

SOW Statement of Work

TSCA Toxic Substances Control Act

USEPA United States Environmental Protection Agency

UST Underground Storage Tank
UTES Unit Training Equipment Site

UTMB Unit Training Maintenance Building



1.0 INTRODUCTION

The New Jersey Army National Guard (NJARNG) has retained PARS Environmental, Inc. (PARS) under Contract No. GS10F0094W, Order No. W912KN-12-F-0032 to perform a survey of potential polychlorinated biphenyl (PCB) containing electrical equipment at various NJARNG facilities. The project was performed at selected NJARNG facilities throughout New Jersey, which are listed in Appendix A.

The purpose of the project was to identify, research and document potential PCB containing electrical equipment within interior mechanical spaces and on exterior grounds of NJARNG facilities throughout New Jersey.

This Summary Report has been prepared to document methodology and findings of the PCB survey and present recommendations and cost estimates for additional work based on the PCB survey findings.



2.0 BACKGROUND

2.1 PROJECT OBJECTIVE AND LOCATION

The primary objective of the project was to identify and document all suspected PCB containing electrical equipment on the building exteriors and grounds and within the boiler rooms and any interior mechanical space at the NJARNG facilities listed in Appendix A. Based on the statement of work (SOW) fluorescent light ballasts and potential PCB containing building materials (e.g. caulking, fire retardant materials, paints, etc.) were not be identified during the surveys.

Note that although they are included in Appendix A, Bordentown Combined Support Maintenance Shop (CSMS), Newton Armory and Plainfield Armory are no longer NJARNG facilities and were not included in the surveys.

2.2 BACKGROUND INFORMATION

NJARNG is a member of the Army National Guard of the United States, a reserve military force partnered with the Active Army and the Army Reserves in fulfilling the United States' military needs. The National Guard has been an active organization since 1637 when various militias of the Massachusetts Bay Colony were organized into Regiments. Today, the National Guard responds to domestic emergencies, combat missions, counterdrug efforts, reconstruction missions and more. NJARNG facilities include armories, warehouses, training centers, office complexes, maintenance buildings and other military support facilities located throughout New Jersey.

PCBs are synthetic organic chemical compounds consisting of carbon, hydrogen and chlorine atoms. PCBs have no taste or odor and typically have the appearance of a pale-yellow viscous liquid, ranging in consistency from oil to a waxy solid. Due to their stability, inflammability and low electrical conductivity, PCBs are ideal for use as dielectric and heat transfer fluids and were commonly used for various applications from approximately 1929 until 1979 when the United States banned PCB manufacturing, processing, distribution and use. PCBs were used widely in transformers, transformer bushings, capacitors, voltage regulators, hydraulic systems, small capacitors in fluorescent light ballasts and heat transfer systems (*PCB Inspection Manual*, United States Environmental Protection Agency [USEPA], August 2004). Other potential sources of PCBs include oil filled switches and circuit breakers, reclosers, electric motors using PCB coolants, electromagnets, submersible well pumps (not sump pumps), natural gas compressors and various building materials including caulking, fire retardant materials and paints.

Based on information presented in *PCBs Source Identification* (EIP Associates, 1997), the most common sources of PCBs (approximately 60%) are closed system and heat transfer fluids typically found in transformers, capacitors, fluorescent light ballasts and other electrical equipment. Other sources include plasticizers (25%) and hydraulic fluids and lubricants (10%). The remaining 5% of PCB sources are miscellaneous use.



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PCBs have been linked to various adverse health effects including cancer and harmful effects to the immune, reproductive, nervous and endocrine systems in animals. Section 6(e) of the Toxic Substances Control Act (TSCA) of 1976 was developed with the intent that USEPA regulate manufacturing, processing, distribution in commerce, use and disposal of PCBs. Under Section 6 of TSCA, which was enacted on January 1, 1977, manufacturing of PCBs was banned starting January 1, 1979, while processing and distribution in commerce of PCBs was banned starting July 1, 1979. USEPA assumes that all equipment manufactured after July 1, 1979, is non-PCB, which is defined by USEPA as less than 50 parts per million (ppm) PCBs.



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3.0 METHODOLOGY

Between September 9 and October 18, 2016, PARS surveyed potential PCB containing electrical equipment found in mechanical spaces, transformer vaults and on exterior grounds at the NJARNG facilities listed in Appendix A. A facility armorer or regional supervisor escorted PARS staff through each facility, directing PARS to accessible mechanical spaces and providing background information via informal interviews. Occasionally, secured spaces were inaccessible and these instances are noted in Section 4.0.

Potential PCB containing electrical equipment that was investigated during the surveys included, but was not limited to, transformers, high voltage capacitors, switches, circuit breakers, voltage regulators, reclosers, electric motors using PCB coolants, hydraulic systems and heat transfer systems that use PCB fluids. Electrical equipment included in the survey was located on the building exteriors and grounds and within mechanical spaces and transformer vaults at the NJARNG facilities. The mechanical spaces included boiler rooms, electrical closets, telecom equipment rooms, sprinkler/fire pump rooms, elevator machine rooms and air handler/ventilation spaces.

Upon identification of potential PCB containing electrical equipment, the equipment's manufacturer, model number, serial number, location, physical characteristics and any other visible information were recorded. Physical condition of the equipment was also inspected for damage, staining or other evidence of a discharge and observations were recorded in survey field notes. There was no visual evidence of a discharge to the environment from any of the equipment inspected as part of the survey.

While inspecting pole-mounted electrical equipment, all transformers located on the subject property or feeding a NJARNG facility (even if located outside the property boundaries) were included in the survey. Utility pole numbers were recorded and manufacturer name plates on the transformers were photographed when possible.

Pad-mount transformers and transformers located within vaults were surveyed when present within a facility's property boundaries. When possible, pad-mount transformer cabinets were opened by others to record manufacturer identification plates. When a pad-mount transformer could not be opened, the utility number assigned by the responsible utility company was recorded for future reference. In some cases, pad mount transformer cabinets could not be opened and no identifying information was observed on the outside of the transformer. These instances are noted in Section 4.0.



Following facility surveys, equipment data was organized and used to determine if manufacturer records provided evidence that the equipment may contain PCBs. To do this, manufacturer names and serial numbers were compared to the New Jersey Department of Environmental Protection (NJDEP) *Guidelines for Determining PCB Status of Distribution Transformers* (Appendix B) as an initial effort to rule out transformers known to be manufactured non-PCB and single out transformers known to potentially contain PCBs. In the case that a transformer manufacturer was not included in the NJDEP guidelines, the manufacturer was contacted to obtain available information pertaining to PCB status. PCB status was also determined by manufacturer name plate (when the name plate specifically stated "non-PCB"), historic documentation provided by NJARNG, historic aerial photographs, information collected during informal interviews, various other observations and professional judgement. An explanation of how PCB status was determined for each piece of potential PCB containing electrical equipment is included in both Section 4.0 and Table 1.

Based on the surveys, the majority of the equipment suspected to contain PCBs consists of transformers. Additional equipment identified as suspected to contain PCBs includes an oil filled electrical switch, a single current regulator and two hydraulic elevator motors.

Findings are summarized in Section 4.0 and electrical equipment data that was recovered during the surveys is included in Table 1. Recommendations, estimated costs to sample and photographs of equipment suspected of containing PCBs are included in Section 5.0.



4.0 FINDINGS

This section summarizes observations made during the PCB surveys performed at each facility. Electrical equipment that was found to have the potential to contain PCBs is listed on Table 1 and associated locations are depicted on Figures 1 through 36.

In this report, transformers listed as non-PCB may contain PCBs at concentrations of 50 ppm or less, due to USEPA TSCA assumptions pertaining to PCB status of transformers. TSCA defines transformers containing PCBs at concentrations less than or equal to 50 ppm or containing less than three pounds of fluid as "non-PCB", transformers with concentrations greater than 50 and less than 500 ppm as "PCB contaminated" and with concentrations greater than 500 ppm as "PCB-transformers". These definitions do not apply to electrical equipment other than transformers and equipment other than transformers in this report that are listed as non-PCB are assumed to not contain PCBs at detectable levels. Note that TSCA assumptions of PCB status only apply while the transformer is in use, once a transformer is to be disposed or stored for disposal, PCB concentrations must be determined no matter the age of the transformer.

Unless otherwise noted in the following summaries, the equipment was found to be in good condition. Dates included in parentheses represent the year that the building was construction based on the facility list included in Appendix A.

4.1 SOUTHERN REGION

4.1.1 Atlantic City

On September 14, 2016, PARS was escorted by the armorer to survey the Atlantic City Armory facility located on 1008 Absecon Boulevard in Atlantic City, New Jersey. The facility consists of an Armory (1926) and Motor Vehicle Storage Building (MVSB) (1926).

The Armory is a three-story brick building that contains an orderly's office, indoor track, an apartment, boiler room, kitchen and maintenance area. The boiler room contains a gas-powered boiler system and a hot water heater. Telecommunication lines and electrical safety switches and panels are also located in the boiler room, and the main electrical service panels are located in the orderly's office near the main entrance. The drill floor and associated heating, ventilation and air conditioning (HVAC) system underwent renovation in 2006 and is used as an indoor track and recreational area. Electric panels and breaker-boxes are located throughout the building. No potential PCB containing equipment was identified within the Armory.

The MVSB is single-story cinderblock building located in the southern portion of the property. The armorer informed PARS that the MVSB space is currently used for storage. The MVSB contains an air compressor. Oil staining was observed on the air compressor; however, USEPA does not expect that air compressors will contain PCBs at regulated levels of greater than or equal to 50 ppm (*PCB Question and Answer Manual*, USEPA, June 2014). An abandoned heating oil line was observed. The oil tank that supplied the MVSB's former heating system is no longer located on the property and appeared to be an above ground storage tank (AST) that was located within a concrete containment area north of the garage. No potential PCB containing equipment was identified within the MVSB.



A pole-mounted capacitor bank with oil switches (Figure 1, Map ID 002) and seven pole-mount transformers are located at the facility. Six of the pole-mount transformers (Figure 1, Map IDs 001, 003 and 004) are manufactured by Howard Industries (Howard) and one (Figure 1, Map ID 005) by Westinghouse. Howard is not included in the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*. Based on communication with the manufacturer, all Howard transformers are non-PCB. Based on the serial number, the Westinghouse transformer was built in 2009 and, therefore, non-PCB. The capacitor bank is labeled non-PCB and observed to be newer construction.

None of the equipment surveyed at the Atlantic City facility is suspected to contain PCBs.

4.1.2 Bridgeton

On October 7, 2016, PARS was escorted by the armorer to survey the Bridgeton Armory facility located at 1240 Highway 77 in Bridgeton, New Jersey. The Bridgeton facility consists of an Armory (1964) and a former Field Maintenance Shop (FMS) (1949). Also included on the NJARNG Bridgeton property is a pallet storage business that the armorer informed PARS is privately leased and not accessible. The pallet business is located on Finley Road near the intersection with State Highway 77.

The Armory is a single-story brick building with a drill floor with an elevated roof, offices and an electrical room. The armorer informed PARS that the Armory was used as a meeting place for various community groups. The drill floor contains overhead HVAC units powered by aircooled electric motors. The electrical room contains safety switches, electrical service panels, telecommunications lines, a large domestic hot water heater and a well water reserve tank. PARS was informed by the armorer that the Armory is heated by electric radiators. No potential PCB containing equipment was identified in the Armory.

The former FMS is a single-story brick building that was being rented for office space at the time of the survey. An electrical safety switch, electrical panel and a dry-type transformer are located on the southeast corner inside the former maintenance bay. No potential PCB containing equipment was identified in the former FMS building.

Five utility poles with pole-mount equipment are located on the property. Two of the utility poles (Figure 2, Map IDs 004 and 005) are located along the western property boundary on County Route 617. The pole-mount equipment includes nine transformers manufactured by H. K. Porter (Figure 2, Map ID 001), RTE Corporation (Figure 2, Map ID 001), Cooper Power Systems (Cooper) (Figure 2, Map ID 002), Westinghouse (Figure 2, Map ID 002), ERMCO (Figure 2, Map ID 003) and Power Partners, Inc. (Figure 2, Map ID 005) and a new recloser (Figure 2, Map ID 004). Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the H. K. Porter, RTE Corporation and Westinghouse transformers are non-PCB. ERMCO, Cooper and Power Partners are not included in the NJDEP guidelines. Based on information from the manufacturer, Cooper started manufacturing transformers in 1985 and all Cooper equipment is non-PCB. Power Partners also confirmed that all Power Partners transformers are non-PCB. The manufacturer name plate on the ERMCO transformer states that it is non-PCB. The recloser, which is located on the corner of State Highway 77 and Finley Road, is new construction, installed in the last 10 years and assumed to be non-PCB.



None of the equipment surveyed at the Bordentown facility is suspected to contain PCBs.

4.1.3 Cape May

On September 15, 2016, PARS was escorted by the armorer to survey the Cape May Armory facility located at 600 Garden State Parkway in Cape May Court House, New Jersey. The Cape May facility consists of an Armory (1961) and FMS (1952).

The Armory is a single-story brick building with a drill floor with an elevated roof, offices and a boiler room. Electrical safety switches and panels are located throughout the building. The boiler room contains an oil-fired system. Telecommunication lines, safety switches and circuit breaker boxes are located on the southern wall of the boiler room. No potential PCB containing equipment was identified in the Armory.

The FMS is a one-story brick building containing six vehicle maintenance bays and an office. An electric-powered air-cooled motor operates each of the six bay doors. HVAC units located overhead contain blowers also powered by air-cooled electric motors. A floor-mounted air compressor is located on the north side of the dividing wall in the maintenance bay and an electric motor lubricated with motor oil is utilized to pump heating oil into the building. A wastewater treatment system that appears to contain a lift station with two lubricated pumps and an oil/water separator are located to the south of the FMS building. No potential PCB containing equipment was identified in and around the FMS building.

Three utility poles, each containing three transformers manufactured by Cooper (Figure 3, Map ID 001), McGraw-Edison (Figure 3, Map ID 002) and Power Partners (Figure 3, Map ID 003), are located on the property to the east of the Armory. The transformers feed electricity to both the Armory and FMS. Based on communication with the manufacturers, all Power Partner and Cooper transformers are non-PCB. Based on NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, one McGraw-Edison transformer (Serial No. 90NC07-042) was manufactured in 1990 and is non-PCB. The remaining two McGraw-Edison transformers were manufactured by McGraw-Edison in 1974. McGraw-Edison discontinued use of PCB fluids in 1965. Based on communication with the manufacturer, they do not certify equipment produced prior to 1979 to be non-PCB because the transformer may have been serviced by an outside contractor and refilled with PCB fluid before the use of PCBs was banned. It is assumed that the McGraw-Edison transformers are non-PCB because they were manufactured in 1974 after the company ceased using PCBs.

None of the equipment surveyed at the Cape May facility is suspected to contain PCBs.

4.1.4 Cherry Hill

On September 13, 2016, PARS was escorted by the armorer to survey the Cherry Hill Armory facility located at 2001 Park Boulevard in Cherry Hill, New Jersey. The Cherry Hill facility consists of an Armory (1957) and Unit Training Maintenance Bay (UTMB) (1977).





The Armory is a single-story brick building with a drill floor, supply rooms, classrooms, offices and a boiler room. The boiler room contains electrical safety switches, electrical panels and a gas-powered boiler system. A heavy-duty Westinghouse safety switch, electric utility meters and a current transformer cabinet are located in the orderly's office. A current transformer cabinet is also located on the exterior of the orderly's office. The transformer cabinets in the Armory appear to be utilized as junction, metering or service boxes. Assorted electrical safety switches and circuit breaker boxes are located throughout the Armory building. No potential PCB containing equipment was identified in the Armory.

The UTMB is a single-story maintenance building that contains a work bay, an office, a mechanical room and a battery storage room. A hot water heater and electrical breaker panels are located in the mechanical room. The battery storage room contains intrinsically safe electric equipment including a sealed motor used to power the room's vent and sealed lighting. No potential PCB containing equipment was identified in the UTMB.

Four utility poles with electrical equipment are located on the property along Park Drive. Polemount equipment includes a Cooper capacitor bank with oil switches (Figure 4, Map ID 001) and five transformers manufactured by Cooper (Figure 4, Map ID 002), Central Moloney (Figure 4, Map IDs 002 and 003) and General Electric (GE) (Figure 4, Map ID 004). The capacitor bank is labeled "non-PCB" and observed to be in new condition. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the Central Moloney and GE transformers are non-PCB. Based on contact with the manufacturer, all Cooper equipment is non-PCB.

None of the equipment surveyed at the Cherry Hill facility is suspected to contain PCBs.

4.1.5 Hammonton

On September 14, 2016, PARS was escorted by the armorer to survey the Hammonton Armory facility located at 550 South Egg Harbor Road in Hammonton, New Jersey. The Hammonton facility consists of an Armory (1949) and MVSB (1949).

The Armory is a single-story brick building with a supply room, boiler room and electrical room. The electrical room contains a main electrical breaker panel. The boiler room contains a gaspowered boiler system. No potential PCB containing equipment was identified in the Armory.

The MVSB building contains offices and an indoor motor pool parking area that was being used for storage at the time of the survey. The motor pool area contains an air compressor and two HVAC blower units powered by air-cooled electric motors. No potential PCB containing equipment was identified in the MVSB.

One utility pole containing two Kuhlman transformers (Figure 5, Map ID 001) is located to the east of the Armory building. The serial numbers and date of manufacture stamped on the manufacturer nameplate were not legible; however, the name plates each state that the transformers are non-PCB.

None of the equipment surveyed at the Hammonton facility is suspected to contain PCBs.



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4.1.6 Vineland

On October 7, 2016, PARS was escorted by the armorer to survey the Vineland Armory facility located at 2560 South Delsea Drive in Vineland, New Jersey. The Vineland facility consists of an Armory (1940) and FMS (1956).

The Armory is a three-story building with a basement. The majority of the first floor is a drill floor, garage/storage area and gym. The second and third floors contain former barracks that have been converted to office space. The boiler room and electrical room are located in the basement. PARS was informed by the armorer that most of the mechanical equipment, including the boiler system and water heater, were installed since 2000. PARS was also informed that new heaters were going to be installed during the week of October 10, 2016, at which time the Armory would switch to gas-powered equipment. Breaker panels, safety switches and telecommunication lines are located in the electrical room. PARS was informed that the entire building was rewired in 1989. No potential PCB containing equipment was identified in the Armory.

Electricity enters the Armory via an underground transformer vault located near the northeast corner of the building. The vault contains three GE three-phase submersible transformers (Figure 6, Map ID 001) and a Roller Smith oil switch (Figure 6, Map ID 002). The three vault transformers are owned and operated by Vineland Electric (See Appendix C for statement of ownership). Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the transformers are all non-PCB. Roller-Smith could not provide information pertaining to the PCB status of the oil switch. Due to its age (believed to be 1940's), the Roller-Smith oil switch is suspected to contain PCBs. The oil switch was observed in good condition and did not show signs of corrosion.

The FMS contains three maintenance bays, an office, mechanical shops and a supply room. Aircooled electric motors power overhead HVAC blowers and automatic bay doors. No potential PCB containing equipment was identified in the.

Two pad-mount transformers manufactured by Howard (Figure 6, Map ID 003) and Westinghouse (Figure 6, Map ID 004) and six pole-mount transformers manufactured by GE (Figure 6, Map ID 007), Power Partners (Figure 6, Map ID 006), ERMCO (Figure 6, Map ID 008) and Allis Chalmers (Figure 6, Map ID 005) are located on the property. The pole-mount Allis-Chalmers transformer supplies power to the lights in the vehicle staging yard associated with the FMS building. The remaining five pole-mount transformers are located along South Delsea Drive and feed electricity to buildings across South Delsea Drive that are not associated with the NJARNG facility. All pole and pad-mount transformers are owned and maintained by Vineland Electric. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers* and manufacturer name plates, the pole-mount transformers are all non-PCB.

The Roller Smith oil switch (Figure 6, Map ID 002) located in the vault at the Vineland facility is suspected to contain PCBs.



4.1.7 Woodbury

On September 13, 2016, PARS was escorted by the armorer to survey the Woodbury Armory facility located at 658 North Evergreen Avenue in Woodbury, New Jersey. The Woodbury facility consists of an Armory (1929), two MVSBs (1941) and a UTMB (1941).

The Armory is a two-story building with offices, classrooms, a kitchen, supply room, storage rooms, an electric panel room and a boiler room. An addition to the Armory was constructed in the mid-80's and at that time the entire electrical system within the building was upgraded. The boiler room contains a gas-powered boiler system. The electrical room contains an electrical switchboard, meter and other electrical equipment. Electrical panels were observed throughout the building. No potential PCB containing equipment was identified in the Armory.

Utilities in the UTMB were disconnected at the time of the survey. Two MVSBs located north of the UTMB building function as vehicle and cold storage. No potential PCB containing equipment was identified in the MVSBs and UTMB.

A locked and unmarked pad-mount transformer (Figure 7, Map ID 001) is located to the north of the northwestern corner of the Armory. Although no manufacture data was available, this transformer was not present during the previous PCB survey performed in 1982 (see Appendix D) when power was supplied to the Armory from a series of pole-mount transformers. It is assumed that the transformer was installed circa 1985 when the addition to the Armory was built and the electrical system was upgraded.

None of the equipment surveyed at the Woodbury facility is suspected to contain PCBs.

4.1.8 Woodstown

On September 13, 2016, PARS was escorted by the armorer to survey the Woodstown Armory located at 501 North Main Street in Woodstown, New Jersey. It should be noted that the Woodstown Armory was constructed in 1981, and, therefore, is unlikely to contain PCB equipment.

The Armory is a single-story brick building with offices, a caged storage area, a boiler room and a maintenance bay. The boiler room contains a gas-powered boiler system, circuit breakers and electrical safety switches. A sewage lift pit system is also located in the boiler room. No potential PCB containing equipment was identified in the Armory.

Two utility poles, each containing three pole-mount transformers manufactured by Central Moloney (Figure 8, Map ID 001), McGraw-Edison (Figure 8, Map ID 001) and ABB Power (Figure 8, Map ID 002), are located one the property. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the Central Moloney and McGraw-Edison transformers are non-PCB. Based on contact with the manufacturer, all ABB Power transformers are non-PCB.

None of the equipment surveyed at the Woodstown facility is suspected to contain PCBs.



4.2 CENTRAL REGION

4.2.1 Bordentown

On September 20, 2016, PARS was escorted by the armorer to survey the Bordentown Armory facility located at 1048 Route 206 in Bordentown, New Jersey. The Bordentown facility consists of an Armory (1956) and Soldier Family Support Center (1949).

The Armory is a single-story brick building containing a drill floor, offices, a boiler room and a service pantry. A fire suppression system is located in the service pantry. The boiler room contains an electric boiler that was installed sometime after 2001 based on information provided by the armorer. No potential PCB containing equipment was identified in the Armory.

The Soldier Family Support Center is a single-story brick building with six vehicle bays and a caged storage area. The Soldier Family Support Center underwent renovation in 2010 to include a classroom, electrical panel/server room, boiler room and a fire sprinkler valve room. Aircooled electric motors power the roll-up bay doors and blowers in the overhead heating units. No potential PCB containing equipment was identified in the Soldier Family Support Center.

Two utility poles, each with three pole-mount transformers manufactured by ERMCO (Figure 9, Map ID 001) and Kuhlman (Figure 9, Map ID 002), are located to the south of the Armory. Based on the manufacturer name plates on each ERMCO transformer, they are all non-PCB. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the three Kulhman transformers were manufactured before 1979 in a facility that discontinued use of PCB fluids in 1965. Kuhlman did not include manufacture dates in their serial numbers prior to 1979. Therefore, the age of all three Kuhlman transformers at the Bordentown facility is unknown and they are suspected to contain PCB fluids. The Kuhlman transformers were slightly rusted, but did not appear to be leaking at the time of survey.

Three Kuhlman pole-mount transformers (Figure 9, Map ID 002) at the Bordentown facility are suspected to contain PCBs.

4.2.2 Burlington

On September 20, 2016, PARS was escorted by the armorer to survey the Burlington Armory facility located at 599 High Street in Burlington, New Jersey. The Burlington facility consists of an Armory (1926) and MVSB (1950).

The Armory is a two-story brick building that was vacant at the time of the survey. The Armory includes offices, a firing range and a boiler room. The boiler room contains a gas-powered boiler system. No potential PCB containing equipment was identified in the Armory.

The MVSB is a single-story brick building with an open floor plan. The building was vacant at the time of the survey. Mechanical equipment associated with this space includes air-cooled motors associated with the HVAC system and powered roll-up doors. No potential PCB containing equipment was identified in the MVSB.



Three utility poles containing a total of seven transformers manufactured Howard (Figure 10, Map ID 001), GE (Figure 10, Map ID 002) and Cooper (Figure 10, Map ID 003) are located on the property. Two of the utility poles, each containing three transformers, are located to the west of the Armory building on High Street. The seventh pole-mount transformer is located to the east of the Armory building on Lawrence Street. Based on NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the GE transformers were manufactured in a non-PCB GE facility. Based on contact with the manufacturers, all Cooper and Howard transformers are non-PCB.

None of the equipment surveyed at the Burlington facility is suspected to contain PCBs.

4.2.3 Fort Dix

On September 28, 2016, PARS was escorted by the armorer to survey the NJARNG Joint Force Headquarters (JFHQ) located at Joint Base McGuire-Dix-Lakehurst in the Dix Cantonment Area, Burlington County, New Jersey. The JFHQ complex consists of three brick-buildings (Buildings 3601, 3650 and 3651) and a new storage building (Building 3652). The interior of Building 3652 was not included as part of the survey because it was constructed within the last 10 years and would not likely contain PCB equipment.

Building 3650 was constructed in 1986 and is a two-story building with offices, classrooms, a kitchen, dining area, elevator room, fire suppression room and boiler room. The elevator room contains a Schindler Elevator Corporation power unit with hydraulic fluid that was installed in 1986. Based on the age of the equipment the hydraulic fluid is non-PCB. The boiler room contains electrical equipment and two new digitally controlled, modulated boilers. The main electrical room was installed on the second floor in 1994 and contains a main switch and service panel. No potential PCB containing equipment was identified in Building 3650.

Building 3601 was constructed in 1990 and is a single-story cinder block building with a recent addition. The building contains offices, two electrical rooms, two pump rooms and two boiler rooms. The original boiler system, located in the boiler room at the north end of the building, was under repair during the survey. The northern boiler room contains a gas-powered boiler system, electrical safety switches and a dry-type transformer. A second boiler room is located on the south end of Building 3601 and contains a gas-powered boiler system. Two electrical rooms, one in the original building and one in the recent addition, each contain circuit breakers, electrical panels and dry-type transformers. The second electrical room, Room 211, contains monitoring equipment and controls for the building's solar panel array located on the roof. A fire suppression system is located in Room 210. No potential PCB containing equipment was identified in Building 3601.

Building 3651, also known as the Regional Training Support Maintenance (RTSM) building, contains a maintenance bay, a trade development classroom and offices. Safety switches, communication lines and electrical panels and cabinets are located in the classroom. A boiler room, accessible through the eastern side of the building, contains a boiler system, a domestic hot water heater and electrical safety switches and controls. Three dry-type transformers, four large switches and an electrical cabinet are located outside within the vehicle staging yard. No potential PCB containing equipment was identified in and around the exterior of Building 3651.



Five pad-mount transformers were identified on the JFHQ grounds. Based on serial numbers, four of the pad-mount transformers (Figure 11, Map IDs 004, 006, 007 and 008) were manufactured in 1986 or later and are non-PCB. The fifth pad-mount transformer (Figure 11, Map ID 003) does not have manufacturer information on the outer cabinet and is secured closed. The transformer is located in the secured vehicle staging yard behind Building 3601 and was observed to be heavily rusted with some vegetation growing on it. Due to the physical condition, lack of manufacturer data and proximity to the 1978 pole-mount transformer (discussed in the following paragraph), this pad-mount transformer is suspected to contain PCBs.

A single pole-mount McGraw-Edison transformer (Figure 11, Map ID 005) located on the north side of the vehicle staging yard was observed during the survey. Based on the serial number, this transformer was manufactured in 1978. McGraw-Edison discontinued use of PCB fluids in 1965. It is assumed that the transformer is non-PCB because it was manufactured in 1978 after the company ceased using PCBs.

One pad-mount transformer (Figure 11, Map ID 003) at JFHQ is suspected to contain PCBs.

4.2.4 Freehold

On September 22, 2016, PARS was escorted by the armorer to survey the Freehold Armory located at 635 State Highway 33 in Freehold, New Jersey. The Freehold facility consists of an Armory built in 1940.

The Armory is a single-story brick building consisting of a drill hall with an elevated roof, boiler room, offices and an attached MVSB. The boiler room contains a boiler system and an air compressor. Electrical panels and electric safety switches are located throughout the building. Electric air-cooled motors power HVAC blowers and mechanized bay doors. No potential PCB containing equipment was identified in the Armory.

One utility pole with three pole-mount transformers manufactured by Howard (Figure 12, Map ID 001) is located on the grounds adjacent to the drill hall. Based on communication with the manufacturer, all Howard transformers are non-PCB.

None of the equipment surveyed at the Freehold facility is suspected to contain PCBs.

4.2.5 Lawrenceville

On September 27, 2016, PARS was escorted by the armorer to survey the Lawrenceville Armory facility located at 151 Eggerts Crossing Road in Lawrenceville, New Jersey. The Lawrenceville facility consists of Building 101 – NJARNG HQ (1971), Building 131 – HSCOE/USPFO (1971), Building 141 – DLOGs (1987), Building 151 – Armory (1927), FMS #1 and FMS #2 (1941), an MVSB (1941) and a warehouse.



The NJARNG HQ is a three-story office building with a basement. The floorplan of the NJARNG HQ building is mainly office space. Mechanical spaces are confined to the basement and penthouse, the latter of which is accessed only by elevator. A storage room on the southern side of the basement contains a dry-type transformer. A mechanical room in the basement contains the fire suppression system and a water chiller unit. The Federal/State Flat File – Planning Room, also located in the basement contains a main switch and service panel and a dry-type transformer. The penthouse is utilized to house HVAC equipment, which has been completely renovated since 2000. The elevator room contains electrical panels and an Otis hydraulic elevator motor. The Otis hydraulic motor (Figure 13, Map ID 001) has a production year of 1970 and based on information provided by the armorer, has been routinely serviced on an annual basis. The hydraulic motor was in good condition without any signs of corrosion at the time of the survey. Because the elevator motor was manufactured prior to 1979, it is suspected to contain PCB fluids. No other potential PCB containing equipment was identified in the NJARNG HQ.

The Armory building is a two-story building that consists of a drill floor, rink, cold storage, a military museum, fire suppression room, boiler room, kitchen and cafeteria. The kitchen contains a sump pit with a sump pump. The fire suppression room contains the main electrical switch board and suppression system. A gas-powered boiler system is located in the boiler room. Various electrical panels and safety switches are located throughout the building. An oilburning furnace provides heat to the supply room and Department of Military and Veterans Affairs (DMAVA) warehouse, located in the Armory building. No potential PCB containing equipment was identified in the.

The MVSB is a storage facility with an open floor plan located to the south of FMS #1 and #2. Air-cooled electric motors power the bay doors of the MVSB. FMS #1 is a storage facility with a heating unit blower powered by an air-cooled electric motor located in the part of the building maintained by NJARNG. The other portion of FMS #1 is utilized by the Department of State Motor Vehicles (DSMV) as a maintenance facility. Two newer overhead heating systems with blowers powered by air-cooled electrical motors and three floor-mounted air compressors are located in the maintenance bays of the DSMV portion of FMS #1. A new wash rack building is located east of FMS #1. This building was not included in the SOW because it was constructed within the last 3 years and would not likely contain PCB equipment. FMS #2 contains two maintenance bays and an electrical room. A sump pit and pump is located to the north of FMS #2. No potential PCB containing equipment was identified in and around the MVSB, FMS #1 and FMS #2 does not contain fluid that would potentially contain PCBs.

A warehouse on the western edge of the complex is utilized for cold storage. The electrical room of the warehouse contains an electrical panel, electrical switch, dry-type transformer and an air compressor. The air compressor was in poor condition at the time of the inspection and staining was observed on the compressor and nearby concrete floor. The USEPA does not expect that air compressors will contain PCBs at regulated levels of greater than or equal to 50 ppm (*PCB Question and Answer Manual*, USEPA, June 2014). No potential PCB containing equipment was identified in the warehouse.



The HSCOE/USPFO is a one-story brick building with a boiler room, two electrical rooms, HVAC room, offices and caged storage. The boiler room contains a gas boiler system, air handling unit and two dry-type transformers. Two additional dry-type transformers were mounted on the floor in the electrical room (Room 2) and one dry-type transformer and a main breaker panel is located in the second electrical room (Room 3). A safety switch and a dry-type transformer are located in the hallway outside of the caged storage area. The caged storage area contains mechanized bay doors and overhead HVAC blowers that are powered by air-cooled electric motors. No potential PCB containing equipment was identified in the HSCOE/USPFO.

Eight utility poles containing a total of fifteen pole-mount transformers manufactured by Howard (Figure 13, Map IDs 005, 006 and 007), Kuhlman (Figure 13, Map ID 007), Allis-Chalmers (Figure 13, Map ID 007), Westinghouse (Figure 13, Map IDs 008 and 013), ABB (Figure 13, Map ID 011) and GE (Figure 13, Map ID 012) were identified on the property. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the Westinghouse, Allis-Chalmers and GE transformers are non-PCB. Based on communication with the manufacturers and information presented on the transformers' name plates, the Howard and ABB transformers are non-PCB. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the Kuhlman transformer was manufactured in a facility that discontinued use of PCBs in 1965; however, they did not include date of manufacture in their serial numbers prior to 1979. The age of the Kuhlman transformer could not be determined and it is suspected to contain PCBs.

Five pad-mount transformers were observed at the Lawrenceville facility. Two of the pad-mount transformers are labeled with Public Service Electric & Gas (PSE&G) company numbers and appear to be manufactured in the 1980's. One of these transformers was manufactured by ABB (Figure 13, Map ID 009), who confirmed that all of their equipment is non-PCB. Based on communication with the utility company, PSE&G could not locate the other pad-mount transformer (Figure 13, Map ID 004) in their database when searching for the company number (P3122). Manufacturer information could not be confirmed for P3122. Therefore, the transformer is suspected to contain PCBs.

Historical records provided by NJARNG (see Appendix E) indicate that a 2,000 kVA rated padmount transformer (Figure 13, Map ID 002) located next to a 750 kVA pad-mount transformer (Figure 13, Map ID 003) south of the southeastern corner of the NJARNG HQ building was sampled on January 11, 1986. Analytical results show that PCBs were detected at a concentration of 630 ppm. There are currently two unmarked, locked and moderately weathered transformers located in this area that are believed to be the same transformers. A third unmarked transformer (Figure 13, Map ID 010) is located at the entrance of the HSCOE/USPFO building. Two of the unmarked pad-mount transformers that have no record of historic PCB sampling (Figure 13, Map IDs 003 and 010) are suspected to contain PCBs.

The elevator motor (Figure 13, Map ID 001) in the NJARNG HQ building, one Kuhlman polemount transformer (Figure 13, Map ID 007) and three pad-mount transformers (Figure 13, Map IDs 003, 004 and 010) are suspected to contain PCBs.



4.2.6 Mount Holly

On September 20, 2016, PARS was escorted by the armorer to survey the Mount Holly Armory located at 1670 Route 38 East in Mount Holly, New Jersey. The Mount Holly facility consists of one Armory constructed in 1963.

The Armory is a single-story brick building containing a drill hall with an elevated roof, supply room, weight room, boiler room and computer server room. Telecommunication equipment is located in the server room. The boiler room contains circuit breakers, electric safety switches, a domestic water heater and two boilers. The armorer informed PARS that the original boiler system was upgraded in 2006. Roll-up doors located in the drill hall are powered by air-cooled electrical motors. A lift station for the sewage system is located south of the Armory and contains two sewage pumps. The lift pit system control panel is located in the building adjacent to the pit. No potential PCB containing equipment was identified in and around the Armory.

One utility pole containing three Westinghouse pole-mount transformers (Figure 14, Map ID 001) is located east of the Armory on Windmill Way. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the three Westinghouse transformers were manufactured in 1987 and are therefore non-PCB.

None of the equipment surveyed at the Mount Holly facility is suspected to contain PCBs.

4.2.7 Princeton

On September 23, 2016, PARS was escorted by the armorer to survey the Princeton Warehouse located at 168 River Road in Princeton, New Jersey.

Constructed in 1934, the warehouse is a two-story brick building that is shared by the New Jersey Police and NJARNG. The floor plan consists of office and warehouse space. Air-cooled motors power HVAC blowers and bay door openers. A fire suppression system and air compressor are also located within the warehouse. No potential PCB containing equipment was identified in the Princeton Warehouse.

A single pole-mount GE transformer (Figure 15, Map ID 001) is located to the east of the Armory warehouse. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the transformer was manufactured in a non-PCB GE facility.

None of the equipment surveyed at the Princeton facility is suspected to contain PCBs.

4.2.8 Sea Girt

On October 17, 2016, PARS was escorted by the armorer to survey the Sea Girt National Guard Training Center located at 5 Camp Drive in Sea Girt, New Jersey. The Sea Girt facility was established in 1930 and has been receiving ongoing renovations through present time. Based on the table included in Appendix A, the Sea Girt Facility contains 44 buildings including barracks, residences, training buildings, camp ground facilities, a museum, Armory and pump house.



The Sea Girt armorer informed PARS that only a few buildings contained mechanical spaces that would need to be inspected. PARS was escorted to survey the interior of four buildings: Building 7 – Offices (1969), Building 11 – Mess Hall (1967), Building 26 – Theater (1940), and Building 35 – Armory (1977). PARS was informed that other buildings do not contain mechanical spaces relevant to the survey and that most of the buildings on the property are heated using radiant heat and hot water heaters or by HVAC systems located exterior to the buildings. Additionally, all transformers and oil-containing electrical equipment are located exterior to buildings.

Building 7 is a two-story brick office building that was being utilized by the New Jersey State Police as office space at the time of the survey. PARS was informed by the armorer that power is supplied to Building 7 from a small enclosure located southeast of Building 7 that contains new electrical equipment. Various electrical switches and panels are located throughout the building. A solar panel canopy is located above the parking lot west of Building 7. Electrical equipment including photovoltaic monitoring gear is located along the eastern end of the parking lot. No potential PCB containing equipment was identified in and around Building 7.

Building 11 is a single-story cinderblock building. The open floor plan is utilized as a mess hall. Two Allis-Chalmers pad mounted transformers (described below) provide power to Building 11 through an underground conduit to the building's mechanical room. The mechanical room contains a domestic hot water tank and a gas-powered boiler system. No potential PCB containing equipment was identified in Building 11.

Building 26 is a single-story cinderblock building. The armorer informed PARS that the building was formerly a movie theater that was converted to a classroom currently utilized by the State Police. An HVAC room containing an air-conditioning system comprised of six condenser units is located near the rear of the building. No potential PCB containing equipment was identified in Building 26.

Building 35 is a single-story brick building that serves as the NJARNG armory and contains a drill floor, vehicle maintenance bays, a boiler room, offices and a storage room. Electrical switches and panels are located throughout the building. A gas-powered boiler system is located in the boiler room. The boiler room also contains electrical breaker panels and safety switches. An industrial-sized air conditioning unit manufactured by Trane supplies the building air conditioning. The parking lot to the south of the armory building contains a solar panel canopy. The solar panels are connected to photovoltaic equipment located to the east of the parking lot. No potential PCB containing equipment was identified in and around the Armory.

Access to the northeastern edge of the property was restricted by construction activities. PARS was informed by the armorer that the buildings located in that area (Buildings 92, 94 and 95) are not furnished with electrical equipment.



Most of the buildings at Sea Girt receive power from pole-mount transformers. Pad-mount transformers provide power to Buildings 2, 7, 8, 11, 13, 35, 37 and the New Jersey State Police (NJSP) Crime Lab. In total, 12 pad-mount transformers, 67 pole-mount transformers and 2 pole-mount capacitor banks are either located on the Sea Girt facility grounds or outside the facility and supply electricity to Sea Girt buildings.

Of the 12 pad-mount transformers, nine were determined to be non-PCB based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the age of the transformers and contact with manufacturers (see Table 1 for details). Two pad-mount transformers (Figure 16, Map IDs 027 and 034) are located outside the Crime Lab and across Camp Drive to the northwest. These two transformers (Figure 16, Map IDs 027 and 034) are both secured shut and marked with utility company numbers (5279 and 61037, respectively). PARS requested manufacturer information regarding the transformers from Jersey Central Power & Light (JCP&L). JCP&L could not locate any information. The two transformers and the buildings associated with them are not visible in a 1979 historic aerial photograph. Therefore, these two pad-mount transformers (Figure 16, Map IDs 027 and 034) are believed to have been installed after 1979 and are assumed to be non-PCB. The remaining pad-mount transformer is located north of Building 8 (Figure 16, Map ID 028). This GE transformer north of Building 8 appears to be a build-type from the 1970's and is suspected to contain PCBs.

Of the 67 pole-mount transformers, 59 were determined to be non-PCB based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, age of the transformers, manufacturer name plates and contact with manufacturers (see Table 1 for details). The eight remaining pole-mount transformers were manufactured by Westinghouse (Figure 16, Map IDs 007 and 022), GE (Figure 16, Map ID 016) and the Standard Transformer Company (Figure 16, Map ID 040). Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, three of the Westinghouse transformers and the GE transformer were manufactured in facilities at a time when they were known to have used PCBs. The fourth Westinghouse transformer's name plate serial number was illegible and PCB status could not be determined. No information is available for the Standard Transformer Company except that they did use PCBs to some extent. These eight pole-mount transformers are suspected to contain PCBs.

The two capacitor units and associated oil or vacuum switches (Figure 16, Map IDs 036 and 038) were both manufactured by Cooper. Based on communication with the manufacturer, all Cooper equipment is non-PCB.

One pad-mount transformer (Figure 16, Map ID 028) and eight pole-mount transformers (Figure 16, Map ID's 007, 016, 022 and 040) located at the Sea Girt facility are suspected to contain PCBs.

4.2.9 Toms River

On September 23, 2016, PARS was escorted by the armorer to survey the Toms River Armory facility located at 1200 Whitesville Road in Toms River, New Jersey. The Toms River facility consists of an Armory (1956), UTMB (1956) and FMS (1956).



The Armory is a single-story brick building containing a drill floor with an elevated ceiling, kitchen, boiler room and offices. A small fire suppression system is associated with the commercial stove in the kitchen. The boiler room contains a gas-powered boiler system, electrical panels, breaker boxes and telecommunication equipment. The drill floor is heated by an overhead blower system powered by air-cooled electric motors. No potential PCB containing equipment was identified in the Armory.

The UTMB and contains an overhead oil-fired heating unit that is fueled from an AST located on the east side of the building. PARS was informed by the armorer that the FMS has no electricity and does not contain equipment relevant to the survey. No potential PCB containing equipment was identified in the UTMB.

One utility pole with three pole-mount Westinghouse transformers (Figure 17, Map ID 001) is located to the north of the Armory building. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the three Westinghouse transformers are non-PCB.

None of the equipment surveyed at the Toms River facility is suspected to contain PCBs.

4.2.10 Trenton-Mercer Aviation

On September 23, 2016, PARS was escorted by the armorer to survey the Trenton-Mercer Aviation Armory facility located at 152 Scotch Road West in Trenton, New Jersey. The Trenton-Mercer Aviation facility consists of a Hanger (1976) and FMS (1976).

The Hanger is a two-story brick building functioning as a helicopter hanger that is shared with the New Jersey State Police. Large mechanized bay doors along northeast and southwest walls of the hanger are operated by air-cooled motors. Various large wall-mounted fuse boxes located on the southeastern wall supply electricity to the hanger lights and HVAC system. Additional spaces on the first floor consist of a kitchen, two boiler rooms and offices. The boiler rooms contain boiler systems, air compressors (two of which appear to control heat to the building), a fire suppression system and various circulation pumps. An aviation parts washer was also observed in the Hanger. The basement of the building contains a large electrical panel room and caged storage. Air-cooled electrical motors power HVAC blowers throughout the Hanger.

The FMS building contains three maintenance bays and offices. Electrical components were limited to lights and a main electrical breaker. No potential PCB containing equipment was identified in the Hanger and FMS.

Two utility poles, each with a single pole-mount transformer manufactured by GE (Figure 18, Map ID 001) and Wagner (Figure 18, Map ID 002), were located to the east of the Armory along an unnamed access road. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the GE transformer was manufactured in a non-PCB facility and all Wagner transformers are non-PCB.

None of the equipment surveyed at the Trenton-Mercer facility is suspected to contain PCBs.



PARS

4.2.11 Tuckerton

On October 4, 2016, PARS was escorted by the armorer to survey the Tuckerton Armory facility located at 365 East Main Street in Tuckerton, New Jersey. The Tuckerton facility consists of an Armory (1961) and MVSB (1954).

The Armory is a single-story brick building with a kitchen, supply room, classrooms, offices and a boiler room. The boiler room contains a gas-powered boiler, sump pump and several electrical panels with gas-filled fuses. Telecommunications and electrical equipment is located in a classroom on the northern side of the building. PARS was informed by the armor that the HVAC system was replaced in 2015. No potential PCB containing equipment was identified in the Armory.

The MVSB was vacated when surveyed and the only electrical equipment located in the building is a fuse box with gas filled fuses. No potential PCB containing equipment was identified in the MVSB.

One utility pole containing three pole-mount Kuhlman transformers (Figure 19, Map ID 001 is located to the north of the Armory along the facility's driveway. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the three Kuhlman transformers were manufactured in 1989 and are non-PCB.

None of the equipment surveyed at the Tuckerton facility is suspected to contain PCBs.

4.2.12 Unit Training Equipment Site (UTES)

On October 4, 2016, PARS was escorted by the armorer to survey the UTES located at the intersection of Hawkins Road and Route 539 in Manchester Township, New Jersey. The UTES facility consists of a maintenance shop (1963), an Armory (1959) and a metal storage building (2000).

The Armory is a single-story brick building with an attached maintenance bay containing an electrical room, boiler room, storage room and offices. A metering cabinet and various electric switches and panels are located in the electrical room. The boiler room contains an oil-fired boiler system, main breaker boxes and telecommunications lines. Air-cooled electric motors power the mechanized bay doors in the maintenance area. No potential PCB containing equipment was identified in the Armory.

The maintenance shop and metal storage building are located northwest of the Armory. At the time of the survey, both buildings were vacant and utilities were disconnected. HVAC components in the maintenance shop is powered by an exterior portable generator. No potential PCB containing equipment was identified in the maintenance shop or metal storage building.



Three utility poles with a total of seven transformers are located on the property. Two utility poles contain three transformers manufactured by RTE Corporation (Figure 20, Map ID 001) and Westinghouse (Figure 20, Map ID 003) and one utility pole contains a single pole-mount ERMCO transformer (Figure 20, Map ID 002). Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the Westinghouse and RTE Corporation transformers are non-PCB and the ERMCO transformer's name plate states that it is non-PCB.

None of the equipment surveyed at the UTES facility is suspected to contain PCBs.

4.2.13 Westfield

On October 3, 2016, PARS was escorted by the armorer to survey the Westfield Armory facility located at 500 Rahway Avenue in Westfield, New Jersey. The Westfield facility consists of an Armory (1925) and FMS (1949).

The Armory is a two-story brick building with a partial basement that contains offices, a boiler room, mechanical space and drill floor. The partial basement contains the sprinkler system controls, telecommunications equipment and electrical safety switches and boxes. The boiler room is also located in the basement. PARS was informed the entire HVAC system was replaced since 2010 and the building's two digitally controlled modulated boilers were installed since 2012. The drill floor contains two floor mounted heating units with associated electrical safety switches, boxes and panels. No potential PCB containing equipment was identified in the Armory.

The FMS building is a one-story maintenance building that contains a large storage area, a work bay, a former drive-through fueling station and offices. Safety switches and air-cooled electrical motors that operate the mechanized bay doors are the only electrical components located within the FMS building. No potential PCB containing equipment was identified in the FMS.

One utility pole containing three pole-mount Cooper transformers (Figure 21, Map ID 001) is located to the north of the Armory complex along Rahway Avenue. Based on communication with the manufacturer, all Cooper equipment is non-PCB.

None of the equipment surveyed at the Westfield facility is suspected to contain PCBs.

4.2.14 Woodbridge

On October 18, 2016, PARS was escorted by the armorer to survey the Woodbridge Armory located at 625 Main Street in Woodbridge, New Jersey.

Constructed in 1961, the Armory is a single-story brick building with offices, a drill floor with an elevated roof, a kitchen and boiler room. Electrical service panels, safety switches and air-cooled electric motors are located in the drill floor area. The boiler room contains electrical service panels, safety switches, a gas-powered boiler system and telecommunication lines. No potential PCB containing equipment was identified in the Armory.



Two utility poles, one with two pole-mount Central Moloney transformers (Figure 22, Map ID 002) and the other with three pole-mount transformers manufactured by Central Moloney, Allis-Chalmers and Westinghouse (Figure 22, Map ID 001), are located alongside of the driveway on the eastern limits of the property. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, all of the transformers are non-PCB.

None of the equipment surveyed at the Woodbridge facility is suspected to contain PCBs.

4.3 NORTHERN REGION

4.3.1 Dover

On October 11, 2016, PARS was escorted by the armorer to survey the Dover Armory facility located at 479 West Clinton Street in Dover, New Jersey. The Dover facility consists of an Armory (1963) and a former FMS (1949).

The Armory is a two-story brick building with a drill floor, kitchen, two supply rooms, two storage rooms, classrooms and a boiler room. Access to the building was limited during the time of survey due to construction to both the interior and exterior of the Armory. The boiler room contains a gas-powered boiler system with circuit breakers, meters and electrical safety switches located on the walls. No potential PCB containing equipment was identified in the Armory.

The FMS is a one-story building that contains a kitchen, maintenance area, office and supply room. Three oil-fired HVAC heating units were installed in the building since 2014. No potential PCB containing equipment was identified in the FMS.

A utility pole located to the west of the Armory contains a single transformer manufactured by Line Material Company (Figure 23, Map ID 001). The age of the transformer predates company records and has the potential to contain PCBs. Heavy rusting was visible on the lid of the transformer with discoloration and rusting along its weld points. A second pole located to the east of the Armory building contains three GE transformers (Figure 23, Map ID 002). Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, two of the GE transformers were manufactured in a non-PCB GE facility. The third GE transformer was produced at a GE facility that was known to use PCBs and is suspected to contain PCBs.

One Line Material Company Transformer (Figure 23, Map ID 001) and one GE pole-mount transformer (Figure 23, Map ID 002) at the Dover facility are suspected to contain PCBs.

4.3.2 Flemington

On October 12, 2016, PARS was escorted by the armorer to survey the Flemington Armory facility located on State Highway #12 in Flemington, New Jersey. The Flemington facility consists of an Armory (1961) and a MVSB (1950).



The Armory is a one-story brick building containing a drill floor with an elevated roof, boiler room, telecommunications room and offices. The boiler room contains a boiler system that was converted to natural gas in 1986 and a domestic hot water heater. The telecommunications room contains a main breaker, electrical switches and meter, telecommunication lines and a limited service fire pump controller. No potential PCB containing equipment was identified in the Armory.

The MVSB is a brick single-story building containing a large area for cold storage. A wash rack/vehicle paint area separates the maintenance area from a small office area. The wash rack/vehicle paint room of the MVSB contains an abandoned fuel line which was once connected to an underground storage tank (UST) that is no longer located on the property. Air handler units are powered by air-cooled motors. A fire suppression room with an associated 10,000-gallon AST is attached to the northern side of the MVSB. No potential PCB containing equipment was identified in the MVSB.

Two utility poles containing a total of four Westinghouse pole-mount transformers (Figure 24, Map IDs 001 and 002) are located on the property to the west of the Armory. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers* and the serial numbers, the four Westinghouse transformers were manufactured in 1986 and are non-PCB.

None of the equipment surveyed at the Flemington facility is suspected to contain PCBs.

4.3.3 Franklin

On October 11, 2016, PARS was escorted by the armorer to survey the Franklin Armory facility located at 12 Monsunhurst Road in Franklin, New Jersey. The Franklin facility consists of an Armory (1956) and MVSB (1949).

The Armory is a single-story brick building containing a drill floor with an elevated roof, offices and a boiler room. During the survey, the armorer informed PARS that various community organizations utilize the Armory building for meetings. The boiler room contains a boiler system that was upgraded in 2001 and electrical panels. The HVAC distribution system and mechanized roll-up doors located above the drill floor are powered by air-cooled electric motors. No potential PCB containing equipment was identified in the Armory.

At the time of the survey, the MVSB was under lease to a private party and PARS was not permitted to enter the building. PARS was informed by the armorer that there is no equipment relevant to the survey inside the building.

Three utility poles containing a total of four transformers were identified on the property. One utility pole containing a single Cooper transformer (Figure 25, Map ID 003) is located to the north of the Armory on Monsunhurst Road. Two utility poles, one with three Cooper polemount transformers (Figure 25, Map ID 001) and one with a single ERMCO pole-mount transformer (Figure 25, Map ID 002), are located to the south and southwest of the property. The ERMCO and Cooper transformer name plates state that all the transformers are non-PCB.

None of the equipment surveyed at the Franklin facility is suspected to contain PCBs.



4.3.4 Hackettstown

On October 12, 2016, PARS was escorted by the armorer to survey the Hackettstown Armory facility located at 901 Willow Grove Street in Hackettstown, New Jersey. The Hackettstown facility consists of an Armory (1946) and attached MVSB (1949).

The Armory is a single-story brick building containing a storage room, mechanical room, furnace room, offices, classrooms and an attached MVSB. During the survey, PARS was informed by the armorer that the building's electrical components had been updated in 2005. The electrical room contains telecommunication lines and a main breaker panel. The boiler room contains a boiler system and one domestic hot water heater. PARS was informed by the armorer that all of the equipment in the boiler room, including the domestic hot water heater, was replaced in 2013 or later. Junction boxes and system controls are located on the walls of the boiler room. An HVAC blower and an exhaust fan mounted on the eastern wall of the motor vehicle storage area are both powered by air-cooled electric motors. No potential PCB containing equipment was identified in the.

A dry-type transformer is located south of the motor vehicle storage area on a concrete pad. The dry-type transformer once provided power to a former tank simulator.

Two utility poles, one containing three Westinghouse (Figure 26, Map ID 001) and the other containing three GE transformers (Figure 26, Map ID 002), were identified in the southern portion of the armory. Based on serial numbers, the transformers were manufactured in 1982 and 1986 and are non-PCB.

None of the equipment surveyed at the Hackettstown facility is suspected to contain PCBs.

4.3.5 Jersey City

On October 14, 2016, PARS was escorted by the armorer to survey the Jersey City Armory located at 678 Montgomery Street in Jersey City, New Jersey.

Constructed in 1939, the Armory is a four-story brick building containing a drill floor, parking garage, boiler room, full-service cafeteria and offices. The drill floor has been converted into a basketball court with an HVAC system installed in 2015. The boiler room contains two boilers, two domestic hot water tanks, the building's fire suppression system and various electrical panels, meters and switches. Electricity is fed directly into the building from an underground source through a vault located in the basement of the building along the southern wall. Historic documentation from 1982 (see Appendix F) indicates that there were formerly six single-phase transformers located within the vault. The armorer informed PARS that PSE&G had removed the transformers. PARS observed the vault to be empty aside from electric cables and old support framework. Electricity appears to travel from the vault to the electrical room, supplying power to a main breaker panel and safety switch. No potential PCB containing equipment was identified in the Armory.

PARS walked the perimeter of the Armory and did not observe any transformers or other potential PCB-containing electrical equipment exterior to the building.



PARS

None of the equipment surveyed at the Jersey City facility is suspected to contain PCBs.

4.3.6 Lodi

On October 14, 2016, PARS was escorted by the armorer to survey the Lodi Armory facility located at 178 Essex Street in Lodi, New Jersey. The Lodi facility consists of an Armory (1958) and two MVSBs (1948).

The Armory is a single-story brick building containing a drill hall with an elevated roof, kitchen, supply rooms, storage rooms, offices and a boiler room. The boiler room contains electrical service panels and a boiler system. No potential PCB containing equipment was identified in the Armory.

During the survey, PARS was informed that both MVSBs were occupied by the New Jersey DSMV and activities performed in these buildings are unaffiliated with NJARNG. The two MVSBs each contain an air compressor and four overhead oil-burning HVAC units with blowers powered by air-cooled electric motors. Mechanized bay doors are also powered by air-cooled electric motors. No potential PCB containing equipment was identified in the MVSBs.

A single pole-mount Central Moloney transformer (Figure 28, Map ID 001) is located northeast of the Armory and three Westinghouse transformers (Figure 28, Map ID 002) are mounted to a single pole located along the northwestern property boundary. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the transformers were manufactured in 1988 and 2007 and are non-PCB.

None of the equipment surveyed at the Lodi facility is suspected to contain PCBs.

4.3.7 Morristown

On October 12, 2016, PARS was escorted by the armorer to survey the Morristown Armory facility located at 430 Western Avenue in Morristown, New Jersey. The Morristown facility consists of an Armory (1958) and UTMB (1956).

The Armory is a two-story brick building containing a drill hall, offices, an electrical room and a boiler room. The boiler room contains telecommunications equipment, electrical panels, an electrical cabinet, electrical safety switches, two digitally controlled modulated boiler systems and two domestic hot water heaters. During the survey, PARS was informed by the armorer that the boiler systems were installed since 2010 and the domestic water heaters were replaced since 2014. A large electric metering cabinet with a JCP&L sticker is located in the electrical room. The drill hall contains several electric panels, a main service panel, a Square D safety switch cabinet and high voltage outlets and cables. The equipment surveyed in the Armory does not contain fluids that would potentially contain PCBs.

The UTMB is a one-story brick building that contains work bays and an office. HVAC blowers and mechanized bay doors are operated by air-cooled electric motors. No potential PCB containing equipment was identified in the UTMB.



Three pole-mount transformers manufactured by H. K. Porter (Figure 29, Map ID 002) are mounted on a utility pole located east of the Armory. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, H. K. Porter never used PCBs, but does not certify any transformer that was manufactured prior to July 1, 1979 to be non-PCB. These transformers are not suspected to contain PCBs because H. K. Porter never used PCBs.

Two small structures that the armorer informed to be radio control bunkers, along with a radio tower and storage shed, are located southwest of the Armory near a wooded area. The storage shed does not have electricity and the two radio control bunkers were locked and inaccessible at the time of the survey. A pole-mount transformer manufactured by GE was identified near the radio control bunkers at the southern limits of the property. During the survey, PARS was informed that the area around the utility pole had recently been cleared of heavy vegetation and the transformer previously had been concealed from view. The GE transformer (Figure 29, Map ID 003) was noted to not be properly mounted on the pole, possibly due to a failed mounting bracket. The manufacturer name plate on the GE transformer is not legible. Based on the transformer's apparent age and lack of manufacturer data, it is suspected to contain PCBs.

A pad-mount transformer (Figure 29, Map ID 001) with faded identification markings is located south of the Armory boiler room. A sticker which reads "No PCBs" is affixed to the front of the transformer. The transformer appears to be a build-type from the 1980's, but its age and contents could not be confirmed without access to the serial plate on the inside of the transformer door. Based on historic documents, this transformer was not identified during the 1982 PCB survey (see Appendix G); therefore, it is assumed to have been installed after 1982 and non-PCB.

One GE pole-mount transformer (Figure 29, Map ID 003) at the Morristown facility is suspected to contain PCBs.

4.3.8 Newark

On October 5, 2016, PARS was escorted by the armorer to survey the Newark Armory located at 120 Roseville Avenue in Newark, New Jersey. Constructed in 1908, the Armory building is a three-story brick building with a majority of the floorplan dedicated to vehicle maintenance and storage. The boiler room contains electrical panels, fire suppression system controls and two gas-powered boilers. No potential PCB containing equipment was identified in and around the Armory.

Power to the Armory was traced to an overhead line that enters the building at its southwestern corner. The powerline appears to travel through the building directly into the main service panel and safety switch. Outside the building the overhead line travels down a utility pole and underground. No transformers or other fluid filled electrical equipment were observed inside or outside the Armory.

None of the equipment surveyed at the Newark facility is suspected to contain PCBs.



4.3.9 Picatinny

On October 11, 2016, PARS was escorted by the armorer to survey the Picatinny FMS located at the intersection of Lake Denmark and Snake Hill Road in Wharton, New Jersey.

Constructed in 1978, the FMS is a single-story brick building with offices, a kitchen, boiler room and a large maintenance bay with an elevated roof. The boiler room contains three boilers with associated system components. PARS was informed by the armorer that the boilers were installed since 2010 and the oil burners for the boiler system were installed in 2014. Wall-mounted electric controls, panels, alarms, monitors and the main electrical breaker are also located within the boiler room. Maintenance bay doors and HVAC blowers are powered by air-cooled electric motors. A small fire suppression system is associated with the commercial stove in the kitchen. No potential PCB containing equipment was identified in the FMS.

A fueling dock is located to the south of the building and the only electrical equipment observed around the fueling dock was a meter and fuel pumps.

A pad-mount transformer (Figure 31, Map ID 001) is located northwest of the FMS. Based on the barcode and serial number sticker affixed to the transformer, the unit was manufactured in either 1988 or 1998 and is non-PCB. Additionally, based on historic documents (see Appendix H), the pad-mount transformer was not present during the survey performed in 1982.

A Crouse - Hinds SEPCO single-phase constant current regulator (Figure 31, Map ID 002) enclosed in a metal cabinet is located to the west of the northern corner of the FMS building. The regulator maintains voltage traveling to the airfield lighting circuits associated with the helicopter landing pads. Manufacturer information obtained by PARS could not eliminate the potential that the regulator contains PCBs. Additionally, based on historic documents (see Appendix H), the regulator was present during the previous PCB survey performed in 1982. Therefore, the Crouse – Hinds SEPCO single phase constant current regulator was likely installed during the construction of the FMS in 1978 and is suspected to contain PCB fluids. The constant current regulator was in good condition with only minor rusting at the time of surveillance, however, groundhog activity adjacent to and under the pad may compromise the stability of the equipment.

The Crouse – Hinds SEPCO single phase constant current regulator (Figure 31, Map ID 002) at the Picatinny facility is suspected to contain PCBs.

4.3.10 Riverdale

On October 11, 2016, PARS was escorted by the armorer to survey the Riverdale Armory facility located at 107 Newark-Pompton Turnpike in Riverdale, New Jersey. The Riverdale facility consists of an Armory (1962) and UTMB (1949).

The Armory is a two-story brick building with a drill floor, boiler room, kitchen and offices. The boiler room contains two boilers, electrical panels and telecommunications equipment. Various electrical panels and safety switches are located throughout the Armory building. No potential PCB containing equipment was identified in the Armory.



The UTMB is a one-story brick building. Blowers for the overhead oil-fired heater units are powered by air-cooled motors. Electric panels, meters and safety switches are mounted on the wall of the UTMB. No potential PCB containing equipment was identified in the UTMB.

Three utility poles containing a total of five pole-mount transformers manufactured by ERMCO (Figure 32, Map IDs 002 and 004) and Wagner (Figure 32, Map ID 003) are located on the property. A fourth utility pole with three pole-mount GE transformers (Figure 32, Map ID 001) is located near the northern property boundary adjacent to a New Jersey Department of Transportation (NJDOT) equipment staging yard. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, all Wagner transformers are non-PCB. The ERMCO and GE transformers all have manufacturer name plates stating that they are non-PCB.

None of the equipment surveyed at the Riverdale facility is suspected to contain PCBs.

4.3.11 Somerset

On October 18, 2016, PARS was escorted by the armorer to survey the Somerset Armory facility located at 1060 Hamilton Street in Somerset, New Jersey. The Somerset facility consists of an Armory (1980) and FMS (1980).

The Armory is a two-story brick building with a drill floor, boiler room, kitchen and offices. The boiler room contains two gas-powered boilers, various electrical panels, breaker boxes and telecommunications equipment. The drill floor contains a large HVAC blower that is powered by an air-cooled motor. No potential PCB containing equipment was identified in the Armory.

The FMS building contains five vehicle maintenance bays, a mechanical room, supply room and flammable storage room. Overhead blowers associated with the HVAC and mechanized bay doors are powered by air-cooled motors. No potential PCB containing equipment was identified in the FMS.

Three utility poles each containing three pole-mount transformers are located on the property. The transformers were manufactured by RTE Corporation (Figure 33, Map ID 001), Central Moloney (Figure 33, Map ID 001 and 003), Howard (Figure 33, Map ID 002), Allis-Chalmers (Figure 33, Map ID 003) and GE (Figure 33, Map ID 003). Six of the transformers are located to the north of the FMS building and supply power to the FMS building and adjacent vehicle storage yard. The other three transformers are located to the west of the Armory and supply electricity to the Armory. Based on communication with the manufacturer, all Howard transformers are non-PCB. The NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers* indicates that the Allis-Chalmers, Central Moloney, GE and RTE Corporation transformers are also non-PCB.

None of the equipment surveyed at the Somerset facility is suspected to contain PCBs.



PARS

4.3.12 Teaneck

On October 14, 2016, PARS was escorted by the armorer to survey the Teaneck Armory facility located at 1799 Liberty Road in Teaneck, New Jersey. The Teaneck facility consists of an Armory (1938) and FMS (1955).

The Armory is a three-story brick building that contains vehicular storage, skilled craft shops, supply rooms, a switch room and boiler room. Mechanical spaces are confined to the basement of the Armory. The first and second floor layouts consist of the drill floor and offices. The drill floor is utilized as an indoor turf field rented out to local sports organizations. The drill floor contains an electric panel board to control overhead lighting and HVAC. The boiler room contains two gas-powered boilers. Electrical panels and safety switches are located throughout the building and the main electrical breaker and various safety switches are located in the switch room. No potential PCB containing equipment was identified in the Armory.

During the survey, PARS was informed by the armorer that a transformer vault (Figure 34, Map ID 001) is located on the northern side of the basement that contains four transformers that distribute electricity throughout the building. The vault door was locked and could not be opened at the time of the survey. Based on information included from the PCB survey performed in 1982 (see Appendix F and I), the vault contains three GE transformers that were original to the building (circa 1938), an oil switch manufactured in 1935, a circuit breaker and a circuit panel. The current status and model numbers of equipment in the Teaneck Armory transformer vault could not be confirmed and the PCB-status of the electrical equipment in the vault is unknown. PARS requested information regarding the transformer vault from PSE&G and PSE&G was not able to locate any information. If equipment is still present in the vault, then it is suspected to contain PCBs.

The FMS is a single-story brick building that consists of maintenance bays, offices, a boiler room and a storage area. The boiler room contains a gas-powered boiler system. Mechanized bay doors are powered by air-cooled electric motors. No potential PCB containing equipment was identified in the FMS.

Two utility poles containing six pole-mount transformers manufactured by ERMCO (Figure 34, Map ID 002) and Central Moloney (Figure 34, Map ID 003) are located to the northeast of the Armory building. Based on manufacturer name plates on each transformer they are all non-PCB.

None of the equipment surveyed at the Teaneck facility is suspected to contain PCBs, however, PCB status of the any equipment stored in the transformer vault of the Armory (Figure 34, Map ID 001) is suspected to contain PCBs based on lack of data.

4.3.13 Washington (Port Murray)

On October 12, 2016, PARS was escorted by the armorer to survey the Washington Armory (also known as Port Murray) located at 550 Route 57 in Washington, New Jersey.



Constructed in 1958, the Armory is a two-story brick building containing a drill floor, maintenance garage, mechanical shops, class rooms, offices, a weight room, elevator room and heater room. The heater room contains an oil-fired heater unit, fire suppression system controls, a well water tank and various electrical panels and safety switches. Electrical panels and safety switches are located throughout the building. The elevator room contains an Otis Company hydraulic motor (Figure 35, Map ID 004). Due to its age, the elevator equipment is suspected to contain PCBs.

A dry-type transformer is located south of the building within a fenced in yard. Four pole-mount transformers manufactured by Howard (Figure 35, Map ID 002) and Central Moloney (Figure 35, Map ID 003) are mounted on two poles located near the eastern limits of the property. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the Central Moloney pole-mount transformers are non-PCB. Based on communication with the manufacturer, all Howard equipment is non-PCB. A pad-mount transformer (Figure 35, Map ID 001) located on the grass to the west of the maintenance shop supplies power to the Armory. JCP&L stickers and a utility number are affixed to the pad-mount transformer. PARS requested information regarding the transformers from JCP&L. JCP&L confirmed ownership of the transformer but could not provide information pertaining to the transformer's PCB status. Based on lack of manufacturer information, the pad-mount transformer is suspected to contain PCBs.

The Otis Company hydraulic elevator motor (Figure 35, Map ID 004) and pad-mount transformer (Figure 35, Map ID 001) at the Washington facility are suspected to contain PCBs.

4.3.14 West Orange

On October 5, 2016, PARS was escorted by the armorer to survey the West Orange Armory facility located at 1315 Pleasant Valley Way in West Orange, New Jersey. The West Orange facility consists of an Armory (1939), two CSMSs (1958) and a Computer Repair Shop (1977). The property also contains a building for refrigerated storage and a Homeland Security outpost. The refrigerated storage and the Homeland Security buildings were installed since 2000 and were not included in the SOW.

The Armory is a two-story brick building that contains offices, a supply room, a boiler room and a drill floor. Electricity enters the building through the boiler room where a service disconnect, current transformer cabinet, transfer switch, telecommunication lines and main breakers are located in addition to two gas-powered boilers. During the survey, PARS was informed by the armorer that the boiler room was renovated since 2000 and the HVAC system was renovated in 2015. No potential PCB containing equipment was identified in the Armory.

CSMS #1 is a one-story brick building that contains a maintenance bay area, offices, a kitchen, a supply room, an electrical closet and a boiler room. The electrical closet contains electrical safety switches and circuit breaker panels and the boiler room contains a gas-powered boiler system. A small fire suppression system is associated with the commercial stove in the kitchen. Three dry-type transformers are suspended from the rafters of the maintenance bay area. CSMS #2 is a one-story brick building used for cold storage. A hot water heater is located in CSMS #2. No potential PCB containing equipment was identified in the CSMS buildings.



PARS

The Computer Repair Shop is a one-story brick building used as a small vehicle maintenance building. Air-cooled electric motors power the overhead heating unit blowers. No potential PCB containing equipment was identified in the Computer Repair Shop.

Two pad-mount transformers manufactured by Cooper (Figure 36, Map ID 001) and ABB Power (Figure 36, Map ID 005) and nine pole-mount transformers manufactured by GE (Figure 36, Map IDs 002 and 004), Cooper (Figure 36, Map ID 004), Howard (Figure 36, Map ID 003) and Westinghouse (Figure 36, Map ID 004), are located on the property. Pad-mount transformers are located west of the Armory and south of CSMS #1. Pole-mount transformers are located to the east of the Armory complex and supply power to CSMS #2, the Computer Repair Shop and Homeland Security building. The pad-mount transformers were manufactured in 1995 and 1998 and are non-PCB. Manufacturer name plates on all of the pole-mount transformers, except one GE transformer, state that the equipment is non-PCB. Based on the NJDEP *Guidelines for Determining the PCB Status of Distribution Transformers*, the remaining pole-mount GE transformer was manufactured in a non-PCB GE facility.

None of the equipment surveyed at the West Orange facility is suspected to contain PCBs.



PARS

5.0 RECOMMENDATIONS AND ESTIMATED COSTS

A total of 27 pieces of electrical equipment located at various NJARNG facilities were determined to be suspected of containing PCBs based on the surveys performed by PARS in September and October of 2016. Additional suspected PCB containing equipment may be present in the locked transformer vault at the Teaneck Armory. One piece of equipment, a pad mount transformer at the Lawrenceville Headquarters, was determined to have been previously tested and confirmed to contain PCBs at a concentration of 630 ppm.

In this section, findings and recommendations related to the equipment suspected to contain PCBs are summarized and accompanied by photographs and order of magnitude (ROM) cost estimates to sample and analyze the equipment's fluids for PCBs. Equipment summaries, photographs and sampling costs are presented below by region and facility.

Estimated costs recorded in the following subsections include labor for project coordination, a sampling technician and electrician for sample collection and analytical laboratory costs. For pole-mount equipment, additional cost for a lift crane and operator are included, and for the equipment located within a confined space, cost for a three-member confined space entry crew and required equipment is included.

5.1 SOUTHERN REGION

The total estimated cost for sampling all equipment suspected of containing PCBs in the Southern Region is \$3,570. Vineland is the only facility in the Southern Region where equipment suspected to contain PCBs was observed.

5.1.1 Vineland

A Roller Smith oil switch (Figure 6, Map ID 002) with unknown PCB status is installed in a transformer vault located outside the Vineland Armory. Vineland Electric claims they own the transformers in the vault but do not own the switch.

The estimated cost to sample the Roller Smith oil switch located at the Vineland facility is \$3,570.







Photograph 1 – The Roller Smith oil switch and associated name plate located in the transformer vault at the Vineland facility (Figure 6, Map ID 002).

5.2 CENTRAL REGION

The total estimated cost for sampling all equipment suspected of containing PCBs in the Central Region is \$12,810. Estimated cost for each facility is included in the following subsections.

5.2.1 Bordentown

Three pole-mount Kuhlman transformers (Figure 9, Map ID 002) with unknown manufacture dates are located on a single utility pole at Bordentown. The transformers are owned by PSE&G.

The estimated cost to sample the three pole-mount Kuhlman transformers located at the Bordentown facility is \$3,160.





Photograph 2 – Three pole-mount Kuhlman transformers located at the Bordentown Facility (Figure 9, Map ID 002).



Photograph 3 – The name plate on Kuhlman transformer #1 at the Bordentown facility (Figure 9, Map ID 002).





Photograph 4 – The name plate on Kuhlman transformer #2 at the Bordentown facility (Figure 9, Map ID 002).



Photograph 5 – The name plate on Kuhlman transformer #3 at the Bordentown facility (Figure 9, Map ID 002).



5.2.2 Fort Dix

One pad-mount transformer (Figure 11, Map ID 003) is located in the secured vehicle yard behind Building 3601. The transformer is heavily rusted and has various JCP&L stickers affixed to its case. The transformer's manufacture data is unknown.

The estimate cost to sample the pad-mount transformer behind Building 3601 at Fort Dix is \$1,920. Due to the vegetation and heavy rust on the transformer, maintenance or replacement of the transformer is recommended.



Photograph 6 – The pad mount transformer located behind Building 3601 in the secured vehicle yard (Figure 11, Map ID 003).







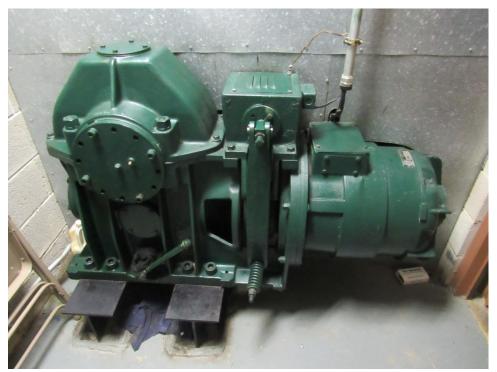
Photograph 7 – Another angle of the pad mount transformer located behind Building 3601 in the secured vehicle yard (Figure 11, Map ID 003).

5.2.3 Lawrenceville

The Otis elevator motor (Figure 13, Map ID 001) in the NJARNG HQ building, one Kuhlman pole-mount transformer (Figure 13, Map ID 007) and three pad-mount transformers (Figure 13, Map IDs 003, 004 and 010) are suspected to contain PCBs. Additionally, one pad-mount transformer (Figure 13, Map ID 002) located south of the NJARNG HQ building was sampled in 1986 and confirmed to contain PCBs at a concentration of 630 ppm. The elevator motor, the two pad-mount transformers located behind the NJARNG HQ building and the pad-mount transformer outside the USPFO/HSCOE building are believed to be owned by NJARNG. All other equipment is owned by PSE&G.

The estimated cost to sample the elevator motor, Kuhlman pole-mount transformer and three suspected pad-mount transformers is \$3,400. This cost does not include resampling of the GE transformer that was previously sampled in 1986.





Photograph 8 – The Otis elevator motor located in the basement of the NJARNG HQ building at the Lawrenceville facility (Figure 13, Map ID 001).



Photograph 9 – Located behind the NJARNG HQ building, the pad-mount transformer in the foreground is believed to be a GE and is suspected to contain PCBs (Figure 13, Map ID 003). The larger transformer in the background is a GE that was sampled in 1986 and confirmed to contain PCBs at 630 ppm (Figure 13, Map ID 002).





Photograph 10 – Another photo of the GE transformer confirmed to contain PCBs in 1986 (Figure 13, Map ID 002).



Photograph 11 – A pad-mount transformer located north of the Armory (Figure 13, Map ID 004). PSE&G could not find this transformer in their database. The transformer appears to be a mid-80's build, however, manufacture data is unknown.





Photograph 12 – An unmarked pad-mount transformer located outside the USPFO/HSCOE building (Figure 13, Map ID 010). Manufacture data is unknown.



Photograph 13 – The utility pole containing the suspected PCB containing Kuhlman transformer (Figure 13, Map ID 007).







Photograph 14 – The manufacturer name plate on one of the Kuhlman transformers located at the Lawrenceville facility (Figure 13, Map ID 007).

5.2.3 Sea Girt

One pad-mount transformer (Figure 16, Map ID 028) and eight pole-mount transformers (Figure 16, Map ID's 007, 016, 022 and 040) located at the Sea Girt facility are suspected to contain PCBs. All suspected equipment is believed to owned by NJARNG.

The estimated cost to sample the three pad-mount and eight pole-mount transformers at the Sea Girt facility is \$4,330.





Photograph 15 – The utility pole containing three Westinghouse transformers that were manufactured in a facility known to have used PCBs (Figure 16, Map ID 007).



Photograph 16 – The manufacturer name plate on Westinghouse transformer #1 (Figure 16, Map ID 007).





Photograph 17 – The manufacturer name plate on Westinghouse transformer #2 (Figure 16, Map ID 007).



Photograph 18 – The manufacturer name plate on Westinghouse transformer #3 (Figure 16, Map ID 007).





Photograph 19 – The utility pole containing one GE transformer that was manufactured in a GE facility known to have used PCBs (Figure 16, Map ID 016).



Photograph 20 – The manufacturer name plate on the GE transformer suspected to contain PCBs (Figure 16, Map ID 016).





Photograph 21 – The utility pole containing three Westinghouse transformers manufactured in 1976 (Figure 16, Map ID 022).



Photograph 22 – The manufacture name plate for the Westinghouse transformer above, the third character of the serial number (which indicates place of manufacture) is illegible (Figure 16, Map ID 022).



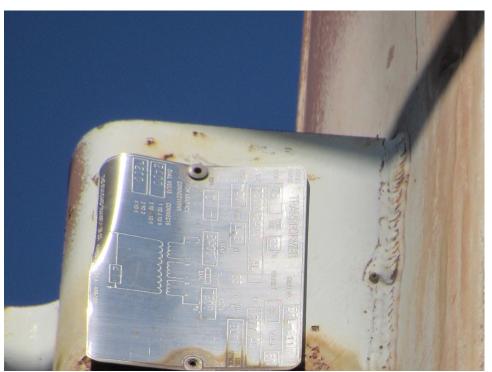


Photograph 23 – An unmarked transformer located outside Building 8. Build is consistent to transformers built in the 1970's and manufacture data is unknown (Figure 16, Map ID 028).



Photograph 24 – The utility pole containing three Standard Transformer Company transformers (Figure 16, Map ID 040).





Photograph 25 – The manufacturer name plate on Standard Transformer Company transformer #1 (Figure 16, Map ID 040).



Photograph 26 – The manufacturer name plate on Standard Transformer Company transformer #2 (Figure 16, Map ID 040).







Photograph 27 – The manufacturer name plate on Standard Transformer Company transformer #3 (Figure 16, Map ID 040).

5.3 NORTHERN REGION

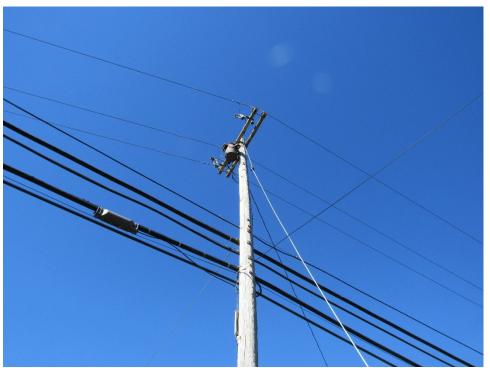
The total estimated cost for sampling all equipment suspected of containing PCBs in the Northern Region is \$10,020. Estimated cost for each facility is included in the following subsections.

5.3.1 Dover

Two pole-mount transformers, one manufactured by Line Material Company with unknown PCB status (Figure 23, Map ID 001) and the other by GE at a facility that is known to have used PCBs at the time it was manufactured (Figure 23, Map ID 002). The transformers are located on separate utility poles and are owned by JCP&L.

The estimated cost to sample the two pole-mount transformers at the Dover facility is \$3,090.





Photograph 28 – Utility pole containing the Line Material Co. transformer at the Dover facility (Figure 23, Map ID 001).



Photograph 29 – The name plate on the Line Material Co. transformer at the Dover facility (Figure 23, Map ID 001).





Photograph 30 – Utility pole containing the suspected GE transformer at the Dover facility (also contains two GE transformers manufactured at a non-PCB GE facility) (Figure 23, Map ID 002).



Photograph 31 – The name plate on the GE transformer suspected to contain PCBs at the Dover facility (Figure 23, Map ID 002).



5.3.2 Morristown

One GE pole-mount transformer (Figure 29, Map ID 003) at the Morristown facility is suspected to contain PCBs.

The estimated cost to sample the pole-mount transformer located at the Morristown facility is \$3,020.



Photograph 32 – A GE transformer located in a heavily vegetated area at the Morristown facility (Figure 29, Map ID 003). The transformer appears to be hanging by only one bracket, rusted and in need of attention. Manufacturer data is unknown.

5.3.3 Picatinny

One Crouse – Hinds SEPCO single phase constant current regulator (Figure 31, Map ID 002) at the Picatinny facility is suspected to contain PCBs.

The estimated cost to sample the constant current regulator at the Picatinny facility is \$1,920.







Photograph 33 – The manufacturer name plate for the Crouse – Hinds SEPCO single phase constant current regulator located at the Picatinny facility (Figure 31, Map ID 002). PCB status could not be confirmed using manufacturer data.

5.3.4 Teaneck

A locked transformer vault (Figure 34, Map ID 001) at the Teaneck facility could not be accessed by the armorer at the time of the survey and its contents are unknown. PARS recommends opening the vault to collect manufacturer information from any contained equipment. Estimated sampling costs cannot be determined without knowing what equipment is contained in the vault.





Photograph 34 – The locked door to the transformer vault located in the basement of the Teaneck Armory (Figure 34, Map ID 001).

5.3.3 Washington

The Otis Company hydraulic elevator motor (Figure 35, Map ID 004) and a pad-mount transformer (Figure 35, Map ID 001) at the Washington facility is suspected to contain PCBs. Due to its age the elevator motor is suspected to contain PCBs. The pad-mount transformer is suspected to contain PCBs due to lack of manufacturer data. The pad-mount transformer is owned by JCP&L.

The estimated cost to sample the elevator motor and pad-mount transformer at the Washington facility is \$1,990.





Photograph 35 – The manufacturer name plate for the Otis Elevator Company (Figure 35, Map ID 004). Due to its age the elevator motor is suspected to contain PCBs.

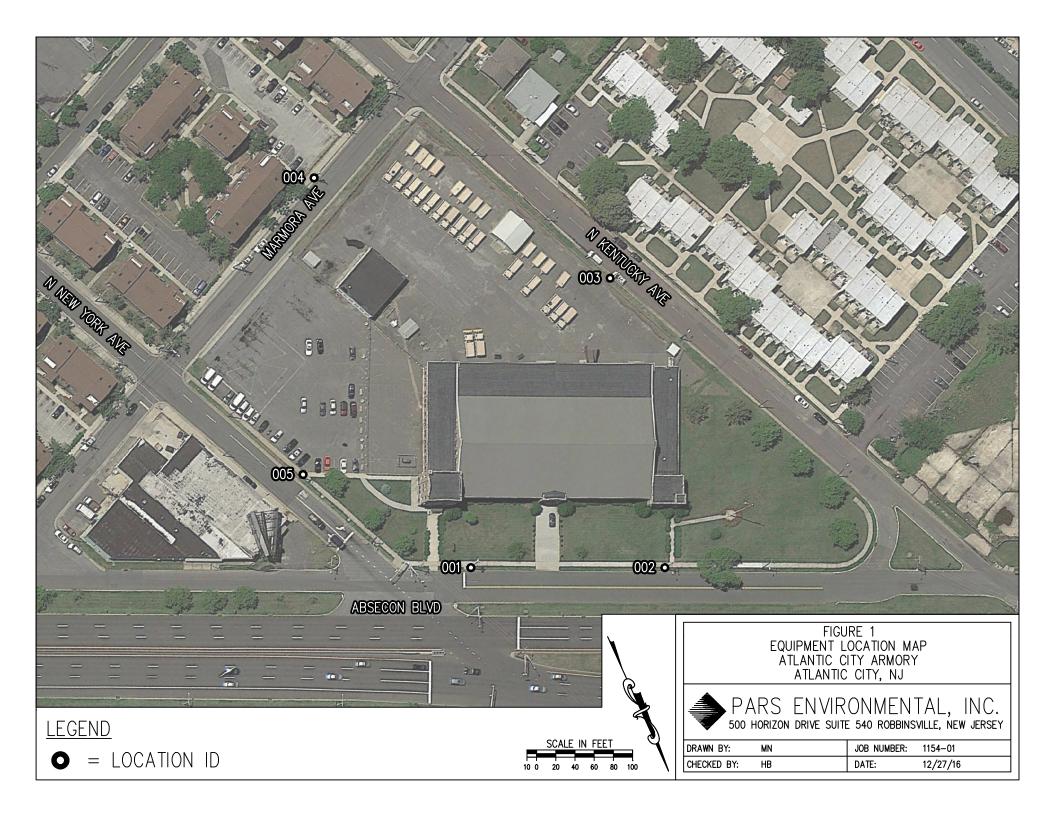


Photograph 36 – The pad-mount transformer (Figure 35, Map ID 001). PCB status could not be determined due to lack of manufacturer data. This transformer is owned by JCP&L.

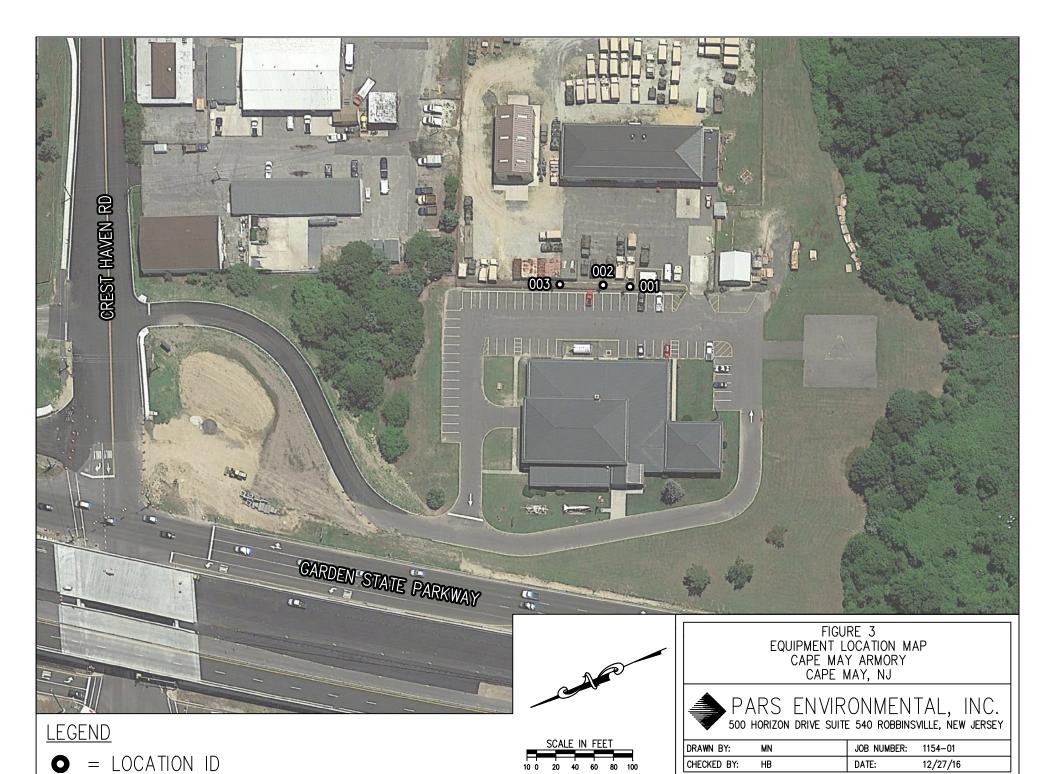


FIGURES

Figure 1 – Atlantic City	Figure 19 – Tuckerton
Figure 2 – Bridgeton	Figure 20 – UTES
Figure 3 – Cape May	Figure 21 – Westfield
Figure 4 – Cherry Hill	Figure 22 – Woodbridge
Figure 5 – Hammonton	Figure 23 – Dover
Figure 6 – Vineland	Figure 24 – Flemington
Figure 7 – Woodbury	Figure 25 – Franklin
Figure 8 – Woodstown	Figure 26 – Hackettstown
Figure 9 – Bordentown	Figure 27 – Jersey City
Figure 10 – Burlington	Figure 28 – Lodi
Figure 11 – Fort Dix JFHQ	Figure 29 – Morristown
Figure 12 – Freehold	Figure 30 – Newark
Figure 13 – Lawrenceville	Figure 31 – Picatinny
Figure 14 – Mount Holly	Figure 32 – Riverdale
Figure 15 – Princeton	Figure 33 – Somerset
Figure 16 – Sea Girt	Figure 34 – Teaneck
Figure 17 – Toms River	Figure 35 – Washington
Figure 18 – Trenton Mercer	Figure 36 – West Orange



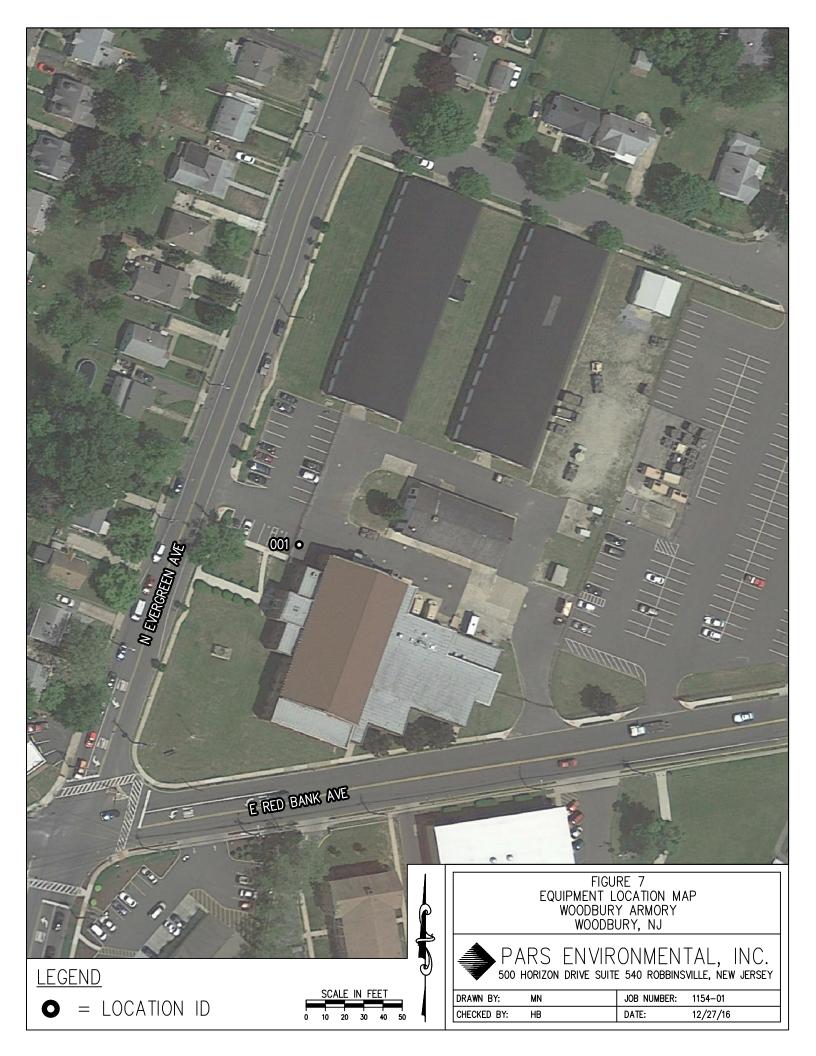


















LEGEND



= LOCATION ID



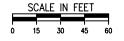
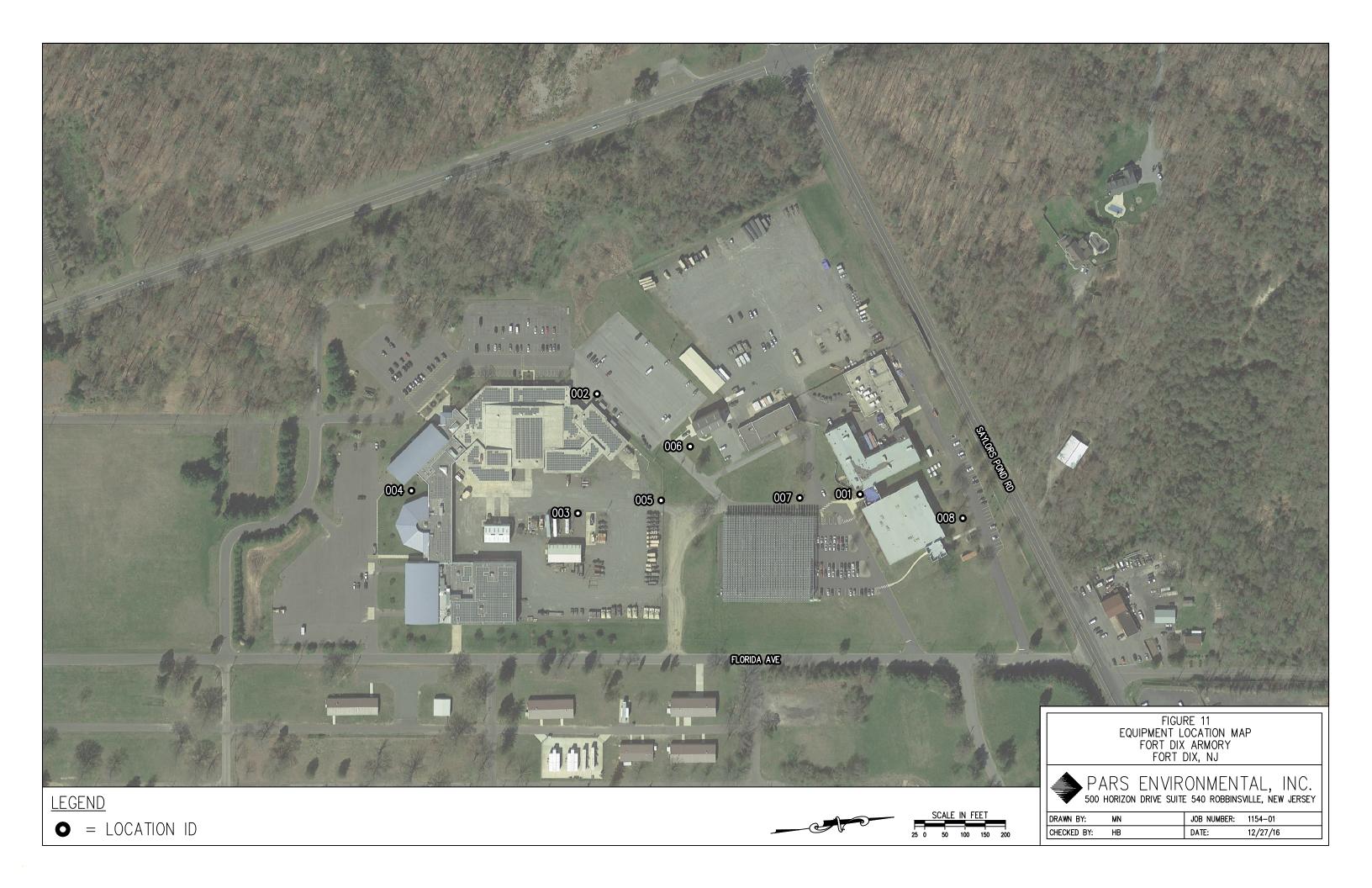


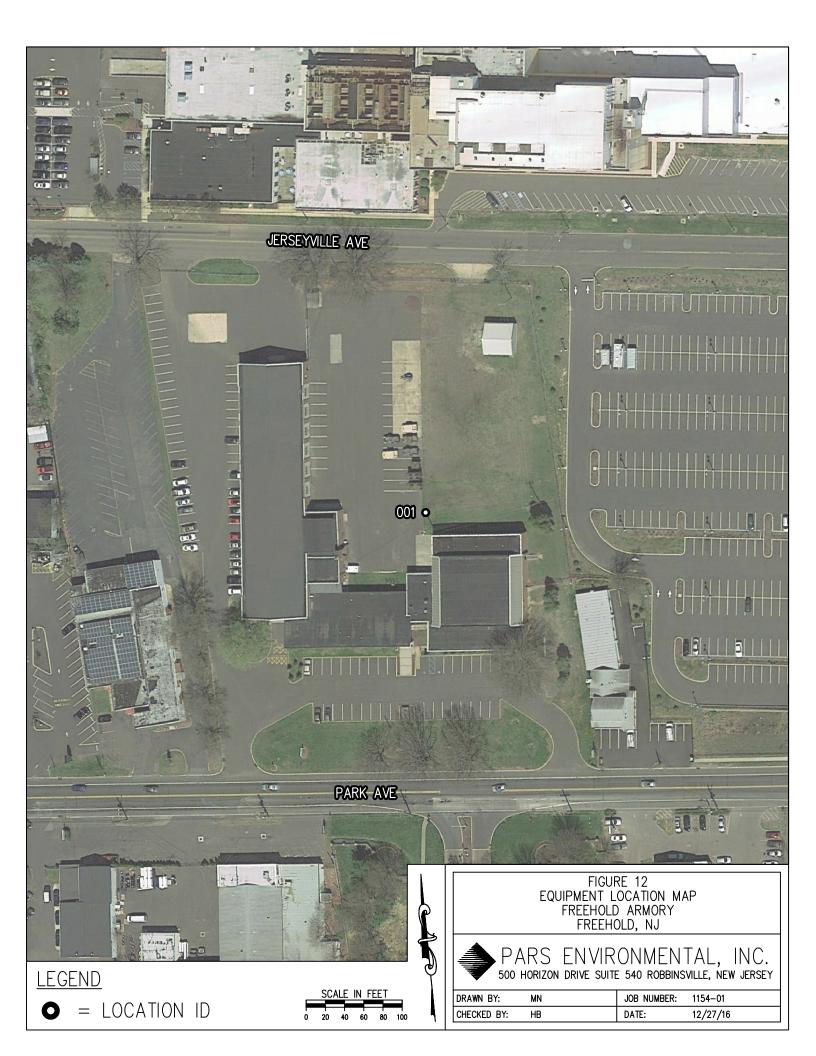
FIGURE 10 EQUIPMENT LOCATION MAP BURLINGTON ARMORY BURLINGTON, NJ



PARS ENVIRONMENTAL, INC. 500 HORIZON DRIVE SUITE 540 ROBBINSVILLE, NEW JERSEY

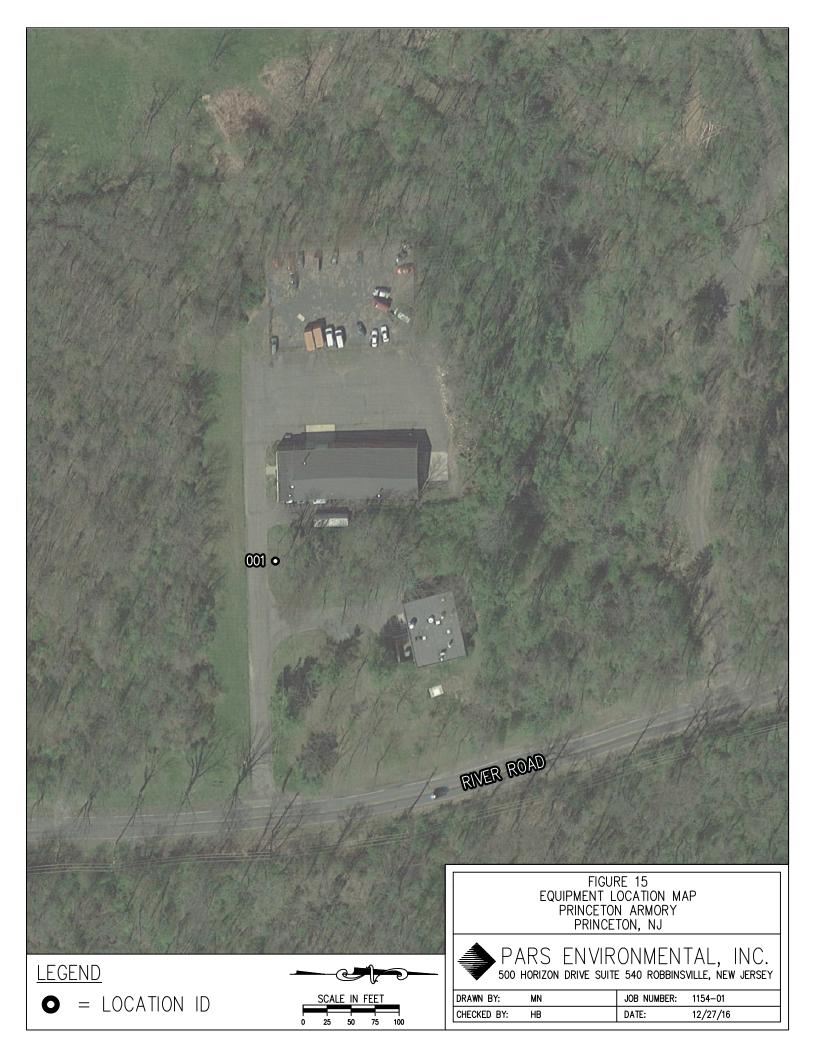
DRAWN BY:	MN	JOB NUMBER:	1154-01
CHECKED BY:	НВ	DATE:	12/27/16











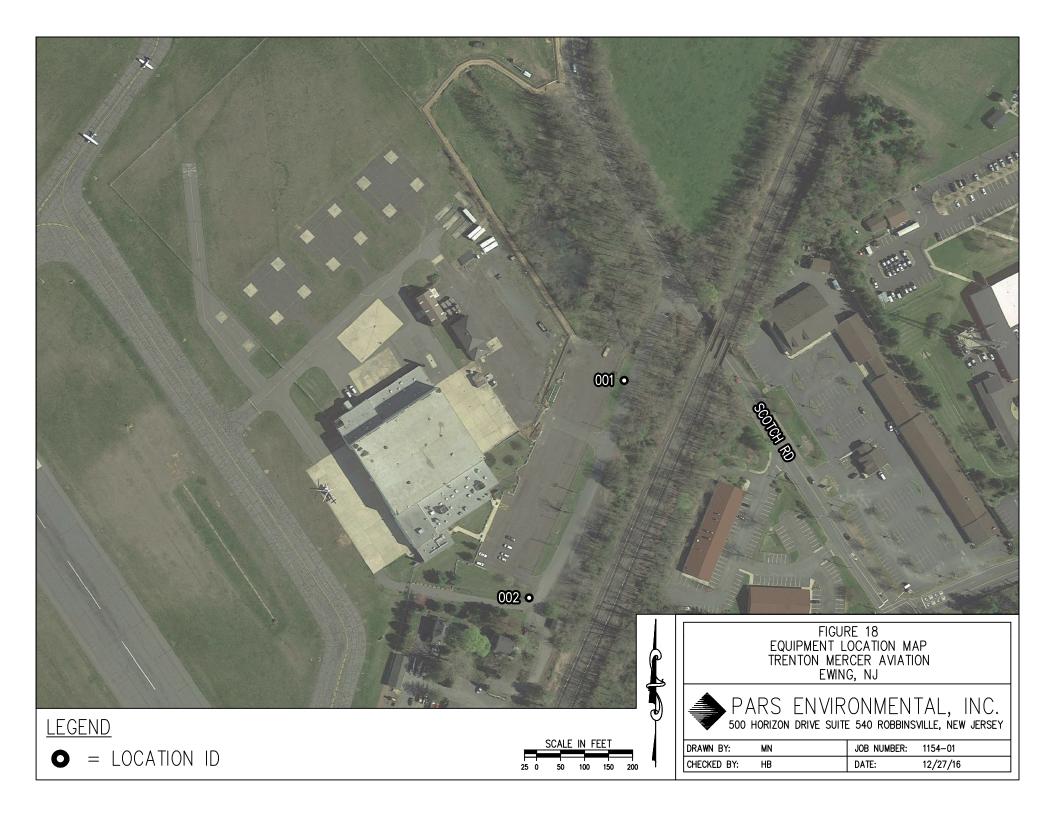




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DRAWN BY:	MN	JOB NUMBER:	1154-01
CHECKED BY:	НВ	DATE:	12/27/16







= LOCATION ID



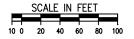
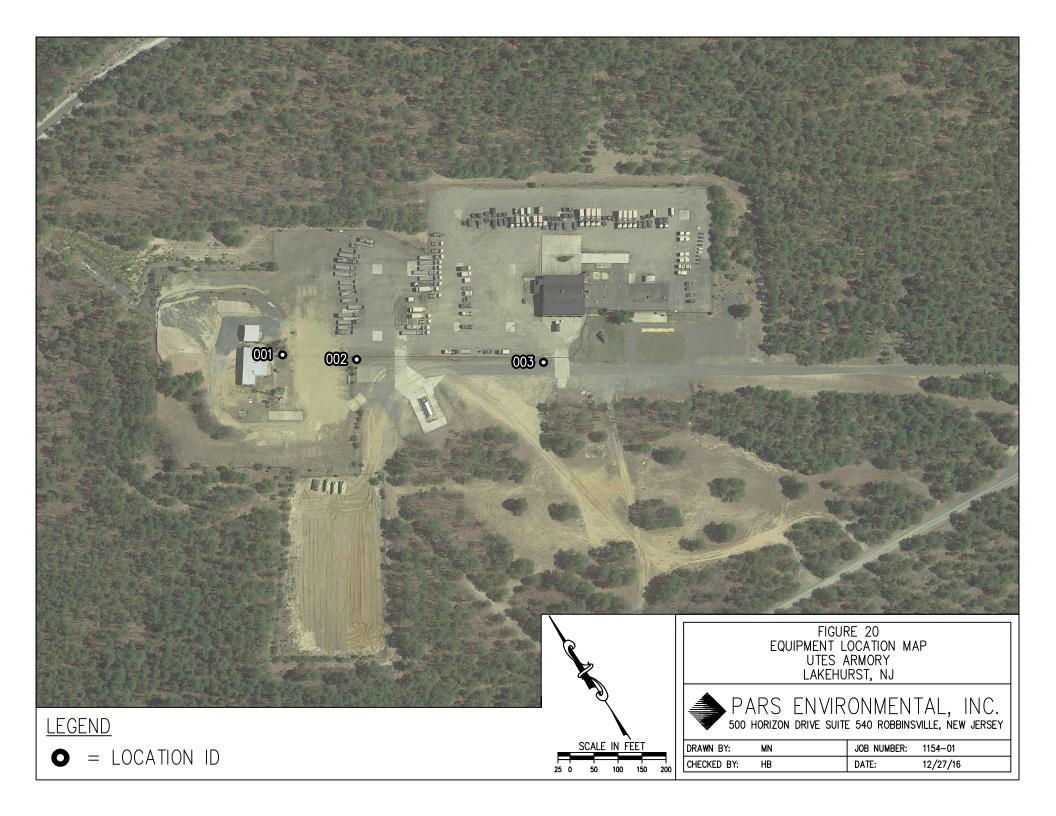


FIGURE 19 EQUIPMENT LOCATION MAP TUCKERTON ARMORY TUCKERTON, NJ



DRAWN BY:	MN	JOB NUMBER:	1154-01
CHECKED BY:	НВ	DATE:	12/27/16









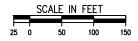


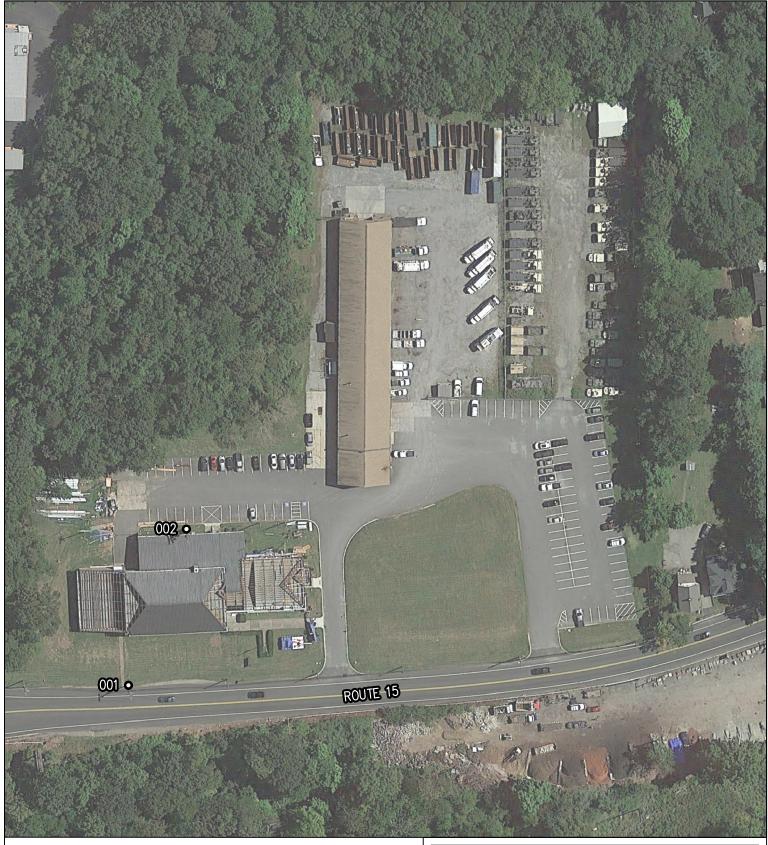
FIGURE 21 EQUIPMENT LOCATION MAP WESTFIELD ARMORY WESTFIELD, NJ



PARS ENVIRONMENTAL, INC. 500 HORIZON DRIVE SUITE 540 ROBBINSVILLE, NEW JERSEY

DRAWN BY: MN JOB NUMBER: 1154-01 12/27/16 CHECKED BY: DATE:







= LOCATION ID



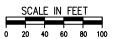
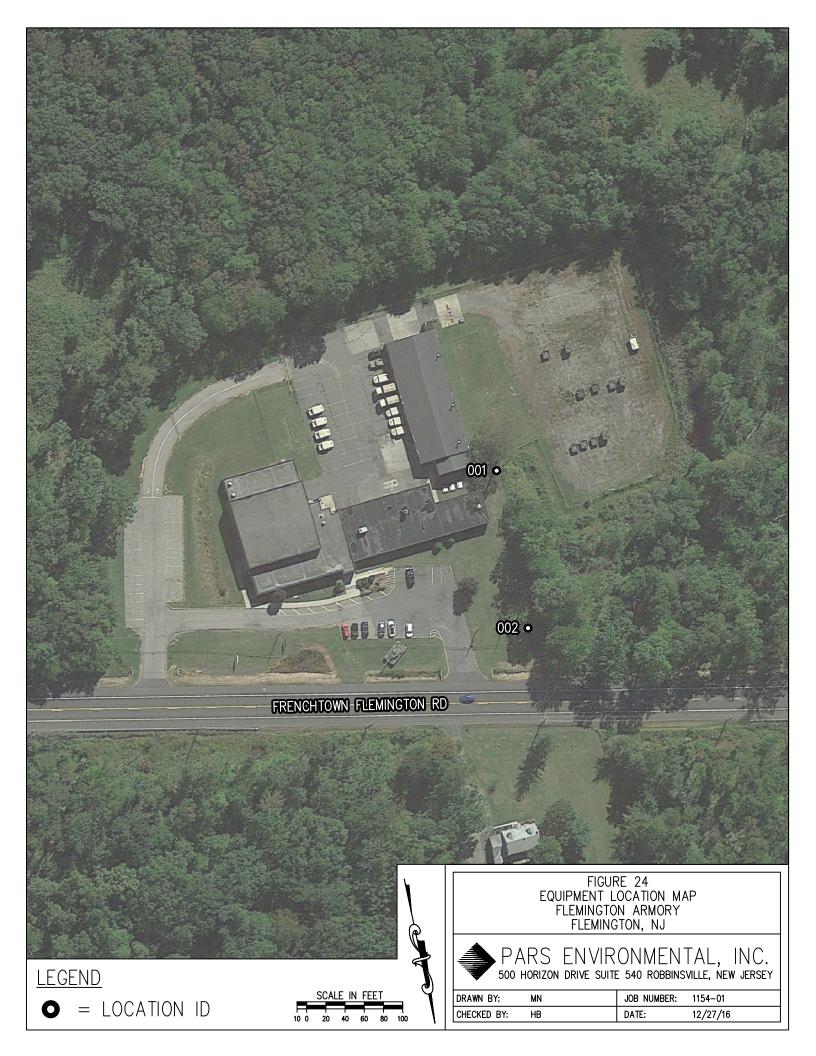
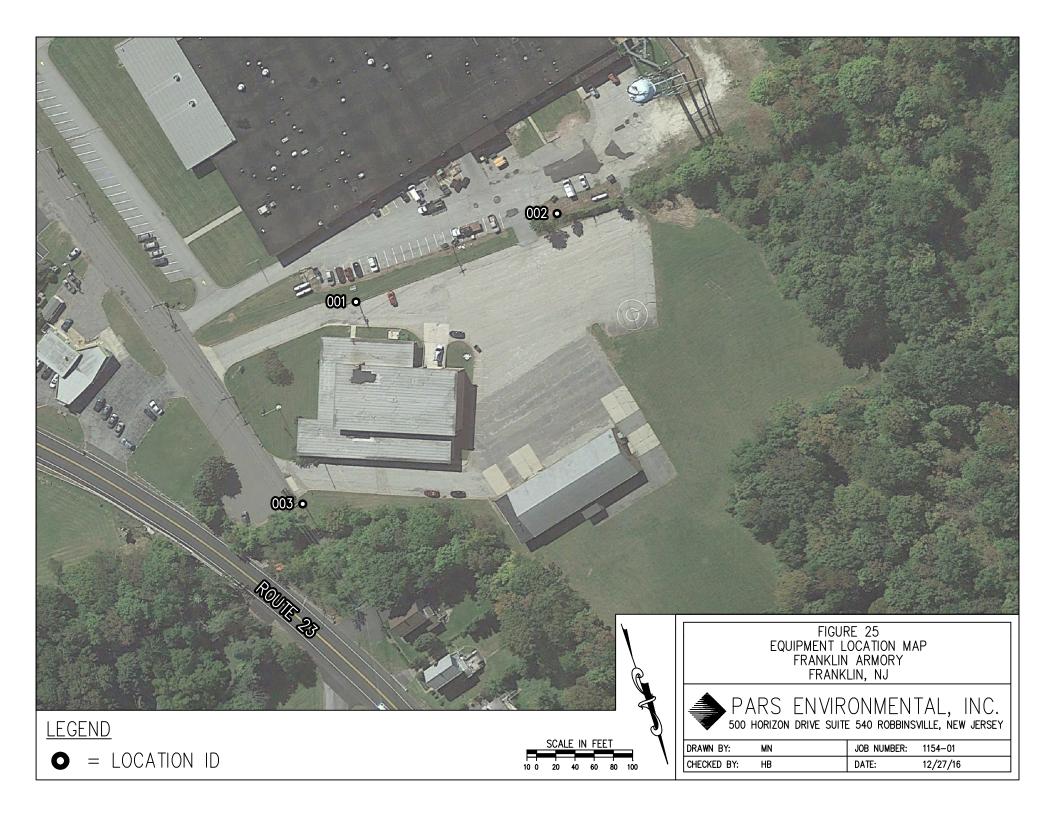


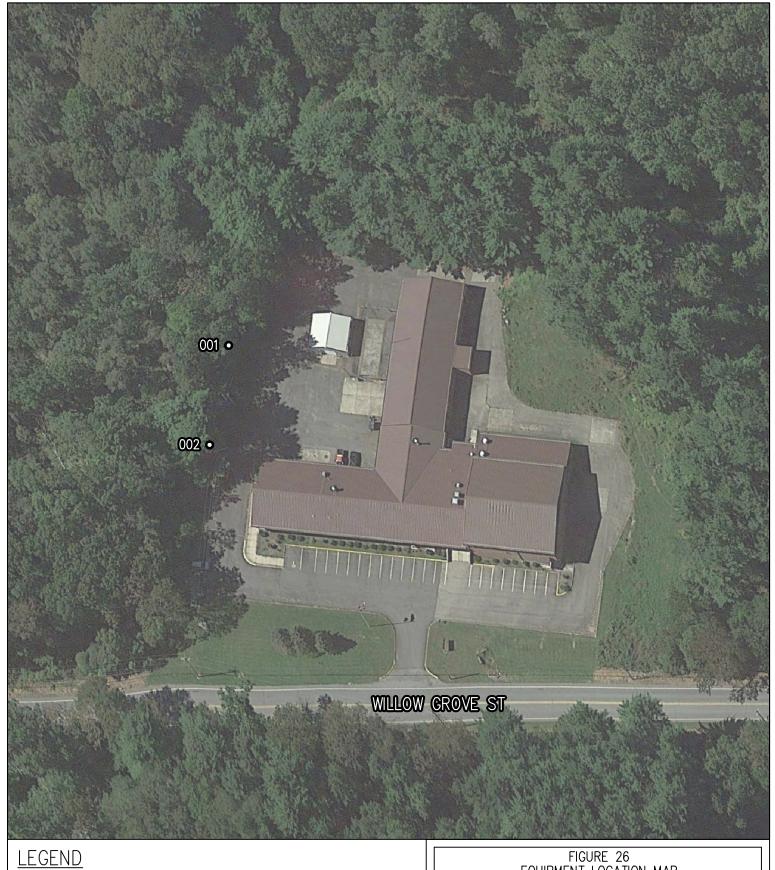
FIGURE 23 EQUIPMENT LOCATION MAP DOVER ARMORY DOVER, NJ



DRAWN BY:	MN	JOB NUMBER:	1154-01
CHECKED BY:	НВ	DATE:	12/27/16











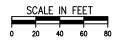


FIGURE 26
EQUIPMENT LOCATION MAP
HACKETTSTOWN ARMORY
HACKETTSTOWN, NJ



DRAWN BY:	MN	JOB NUMBER:	1154-01
CHECKED BY:	HB	DATE:	12/27/16



SCALE IN FEET

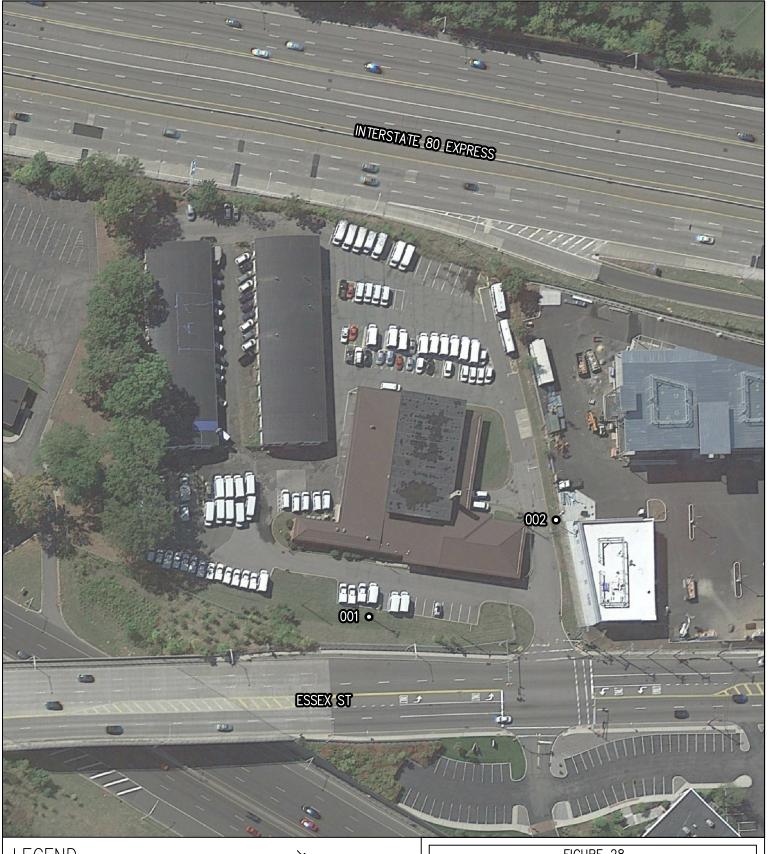
FIGURE 27
EQUIPMENT LOCATION MAP
JERSEY CITY ARMORY
JERSEY CITY, NJ



PARS ENVIRONMENTAL, INC. 500 HORIZON DRIVE SUITE 540 ROBBINSVILLE, NEW JERSEY

DRAWN BY:	MN	JOB NUMBER:	1154-01
CHECKED BY:	НВ	DATE:	12/27/16

NOTE: NO LOCATIONS FOUND ON THIS MAP





• = LOCATION ID



FIGURE 28 EQUIPMENT LOCATION MAP LODI ARMORY LODI, NJ



DRAWN BY:	MN	JOB NUMBER:	1154-01
CHECKED BY:	НВ	DATE:	12/27/16







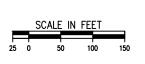


FIGURE 29 EQUIPMENT LOCATION MAP MORRISTOWN ARMORY MORRISTOWN, NJ



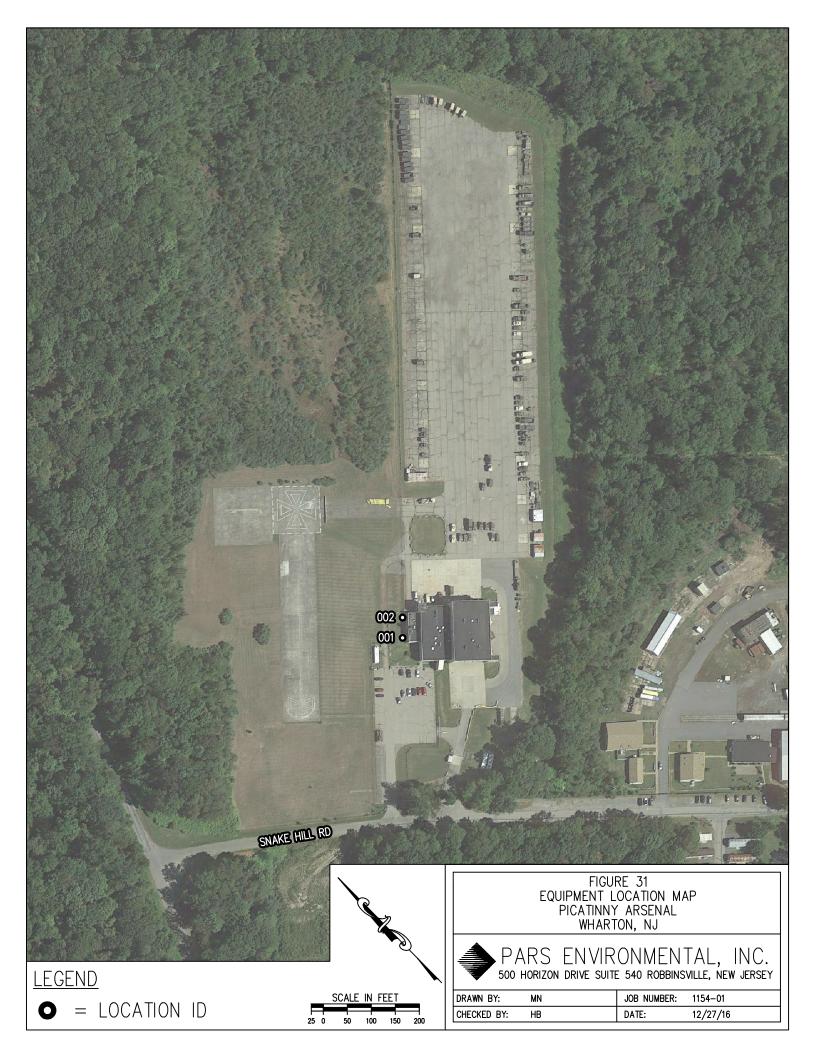
DRAWN BY:	MN	JOB NUMBER:	1154-01
CHECKED BY:	НВ	DATE:	12/27/16



NOTE: NO LOCATIONS FOUND ON THIS MAP



DRAWN BY:	MN	JOB NUMBER:	1154-01
CHECKED BY:	НВ	DATE:	12/27/16









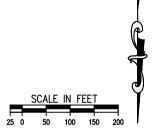
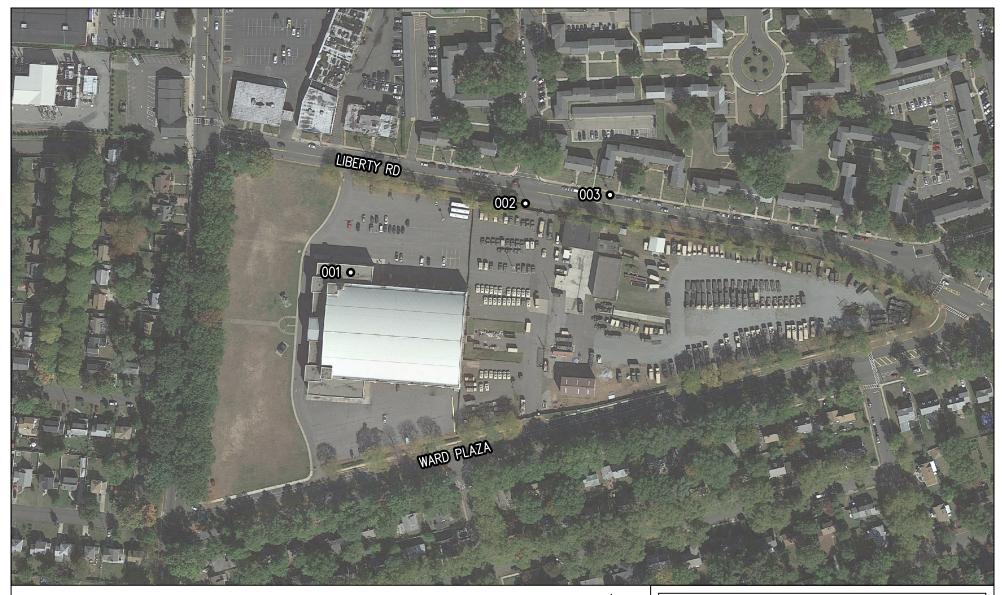


FIGURE 33 EQUIPMENT LOCATION MAP SOMERSET ARMORY SOMERSET, NJ



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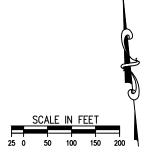


FIGURE 34
EQUIPMENT LOCATION MAP
TEANECK ARMORY
TEANECK, NJ



DRAWN BY:	MN	JOB NUMBER:	1554-01
CHECKED BY:	НВ	DATE:	12/27/16







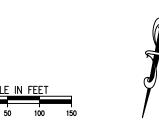


FIGURE 35 EQUIPMENT LOCATION MAP WASHINGTON ARMORY PORT MURRAY, NJ



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CHECKED BY:	НВ	DATE:	12/27/16





= LOCATION ID



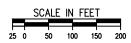


FIGURE 36 EQUIPMENT LOCATION MAP WEST ORANGE ARMORY WEST ORANGE, NJ



CHECKED BY:

HB

PARS ENVIRONMENTAL, INC. 500 HORIZON DRIVE SUITE 540 ROBBINSVILLE, NEW JERSEY

DATE:

12/27/16

DRAWN BY: MN JOB NUMBER: 1154-01



SUMMARY REPORT PCB CONTAINING ELECTRICAL EQUIPMENT INVENTORY VARIOUS NJARNG FACILITIES STATEWIDE FEBRUARY 2017

TABLE

Table 1 - List of Equipment with Potential to Contain PCBs

Table 1 - List of Equipment with Potential to Contain PCBs NJARNG PCB Survey

Facility	Map ID	Equipment	Pole/Pad # or Location	Make	Serial #	PCB Status	Volume	Voltage	Owner	Notes
					S	OUTHERN R	REGION			
Atlantic City	001	Pole Transformer	A14999	Howard Industries	Q023968-YZF	Non-PCB	15 Gal	25 kVA	AC Electric	Call to manufacturer - All Howard equipment is non-PCB
(Figure 1)	001	Pole Transformer	A14999	Howard Industries	N/A	Non-PCB	15 Gal	25 kVA	AC Electric	Call to manufacturer - All Howard equipment is non-PCB
	001	Pole Transformer	A14999	Howard Industries	N/A	Non-PCB	15 Gal	25 kVA	AC Electric	Call to manufacturer - All Howard equipment is non-PCB
		Capacitor Bank and Switches	A6985	General Electric	5461	Non-PCB	N/A	N/A		New build, labeled non-PCB
	003	Pole Transformer	A3021	Howard Industries	28015-1779	Non-PCB	15 Gal	25 kVA		Call to manufacturer - All Howard equipment is non-PCB
	004	Pole Transformer	A4794	Howard Industries	16808-0985	Non-PCB	15 Gal	25 kVA		Call to manufacturer - All Howard equipment is non-PCB
	004	Pole Transformer	A4794	Howard Industries	N/A	Non-PCB	15 Gal	25 kVA	-	Call to manufacturer - All Howard equipment is non-PCB
	005	Pole Transformer	A4786	Westinghouse	09A020711	Non-PCB	14.5 Gal	N/A	AC Electric	NJDEP Guidelines - Manufactured in 2009 in a non-PCB Westinghouse facility
Bridgeton	001	Pole Transformer	B42728	H. K. Porter	2761376	Non-PCB	30 Gal†	75 kVA	AC Electric	NJDEP Guidelines - HK Porter never used PCBs, does not certfiy before 1979
(Figure 2)	001	Pole Transformer	B42728	H. K. Porter	2780973	Non-PCB	30 Gal†	75 kVA	AC Electric	NJDEP Guidelines - HK Porter never used PCBs, does not certfiy before 1979
, 6	001	Pole Transformer	B42728	RTE Corporation	691059670	Non-PCB	30 Gal	75 kVA	AC Electric	NJDEP Guidelines - All RTE equipment is certified non-PCB
	002	Pole Transformer	62376	Cooper Power Systems	1020620	Non-PCB	16 Gal	37.5 kVA	AC Electric	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	002	Pole Transformer	62376	Cooper Power Systems	1020	Non-PCB	16 Gal	37.5 kVA	AC Electric	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	002	Pole Transformer	62376	Westinghouse	76A510938	Non-PCB	16 Gal†	37.5 kVA	AC Electric	NJDEP Guidelines - Manufactured in a non-PCB Westinghouse facility
	003	Pole Transformer	B24987	ERMCO	112311900	Non-PCB	10.75 Gal	15 kVA	AC Electric	Manufacturer name plate states non-PCB
	004	Recloser	B54850	N/A	3291	Non-PCB	N/A	N/A		New Build
	005	Pole Transformer	B35539	Power Partners Inc.	10A01045	Non-PCB	16.4 Gal	25 kVA		Call to manufacturer - All Power Partners equipment is non-PCB
	005	Pole Transformer	B35539	Power Partners Inc.	10A010280	Non-PCB	16.4 Gal	25 kVA	AC Electric	Call to manufacturer - All Power Partners equipment is non-PCB
Cape May	001	Pole Transformer	26922	Cooper Power Systems	1028337	Non-PCB	12 Gal	15 kVA	AC Electric	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
(Figure 3)	001	Pole Transformer	26922	Cooper Power Systems	1028340	Non-PCB	12 Gal	15 kVA		Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
\ \ \ \ \ \	001	Pole Transformer	26922	Cooper Power Systems	1028342	Non-PCB	12 Gal	15 kVA		Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	002	Pole Transformer	25260	McGraw Edison	90NC07-042	Non-PCB	16 Gal	25 kVA	AC Electric	NJDEP Guidelines - Manufactured after McGraw-Edison discontinued PCB use
	002	Pole Transformer	25260	McGraw Edison	74TD091031	Non-PCB	16 Gal	25 kVA	AC Electric	NJDEP Guidelines - Manufactured after McGraw-Edison discontinued PCB use
	002	Pole Transformer	25260	McGraw Edison	74WX1263	Non-PCB	16 Gal	25 kVA	AC Electric	NJDEP Guidelines - Manufactured after McGraw-Edison discontinued PCB use
	003	Pole Transformer	19784	Power Partners Inc.	13A311051	Non-PCB	16.6 Gal	25 kVA	AC Electric	Call to manufacturer - All Power Partners equipment is non-PCB
	003	Pole Transformer	19784	Power Partners Inc.	N/A	Non-PCB	16.6 Gal	25 kVA	-	Call to manufacturer - All Power Partners equipment is non-PCB
	003	Pole Transformer	19784	Power Partners Inc.	N/A	Non-PCB	16.6 Gal	25 kVA	AC Electric	Call to manufacturer - All Power Partners equipment is non-PCB
Cherry Hill	001	Capacitor Bank and Switches	1084DL	Cooper Power Systems	0310P36183	Non-PCB	N/A	0.5 kVA	PSE&G	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
(Figure 4)	002	Pole Transformer	65619DL	Cooper Power Systems	921048480	Non-PCB	21 Gal	50 kVA	PSE&G	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	002	Pole Transformer	65619DL	Central Moloney	104171320	Non-PCB	10 Gal	10 kVA	PSE&G	NJDEP Guidelines - Manufactured after Central Moloney discontinued PCB use
	002	Pole Transformer	65619DL	Central Moloney	104171316	Non-PCB	10 Gal	10 kVA	PSE&G	NJDEP Guidelines - Manufactured after Central Moloney discontinued PCB use
	003	Pole Transformer	65618DL	Central Moloney	1061414-16	Non-PCB	10 Gal	10 kVA	PSE&G	NJDEP Guidelines - Manufactured after Central Moloney discontinued PCB use
	004	Pole Transformer	65616DL	General Electric	J542954Y70	Non-PCB	10 Gal	10 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB GE facility
Hammonton	001	Pole Transformer	N/A	Kuhlman	N/A	Non-PCB	19 Gal†	50 kVA	AC Electric	Manufacturer name plate states non-PCB
(Figure 5)	001	Pole Transformer	N/A	Kuhlman	N/A	Non-PCB	19 Gal†	50 kVA		Manufacturer name plate states non-PCB
Vineland	001	Submersible Transformer	Vault	General Electric	L877035YLLA	Non-PCB	39 Gal†	50 kVA		NJDEP Guidelines - Manufactured in a non-PCB GE facility
(Figure 6)	001	Submersible Transformer	Vault	General Electric	L877037YLLA	Non-PCB	39 Gal†	50 kVA		NJDEP Guidelines - Manufactured in a non-PCB GE facility NJDEP Guidelines - Manufactured in a non-PCB GE facility
(Figure 0)	001	Submersible Transformer	Vault	General Electric	L876013YKLA	Non-PCB	39 Gal†	50 kVA		NJDEP Guidelines - Manufactured in a non-PCB GE facility
	001	Oil Switch	Vault	Roller Smith	303777	Suspect	N/A	N/A		Located in vault - PCB status unknown
	003	Pad Transformer	5724	Howard Industries	2539225191	Non-PCB				Call to manufacturer - All Howard equipment is non-PCB
	003	Pad Transformer	N/A	Westinghouse	819130	Non-PCB				NJDEP Guidelines - Manufactured in 1981
	005	Pole Transformer	CVEU-1347-L	Allis-Chalmers	5293552	Non-PCB	7 Gal			NJDEP Guidelines - Manufactured in 1761 NJDEP Guidelines - All Allis-Chalmers equipment is non-PCB
	006	Pole Transformer	VE1358	Power Partners Inc.	09A331405	Non-PCB				Call to manufacturer - All Power Partners equipment is non-PCB
	007	Pole Transformer	HC-726	General Electric	M221610YENA	Non-PCB	10 Gal†		-	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	007	Pole Transformer	HC-726	General Electric	M341586YJNA	Non-PCB	10 Gal†			NJDEP Guidelines - Manufactured in a non-PCB GE facility
	007	Pole Transformer	HC-726	General Electric	M221614YENA	Non-PCB	10 Gal†			NJDEP Guidelines - Manufactured in a non-PCB GE facility
	008	Pole Transformer	VE1362	ERMCO	80407890698	Non-PCB	12 Gal	25 kVA	-	Manufacturer name plate states non-PCB
Woodbury (Figure 7)	001	Pad Transformer	N/A	N/A	N/A	Non-PCB	N/A	N/A		Not present in 1982 during previous PCB survey, associated to Armory addition circa 1985

Table 1 - List of Equipment with Potential to Contain PCBs
NJARNG PCB Survey

Facility	Map ID	Equipment	Pole/Pad # or Location	Make	Serial #	PCB Status	Volume	Voltage	Owner	Notes
Woodstown	001	Pole Transformer	S34104	Central Moloney	2772444-7	Non-PCB	19 Gal	N/A	AC Electric	NJDEP Guidelines - Manufactured in 1977, Central Moloney certifies post-1962 non-PCB
(Figure 8)	001	Pole Transformer	S34104	Central Moloney	2772444-5	Non-PCB	19 Gal	N/A	AC Electric	NJDEP Guidelines - Manufactured in 1977, Central Moloney certifies post-1962 non-PCB
	001	Pole Transformer	S34104	McGraw-Edison	90NCO49-010	Non-PCB	19.7 Gal	N/A		NJDEP Guidelines - Manufactured in 1990
	002	Pole Transformer	538345	ABB Power	91A312710	Non-PCB		N/A		Call to manufacturer - All ABB Power equipment is non-PCB
	002	Pole Transformer	538345	ABB Power	91A312711	Non-PCB	16.5 Gal	N/A		Call to manufacturer - All ABB Power equipment is non-PCB
	002	Pole Transformer	538345	ABB Power	91A3127	Non-PCB	•	N/A	AC Electric	Call to manufacturer - All ABB Power equipment is non-PCB
						CENTRAL R				
Bordentown	001	Pole Transformer	62364BD	ERMCO	410 09028412	Non-PCB	29 Gal	50 kVA	PSE&G	Manufacturer name plate states non-PCB
(Figure 9)	001	Pole Transformer	62364BD	ERMCO	610 09053855	Non-PCB	29 Gal	50 kVA	PSE&G	Manufacturer name plate states non-PCB
	001	Pole Transformer	62364BD	ERMCO	610 09142341	Non-PCB	29 Gal	50 kVA	PSE&G	Manufacturer name plate states non-PCB
	002	Pole Transformer	A61657BD	Kuhlman-CSP	1-356324	Suspect	14 Gal†	25 kVA	PSE&G	Unknown manufacture date
	002	Pole Transformer	A61657BD	Kuhlman-CSP	1-356153	Suspect	14 Gal†	25 kVA	PSE&G	Unknown manufacture date
	002	Pole Transformer	A61657BD	Kuhlman-CSP	1-356227	Suspect	14 Gal†	25 kVA	PSE&G	Unknown manufacture date
Burlington	001	Pole Transformer	61564	Howard Industries	1650171415	Non-PCB	27 Gal	50 kVA	PSE&G	Call to manufacturer - All Howard equipment is non-PCB
(Figure 10)	002	Pole Transformer	60208	General Electric	G871076-67Y	Non-PCB	10 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	002	Pole Transformer	60208	General Electric	G460108-66Y	Non-PCB	10 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	002	Pole Transformer	60208	General Electric	G469316-66Y	Non-PCB	10 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	003	Pole Transformer	60559	Cooper Power Systems	931082654	Non-PCB	23 Gal	50 kVA	PSE&G	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	003	Pole Transformer	60559	Cooper Power Systems	931082651	Non-PCB	23 Gal	50 kVA	PSE&G	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	003	Pole Transformer	60559	Cooper Power Systems	931082560	Non-PCB	23 Gal	50 kVA	PSE&G	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
Fort Dix JFHQ	001	Elevator Motor	Boiler Room 1	Schindler Elevator	E-0 187Y	Non-PCB	150 Gal	30 Watts	NJARNG	Installed in 1986
(Figure 11)	002	Pad Transformer	65114SP	Westinghouse	86JK785235	Non-PCB	N/A	1500 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1986 in a non-PCB Westinghouse facility
(Figure 11)	003	Pad Transformer	236185	N/A	N/A	Suspect	N/A	N/A	JCP&L	Behind 3601, heavily rusted, JCP&L sticker on cabinet but JCP&L could not confirm ownership
	004	Pad Transformer	65402 WB	Westinghouse	95J775026	Non-PCB	N/A	750 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1995 in a non-PCB Westinghouse facility
	005	Pole Transformer	61002 SP	McGraw Edison	78ZF089022	Non-PCB	16 Gal	25 kVA	Unknown	NJDEP Guidelines - Manufactured in 1978, McGraw-Edison ceased PCB use in 1965
	006	Pad Transformer	P65115SP	N/A	200790A43540	Non-PCB	N/A	500 kVA	JCP&L	Serial Number - Manufactured in 2007
	007	Pad Transformer	65113SP	Westinghouse	88JK265298	Non-PCB	N/A	300 kVA	JCP&L	Serial Number - Manufactured in 1988
	008	Pad Transformer	P61074 SP	Westinghouse	96J226029	Non-PCB	N/A	500 kVA	JCP&L	Serial Number - Manufactured in 1996
Essalud	001	Dala 4000 of 0 0000	JC 1182	Harris of Industrias	1720044000	Non DCD	15 Cal	25 1-X/A	ICD 6-I	Call to manufacturer - All Howard equipment is non-PCB
Freehold		Pole transformer	JC 1182 JC 1182	Howard Industries	1730944990	Non-PCB	15 Gal 15 Gal	25 kVA 25 kVA	JCP&L	
(Figure 12)	001	Pole transformer	JC 1182 JC 1182	Howard Industries Howard Industries	N/A N/A	Non-PCB	15 Gal	25 kVA 25 kVA	JCP&L JCP&L	Call to manufacturer - All Howard equipment is non-PCB Call to manufacturer - All Howard equipment is non-PCB
		Pole transformer			N/A	Non-PCB	•			
Lawrenceville		Elevator Motor	Elevator Room	Otis Elevator Company	705117	Suspect			NJARNG	In NJARNG HQ
(Figure 13)	002	Pad Transformer	A22641	General Electric	G-859318	PCB		2,000 kVA		Behind NJARNG HQ - Tested in 1986 - PCBs detected at 630 ppm
	003	Pad Transformer	N/A	N/A	N/A	Suspect	N/A	750 kVA	NJARNG	Behind NJARNG HQ - No record of previous testing
	004	Pad Transformer	P3122	N/A	N/A	Suspect	N/A	N/A	PSE&G	North of Armory - Appears to be 80's build, PSE&G could not locate record of this transformer
	005	Pole Transformer	66814	Howard Industries	3566494615	Non-PCB	22 Gal	50 kVA	PSE&G	Call to manufacturer - All Howard equipment is non-PCB
	005	Pole Transformer	66814	Howard Industries	3566514615	Non-PCB	22 Gal	50 kVA	PSE&G	Call to manufacturer - All Howard equipment is non-PCB
	005	Pole Transformer	66814	Howard Industries	3600284615	Non-PCB	22 Gal	50 kVA	PSE&G	Call to manufacturer - All Howard equipment is non-PCB
	006	Pole Transformer	N/A	Howard Industries	1372600716	Non-PCB	32 Gal	25 kVA		Call to manufacturer - All Howard equipment is non-PCB
	006	Pole Transformer	N/A	Howard Industries	2936943814	Non-PCB	33 Gal	25 kVA		Call to manufacturer - All Howard equipment is non-PCB
	006	Pole Transformer	N/A	Howard Industries	3015193815	Non-PCB	33 Gal	25 kVA	PSE&G	Call to manufacturer - All Howard equipment is non-PCB
	007	Pole Transformer	62945 LA	Kuhlman-CSP	1-355044	Suspect	N/A	10 kVA	PSE&G	North of FMS #1
	007	Pole Transformer	62945 LA	Howard Industries	1851711815	Non-PCB	33 Gal	25 kVA	PSE&G	Call to manufacturer - All Howard are non-PCB
	007	Pole Transformer	62945 LA	Allis-Chalmers	3684440	Non-PCB	10 Gal	10 kVA	PSE&G	NJDEP Guidelines - All Allis-Chalmers equipment is non-PCB
	008	Pole Transformer	A67305 LA	Westinghouse	89A451169	Non-PCB	21.1 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in 1989 in a non-PCB Westinghouse facility
	008	Pole Transformer	A67305 LA	Westinghouse	89A451155	Non-PCB		25 kVA	PSE&G	NJDEP Guidelines - Manufactured in 1989 in a non-PCB Westinghouse facility
	008	Pole Transformer	A67305 LA	Westinghouse	89A481628	Non-PCB	21.1 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in 1989 in a non-PCB Westinghouse facility
	009	Pad Transformer	2722	ABB Power	N/A	Non-PCB	N/A	N/A	PSE&G	Call to manufacturer - All ABB Power are non-PCB
	010	Pad Transformer	N/A	N/A	N/A	Suspect	N/A	N/A	Unknown	At entrance to USPFO/HSCOE
	011	Pole Transformer	4778	ABB Power	ODA314421	Non-PCB	32.2 Gal	25 kVA	PSE&G	Call to manufacturer - All ABB Power are non-PCB

Table 1 - List of Equipment with Potential to Contain PCBs NJARNG PCB Survey

Facility	Map ID	Equipment	Pole/Pad # or Location	Make	Serial #	PCB Status	Volume	Voltage	Owner	Notes
Lawrenceville	012	Pole Transformer	61134	General Electric	M927423YJRA	Non-PCB	19 Gal†	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB GE facility
(Continued)	013	Pole Transformer	60668	Westinghouse	69A0342	Non-PCB	19 Gal†	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB Westinghouse facility
Marrie Haller	001	Pole Transformer	1644NO	Westinghouse	87A412397	Non-PCB	32 Gal	50 kVA	PSE&G	NJDEP Guidelines - Manufactured in 1987
Mount Holly	001	Pole Transformer Pole Transformer	1644NO	Westinghouse	87A412397 87A412386	Non-PCB	32 Gal	50 kVA	PSE&G	NJDEP Guidelines - Manufactured in 1987 NJDEP Guidelines - Manufactured in 1987
(Figure 14)	001	Pole Transformer	1644NO	Westinghouse	87A412401	Non-PCB	32 Gal	50 kVA	PSE&G	NJDEP Guidelines - Manufactured in 1987 NJDEP Guidelines - Manufactured in 1987
		Fole Halistoffilet	1044110	westingnouse	07A412401	Noil-FCB	32 Gai		rseau	INJUER Guidelines - Manufactured in 1987
Princeton (Figure 15)	001	Pole Transformer	61568 PT	General Electric	N469465YEUA	Non-PCB	10 Gal†	50 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB GE facility
Sea Girt	001	Pad Transformer	N/A	Allis-Chalmers	4642530	Non-PCB	175 Gal	300 kVA	NJARNG	NJDEP Guidelines - All Allis-Chalmers equipment is non-PCB
(Figure 16)	002	Pad Transformer	N/A	Allis-Chalmers	4633383	Non-PCB	240 Gal	300 kVA	NJARNG	NJDEP Guidelines - All Allis-Chalmers equipment is non-PCB
	003	Pad Transformer	N/A	N/A	A41291-1-1	Non-PCB	N/A	N/A	NJARNG	New transformer
	004	Pad Transformer	N/A	Howard Industries	2983742704	Non-PCB	N/A	300 kVA	NJARNG	Call to manufacturer - All Howard equipment is non-PCB
	005	Pole Transformer	N/A	Sunbelt	15A021766	Non-PCB	23.4 Gal	50 kVA	NJARNG	Manufacturer name plate states non-PCB
	006	Pole Transformer	N/A	Cooper Power Systems	1455090240	Non-PCB	23 Gal	50 kVA	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	007	Pole Transformer	59NG July 65	Westinghouse	57B17528	Suspect	19 Gal†	37.5 kVA	NJARNG	South of Building 25 - Manufactured in PCB facility
	007	Pole Transformer	59NG July 65	Westinghouse	58B15046	Suspect	19 Gal†	37.5 kVA	NJARNG	South of Building 25 - Manufactured in PCB facility
	007	Pole Transformer	59NG July 65	Westinghouse	56B15064	Suspect	19 Gal†	37.5 kVA	NJARNG	South of Building 25 - Manufactured in PCB facility
	008	Pole Transformer	N/A	Jerry's Electric	22598-5	Non-PCB	10 Gal†	50 kVA	NJARNG	Manufacturer name plate states non-PCB
	800	Pole Transformer	N/A	Jerry's Electric	22598-6	Non-PCB	10 Gal†	50 kVA	NJARNG	Manufacturer name plate states non-PCB
	008	Pole Transformer	N/A	Jerry's Electric	22598-7	Non-PCB	10 Gal†	50 kVA	NJARNG	Manufacturer name plate states non-PCB
	009	Pole Transformer	63NG July 65	Jerry's Electric	22598-3	Non-PCB	10 Gal†	50 kVA	NJARNG	Manufacturer name plate states non-PCB
	009	Pole Transformer	63NG July 65	Jerry's Electric	22598-8	Non-PCB	10 Gal†	50 kVA	NJARNG	Manufacturer name plate states non-PCB
	009	Pole Transformer	63NG July 65	Jerry's Electric	22598-9	Non-PCB	10 Gal†	50 kVA	NJARNG	Manufacturer name plate states non-PCB
	010	Pole Transformer	64NG July 65	General Electric	G182937-65Y	Non-PCB	10 Gal	10 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	011	Pole Transformer	65NG July 65	Cooper Power Systems	013803165	Non-PCB	19 Gal†	15 kVA	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	011	Pole Transformer	65NG July 65	Cooper Power Systems	01345	Non-PCB	19 Gal†	15 kVA	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	011	Pole Transformer	65NG July 65	Cooper Power Systems	N/A	Non-PCB	19 Gal†	15 kVA	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	012	Pole Transformer	69NG July 65	General Electric	G192274-65Y	Non-PCB	10 Gal	37.5 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	012	Pole Transformer	69NG July 65	General Electric	G192778-65Y	Non-PCB	10 Gal	37.5 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	012	Pole Transformer	69NG July 65	General Electric	G192779-65Y	Non-PCB	10 Gal	37.5 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	013	Pad Transformer	N/A	N/A	N/A	Non-PCB	N/A	N/A	NJARNG	Utility owned - New Transformer
	014	Pad Transformer	N/A	N/A	N/A	Non-PCB	N/A	N/A	NJARNG	Utility owned - New Transformer
	015	Pole Transformer	N/A	Cooper Power Systems	1757246	Non-PCB	35 Gal†	N/A	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	015	Pole Transformer	N/A	Jerry's Electric	22615-1	Non-PCB		75 kVA	NJARNG	Manufacturer name plate states non-PCB
	015	Pole Transformer	N/A	Cooper Power Systems	40	Non-PCB	35 Gal†	N/A	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	016	Pole Transformer	27NG July 65	General Electric	F604715-66P	Suspect	10 Gal	5 kVA	NJARNG	Along Camp Drive north of Building 60 - Manufactured in PCB facility
	017	Pole Transformer	N/A	Cooper Power Systems	1055656799	Non-PCB	10 Gal	N/A	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	017	Pole Transformer	N/A	Cooper Power Systems	N/A	Non-PCB	10 Gal	N/A	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	017	Pole Transformer	N/A	Cooper Power Systems	N/A	Non-PCB	10 Gal	N/A	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	018	Pole Transformer	28NG July 65	General Electric	G210541-65Y	Non-PCB	10 Gal	50 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	018	Pole Transformer	28NG July 65	General Electric	G203462-65Y	Non-PCB	10 Gal	50 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	018	Pole Transformer	28NG July 65	General Electric	G203463-65Y	Non-PCB	10 Gal	50 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	019	Pole Transformer	3NG July 65	General Electric	G189425-65Y	Non-PCB	10 Gal	10 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	019	Pole Transformer	3NG July 65	General Electric	G189424-65Y	Non-PCB	10 Gal	10 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	019	Pole Transformer	3NG July 65	General Electric	G188936-65Y	Non-PCB	10 Gal	10 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	020	Pad Transformer	N/A	N/A	N/A	Non-PCB	N/A	N/A	NJARNG	Ext of bldg 37 - Newer Transformer and Pad
	021	Pole Transformer	54NG July 65	Cooper Power Systems	0402151888	Non-PCB	35 Gal	75 kVA	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	022	Pole Transformer	36NG July 65	Westinghouse	76A480390	Non-PCB	35 Gal†	25 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB Westinghouse facility
	022	Pole Transformer	36NG July 65	Westinghouse	78-033277	Suspect	35 Gal†	25 kVA	NJARNG	North of Building 36 - Unable to read name plate/serial number
	022	Pole Transformer	36NG July 65	Westinghouse	76A411425	Non-PCB	35 Gal†	25 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB Westinghouse facility
	023	Pole Transformer	38NG July 65	General Electric	G566020-66Y	Non-PCB	10 Gal	37.5 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	023	Pole Transformer	38NG July 65	General Electric	G563627-66Y	Non-PCB	10 Gal	37.5 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility

Table 1 - List of Equipment with Potential to Contain PCBs
NJARNG PCB Survey

Facility	Map ID	Equipment	Pole/Pad # or Location	Make	Serial #	PCB Status	Volume	Voltage	Owner	Notes
Sea Girt	023	Pole Transformer	38NG July 65	General Electric	G202415-65Y	Non-PCB	10 Gal	37.5 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
(Continued)	024	Pole Transformer	39NG July 65	Cooper Power Systems	1055066551	Non-PCB	36 Gal	75 kVA	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	024	Pole Transformer	39NG July 65	Cooper Power Systems	N/A	Non-PCB	36 Gal	75 kVA	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	024	Pole Transformer	39NG July 65	Cooper Power Systems	N/A	Non-PCB	36 Gal	75 kVA	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	025	Pole Transformer	40NG July 65	General Electric	G202416-65Y	Non-PCB	10 Gal	37.5 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	025	Pole Transformer	40NG July 65	General Electric	G202422-65Y	Non-PCB	10 Gal	37.5 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	025	Pole Transformer	40NG July 65	General Electric	G204946-65Y	Non-PCB	10 Gal	37.5 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	026	Pole Transformer	N/A	Howard Industries	1483120995	Non-PCB	16 Gal	25 kVA	NJARNG	Call to manufacturer - All Howard equipment is non-PCB
	026	Pole Transformer	N/A	General Electric	G555700-66Y	Non-PCB	10 Gal	25 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	026	Pole Transformer	N/A	ERMCO	B12 09542882	Non-PCB	19 Gal	25 kVA	NJARNG	Manufacturer name plate states non-PCB
	027	Pad Transformer	5279	N/A	N/A	Non-PCB	N/A	N/A	JCP&L	On NJSP property, not present in 1979, JCP&L sticker but could not confirm ownership
	028	Pad Transformer	N/A	General Electric	N/A	Suspect	N/A	150 kVA	NJARNG	Exterior of Building 8, appears to be 1970's build, Model # 9T23A3876G12
	029	Pad Transformer	N/A	Cooper Power Systems	1150000514	Non-PCB	N/A	N/A	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	030	Pad Transformer	N/A	Cooper Power Systems	1250012245	Non-PCB	N/A	N/A	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	031	Pole Transformer	N/A	ERMCO	615 10132399	Non-PCB	19 Gal	25 kVA	NJARNG	Manufacturer name plate states non-PCB
	031	Pole Transformer	N/A	ERMCO	615 10132397	Non-PCB	19 Gal	25 kVA	NJARNG	Manufacturer name plate states non-PCB
	031	Pole Transformer	N/A	Howard Industries	3676113105	Non-PCB	15 Gal	25 kVA	NJARNG	Call to manufacturer - All Howard equipment is non-PCB
	032	Pole Transformer	9NG July 65	Sunbelt	15A021767	Non-PCB	23.4 Gal	50 kVA	NJARNG	Manufacturer name plate states non-PCB
	033	Pole Transformer	NG-11-July 65	General Electric	G566017-66Y	Non-PCB	10 Gal	37.5 kVA	NJARNG	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	034	Pad Transformer	61037	N/A	N/A	Non-PCB	N/A	N/A	Unknown	Looks like 80's build, not present in 1979, JCP&L could not locate in company database
	035	Pole Transformer	BT 116 SG	Westinghouse	82A122324	Non-PCB	N/A	50 kVA	NJARNG	NJDEP Guidelines - Manufactured in 1982
	036	Capacitor Bank and Switches	V 2118 SG	Cooper Power Systems	0110P1848	Non-PCB	20 Gal†	300 kVA	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	037	Pole Transformer	BT 218 SG	H. K. Porter	1153164	Non-PCB	19 Gal†	50 kVA	NJARNG	NJDEP Guidelines - HK Porter never used PCBs, does not certfiy before 1979
	037	Pole Transformer	BT 218 SG	Allis-Chalmers	7308-6008909	Non-PCB	25.1 Gal	50 kVA	NJARNG	NJDEP Guidelines - All Allis-Chalmers are non-PCB
	037	Pole Transformer	BT 218 SG	Allis-Chalmers	7308-6008907	Non-PCB	25.1 Gal	50 kVA	NJARNG	NJDEP Guidelines - All Allis-Chalmers are non-PCB
	038	Capacitor Bank and Switches	BT 123 SG	Cooper Power Systems	1254P04035	Non-PCB	20 Gal†	450 kVA	NJARNG	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	039	Pole Transformer	JC61015SG	Howard Industries	2036821797	Non-PCB	47 Gal	100 kVA	NJARNG	Call to manufacturer - All Howard equipment is non-PCB
	039	Pole Transformer	JC61015SG	Howard Industries	2036831797	Non-PCB	47 Gal	100 kVA	NJARNG	Call to manufacturer - All Howard equipment is non-PCB
	039	Pole Transformer	JC61015SG	Howard Industries	N/A	Non-PCB	47 Gal	100 kVA	NJARNG	Call to manufacturer - All Howard equipment is non-PCB
	040	Pole Transformer	40074	The Standard Trans Co	EFL 6110	Suspect	39 Gal†	75 kVA	NJARNG	No data available for manufacturer except did use PCBs
	040	Pole Transformer	40074	The Standard Trans Co	N/A	Suspect	39 Gal†	75 kVA	NJARNG	No data available for manufacturer except did use PCBs
	040	Pole Transformer	40074	The Standard Trans Co	N/A	Suspect	39 Gal†	75 kVA	NJARNG	No data available for manufacturer except did use PCBs
	041	Pole Transformer	N/A	Magnetic Electric	ZA 07987	Non-PCB	25.4 Gal	50 kVA	NJARNG	Manufacturer name plate states non-PCB
	042	Pole Transformer	JC 15	Howard Industries	1567-160904	Non-PCB		25 kVA		Call to manufacturer - All Howard equipment is non-PCB
	043	Pole Transformer	JC 16	ERMCO	08895692	Non-PCB	21 Gal	25 kVA	NJARNG	Manufacturer name plate states non-PCB
	043	Pole Transformer	JC 16	ERMCO	08895549	Non-PCB	19 Gal	25 kVA	NJARNG	Manufacturer name plate states non-PCB
	043	Pole Transformer	JC 16	ERMCO	08895546	Non-PCB	19 Gal	25 kVA	NJARNG	Manufacturer name plate states non-PCB
							•	•		
Toms River	001	Pole Transformer	JC3888DV	Westinghouse	86A292155	Non-PCB	38 Gal	75 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1986
(Figure 17)	001	Pole Transformer	JC3888DV	Westinghouse	86A292156	Non-PCB	38 Gal	75 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1986
	001	Pole Transformer	JC3888DV	Westinghouse	86A292154	Non-PCB	38 Gal	75 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1986
Trenton/Mercer	001	Pole Transformer	E60042	General Electric	P834672-YWE	Non-PCB	10 Gal	10 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB GE facility
(Figure 18)	002	Pole Transformer	60040EW	Wagner Transformers	73182057	Non-PCB		25 kVA	PSE&G	NJDEP Guidelines - All Wagner transformers are certified non-PCB
								•		
Tuckerton	001	Pole Transformer	P37271	Kuhlman	4006660589	Non-PCB	10 Gal†	15 kVA	AC Electric	NJDEP Guidelines - Manufactured in 1989
(Figure 19)	001	Pole Transformer	P37271	Kuhlman	4006850489	Non-PCB		15 kVA	AC Electric	NJDEP Guidelines - Manufactured in 1989
	001	Pole Transformer	P37271	Kuhlman	4008662089	Non-PCB	10 Gal†	15 kVA	AC Electric	NJDEP Guidelines - Manufactured in 1989
UTES	001	Pole Transformer	JC1729 PA	RTE Corporation	711083913	Non-PCB	19 Gal†	N/A	JCP&L	NJDEP Guidelines - All RTE transformers are certified non-PCB
(Figure 20)	001	Pole Transformer	JC1729 PA	RTE Corporation	711083917	Non-PCB		N/A	JCP&L	NJDEP Guidelines - All RTE transformers are certified non-PCB
(1 1gui 0 20)	001	Pole Transformer	JC1729 PA	RTE Corporation	711083817	Non-PCB		N/A	JCP&L	NJDEP Guidelines - All RTE transformers are certified non-PCB
	002	Pole Transformer	JC1727 PA	ERMCO	40407809569	Non-PCB	12 Gal	25 kVA	JCP&L	Manufacturer name plate states non-PCB
	003	Pole Transformer	JC1727 PA	Westinghouse		1	19 Gal†	25 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1981
	003	Pole Transformer	JC1/91 PA	westinghouse	81A020126	Non-PCB	19 Gal†	23 KVA	JCP&L	NJDER Guidelines - Manufactured in 1981

Table 1 - List of Equipment with Potential to Contain PCBs NJARNG PCB Survey

Facility	Map ID	Equipment	Pole/Pad # or Location	Make	Serial #	PCB Status	Volume	Voltage	Owner	Notes
UTES	003	Pole Transformer	JC1791 PA	Westinghouse	81A053507	Non-PCB	19 Gal†	25 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1981
(Continued)	003	Pole Transformer	JC1791 PA	Westinghouse	81A021026	Non-PCB	19 Gal†	25 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1981
Westfield	001	Pole Transformer	60768WE	Cooper Power Systems	921043779	Non-PCB	27 Gal	50 kVA	PSE&G	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
(Figure 21)	001	Pole Transformer	60768WE	Cooper Power Systems	921044861	Non-PCB	27 Gal	50 kVA	PSE&G	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	001	Pole Transformer	60768WE	Cooper Power Systems	921041543	Non-PCB	27 Gal	50 kVA	PSE&G	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
Woodbridge	001	Pole Transformer	A 69981WB	Allis-Chalmers	4791260	Non-PCB	13 Gal	25 kVA	PSE&G	NJDEP Guidelines - All Allis-Chalmers equipment is non-PCB
(Figure 22)	001	Pole Transformer	A 69981WB	Westinghouse	78A351481	Non-PCB	10 Gal†	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB Westinghouse facility
,	001	Pole Transformer	A 69981WB	Central Moloney	CM112349917	Non-PCB	25 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in 2012
	002	Pole Transformer	69980WB	Central Moloney	CM107191415	Non-PCB	16 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in 2007
	002	Pole Transformer	69980WB	Central Moloney	CM107235004	Non-PCB	16 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in 2007
						ORTHERN I				
Dover	001	Pole Transformer	BT735	Line Material Co.	174270	Suspect	6.5 Gal	1.5 kVA	JCP&L	Age of transformer pre-dates manufacturer records
(Figure 23)	002	Pole Transformer	NJ 2677 RT	General Electric	E829810-61Y	Non-PCB	10 Gal	25 kVA	JCP&L	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	002	Pole Transformer	NJ 2677 RT	General Electric	E831997-61Y	Non-PCB	10 Gal	25 kVA	JCP&L	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	002	Pole Transformer	NJ 2677 RT	General Electric	E391988-61P	Suspect	10 Gal	25 kVA	JCP&L	Manufactured in 1961 in a GE facility known to use PCBs
Flemington	001	Pole Transformer	P61859RTH	Westinghouse	86A133674	Non-PCB	41 Gal	50 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1986 in a non-PCB Westinghouse facility
(Figure 24)	001	Pole Transformer	P61859RTH	Westinghouse	86A080889	Non-PCB	41 Gal	50 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1986 in a non-PCB Westinghouse facility
	001	Pole Transformer	P61859RTH	Westinghouse	86A080894	Non-PCB	41 Gal	50 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1986 in a non-PCB Westinghouse facility
	002	Pole Transformer	UT66ARTH505	Westinghouse	86A291108	Non-PCB	41 Gal	50 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1986 in a non-PCB Westinghouse facility
Franklin	001	Pole Transformer	NJ 724 FBK	Cooper Power Systems	921013833	Non-PCB	19 Gal	25 kVA	JCP&L	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
(Figure 25)	001	Pole Transformer	NJ 724 FBK	Cooper Power Systems	911083306	Non-PCB	19 Gal	25 kVA	JCP&L	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
, 6	001	Pole Transformer	NJ 724 FBK	Cooper Power Systems	921013832	Non-PCB	19 Gal	25 kVA	JCP&L	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	002	Pole Transformer	NJ FBK	ERMCO	313 09610962	Non-PCB	17 Gal	25 kVA	JCP&L	Manufacturer name plate states non-PCB
	003	Pole Transformer	54	Cooper Power Systems	921066409	Non-PCB	13 Gal	10 kVA	JCP&L	Call to manufacturer - All Cooper equipment is non-PCB)
Hackettstown	001	Pole Transformer	NJ 1235 HX	Westinghouse	82A440302	Non-PCB	19 Gal†	50 kVA	JCP&L	Serial Number - Manufactured in 1982
(Figure 26)	001	Pole Transformer	NJ 1235 HX	Westinghouse	N/A	Non-PCB	19 Gal†	50 kVA	JCP&L	Serial Number - Manufactured in 1982
, 6	001	Pole Transformer	NJ 1235 HX	Westinghouse	N/A	Non-PCB	19 Gal†	50 kVA	JCP&L	Serial Number - Manufactured in 1982
	002	Pole Transformer	NJ 1192 HX	General Electric	P163116-YWA	Non-PCB	35 Gal†	75 kVA	JCP&L	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	002	Pole Transformer	NJ 1192 HX	General Electric	P163117-YWA	Non-PCB	35 Gal†	75 kVA	JCP&L	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	002	Pole Transformer	NJ 1192 HX	General Electric	P163110-YWA	Non-PCB	35 Gal†	75 kVA	JCP&L	NJDEP Guidelines - Manufactured in a non-PCB GE facility
Lodi	001	Pole Transformer	3020	Central Moloney	CM107287005	Non-PCB	16 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in 2007
(Figure 28)	002	Pole Transformer	62155L	Westinghouse	88A042538	Non-PCB	30 Gal	50 kVA	PSE&G	NJDEP Guidelines - Manufactured in 1988 in a non-PCB Westinghouse facility
	002	Pole Transformer	62155L	Westinghouse	88A423976	Non-PCB	28 Gal	50 kVA	PSE&G	NJDEP Guidelines - Manufactured in 1988 in a non-PCB Westinghouse facility
	002	Pole Transformer	62155L	Westinghouse		Non-PCB	30 Gal†	50 kVA	PSE&G	Name plate not visibile, same build as 1988 transformers on the same pole
Morristown	001	Pad Transformer	PM 3296	N/A	N/A	Non-PCB	N/A	500 kVA	JCP&L	Not present in 1982 during previous PCB survey
(Figure 29)	002	Pole Transformer	JC1770	H. K. Porter	534993	Non-PCB	35 Gal†	75 kVA	JCP&L	NJDEP Guidelines - H. K. Porter never used PCBs, manufacture date unknown
(g)	002	Pole Transformer	JC1770	H. K. Porter	534946	Non-PCB	35 Gal†	75 kVA	JCP&L	NJDEP Guidelines - H. K. Porter never used PCBs, manufacture date unknown
	002	Pole Transformer	JC1770	H. K. Porter	534992	Non-PCB	35 Gal†	75 kVA	JCP&L	NJDEP Guidelines - H. K. Porter never used PCBs, manufacture date unknown
	003	Pole Transformer	N/A	General Electric	N/A	Suspect	10 Gal†	N/A	Unknown	Unmarked, located near radio tower
Picatinny	001	Pad transformer	989007041	Unknown	0098W212K05-	Non-PCB	N/A	N/A	JCP&L	Manufactured in 1998
(Figure 31)		Constant Current Regulator	N/A	Crouse-Hinds SEPCO Corp	1037	Suspect	65 Gal	N/A	NJARNG	Powers airfield lighting, PCB status unknown, Model # 30000-02-208-FAAL-828
Riverdale	001	Pole Transformer	JC490	General Electric	P258513-YOB	Non-PCB	19 Gal	25 kVA	JCP&L	Manufacturer name plate states non-PCB
(Figure 32)	001	Pole Transformer Pole Transformer	JC490 JC490	General Electric General Electric	P258513-YOB P258518-YOB	Non-PCB Non-PCB	19 Gal	25 kVA 25 kVA	JCP&L JCP&L	Manufacturer name plate states non-PCB Manufacturer name plate states non-PCB
(Figure 32)	001	Pole Transformer	JC490 JC490	General Electric	P242558-YOB	Non-PCB	19 Gal	25 kVA 25 kVA	JCP&L	Manufacturer name plate states non-PCB
	002	Pole Transformer	JC235RD	ERMCO	508 08710403	Non-PCB	12 Gal	25 kVA	JCP&L	Manufacturer name plate states non-PCB
	003	Pole Transformer	366RD	Wagner Transformers	5Z114741	Non-PCB	28 Gal	50 kVA	JCP&L	NJDEP Guidelines - Certified non-PCB
	003	Pole Transformer	366RD	Wagner Transformers	5Z114733	Non-PCB	28 Gal	50 kVA	JCP&L	NJDEP Guidelines - Certified non-PCB
	003	Pole Transformer	366RD	Wagner Transformers	5Z114737	Non-PCB	28 Gal	50 kVA	JCP&L	NJDEP Guidelines - Certified non-PCB
	004	Pole Transformer	N/A	ERMCO	208 08652461	Non-PCB	14 Gal	25 kVA	JCP&L	Manufacturer name plate states non-PCB

Table 1 - List of Equipment with Potential to Contain PCBs
NJARNG PCB Survey

Facility	Map ID	Equipment	Pole/Pad # or Location	Make	Serial #	PCB Status	Volume	Voltage	Owner	Notes
Somerset	001	Pole Transformer	68805	RTE Corporation	791030941	Non-PCB	20 Gal	50 kVA	PSE&G	NJDEP Guidelines - All RTE transformers are certified non-PCB
(Figure 33)	001	Pole Transformer	68805	RTE Corporation	791030958	Non-PCB	20 Gal	50 kVA	PSE&G	NJDEP Guidelines - All RTE transformers are certified non-PCB
	001	Pole Transformer	68805	Central Moloney	102410705	Non-PCB	20 Gal	50 kVA	PSE&G	NJDEP Guidelines - Manufactured in 2002
	002	Pole Transformer	68810	Howard Industries	2614453414	Non-PCB	27 Gal	50 kVA	PSE&G	Call to manufacturer - All Howard equipment is non-PCB
	002	Pole Transformer	68810	Howard Industries	2614513413	Non-PCB	27 Gal	50 kVA	PSE&G	Call to manufacturer - All Howard equipment is non-PCB
	002	Pole Transformer	68810	Howard Industries	2614543413	Non-PCB	27 Gal	50 kVA	PSE&G	Call to manufacturer - All Howard equipment is non-PCB
	003	Pole Transformer	N/A	Allis-Chalmers	400679(61)	Non-PCB	10 Gal	10 kVA	Unknown	NJDEP Guidelines - All Allis-Chalmers transformers are non-PCB
	003	Pole Transformer	N/A	General Electric	G194541-65Y	Non-PCB	10 Gal	10 kVA	Unknown	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	003	Pole Transformer	N/A	Central Moloney	10536202	Non-PCB	10 Gal	10 kVA	Unknown	NJDEP Guidelines - Manufactured in 2005
Teaneck	001	Vault Transformer(s)	Vault	Inaccessible	N/A	Suspect	N/A	N/A	PSE&G	Vault locked
(Figure 34)	002	Pole Transformer	P55682	ERMCO	714 09912965	Non-PCB	29 Gal	50 kVA	PSE&G	Manufacturer name plate states non-PCB
(g ,	002	Pole Transformer	P55682	ERMCO	714 09912962	Non-PCB	29 Gal	50 kVA	PSE&G	Manufacturer name plate states non-PCB
	002	Pole Transformer	P55682	ERMCO	714 09912964	Non-PCB	29 Gal	50 kVA	PSE&G	Manufacturer name plate states non-PCB
	003	Pole Transformer	P561799BGF	Central Moloney	CM106183001	Non-PCB	21 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in 2006
	003	Pole Transformer	P561799BGF	Central Moloney	CM106183003	Non-PCB	21 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in 2006
	003	Pole Transformer	P561799BGF	Central Moloney	CM106170812	Non-PCB	21 Gal	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in 2006
Washington	001	Pad Transformer	PM-1-MX	N/A	N/A	Suspect	N/A	150 kVA	JCP&L	1980's build with illegible barcode, JCP&L owned (CP-1-MX in their database)
(Figure 35)	002	Pole Transformer	JC61095-MX	Howard Industries	216761197	Non-PCB	9 Gal	10 kVA	JCP&L	Call to manufacturer - All Howard equipment is non-PCB
(g)	003	Pole Transformer	JC61096-MX	Central Moloney	194698401	Non-PCB	37 Gal	75 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1994
	003	Pole Transformer	JC61096-MX	Central Moloney	194698404	Non-PCB	37 Gal	75 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1994
	003	Pole Transformer	JC61096-MX	Central Moloney	195149802	Non-PCB	37 Gal	75 kVA	JCP&L	NJDEP Guidelines - Manufactured in 1995
	004	Elevator Motor	413261	Otis Elevator Company	BE*P221BOTEL02	Suspect	N/A	208 Volts	NJARNG	Located in Armory constructed in 1958
West Orange	001	Pad Transformer	3934	Cooper Power Sytems	959002107	Non-PCB	N/A	N/A	PSE&G	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
(Figure 36)	002	Pole Transformer	E66522WO	General Electric	P772399-YSE	Non-PCB	24.6 Gal	50 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB GE facility
(8 /	002	Pole Transformer	E66522WO	General Electric	P789783-YTE	Non-PCB	24.6 Gal	50 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	002	Pole Transformer	E66522WO	General Electric	P772300-YSE	Non-PCB	24.6 Gal	50 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	003	Pole Transformer	7920 WO	Howard Industries	1504781112	Non-PCB	21 Gal	25 kVA	PSE&G	Call to manufacturer - All Howard equipment is non-PCB
	003	Pole Transformer	7920 WO	Howard Industries	1417611012	Non-PCB	21 Gal	25 kVA	PSE&G	Call to manufacturer - All Howard equipment is non-PCB
	003	Pole Transformer	7920 WO	Howard Industries	1250390612	Non-PCB	21 Gal	25 kVA	PSE&G	Call to manufacturer - All Howard equipment is non-PCB
	004	Pole Transformer	66525 WO	General Electric	J465425YYOA	Non-PCB	19 Gal†	25 kVA	PSE&G	NJDEP Guidelines - Manufactured in a non-PCB GE facility
	004	Pole Transformer	66525 WO	Cooper Power Systems	0038002478	Non-PCB	18 Gal	25 kVA	PSE&G	Call to manufacturer - All Cooper equipment is non-PCB (Est. 1985)
	004	Pole Transformer	66525 WO	Westinghouse	N/A	Non-PCB	19 Gal†	N/A	PSE&G	Manufacturer name plate states non-PCB
	005	Pad Transformer	325296	ABB Power	98J531019	Non-PCB	N/A	N/A	PSE&G	Call to manufacturer - All Power Partners equipment is non-PCB

Notes: †- Volume estimated N/A- Information not available



APPENDIX A

LIST OF FACILITIES INCLUDED IN THE SURVEY

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Facility	Building Use	Ruilt of Floors F		Building Foot Print Area (SF)	Drill Floor Size	Floo	or Plan
					(SF)	(Y/N)	Forma
		thern Regi					
Atlantic City Armory	Armory	1926	3	47,166	20,275	Y	CADD
Atlantic City Armory	MVSB	1926	1	2,372	NA	Y	CADD
Atlantic City Armory	Flammable Material Shed	1957	1	100	NA	N	NA
Bridgeton Armory	Armory	1964	1	11,734	5,400	Y	Paper
Bridgeton Armory	MVSB	1949	1	7,193	NA	N	NA
Bridgeton Armory	Pallet Building	1969	1	2,400	NA	N	NA
Bridgeton Armory	Pallet Shed	1969	1	891	NA	N	NA
Bridgeton Armory	Pallet Shed	1969	1	434	NA	N	NA
Cape May Armory	Armory	1961	1	18,931	6,000	Y	CADE
Cape May Armory	FMS	1952	1	8,837	NA	Y	CADE
Cape May Armory	Flammable Material Shed	1964	1	90	NA	N	NA
Cherry Hill Armory	Armory	1957	1	37,908	8,340	Y	CADI
Cherry Hill Armory	UTMB	1977	1	3,596	NA	Y	CADI
Hammonton Armory	MVSB	1949	1	7,187	NA	Y	CADE
Hammonton Armory	Armory	1949	1	5,917	NA	Y	CADE
Vineland Armory	Armory	1940	3	27,764	4,515	Y	CADE
Vineland Armory	FMS	1956	1	5,511	NA	Y	CADE
Vineland Armory	Flammable Material Shed	1960	1	140	NA	N	NA
Woodbury Armory	Armory	1929	2	40,204	7,373	Y	CADE
Woodbury Armory	MVSB	1941	1	11,317	NA	Y	CADE
Woodbury Armory	MVSB	1941	1	3,412	NA	Y	CADE
Woodbury Armory	UTMB	1941	1	3,412	NA	Y	CADE
Woodbury Armory	Flammable Storage Shed	1960	1	90	NA	N	NA
Woodstown Armory	Armory	1981	1	15,000	5,000	Y	Paper
Woodstown Armory	Flammable Storage Shed	1981	1	90	NA		Tuper
		Central Re	egion				
Bordentown Armory	Armory	1956	1	15,940	6,120	Y	CADE
Bordentown Armory	MVSB	1949	1	8,161	NA	Y	CADE
Bordentown CSMS	Building 1	1953	1	16,383	NA	Y	Paper
Bordentown CSMS	Building 2	1953	1	12,720	NA	N	NA
Bordentown CSMS	Building 3	1953	1	6,875	NA	N	NA
Bordentown CSMS	Storage Building	1953	1	800	NA	N	NA

Table 3
Building Information (cont.)

Facility	Building Use	Year Built	Number of Floors	Building Foot Print	Floor	Floor Plan		
			200	Area (SF)	Size (SF)	(Y/N)	Format	
	Central R	Region (co	nt.)					
Bordentown CSMS	Storage Shed	1953	1	42	NA	N	NA	
Burlington Armory	Armory	1926	2	15,706	5,220	Y	CADD	
Burlington Armory	MVSB	1950	1	7,315	NA	N	NA	
Burlington Armory	Flammable Material Storage Shed	1950	1	90	NA	N	NA	
Fort Dix JFHQ	Bldg 3601 – HQ	1990	2	65,000	NA	N	NA	
Fort Dix JFHQ	Bldg 3650 – JT2DC	1986	1	152,000	NA	Y	Paper	
Fort Dix JFHQ	Bldg 3609 - RTSM	1990	1	7,800	NA	N	NA	
Freehold Armory	Armory	1940	1	38,178	6,300	Y	Paper	
Freehold Armory			1	90	NA	N	NA	
Lawrenceville Armory	Armory	1927	2	112,347	7,452	Y	CADD	
Lawrenceville Armory	FMS Bldg 1	1941	1	19,500	NA	Y	CADD	
Lawrenceville Armory	MVSB	1941	1	12,738	NA	N	NA	
Lawrenceville Armory	FMS Bldg 2	1941	1	3,655	NA	N	NA	
Lawrenceville Armory	Flammable Material Shed	1971	1	2,533	NA	N	NA	
Lawrenceville Armory	FMS Storage Shed	1971	1	173	NA	N	NA	
Lawrenceville Armory	Flammable Material Shed	1941	1	150	NA	N	NA	
Lawrenceville Armory	Flammable Material Shed	1960	1	90	NA	N	NA	
Lawrenceville DMAVA	NJARNG-HQ	1971	3	56,110	NA	Y	CADD	
Lawrenceville, USPFO	USPFO & HSCOE	1971	1	76,715	NA	Y	CADD	
Lawrenceville, DLOGs	DLOGs	1987	1	42,328	NA	Y	Paper	
Mt. Holly Armory	Armory	1963	1	15,172	7,200	Y	CADD	
Mt. Holly Armory	Flammable Material Storage Shed	1963	1	185	NA	N	NA	
Plainfield Armory	Armory	1930	3	16,136	4,420	Y	CADD	
Plainfield Armory	MVSB	1950	1	6,368	NA	N	NA	
Princeton Warehouse	Warehouse and Offices	1934	1	5,988	NA	N	NA	
Sea Girt NGTC	Bldg. 8 Barracks	1970	2	36,688	NA	Y	CADD	
Sea Girt NGTC	Bldg. 35 Armory	1977	1	33,035	7,168	Y	CADD	

Table 3
Building Information (cont.)

Facility	Building Use	Billit Of Bloore		Building Foot Print Area (SF)	Drill Floor Size (SF)	Floor Plan		
					()	(Y/N)	Format	
		al Region	(cont.)					
Sea Girt NGTC	Bldg. 60 Warehouse, Classrooms, Offices	1936	1	26,527	NA	Y	CADD	
Sea Girt NGTC	Bldg. 7 Offices	1969	2	21,868	NA	Y	Paper	
Sea Girt NGTC	Bldg. 11 Mess Hall	1967	1	17,886	NA	Y	Paper	
Sea Girt NGTC	Bldg. 66 Museum	1930	1	17,268	NA	Y	CADD	
Sea Girt NGTC	Bldg. 64 Medical Clinic	1930	1	7,290	NA	Y	Paper	
Sea Girt NGTC	Bldg. 65 Storage	1930	1	6,894	NA	Y	CADD	
Sea Girt NGTC	Bldg. 63 Medical Clinic	2001	1	6,031	NA	N	NA	
Sea Girt NGTC	Bldg. 20 Barracks	1930	1	5,998	NA	Y	CADD	
Sea Girt NGTC	Bldg. 21 Barracks	1930	1	5,998	NA	Y	CADD	
Sea Girt NGTC	Bldg. 22 Barracks	1930	1	5,998	NA	Y	CADD	
Sea Girt NGTC	Bldg. 23 Barracks	1930	1	5,998	NA	Y	CADD	
Sea Girt NGTC	Bldg. 26 Theater	1940	1	5,144	NA	Y	Paper	
Sea Girt NGTC	Bldg. 59 Warehouse & Offices	1936	1	4,950	NA	Y	CADD	
Sea Girt NGTC	Bldg. 15 Barracks	1930	1	4,340	NA	Y	Paper	
Sea Girt NGTC	Bldg. 17 Barracks	1930	1	4,340	NA	Y	CADD	
Sea Girt NGTC	Bldg. 18 Barracks	1930	1	4,340	NA	Y	CADD	
Sea Girt NGTC	Bldg. 24 Barracks	1940	1	4,340	NA	Y	Paper	
Sea Girt NGTC	Bldg. 36 FMS	1977	1	4,172	NA	Y	CADD	
Sea Girt NGTC	Bldg. 95 Classroom	2000	1	1,800	NA	N	NA	
Sea Girt NGTC	Bldg. 58 Classroom	1930	1	3,355	NA	Y	CADD	
Sea Girt NGTC	Bldg. 1 Residence	1930	3	2,700	NA	Y	CADD	
Sea Girt NGTC	Bldg. 56 Warehouse	1940	1	2,546	NA	Y	CADD	
Sea Girt NGTC	Bldg. 54 Classroom	1930	1	2,250	NA	Y	CADD	
Sea Girt NGTC	Bldg. 73 Classroom	1930	1	2,201	NA	Y	CADD	
Sea Girt NGTC	Bldg. 19 Barracks	1930	1	1,672	NA	N	NA	
Sea Girt NGTC	Bldg. 25 Barracks	1930	1	1,660	NA	N	NA	
Sea Girt NGTC	Bldg. 3 Residence	1930	2	1,194	NA	N	NA	
Sea Girt NGTC	Bldg. 71 Ammo Storage	1930	1	1,000	NA	N	NA	
Sea Girt NGTC	Bldg. 6 Residence	1930	1	800	NA	N	NA	

Table 3
Building Information (cont.)

Facility	Building Use	Year Built	Number of Floors	Building Foot Print Area	Drill Floor Size (SF)	Floor Plan	
				(SF)	(SF)	(Y/N)	Format
	Centr	al Region	(cont.)				
Sea Girt NGTC	Bldg. 80 Classroom	1930	1	570	NA	N	NA
Sea Girt NGTC	Bldg. 4 Garage	1930	1	500	NA	N	NA
Sea Girt NGTC	Bldg. 93 Warehouse	1940	1	300	NA	N	NA
Sea Girt NGTC	Bldg. 94 Warehouse	2000	1	1,300	NA	N	NA
Sea Girt NGTC	Bldg. 81 Warehouse	1935	1	110	NA	N	NA
Sea Girt NGTC	Guard Booth	1940	1	81	NA	N	NA
Sea Girt NGTC	Bldg 37 Classroom/Barracks	2005	1	19,000	NA	N	NA
Sea Girt NGTC	Bldg 14 Offices	1930	1	4,340	NA	N	NA
Sea Girt NGTC	Bldg 55 Classroom	1940	1	1,300	NA	N	NA
Sea Girt NGTC	Bldg 72 Shed	2001	1	801	NA	N	NA
Sea Girt NGTC	Bldg 75 Sewer Lift Station	1990	1	600	NA	N	NA
Sea Girt NGTC	Bldg 79 Classroom	1930	1	2,500	NA	N	NA
Sea Girt NGTC	Bldg 92 Office		1	90	NA	N	NA
Toms River Armory	Armory	1956	1	24,352	6,840	Y	CADD
Toms River Armory	UTMB	1956	1	3,091	NA	Y	CADD
Toms River Armory	MVSB	1956	1	3,091	NA	N	NA
Toms River Armory	Flammable Material Shed	1960	1	100	NA	N	NA
Trenton Mercer Aviation	Hanger and Offices	1976	2	88,209	NA	Y	CADD
Trenton Mercer Aviation	FMS	1976	1	3,267	NA	Y	CADD
Tuckerton Armory	Armory	1961	1	6,144	NA	Y	CADD
Tuckerton Armory	MVSB	1954	1	4,880	NA	N	NA
UTES	Armory	1963	1	3,166	NA	N	NA
UTES	UTES	1990	1	17,100	NA	Y	CADD
Westfield Armory	Armory	1925	2	40,564	22,000	Y	CADD
Westfield Armory	FMS	1949	1	8,117	NA	Y	CADD
Westfield Armory	Flammable Material Shed	1960	1	90	NA	N	NA
Woodbridge Armory	Armory	1961	1	30,863	9,300	Y	CADD

Table 3
Building Information (cont.)

Facility	Building Use	Year Built	Number of Floors	Building Foot Print Area	Drill Floor Size (SF)	Floor Plan	
				(SF)	(51)	(Y/N)	Forma
	No	rthern Re	gion				
Dover Armory	Armory	1963	2	16,840	6,700	Y	CADD
Dover Armory	Former FMS	1949	1	14,458	NA	N	NA
Dover Armory	Flammable Material Shed	1949	1	192	NA	N	NA
Dover Armory Flammable Material Shed		1949	1	90	NA	N	NA
Flemington Armory	Armory	1961	1	17,930	5,250	Y	CADD
Flemington Armory	MVSB	1950	1	10,000	NA	Y	CADD
Flemington Armory	Flammable Material Shed	1961	1	192	NA	N	NA
Franklin Armory	Armory	1956	1	14,456	5,200	Y	CADD
Franklin Armory	MVSB	1949	1	7,488	NA	N	NA
Hackettstown Armory	Armory	1946	1	18,912	5,060	Y	CADD
Hackettstown Armory	MVSB	1949	1	7,187	NA	Y	CADD
Jersey City Armory	Armory	1939	4	142,800	46,190	Y	CADD
Lodi Armory	Armory	1958	1	24,523	NA	Y	CADD
Lodi Armory	MVSB	1948	1	12,498	NA	N	NA
Lodi Armory	State Garage	1948	1	11,318	NA	N	NA
Morristown Armory	Armory	1937	2	78,320	37,440	Y	CADD
Morristown Armory	UTMB	1956	1	4,155	NA	Y	CADD
Morristown Armory	Flammable Material Shed	1960	1	128	NA	N	NA
Newark Armory	Armory	1899	3	100,396	43,440	Y	CADD
Newton Armory	Armory	1961	1	17,322	5,400	Y	CADD
Newton Armory	MVSB	1957	1	2,372	NA	Y	CADD
Newton Armory	Flammable Material Shed	1957	1	90	NA	N	NA

Table 3 Building Information (cont.)

Facility	Building Use	Year Built	Number of Floors	Building Foot Print Area	Drill Floor Size (SF)	Floor Plan	
				(SF)		(Y/N)	Format
	North	ern Regio	on (cont.)				
Picatinny FMS	FMS	1978	3	22,395	NA	Y	Paper
Riverdale Armory	Armory	1962	2	17,962	5,580	Y	CADD
Riverdale Armory	FMS	1949	1	13,983	NA	N	NA
Riverdale Armory Flammable Mater Shed		1960	1	90	NA	N	NA
Somerset Armory	Armory	1980	2	32,000	13,000	Y	Paper
Somerset Armory	FMS	1980	1	6,400	NA	Y	Paper
Teaneck Armory	Armory	1938	3	157,316	35,000	Y	CADD
Teaneck Armory	FMS	1955	1	9,918	NA	Y	Paper
Teaneck Armory	Flammable Material Shed	1955	1	150	NA	N	NA
Washington Armory	Armory	1958	2	41,806	6,700	Y	Paper
West Orange Complex	Armory	1939	2	95,268	32,900	Y	CADD
West Orange Complex Computer Repair Shop		1977	1	5,176	NA	Y	Paper
West Orange Complex	CSMS Building # 1	1958	1	20,228	NA	Y	CADD
West Orange Complex	CSMS Building # 2	1958	1	9,813	NA	Y	CADD

Notes:

- 1. Building foot print is the plan view limits of the building. If a building has multiple stories, than multiply the number of stories times the foot print area. Except for the drill floor exception mentioned in Note 2 below.
- 2. Drill floors are limited to the 1st floor of the buildings. Drill floors are large open spaces typically two or more stories high. Therefore, when calculating the total building area of multi floor buildings with a drill floor, subtract out the drill floor area of any floor above the first floor. The exception is the Burlington and Teaneck Armories as the drill floor occupies the 2nd floor while the 1st floor extends under the drill floor at both buildings.
- 3. Any armory typically consists of offices, supply rooms, kitchen, mess halls, classroom, and drill floor space.
- 4. Any CSMS, FMS, shop, state garage, UTMB, and MVSB typically consist of offices and 1 to 3 garage bays.



APPENDIX B

NJDEP GUIDELINES FOR DETERMINING PCB STATUS OF DISTRIBUTION TRANSFORMERS

GUIDELINES FOR DETERMINING PCB STATUS OF DISTRIBUTION TRANSFORMERS

As a result of EPA regulation 40 CRF part 761, published in the Federal Register Volume 44 Number 106 (dated May 13, 1979), oil used in all distribution transformers manufactured after July 1, 1979 must contain less than 50 PPM of PCB (this is the requirement for the classification, "PCB non-contaminated).

The following is a guideline, listed by manufactures, for determining the probable PCB classification of oil in distribution transformers.

In this guideline, the following code is used to represent the type of digits appearing in the serial numbers:

X - numeric character

L - alphabetic character

Allis-Chalmers Corporation

Discontinued the manufacture of distribution transformers in 1975. All Allis-Chalmers mineral-oil filled transformers comply with the PCB non- contaminated guidelines.

<u>Central-Moloney Transformer Division of Colt Industries</u>

C-M will certify that any transformer manufactured after 1962 is PCB non-contaminated.

Serial Number Interpretation

S/N XXXXXXXXXXX

1) Second and third digits indicate the year manufactured.

For example: S/N 2772254-42 (1977 transformer)

A. B. Chance Company

A. B. Chance has never used PCB fluids and will certify that any transformer manufactured after August 1, 1978 is PCB non-contaminated.

Serial Number Interpretation

S/N XXLXXXX

- 1) First two digits indicate the year manufactured.
- 2) Third digit indicated the month.

A- Jan. B- Feb. K- Nov. L- Dec.

For example: S/N 76D24675 (April, 1976 transformer)

General Electric Company

Transformers manufactured in Hickory, N. C. and Shreveport, La. are certified PCB non-contaminated. Transformers manufactured in other General Electric Company plants before July 1, 1979 are not.

Serial Number Interpretation

S/N LXXXXXX-LLLL

1) The last four digits (e.g. S/N LXXXXXX-ABCD) contain the following information:

A) Place of manufacture

K - Oakland., CA

P - Pittsfield, MA.

T - Shreveport, LA.

Y - Hickory, N.C.

B & C) Date of Manufacture

YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1965	AA	BA	CA	DA	EA	FA	GA	HA	JA	KA	LA	MA
1966	AB	BB	CB	DB	EB	FB	GB	HB	JB	KB	LB	MB
1967	AC	BC	CC	DC	EC	FC	GC	НС	JC	KC	LC	MC
1968	AD	BD	CD	DD	ED	FD	GD	HD	JD	KD	LD	MD
1969	ΑE	BE	CE	DE	EE	FE	GE	HE	JΕ	KE	LE	ME
1970	AF	BF	CF	DF	EF	FF	GF	HF	JF	KF	LF	MF
1971	AG	BG	CG	DG	EG	FG	GG	HG	JG	KG	LG	MG
1972	AH	BH	CH	DH	EH	FH	GH	HH	JH	KH	LH	MH
1973	AJ	BJ	CJ	DJ	EJ	FJ	GJ	HJ	JJ	KJ	LJ	MJ
1974	AK	BK	CK	DK	EK	FK	GK	HK	JK	KK	LK	MK
1975	AL	BL	CL	DL	EL	FL	GL	HL	JL	KL	LL	ML
1976	AM	BM	CM	DM	EM	FM	GM	HM	JM	KM	LM	MM
1977	AN	BN	CN	DN	EN	FN	GN	HN	JN	KN	LN	MN
1978	AP	BP	CP	DP	EP	FP	GP	GP	JP	KP	LP	MP
1979	AR	BR	CR	DR	ER	FR	GR	HR	JR	KR	LR	MR
1980	AS	BS	CS	DS	ES	FS	GS	HS	JS	KS	LS	MS
1981	ΑT	BT	CT	DT	ET	FT	GT	HT	JT	KT	LT	MT

D. Winding Material

A. – Aluminum

C. – Cooper

For example: S/N L714041TJMA

(Shreveport, September 1976, Aluminum)

General Electric Company did not use a date code prior to 1965.

Kuhlman Electric Company

Kuhlman has never used PCB fluids in their Versailles, KY and Salinas, CA facilities. The use of all PCB fluids in their remaining plant in Crystal Springs, MS was discontinued in 1965.

Serial Number Interpretation

S/N XXXXXXXXX

1) The first digit of the S/N indicates the place of manufacture

1 & 2 - Crystal Springs, MS

3 - Salinas, CA

Ι

- 4 Versailles, KY
- 2) Prior to 1979 Kuhlman did not use a date code. Since 1979 the last two digits indicate the year of manufacture..

e.g. S/N 3693732379 (Salinas, CA, 1979)

McGraw-Edison Company, Power Systems Division

All McGraw-Edison distribution transformer facilities stopped using PCB fluids in 1965. They will certify that all transformers manufactured after December 1978 are PCB non-contaminated.

(Pre-1967 McGraw-Edison trade-names were PennsylvaniaTransformer Company and Pole Star).

Serial Number Interpretation

1) Prior to 1969:

S/N LXXXX-XX

No date code in serial number

2) From 1969 to present:

S/N XXLLXXLXXX

First two digits indicate year of manufacture e.g.77ZB72A001 (1977 transformer)

NECO Corporation, Transformer Division

All transformers are certified PCB non-contaminated.

H. K. Porter Company, Inc.

Have never used any PCB products in any of their distribution transformer facilities. They will not certify that transformers manufactured before July 1, 1979 are PCB non-contaminated.

RTE Corporation

All transformers are certified PCB non-contaminated.

Standard Transformer Corporation

No information available.

R.E. Uptegraff Manufacturing Corporation

All transformers are certified PCB non-contaminated

<u>Wagner Transformer Division of Turbodyne Industries</u> (Now a division of McGraw-Edison Co.)

All transformers are certified PCB non-contaminated

Westinghouse Electric Corporation

Transformers manufactured in Athens, GA and Jefferson City, MO are certified PCB non-contaminated. Transformers manufactured in South Boston, VA; Sharon, PA; Sunnyvale, CA and Phoenix, AR prior to July 1, 1979 are not certified PCB non-contaminated.

Serial Number Interpretation

1) Prior to 1972

S/N XXLLXXXX

a) First two digits indicate the year of manufacture. The third indicates the place of manufacture.

e.g. S/N XXALXXXX

A – Athens, GA

(Since the Jefferson City, MO plant was opened after 1972, any pre-1972 transformer with a letter other than "A" as the third digit cannot be assumed PCB non-contaminated.")

e.g. S/N) 69A03964 (1969 transformer from Athens, GA)

2) From 1972 to present

a) SN XXLLXXXXX

- i) Serial numbers with this format indicate transformer manufactured in Jefferson City or Athens.
- ii) The first two digits indicate the year of manufacture

e.g. S/N 79MJ121096 (1979 transformer)

b) S/N XXXXXXX

- Serial numbers with this format indicate transformer manufactured in one of the other Westinghouse facilities.
- ii) The first two digits indicate the year of manufacture.

e.g. S/N 7843512 (1978 tansformer)



APPENDIX C

VINELAND ELECTRIC STATEMENT OF OWNERSHIP



WHITNEY Y. PETERS

Senior Engineer, Distribution Division
VINELAND MUNICIPAL ELECTRIC UTILITY
415 N. West Avenue
P.O. Box 1508
Vineland, NJ 08362-1508

Telephone: (856) 794-4000, Ext. 4303

Telefax: (856) 405-4623

E-mail: wpeters@vinelandcity.org

Subject: Vineland Armory

Hunter,

The Pad mount transformer located in back in fenced in area is for the new garage. It is a 112.5 kVA 480Y/277 v. It is a Westinghouse with a serial number 819130.

The 3 transformers located in the vault are owned by VMU as well as the underground 3 phase primary that feeds it from the riser pole.

Thanks, Whitney Peters



APPENDIX D

WOODBURY ARMORY 1982 PCB SURVEY

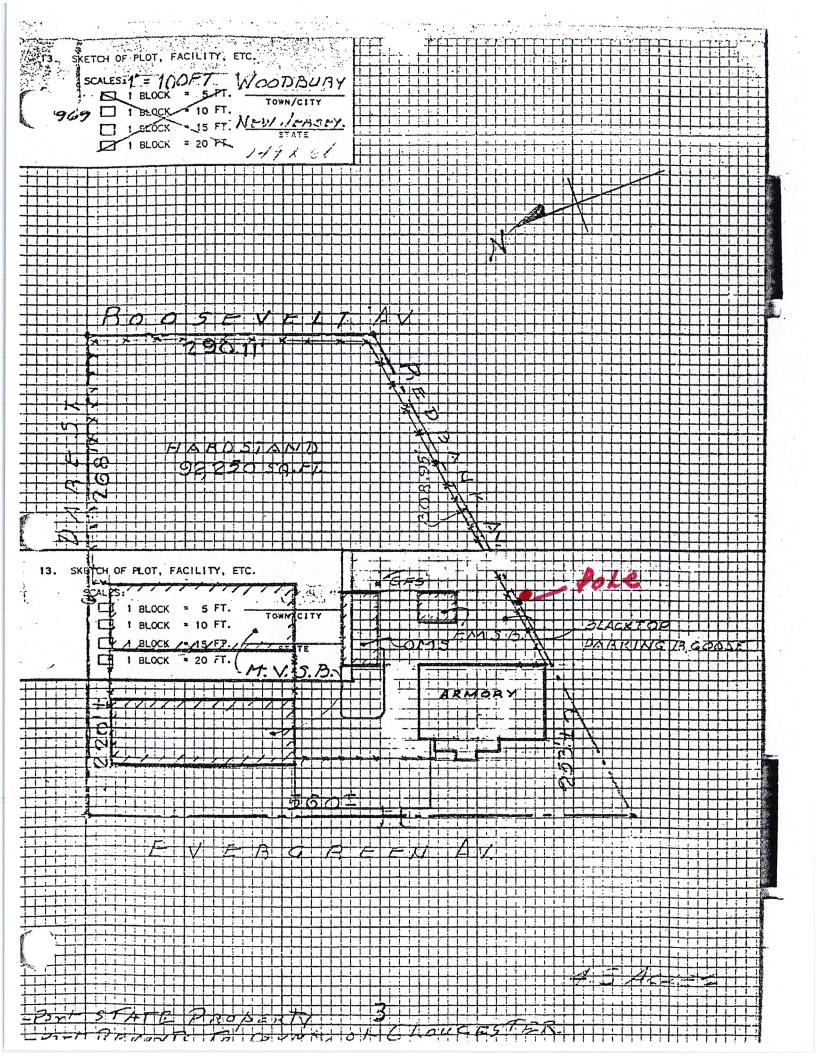
PCB or s REPORT INFORMATION

DATE OF REPORT: 21 JAN 82 FACILITY: Woodhury 2. NUMBER OF TRANSFORMER(s): LOCATION OF TRANSFORMER(s) (Ref attached Site Plan):

ACCROSS STREET ON RED BANKAUR 3. POLE NUMBER TRANSFORMER(s) ARE LOCATED ON: 606/1163, 13 TSWP E79SPR40 OWNERSHIP, CIRCLE ONE: NJ-DOD, UTILITY COMPANY, DON'T KNOW. IF UTILITY COMPANY, GIVE NAME: PUBLIC SERVICE GASTELECTRICE INSTALLATION DATE:_____ 6. TRANSFORMER(s) CLASS: 7. FLUID CAPACITY:____(Gals) 8. MANUFACTURED BY: 9. 10. SERIAL NUMBER(s):

REPORT COMPLETED BY: Joseph Papelli

11.





APPENDIX E

LAWRENCEVILLE HQ HISTORIC DOCUMENTS



Fical Englands Up Andrews Andr

February 17, 1986

New Jersey Department of Defense Eggert Crossing Road, CN340 Trenton, NJ 08625

Attention: Lt. Wayne Hunt

Reference: Repairs to valve leak and electrical testing of 2000 KVA transformer. Our Customer #32266 (12559BM).

Dear Lt. Hunt:

We have completed the electrical testing of your 2000 KVA main transformer and in addition drained the oil and replaced the defective valve to eliminate leakage.

The oil was filtered back into the transformer and addition made to proper level.

Two copies of the test results are enclosed for your review and record.

PAGE #1 - Transformer inspection and electrical tests. The results are acceptable.

PAGE #2 - Insulating fluid analysis of sample. The screen test results are acceptable. The fluid is in the PCB category (over 500 ppm).

We wish to thank you again for the opportunity to extend our specialized services.

Very truly yours,

BURLINGTON TESTING COMPANY, INC.

Ralph R. Barr Supervising Engineer

RRB: im



BURLINGTON TESTING COMPANY, INC.



REPORT

ISSUED TO: NJ Department of Defense REPORT NUMBER: 32266
Eggert Crossing Road CN 340

Trenton, NJ 08625 PROJECT: NJ Department of Defense

DATE OF REPORT: February 1986

LOCATION: Lawerence Township DATE OF TEST: 1/11/86

TRANSFORMER TEST RECORD

DESIGNATION: Main Transformer MANUFACTURER: GE

MANUFACTURER: GE SERIAL NUMBER: G-859318 KVA SIZE: 2000 VOLTAGE RATING: 13200-17620/480 TEMP RISE: 65

IMPEDANCE: COOLANT TYPE: Oil COOLANT GALLONS: 320

INSULATION RESISTANCE MEASURED: SULATION RESISTANCE MEASURED:
Primary windings at 5 volts DC Secondary windings at 1 volts DC

Phase A to Gr. and Sec. 4000 Meg. Phase A to Gr. and Pri. 2000 M

TURNS RATIO TEST: (Tap changer left in position marked with "*".)

NAMEPLATE TAP CONNECTION CONNECTION CONNECTION CALCULAT

VOLTAGE POSITION X0X2/HOH2 X0X1/HOH1 X0X3/HOH3 RATIO

7620 3 27.528:1 27.528:1 27.528:1 26.209

CONNECTION: Wve Wve

REMARKS:

Oil drained and valve repalced. Oil filtered and 25 gallons make up oil added. Sample B7243



BURLINGTON TESTING COMPANY, INC. REPORT



Issued To: N. J. Dept. of Defense Address: Attention:

Job No: 12559BM Report Date: 1/17/86 Customer Number:

Project: Insulating Fluid Analysis

							-		
Sample Designation o No. Description	Designation or	Color	Avg. Diel.	TESTS CONDUC Neut. Spec. No. Gravit REPORTED I	Power y Factor		IFT.	Wat	
	Description		KV	MgKOH	%	PPM	Dynes/ cm	PF	
	B7243-1	Main Transf. (A22G41)	1.5	45	.01 .883	. 05	630		

THIS DEVICE IDENTIFICATION # MAIN TRANSF. (A 2224)

WAS TESTED ON 1/1/86
FOR EVALUATION OF CONTAMINATION BY

POLYCHLORINATED BIPHENYLS (PCB)
ANALYSIS # 7243-1 TEST RESULTS 630 PPM

THIS DEVICE IS CLASSIFIED-

PCB CONTAMINATED

NON PEB



BURLINGTON TESTING CO.
ELLIS STREET
BURLINGTON, NJ 08016

ELECTRICAL TESTING AND MAINTENANCE SPECIALIST, 24 HOUR SERVICE OFFICE (609) 386-3400

277/480 VOLT TRANSFORMER DOD BLOG

SEA GIRT NATIONAL GUARD TRAINING CENTER ELECTRICAL TRANSFORMER INTENTAGES

POLE #	TRANS. AM'T	KVA SIZE	257/10
38	3	37.5	REMARKS
40	3	37.5	Heating/cooling, general lighting - 31dg. 64 General lighting and power - 81dgs. 65, 66, 67, 68, 71, 73, 75
51	3	25	Sewer Plant - Buildings 77, 78, 79 and Bldgs. 80, 81, 93
*	1	Unknown	*North Pole of Building 7 Services Parade Field
**	1	5	**Near Building 20 Photo-cell switch
	43 Pole/R. 6 Ground 49 Total	ack Mounted Mounted	

NJDMAVA HEADOUARTERS BUILDING

Ground Mounted	2	2,000 & 750	Transformers located behind building Analysis of insulating fluid in 2,000 KVA transformer conducted in 1986 indicates PCB concentration of 630 ppm.



APPENDIX F

JERSEY CITY, NEWARK AND TEANECK HISTORIC DOCUMENTS

1. JERSEY CITY ARMORY

- a. General dirty conditions, not adequately ventilated, insufficient lighting and generally unsafe condition with no protection around transformers and open buss. Oil leaks in transformers (probably bad seals). Heat is a major concern and should be addressed. NO PROTECTIVE CACES.
- b_{\star} All wiring is brittle and insulation is frayed. There is no indication of any preventive maintenance.
- c. Continued use of this facility should require replacement of all service beyond entrance to building including transformers and switching gear.

d. Specifications:

Tempature at time of Inspection: 100+ Room 180+ Transformer

Primary 2400 75KVA 60Cycle 208/120 Original equipment Westinghouse Type SK Single Phase 6 Trans. 69 Gal.

Oil Switch - Allis Chalmers

Type: PK5 Mod: 244644

Max: 5000V

Amps: 200

Switches - ITE

Type: S No. 18515

Amps: 10

фз. 10

Freq: 60

Installed: 8/35

2. TEANECK ARMORY

- a. Basically same gear as Jersey City, However, this equipment has been maintained in acceptable condition. However, room containing equipment should be properly secured with transformers and switching gear properly caged. Area is well ventilated and lighted.
- b. Building is apparently underpowered and personnel on duty indicate a continuous tripping of circuit breakers when normal loads are applied.
 - c. Specifications:

Transformers 3 Ea. GE 1938 Original Equipment Model Nr: 4494987 47 Gal. 100 Transil Oil Oil Switch: 1935 Manufacturer Date DWG. NA12472 S.O. NAZ 69081 Style: NAS57524

Gircuit Breaker: Westinghouse Carson
Type: CL10
35 Amps 60 Cycles
250 V
S.O. 44485

New Circuit Panel: Federal Pacific 240 V 200 Amps, 3 Pole 60 HP Max

3. WEST ORANGE ARMORY

- a. This equipment is in good shape and appears to be well maintained. There is a underground primary feed from off base to switches and circuit breakers.
 - b. Specifications:

Transformers 3 Ea. 100KVA

- (1) Federal Pacific Nr. 4400 400 Amps Max 600 Volts Max 1 & 3 Phase 250 V DC Max
- (2) Federal Pacific Nr. AG 892097 400 Amps 120/208 Volts Type CDP 3 Phase, 4W
- (3) Unused <u>Emergency Power</u> GE-4SN
 Type A
 230VAC
 400 Amps

4. WEST ORANGE COMBINED SUPPORT

- a. Public Service has only access to transformers and not available at this time. Vegatation control in this area is immediately required.
- b. <u>OUTSIDE</u>: Ground transformers in cement block yard with barbed wire on top. Unable to check in any way without access.
 - c. INSIDE: Two (2) overhead transformers and three (3) circuit breaker panels.
 - d. Specifications: Power Panels.
 - (1) Federal Pacific 625 Amps 220 Volts 3 Phase, 4 Wire No. DZ61232

- (2) Federal Pacific 1000 Amps 120/208 Volts 3 Phase, 4 Wire No. D261231
- (3) Federal Pacific Type N, Lab 42-4L 200 Amps 120/208 Volts 3 Phase, 4 Wire No. D88184

5. TRENTON DOD COMPLEX

a. Pad mounted transformers are not identified as HIGH VOLTAGE and DANGER. Everything else is apparently well maintained. Underground primary feed into

b. Specifications:

- (1) Transformer GE Nr. G859319 Glass OA Three Phase 60 Cycles 750 KWA 10 C Oil 200 Gal.
- (2) Transformer GE Nr. G859318 Class OA Three Phase 60 Cycles 2000 KWA Voltage Rating 13200/7620 480/277 10 C Oil 320 Gal.

OUTSIDE WAREHOUSE

1) Transformer GE Nr. H268283-70P Class OA, Three Phase 500KVA Voltage Rating 13200/7620 480/277 10 C Oil 183 Gal.

INSIDE WAREHOUSE

- (1) Transformer GE Dry Type 3 Phase, 60HZ, Class AA Model Nr. 9T23A3870 50KVA 480/208/120
- (2) Jefferson Electric Powerformer Nr. 223-3234 75KVA 3 Phase, 60 HZ Class AA - 17407-A 480 High V 208Y/120 Low Volt

6. MECER AIRPORT

a. All public service. They did not know anyone was coming. Equipment in apparently in good shape.

7. GENERAL STATEMENT

Most all areas are in need of standard sign which indicates DANGER-HIGH VOLTAGE.

Consideration should be given to energy conservation. All incandescent lighting should be replaced with modern updated fluorescent, sodium vapor or mercury vapor as possible data.



APPENDIX G

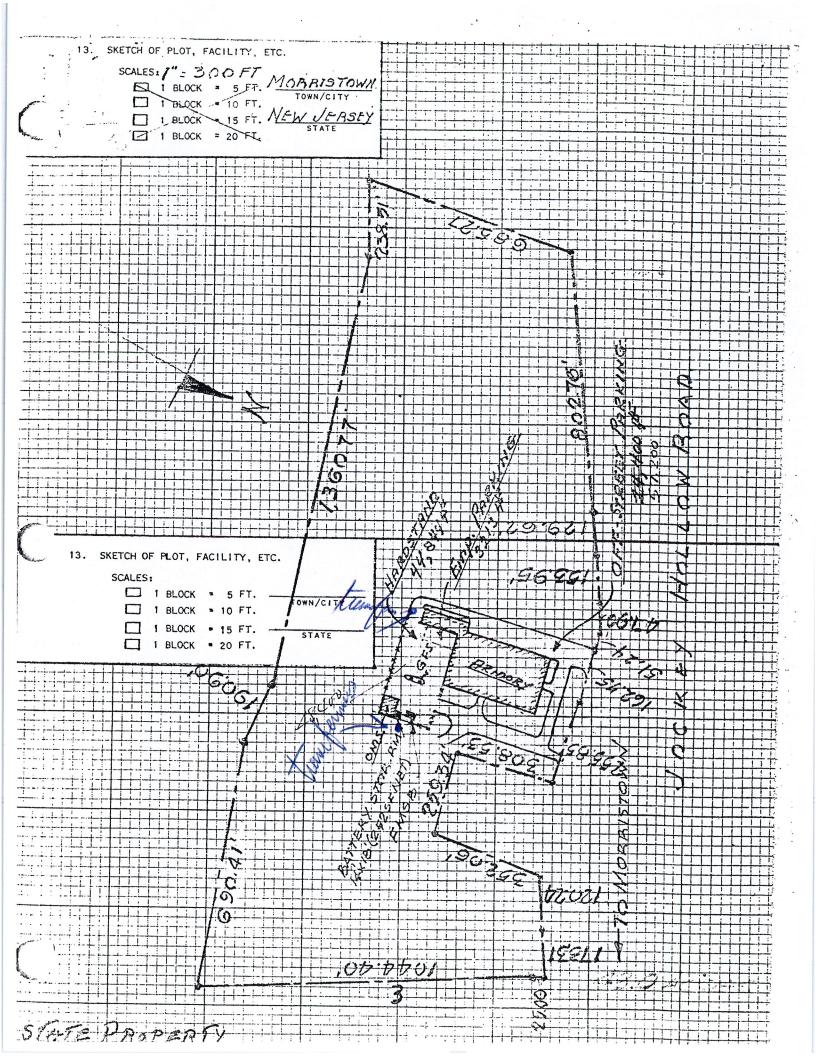
MORRISTOWN ARMORY 1982 PCB SURVEY

PCB 9 S REPORT INFORMATION

	DATE OF REPORT: 1/21/82
1.	FACILITY: Marrestern armay
2.	NUMBER OF TRANSFORMER(s):
3.	LOCATION OF TRANSFORMER(s) (Ref attached Site Plan):
	<u> </u>
4.	POLE NUMBER TRANSFORMER(s) ARE LOCATED ON: Pole JC/7,70
5.	OWNERSHIP, CIRCLE ONE: NJ-DOD, WALLTY COMPANY DON'T KNOW, IF UTILITY COMPANY, GIVE NAME: Level Central Pares Light
6.	INSTALLATION DATE:
7.	TRANSFORMER(s) CLASS:
8.	FLUID CAPACITY:(Gals)
9.	MANUFACTURED BY:
10.	SERIAL NUMBER(s): Could not get
11.	REPORT COMPLETED BY:

PCB s REPORT INFORMATION

	DATE OF REPORT: //2//8-2
1.	FACILITY: Municitarian
2.	NUMBER OF TRANSFORMER(s):
3.	LOCATION OF TRANSFORMER(s) (Ref attached Site Plan):
4.	POLE NUMBER TRANSFORMER(s) ARE LOCATED ON: Polette JC, 1772 MT
	99
5.	OWNERSHIP, CIRCLE ONE: NJ-DOD, UTILITY COMPANY, DON'T KNOW, IF UTILITY COMPANY, GIVE NAME: Level Central freeze & light Co-
6.	INSTALLATION DATE:
7.	TRANSFORMER(s) CLASS:
8.	FLUID CAPACITY:(Gals)
9.	MANUFACTURED BY:
10.	SERIAL NUMBER(s): Cerul mat get
11.	REPORT COMPLETED BY:





APPENDIX H

PICATINNY FMS 1982 PCB SURVEY

PCB s REPORT INFORMATION

	DATE OF REPORT: //22/82
1.	FACILITY: Picating AAFA
2.	NUMBER OF TRANSFORMER(s):
3.	LOCATION OF TRANSFORMER(s) (Ref attached Site Plan): Northwest such of building by backers
4.	POLE NUMBER TRANSFORMER(s) ARE LOCATED ON:,,
	,
5.	OWNERSHIP, CIRCLE ONE: NJ-DOD, UTILITY COMPANY, DON'T KNOW. IF UTILITY COMPANY, GIVE NAME:
6.	INSTALLATION DATE:
7.	TRANSFORMER(s) CLASS: OA - 3 phase 40 Cycles
8.	FLUID CAPACITY: 2/6 (Gals)
9.	MANUFACTURED BY: Leneral Clerture
10.	SERIAL NUMBER(s): 120764 FENA
11.	REPORT COMPLETED BY:

PCB s REPORT INFORMATION

	DATE OF REPORT: $1/22/85$
1.	FACILITY: Lealing AAFA
2.	NUMBER OF TRANSFORMER(s): fae run way lights LOCATION OF TRANSFORMER(s) (Ref attached Site Plan):
3.	LOCATION OF TRANSFORMER(s) (Ref attached Site Plan):
4.	POLE NUMBER TRANSFORMER(s) ARE LOCATED ON:,
5.	OWNERSHIP, CIRCLE ONE: NJ-DOD, WTILITY COMPANY, DON'T KNOW. IF UTILITY COMPANY, GIVE NAME:
6.	INSTALLATION DATE:
7.	TRANSFORMER(s) CLASS:
8.	FLUID CAPACITY:85 (Gals)
9.	MANUFACTURED BY: Circuse Hinds Sepaco
10.	SERIAL NUMBER(s): 30000-02-208-FAAL-828
11.	REPORT COMPLETED BY:



APPENDIX I

TEANECK ARMORY 1982 PCB SURVEY

PCB s REPORT INFORMATION

	DATE OF REPORT: 1/20/82
1.	FACILITY: leimeck annun
2.	NUMBER OF TRANSFORMER(s):
3.	LOCATION OF TRANSFORMER(s) (Ref attached Site Plan): than former some in boule some
4.	POLE NUMBER TRANSFORMER(s) ARE LOCATED ON:,
5.	OWNERSHIP, CIRCLE ONE: NJ-DOD, WTILITY COMPANY, DON'T KNOW. IF UTILITY COMPANY, GIVE NAME: Public Severce Clutter & Coal Co
6.	INSTALLATION DATE: 1936-37
7.	TRANSFORMER(s) CLASS: type H form K F CYL 50-40 Ratery 75K B-A FLUID CAPACITY: 47 (Gals)
8.	FLUID CAPACITY: 47 (Gals)
9.	MANUFACTURED BY: Central Cleeting
10.	SERIAL NUMBER(s): 4494987-4676813-4575052
11.	REPORT COMPLETED BY: July & Carner

TEANER ROAD LIBERTY ROAD MARO PLAZA R.C. pais

TEANECK SITE PLAN